

Association of College and Research Libraries 2018 New Board Member Orientation

Wednesday, October 10, 2018, 8:30 a.m.–noon Hilton Cleveland Downtown, Center Street D, Floor 3

Tuesday, October 9

- 6:45 p.m. Meet in Hilton Cleveland Downtown lobby to walk/share cabs to dinner (0.5 miles/10 min. walk)
- 7:00 p.m. Optional group dinner at Pura Vida Café, 170 Euclid Ave, Cleveland, OH 44115

Agenda

Time	Item		
8:00–8:30	Optional breakfast available.		
8:30–8:40 a.m.	1.0 Welcome / Outcomes / Introductions (Pressley)		
	Overall 2018 orientation outcomes:		
	1.1 Board members will have a greater understanding of ACRL's relationship to ALA.		
	1.2 Board members will have a shared understanding of Board's role in		
	leading the association's advancement of the ACRL strategic plan, priorities and greater awareness of current issues.		
	1.3 Board members will have a shared understanding of expectations of Board		
	members and administrative information.		
8:40–9:10 a.m.	2.0 ALA and ACRL (Davis)		
	2.1 Legal entity [Board Manual 4.13]		
	2.2 Tax status: Political speech and IRS regulation (election info) [Board Manual 4.10, 4.12]		
	2.3 History [Board Manual 5.1, 5.2, Appendix D]		
	2.4 ALA Structure [Board Manual 6.1] [Doc 23.0]		
	2.5 ALA Budget [Board Manual 4.10, 4.11, 4.14]		
	2.6 Operating agreement & Management Practices [Board Manual 4.9]		
	2.7 Indirect Costs/overhead		
	2.8 ACRL structure [Board Manual 5.9, 6.2, 6.3–6.8, Appendix C]		
	2.9 ACRL Staff responsibilities [Board Manual 5.10]		
	2.10 ACRL Bylaws [Board Manual 1.5]		
0.10.0.10	2.11 Who speaks for ACRL [Board Manual 1.18, 1.19]		
9:10–9:40 a.m.	3.0 Role of Board (Pressley) [Board Manual 1.7, 1.12, Section 3, 6.1] [Doc 1.0, 2.0]		
	3.1 Role of Board and Executive Committee and Presidents		

3.2 Types of Board work

- a. *Generative* Generative thinking on the part of each board member leads to a more robust organization. Generative thinking helps the board look at patterns and environmental signals.
 - i. Board working groups [Board Manual Appendix B]
 - ii. Giving suggestions for possible candidates to LRNC
- b. *Strategic* Focus on performance and direction setting. Policy setting and strategic decision making are part of the strategic thinking practice.
 - i. Board liaison work with committees [Board Manual 1.14–1.15] [Doc 38.0, 38.1, 38.2]
 - ii. Strategic Planning and Orientation Session (SPOS)
- c. *Fiduciary* Focus on stewardship and governance, including legal and financial accountabilities. Important aspects of fiduciary thinking are stewardship and representation on behalf of members who elected the board members.
 - i. Financial Stewardship: Reviewing budget documents and personal contributions (Friends, ACRL Conference) [Board Manual Section 4, 5.6, 5.7]
 - ii. Liaison roles with sections and committees (Members of goal-area committees and liaisons to other committees) [Board Manual 1.14–1.15] [Doc 38.0, 38.1, 38.2]
 - iii. Evaluation of Executive Director [Board Manual 1.16]

3.3 Overall expectations for Board members (Middleton) [Board Manual 1.3,1.4]

- a. Virtual votes 100% participation (ALA Connect) [Board Manual 1.11]
- b. Preparing for meetings (virtual and face-to-face) [Board Manual 1.9, Appendix E, F] [Doc 3.0, 4.0, 37.0, 39.0]
- c. Financial support
- d. Attendance at ALA Conferences, ACRL Board meetings, and typical schedule, ACRL 2017 [Board Manual 1.3, 1.6, 1.8, 1.17, 2.1, 2.2]
- e. Social media guidelines [Doc 4.0]
- f. Administrative information: travel, resources, Board housing block, resources for Board members, working with staff, communications (Payne) [Board Manual 1.13, 1.16, 1.20]

9:40–10:10 a.m. **4.0** Key Topics and Issues Facing the Board: What should we cover here?

- 4.1 Transitions ALA is undergoing (Governance, structure, financial)—
 Pressley
- 4.2 Membership—MED
- 4.3 ACRL EDI Signature initiative—CM
- 4.4 New initiatives for Choice—MED
- 4.5 Project Outcome—CM

Time	Item
	4.6 Late Breaking Issues (All)
10:10–10:30 a.m.	 5.0 Strategic Planning and Assessment (Middleton) [Doc 5.0] 5.1 Strategic Goals and Enabling Programs and Services 5.2 Environmental Scanning (Research & Planning Comm. role, too) [Board Manual 5.4, 5.5] [Doc 34.0] 5.3 Annual Work Plan for Committees: Board liaisons & staff liaisons' role [Docs 26.0, 29.0, 30.0, 31.0, 32.0, 38.0, 38.1, 38.2] 5.4 PEAR Report, KPIs, Dashboard Metrics [Board Manual Appendix A, H] [Docs 35.0, 36.0)
10:30–10:45a.m.	Break
10:45–11:30 a.m.	 6.0 ACRL Budget Process (Davis) 6.1 B&F Committee's role [Board Manual 4.3] 6.2 Board's Role [Board Manual 4.3] 6.3 Association budgets (revenue generating; no allocations from ALA) [Board Manual 4.1, 4.2, 4.6–4.8] 6.4 Major revenues/expenses (briefing book) 6.5 Reading the ACRL spreadsheets [Board Manual 4.4, 4.5, Appendix G] 6.6 Dashboard Metrics [Board Manual Appendix H] 6.7 ACRL Infographic [Doc 43.0] 6.8 Overview of annual cycle [Board Manual 4.3]
11:30–11:50 a.m.	7.0 Reflection/discussion/administrative review (Pressley)7.1 What was exciting? Confusing? Questions?7.2 Review of administrative issues as needed
11:50–12:00 p.m.	8.0 Concluding remarks (Middleton) 8.1 Orientation Evaluation https://www.surveymonkey.com/r/SPOSorientation

12:15–1:15 p.m. Optional group lunch at Burnham Restaurant, Hilton Cleveland Downtown

Strategic Planning and Orientation Session begins at 2:00 p.m.

Hilton Cleveland Downtown, Center Street D, Floor 3

Upcoming Meetings

- Fall Board Virtual Meeting: November 16, 2018
- Midwinter Meeting 2019, Seattle, WA: January 25-29, 2019
- ACRL 2019 Conference, Cleveland, OH: April 10–13, 2019
- Spring Virtual Board Meeting 2019*, location & date TBD
- Annual Conference 2019, Washington, DC: June 20–25, 2019
- Fall Executive Meeting 2019*, location & date TBD
 *(Only Executive Committee members attend, but the full Board will be sent meeting documents, and asked for comments.)

ACRL Board Ground Rules

Approved Midwinter 2017

- 1. Accept mutual responsibility for quality of meeting and assess effectiveness.
- 2. Be present, attentive, engaged and prepared.
- 3. Avoid side conversations.
- 4. Encourage candor and be forthright in communication.
- 5. Speak up if you have a question or to test assumptions.
- 6. Listen actively and differ respectfully.
- 7. Signal conclusion, identify next steps, and make clear assignments.
- 8. Encourage/Give everyone an opportunity to talk.
- 9. Make knowledge-based decisions using these four questions:

4 Questions for Knowledge-Based Decision Making

- 1. What do you know about our members/prospective members/customers—needs, wants, and preferences, that is relevant to this decision? *
- 2. What do we know about the current realities and evolving dynamics of our members' marketplace/industry/profession that is relevant to this decision?*
- 3. What do we know about the capacity and strategic position of our organization that is relevant to this decision?*
- 4. What are the ethical implications of this decision?

ACRL Board Social Media Guidelines

Approved Fall Board Meeting: October 19, 2016

These guidelines address ACRL Board members' use of their personal social media accounts in sharing information from Board meetings and events.

1. Purpose

Social media offers an opportunity for the ACRL Board to increase two-way communication with members. As such, we recognize the importance of social media not only for sharing information and updates, but in contributing towards greater transparency and member engagement.

2. Guidelines

Board members who engage with social media agree to do so in a professional manner and to act in accordance with the Board's Ground Rules, which are reviewed and updated each year at the Strategic Planning and Orientation Retreat. The following guidelines are intended to assist Board members in determining what type of social media posts are appropriate. Board members may:

- a. use their personal social media accounts to share Board information;
- b. not share information from closed or executive sessions of the Board;
- c. share objective facts without including personal opinions;
- d. include general summaries of Board discussions without including specific comments or attributing those comments to individual Board members;
- e. report on action items;
- f. leverage social media to gather feedback from members.

^{*}What do you wish that you knew, but don't?

3. Responsibilities

Board members who choose to share Board information on social media are responsible for following member responses and closing the feedback loop, as follows:

- a. Twitter posts should use the #acrlboard hashtag, along with any individual hashtag(s) for specific discussions.
- b. Board members initiating discussion on social media should summarize and report member responses back to the Board promptly.
- c. Board members initiating discussion on social media should report back to responding members with the results of the discussion.





Wednesday, October 10 – Friday, October 12, 2018 Hilton Cleveland Downtown, 100 Lakeside Avenue East, Cleveland, Ohio, 44114

AGENDA Strategic Board Thinking Practices

(Chait, Ryan, & Taylor)

Generative – Generative thinking on the part of each board member leads to a more robust organization. Generative thinking helps the board look at patterns and environmental signals.

Strategic – Focus on performance and direction setting. Policy setting and strategic decision making are part of the strategic thinking practice.

Fiduciary – Focus on stewardship and governance, including legal and financial accountabilities. Important aspects of fiduciary thinking are stewardship and representation on behalf of members who elected the board members.

SPOS Meeting Outcomes

Generative

- Develop a shared understanding of equity, diversity, and inclusion (EDI) issues as they apply to ACRL.
- Identification of how external conditions and member needs impact ACRL's future direction.
- Develop a shared understanding of recent research on ACRL's members.
- Develop a shared understanding of ACRL's fundraising landscape.
- Increased knowledge of the work of the ALA TF on organizational effectiveness.
- A beginning discussion on the role of ACRL in offering events at an ALA MW meeting.

Strategic

- Review of ACRL's strategic direction to ensure relevance and sustainability.
- Consider how ACRL's EDI Initiative can be incorporated into the strategic plan.
- Develop a set of focused initiatives in response to the strategic plan.
- Identify strategies and initiatives ACRL could undertake to infuse EDI throughout the association.

Fiduciary

- Increase understanding of the roles and responsibilities of a strategic board and leadership's role in transformation and change.
- Develop ground rules for the Board's work in 2018–19.
- Strengthen relationships among board members, goal-area committee leaders, and senior staff to foster open communication and effective board stewardship.
- Exercise of effective stewardship of ACRL's Plan for Excellence.



Wednesday, October 10 – Friday, October 12, 2018 Hilton Cleveland Downtown, 100 Lakeside Avenue East, Cleveland, Ohio, 44114 Center Street D Meeting Room 3rd Floor

Wi-Fi Password: ACRL2018

12:15 p.m. – Lunch at The Burnham (inside the Hilton Cleveland Downtown) for available attendees.

Expected Outcomes for Day One:

• Develop a shared understanding of equity, diversity, and inclusion (EDI) issues as they apply to ACRL.

Wednesday Agenda

Time	Agenda Description		
2:00 p.m.	1.0 Opening Remarks, Introductions, and Agenda Overview (Pressley)Welcome, review of agenda, logistics		
	 Introduction of Consultants: DeEtta Jones and Jerome Offord, DJA 		
2:15 p.m.	2.0 Getting to know you (DJA Associates)		
2:45 p.m.	3.0 EDI Discussion (DJA Associates) #5.0, #9.0, #10.0, #11.0, #12.0, #13.0, #14.0, #15.0, #16.0, #20.0, #21.0, #22.0, #23.0		
5:00 p.m.	4.0 Adjourn (Pressley)		
5:45 p.m.	Meet in lobby for departure by bus at 5:45 p.m. The bus will depart from the Ontario entrance of the Hilton.		
6:30–9:30 p.m.	Glass blowing activity and catered dinner		
	Bus will return to the hotel at approximately 10:15 p.m.		



Wednesday, October 10 – Friday, October 12, 2018
Hilton Cleveland Downtown, 100 Lakeside Avenue East, Cleveland, Ohio, 44114
Center Street D Meeting Room 3rd Floor

Wi-Fi Password: ACRL2018

8:00-8:30 a.m. Optional breakfast available in Hilton Cleveland Downtown, Center Street D, 3rd floor

Expected Outcomes for Day Two:

- An identification of how external conditions and member needs impact ACRL's future direction.
- A review of ACRL's strategic direction to ensure relevance and sustainability.
- A set of focused initiatives in response to the strategic plan.
- Consider how ACRL's EDI Initiative can be incorporated into the strategic plan.
- Identify strategies and initiatives ACRL could undertake to infuse EDI throughout the association.

Thursday Agenda

Time	Agenda Item
8:30 a.m.	5.0 Provide welcome and introductions (Pressley)
	6.0 Provide overview of agenda and expected meeting outcomes (Paul D. Meyer, Tecker International)
	• Expected Meeting Outcomes, and Session Ground Rules #1.0, #2.0, #3.0, 4.0
	7.0 Discuss possible follow-up questions from Wednesday afternoon session. (Meyer)
	8.0 Brief introduction to strategic planning process and framework (Meyer) #5.0, #6.0, #7.0, #23.0
	9.0 Conduct scan of professional environment – What has changed in our environment that may impact our strategic direction? (Meyer) #8.0

- 10.0 Report out on scan
- 11.0 Strategic plan review (Meyer) #5.0, #6.0, #7.0, #23.0
 - Assess progress
 - Does anything need to change?
 - Review suggested language in the plan to be sure ACRL's signature initiative is clearly articulated.



Time	Agenda Item
Noon	Lunch – Center Street C, 3 rd Floor
1:00 p.m.	 12.0 Continue discussion on reviewing and updating ACRL's strategic plan (Meyer) #5.0, #6.0, #7.0 Confirm changes Discuss high-level implications of changes Discuss high-level implementation plans Discuss opportunities to work together
	Break
	13.0 Identify next steps (Meyer)
	14.0 Provide closing remarks (Pressley)
4:30 p.m.	15.0 Adjourn (Pressley)
5:45 p.m.	Meet in lobby of Hilton Cleveland Downtown at 5:45 p.m. for bus departure. The bus will depart from the Ontario entrance of the Hilton.
6:00 p.m.	Dinner at Crop, 2537 Lorain Avenue



Wednesday, October 10 – Friday, October 12, 2018 [^] Hilton Cleveland Downtown, 100 Lakeside Avenue East, Cleveland, Ohio, 44114 Center Street D Meeting Room 3rd Floor

Wi-Fi Password: ACRL2018

8:00-8:30a.m. Optional Breakfast available in Hilton Cleveland Downtown, Center Street D, 3rd floor

Expected Outcomes for Day Three:

- 1. Follow up on items from previous day and clear articulation of next steps.
- 2. A shared understanding of ACRL member research.
- 3. A shared understanding of ACRL fundraising landscape.
- 4. Development of Board ground rules for 2018–19.
- 5. Increased knowledge of the work of the ALA TF on organizational effectiveness.
- 6. A beginning discussion on the role of ACRL in offering events at an ALA MW meeting.

Friday Detailed Agenda

Time	Agenda Item			
8:30 a.m.	16.0 Welcome/Review previous days' work. Review work for the day and adjust agenda accordingly. (Pressley)			
9:00 a.m.	17.0 Follow-up on any open loops from previous days (Pressley)			
10:00 a.m.	18.0 Review of latest ACRL membership research (Petrowski) #8.0			
10:30 a.m.	19.0 Board ground rules (Malenfant) #3.0, #4.0			
11:00 a.m.	20.0 Update from ALA Effectiveness Governance Task Force (Daly) #18.0, #19.0, #46.0			
11:30 a.m.	21.0 ACRL Fundraising (Petrowski) #44.0, #44.1, #44.2			
Noon	Lunch – Center Street C, Third Floor			
12:45 p.m.	22.0 Discuss ACRL's participation at Midwinter (Pressley) #43.0, #45.0			
1:30 p.m.	23.0 Review next steps, parking lot issues (Pressley)			
1:45 p.m.	24.0 Provide closing remarks and information about meeting evaluation (Pressley) https://www.surveymonkey.com/r/SPOSevaluation			



Time Agenda Item

2:00 p.m. 25.0 Adjourn (Pressley)

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ACRL SPOS 2018 Document Inventory

Black = Included in packet **Green** = New documents

Doc#	Document		
Doc 1.0	The New Work of Nonprofit Board		
Doc 2.0	Board Governance as Leadership Summary		
Doc 3.0	ACRL Board Ground Rules		
Doc 4.0	Social Media Guidelines		
Doc 5.0	ACRL Plan for Excellence		
Doc 6.0	ACRL Planning Cycle at a Glance		
Doc 7.0	ACRL Annual Planning Cycle Process and Deadlines		
Doc 8.0	2018 Membership Research Survey (emailed confidential document)		
Doc 9.0	Essentials of Cultural Competence Worksheet (emailed confidential document)		
Doc 10.0	ACRL 2019 EDI Message for Speakers		
Doc 11.0	Call for Volunteers Committee Example		
Doc 12.0	Call for Volunteers Task Force Example		
Doc 13.0	ACRL Case Studies and Discussion Questions		
Doc 14.0	ACRL Volunteer Webpage		
Doc 15.0	Diversity Committee Report & Work Plan		
Doc 16.0	EDI Working Group Update		
Doc 18.0	ALA Organizational Effectiveness Plan		
Doc 19.0	PLA Response to Investment Plan		
Doc 20.0	ALA Office for Diversity, Literacy and Outreach Services MW18 Report		
Doc 21.0	Office for Diversity, Literacy and Outreach Services		
Doc 22.0	ACRL Insider EDI Post		
Doc 23.0	ALA Strategic Directions AC18		
Doc 24.0	ALA Committee on Diversity (COD) AC18 Report to Council		
Doc 25.0	ALA Council Resolution on Addressing Roadblocks to Diversity in the Leadership Pipeline		
Doc 26.0	2017-18 Reports and 2018-19 Work Plan Compilation		
Doc 27.0	Plan for Excellence Implementation Reports (by goal area)		
Doc 28.0	Plan for Excellence Implementation Reports (by unit)		
Doc 29.0	Value of Academic Libraries Committee: Report, Work Plan		
Doc 30.0	Student Learning & Information Literacy Committee: Report, Work Plan, and Multi-Year Planning Grid		
Doc 31.0	Research and Scholarly Environment Committee: Report, Work Plan		
Doc 32.0	New Roles and Changing Landscapes Committee: Report, Work Plan, and Multi-Year Planning Grid		
Doc 33.0	2018 ACRL Top Trends in Academic Libraries		
Doc 34.0	ACRL Environmental Scan 2017		
Doc 35.0	FY18 ACRL Plan for Excellence Activity Report (PEAR)		
Doc 36.0	FY18 Enabling Programs and Services Key Performance Indicators (KPIs)		
Doc 37.0	An Introduction to Robert's Rules of Order by Eli Mina		
Doc 38.0	Board Liaison Check List (for Board orientation)		
Doc 38.1	Committee Letter Template for Board Liaisons (for Board orientation)		

Doc 38.2	Section Letter Template for Board Liaisons (for Board orientation)		
Doc 39.0	Board Effectiveness Session (for Board orientation)		
Doc 40.0	2017 New Media Consortium Horizon Report		
Doc 40.1	2018 New Media Consortium Horizon Report		
Doc 41.0	Board Evaluation Distribution (for Board orientation)		
Doc 41.1	Meeting Effectiveness Evaluation (for Board orientation)		
Doc 41.2	Board Effectiveness Evaluation (for Board orientation)		
Doc 42.0	Top Ten Workplace Issues		
Doc 43.0	ACRL Groups Not Meeting at Midwinter 2019		
Doc 44.0	Donations by ACRL Unit and Program		
Doc 44.1	Company Donations by Amount		
Doc 44.2	FY2018 Section Donations with Donor		
Doc 45.0	Future of Midwinter Update		
Doc 46.0	Update on Steering Committee on Organizational		

FYI Documents

FYI#	Document
FYI-1	SPOS Attendee Roster

The New Work of the Nonprofit Board

by Barbara E. Taylor, Richard P. Chait, and Thomas P. Holland



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Harvard Business Review

SEPTEMBER-OCTOBER 1996

Reprint Number

JAMES C. COLLINS AND JERRY I. PORRAS **BUILDING YOUR COMPANY'S VISION** 96501 DAVID A. THOMAS MAKING DIFFERENCES MATTER: A NEW PARADIGM 96510 AND ROBIN J. ELY FOR MANAGING DIVERSITY ANN MAJCHRZAK **BREAKING THE FUNCTIONAL MIND-SET IN** 96505 AND QIANWEI WANG **PROCESS ORGANIZATIONS** A STRATEGIC APPROACH TO MANAGING PRODUCT RECALLS N. CRAIG SMITH, ROBERT J. THOMAS, 96506 AND JOHN A. QUELCH RICHARD B. FREEMAN TOWARD AN APARTHEID ECONOMY? 96503 WITH COMMENTARIES BY: ROBERT B. REICH, JOSH S. WESTON, JOHN SWEENEY, WILLIAM J. McDONOUGH, AND JOHN MUELLER GEORGE STALK, JR., DAVID K. PECAUT, **BREAKING COMPROMISES, BREAKAWAY GROWTH** 96507 AND BENJAMIN BURNETT JOHN STRAHINICH HBR CASE STUDY THE PITFALLS OF PARENTING MATURE COMPANIES 96508 BARBARA E. TAYLOR, RICHARD P. CHAIT, SOCIAL ENTERPRISE AND THOMAS P. HOLLAND THE NEW WORK OF THE NONPROFIT BOARD 96509 THOMAS DONALDSON WORLD VIEW **VALUES IN TENSION: ETHICS AWAY FROM HOME** 96502 JAMES P. WOMACK IDFAS AT WORK **BEYOND TOYOTA: HOW TO ROOT OUT WASTE AND** AND DANIEL T. JONES 96511 **PURSUE PERFECTION** MARC LEVINSON **BOOKS IN REVIEW CAPITALISM WITH A SAFETY NET?** 96504



Is your board adding value or simply wasting its members' time?



The New Work of the Nonprofit Board

by Barbara E. Taylor, Richard P. Chait, and Thomas P. Holland

Effective governance by the board of a nonprofit organization is a rare and unnatural act. Only the most uncommon of nonprofit boards functions as it should by harnessing the collective efforts of accomplished individuals to advance the institution's mission and long-term welfare. A board's contribution is meant to be strategic, the joint product of talented people brought together to apply their knowledge and experience to the major challenges facing the institution.

What happens instead? Nonprofit boards are often little more than a collection of high-powered people engaged in low-level activities. Why? The reasons are myriad. Sometimes the board is stymied by a chief executive who fears a strong board and hoards information, seeking the board's approval at the last moment. Sometimes board members lack sufficient understanding of the work of the institution and avoid dealing with issues requiring specialized knowledge. Individual

board members may not bring themselves fully to the task of governance, because board membership generally carries little personal accountability. And often the powerful individuals who make up the board are unpracticed in working as members of a team. No matter which cause predominates, nonprofit board members are often left feeling discouraged and underused, and the organization gains no benefit from their talents. The stakes remain low, the meetings process-driven, the outcomes ambiguous, and the deliberations insular. Many members doubt whether a board can have any real power or influence.

The key to improved performance is discovering and doing what we call the *new work* of the board. Trustees are interested in results. High-powered people lose energy when fed a steady diet of trivia. They may oblige management by discussing climate control for art exhibitions, the condition of old steam lines, or the design of a new logo, but

they get charged up when searching for a new CEO, successfully completing a capital campaign, or developing and implementing a strategic plan. *New work* is another term for work that matters.

The new work has four basic characteristics. First, it concerns itself with crucial, do-or-die issues central to the institution's success. Second, it is driven by results that are linked to defined timetables. Third, it has clear measures of success. Finally, it requires the engagement of the organization's internal and external constituencies. The new work generates high levels of interest and demands broad participation and widespread support.

The New Work Requires New Practices

The new work defies the conventions that have regulated board behavior in the past. Whereas the customary work of a nonprofit board is limited to scrutinizing management, the new work requires new rules of engagement and unorthodox ways of fulfilling a board's responsi-



bilities. The pressures on most nonprofits today are too great for the old model to suffice. Nonprofit leaders can take the following steps to improve board practices:

Find out what matters. Traditionally, nonprofit boards and CEOs have agreed that management defines problems and recommends solutions. A board might refine management's proposals but rarely rejects any. Why? Few trustees know the industry or the institution well enough to do more, and those who do dread being labeled as meddlers or micromanagers. Board members sometimes are made to feel that asking a thorny question or advancing an alternative opinion is disloyal to the administration. A vote on an issue is a vote on the CEO. But how can a reactive, uninformed board know what opportunities the organization is missing? And how much damage must the organization sustain before the board realizes something is amiss?

To do the new work, trustees and management together must determine the important issues and the agenda of the organization. Trustees need to understand what the CEO sees as the critical issues. They also need to know what other stakehold-

ers and industry experts think, because no chief executive knows enough to be a board's sole supplier of information and counsel. Knowledgeable trustees can help inform the CEO's judgment. They can also perform a useful function for the CEO by focusing the organization's attention on issues that are unpopular within it or that fall outside the staff's capabilities. In addition, the board can find out what matters by engaging in the following four sets of activities:

Make the CEO paint the big picture. The litmus test of the chief executive's leadership is not the ability to solve problems alone but the capacity to articulate key questions and guide a collaborative effort to formulate answers. As one member of a museum's board observes, "What I want most from the president are the big ideas." The CEO must be willing to share responsibility, and the board must be willing to follow the CEO's lead-and ask questions. "If you don't do that," says one college's trustee, "the board doesn't really have a clue about what is going on. When a problem arises and the CEO needs the trustees, they won't own the problem or be willing to help solve it."

The CEO should review the organization's foremost strategic challenges annually with the board. The board, for its part, must consider whether the CEO accurately targeted and defined the issues. This is a moment, maybe *the* moment, in which the board adds value. Together, the CEO and the board must agree on the institution's priorities and strategic direction. Those considerations, in turn, will shape the work of the board and its evaluation of the CEO.

The board of a college in the South has formalized this process success-

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fully. At a retreat each January, the CEO and the trustees rank the most important challenges facing the institution. Then the board structures its committees to reflect those priorities. Last year, for example, the board concluded that marketing and technological infrastructure were its

The new work requires that board members and CEOs get to know their institutions' stakeholders.

top concerns. The board formed task forces of trustees and constituents to study those issues, to specify the decisions the board would have to make during the coming year, and to clarify the board's needs for information and education. At the May board meeting, the task forces provided initial reports, and the board decided how to organize in order to pursue the issues. Trustees also developed measurable expectations for the president that were linked to the board's top concerns.

Get to know key stakeholders. Boards and CEOs have to know what matters to the constituents they serve. The interactions of the old work - which were mostly social events and show-and-tell sessions will not do. The new work requires two-way communication. As a college president remarks, part of the reason for such communication is "to make the board vulnerable to constituents"-to make it accessible and accountable rather than insulated from the ordinary life of the institution. In that spirit, the boards of several colleges now meet routinely with leaders of student, faculty, and alumni bodies to explore matters of common concern.

Consider the example of a residential treatment center for children with emotional disabilities. When a major benefactor died, the center needed to find new sources of income. While interviewing leaders of social service organizations (a major source of referrals), several board members were shocked to discover

that the center was seen as elitist and interested only in easy cases. In fact, many professionals referred the easy cases to less expensive care and assumed that the center would reject the difficult ones. Alarmed by these misperceptions, the trustees formed a task force to guide a pub-

> lic relations effort. The board expanded to include trustees with ties to sources of referrals and strengthened its relationships with other constituents through educational events and joint programming. "I want to make sure this board is

never again so out of touch with its community," said the board's chair at the end of the process.

Close ties between the board and constituents unnerve CEOs who are determined to be the board's sole source of information and fear that direct communication between trustees and stakeholders will weaken time-honored lines of authority. That reaction puzzles board members; as one college trustee asks, "Why not have students talk to trustees? What's there to hide? These are our clients. I'm old enough and smart enough to know that some people just want to complain. Trustees are as qualified as the president to interpret the views they express. The closer I get to reality, the better I can sympathize with and help the CEO."

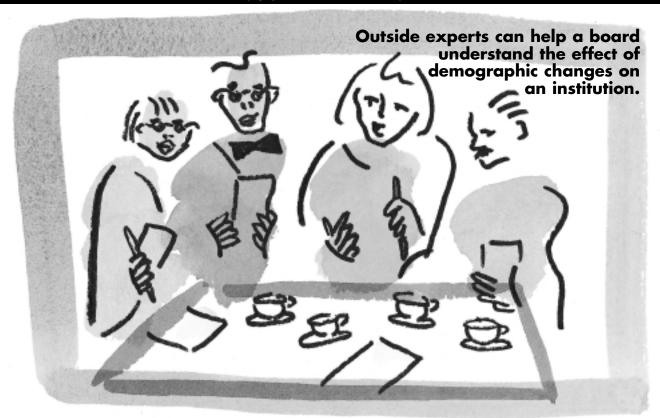
Consult experts. Many nonprofits are susceptible to competitive forces and to changes in public policy. Consider, for example, the impact on museums of cuts in funding by the National Endowment for the Arts, or the effect on hospitals of efforts to reform federally funded health care. Unless trustees understand the basic economics, demographics, and politics of the industry, boards will be hard pressed to separate the trivial from the significant and the good news from the bad. The new work requires learning about the industry from many sources.

One of those sources should be experts on the board itself. Although boards regularly recruit trustees with expertise in functional areas

like finance, law, and marketing, the new work requires a board to have more than a few trustees with relevant professional expertise: physicians on a hospital's board, academics on a college's board, social workers on a clinic's board. Expert trustees can guide fellow board members through a foreign culture. For example, one Ivy League institution counted a former university president among its board members. At one point, he criticized his colleagues for second-guessing the administration's disciplining of a fraternity, saying, "I'd be furious if my board did this." The board backed off. And at a liberal arts college, a trustee who was a professor at another school helped educate the board about the complexities of measuring teaching quality and reallocating academic positions from departments with declining enrollments to those with growing demand. At the same time, he helped establish the board's credibility with the faculty.

Another source of knowledge is outside experts. They can help boards understand competition, client demographics, trends in government support, and public policy debates. For example, the board of a Protestant theological seminary faced with declining enrollment conferred with experts on professional education, the economics of religious education, and the demographics of its own denomination. The trustees learned that their denomination's population would continue to decline, further eroding financial support for the seminary and job opportunities for new ministers. On its current course, the institution would be bankrupt in a few years. The seminary decided to leverage the strength of its highquality faculty by becoming a resource to the broader Protestant community, offering theological education to laypeople and continuing education for church workers and ministers, both on campus and in local churches.

Decide what needs to be measured. Corporate boards typically monitor a limited number of performance indicators. Those vital signs



convey the company's overall condition and signal potential problems. Nonprofit boards often lack comparable data, largely because the trustees and the staff have never determined what matters most.

Together, the board and management should identify 10 to 12 critical indicators of success. For a college, that may mean scrutinizing its tuition discount (the average remission the institution gives to students as financial aid). For a museum, it may mean measuring its total return on endowment investments. For a hospital, the board may monitor occupancy rates. Distinctive strategies can suggest novel measures. A boarding school focusing on computer literacy monitored the ratio between students' dial-ups to the campus network and their phone calls from their dorm rooms for pizza delivery. A rising percentage of network calls meant that students were becoming more comfortable with new technology. Using comparable creativity, an orchestra with an aging subscriber base monitored ticket sales to single people in their twenties and thirties who had attended chamber music programs

with wine and cheese receptions held afterward.

Graphic comparisons against projections, past performance, or industry norms focus a board's attention on crucial issues and remind trustees that the ultimate goal of the board is to influence those indicators in a positive way. As the CEO of a college in the Midwest says, "We have a set of key performance indicators, explicitly linked to the

strategic plan, that are reviewed at every meeting. We even put them on a pocket-size card that trustees can carry around."

Act on what matters. In the world of the old work, the lines were clearly drawn:

the board remained on the policysetting side of the net, management on the implementation side, and so the game of governance was played. In the new work, the board and management are on the same side of the net as partners in both roles. The question is not, Is this an issue of policy or implementation? Rather, the question is, Is the issue at hand important or unimportant, central or peripheral?

Today few nonprofits can risk barring the CEO from policy development or divorcing the board from policy implementation. In a capital campaign, establishing priorities and goals is setting policy, identifying prospects and making calls is implementation. In the search for a new CEO, determining selection criteria is making policy, designing the

In the new work, the board and management work together on both policy and implementation.

procedure and conducting the interviews is implementation. In brief, most important matters cannot be subdivided neatly into policy or administration.

In many instances, implementation is far more consequential than formulation. For example, in faceto-face meetings, trustees of a Catholic women's college persuaded

affluent older alumnae to support a new institutional focus on serving poor minority women from the inner city. The board of another college, troubled by the decline in students able to pay full tuition, selected three trustees to assist the administration with the design of a

For the new work to happen, substance must dictate a board's structure.

marketing strategy aimed at attracting more students able to pay.

In another case, a university owned a commercial radio station. The board questioned how the station fit in with the school's mission. After deciding with the president that the university could turn profits from the sale of the station to better educational use, the trustees negotiated the transaction. Afterward, the president exulted, "This was the board at its best." The board members knew more than the staff about the radio business and about selling a major asset, and they put that knowledge to use.

Involving trustees in policy implementation can be critically important during a crisis. In the aftermath of the scandal at the United Way of America (the CEO used more than a million dollars of United Way money for personal expenses), the board and CEO of one local chapter

agreed that each of the trustees would interview five business leaders to learn what the chapter might do to improve community support for an upcoming campaign. The advice was consistent:

admit that the national organization had blundered badly, stop all payments to the national headquarters until the charges were resolved, promise that all funds would remain in the community, allow donor-designated contributions, and promise that the board would issue a public report on allocations. The CEO and the trustees accepted those recommendations and inaugurated an intense public-relations effort that engaged every board member. In the end, the campaign was almost as successful as the previous year's and was substantially more successful than those of other chapters in the region. That would not have been the case had the board only set policy.

Organize around what matters. The board's new work must be organized to deal with the institution's priorities. That may seem self-evident, but boards often organize their work in functionally oriented committees (physical plant, finance, public relations) that channel trustees toward low-stakes operational decisions. For the new work to happen, substance must dictate structure. Committees, work groups, and task forces must mirror the institution's strategic priorities.

For instance, a theological seminary replaced most of its operationally oriented committees with ones that reflected the major goals of the strategic plan: globalizing the curriculum, improving relations with local churches, and providing continuing education for the ministry. The committees included trustees and constituents. One result: on the recommendation of the committee on church relations, the seminary established a clearinghouse to provide local churches with technical assistance in such areas as financial management, adult education, and church governance.

Teaching an Old Board New Work

Old Work

- 1. Management defines problems, assesses options, and proposes solutions. Board listens, learns, approves, and monitors.
- 2. Board sets policy, which management implements. Respective territories are sharply defined; there is little or no border traffic. Domains are decided by organization chart.
- 3. Structure of standing committees parallels administrative functions. Premium is on permanent structure, established routines. Members occupy functional niches. Board maintains busywork.
- 4. Board meetings are process driven. Protocol doesn't vary. Function follows form. Emphasis is on transmission of information and reports.
- 5. Board is a collection of stars. It recruits people with an eye to expertise and status. The CEO cultivates individual relationships and exploits each trustee's talents.

New Work

- 1. Board and management discover issues that matter, mutually determine the agenda, and solve problems together.
- 2. Board and management both set policy and implement it. Lines are blurred, borders open. Domains are decided by nature of issue at hand.
- 3. Structure of board mirrors institution's strategic priorities. Premium is on flexibility, ad hoc arrangements. Members occupy functional intersections. Board creates centers of action.
- 4. Board meetings are goal driven. Protocol varies with circumstances. Form follows function. Emphasis is on participation and action.
- 5. Board is a constellation. It recruits team members with an eye to personality and overall chemistry. Board cultivates group norms and collective capabilities of trustees.

In another example, the board of a preeminent women's college has under active consideration the creation of four "councils" (business affairs, campus affairs, external affairs, and governance and board affairs) as umbrellas for clusters of standing committees. The council on campus affairs, for example, would oversee the activities and orchestrate the annual agendas of the student-life, admissions, and trustee-faculty relations committees, which would meet only as necessary. The council chairs would coordinate the annual agendas of the four councils and suggest strategic issues for in-depth discussion at board meetings.

Task forces that include constituents and nontrustee experts can tackle critical yet discrete matters such as outsourcing certain functions or installing a total quality management program. For example, the board of an independent day school appointed two task forces to explore accreditation issues with the appropriate state and federal agencies. The task forces gathered information about demographic trends, accreditation requirements, and possible legislation that would affect independent schools. At a special Saturday session, the task forces presented their findings, the board discussed whether to seek accreditation and whether to become more selective, and the task forces disbanded. The work had been done.

Such "tissue paper" task forces (use and discard) drive the board toward real-time results, multiply leadership opportunities, and prevent longtime members from dominating standing committees. As one college's trustee confesses, "Many of our standing committees don't really shape policy or identify needs. They're an empty ritual, a burden, not an asset. In contrast, task forces are very effective. For example, we're looking at the cost and shape of a marketing plan. A task force helped the board understand the problem and recommended directions. There was a material difference in the sense of ownership."

Focus meetings on what matters. Boards are boards only in meetings, and yet meetings are where boards

underperform most visibly. Many trustees think that lack of time is the most significant barrier to a board's ability to perform the new work. In fact, the greater problem is the failure to determine what matters and to let that imperative drive the frequency, format, and duration of board and committee meetings. And if a board can meet only infrequently or for short periods, trustees should consider realistically what they can deliver. The chair, the CEO, and perhaps the executive committee should design each meeting by asking the questions, What is the purpose of this meeting? and How can we organize it to fulfill that purpose? Four common responses will help illustrate the point.

We need more background to make a decision. This answer calls for a discussion led by a moderator. Discussion sessions can engage and educate the entire board about issues facing the institution. The goal is to air views, invite questions, and consider alternatives—not to win an argument. No specific decision is on the table, and no votes are taken.

Consider the case of the college board that was generally concernedbut not sufficiently informed-about the interrelated issues of student quality, tuition charges, and financial aid. Each year, the finance committee, usually under pressure to balance the next year's budget, presented a tuition recommendation to the board. The process afforded no practical opportunity for the board to study the causes and effects of tuition increases. Last year, the board convened explicitly to learn more about the effect of tuition and financial aid decisions on enrollment and student quality, as well as on the bottom line. Subsequently, the board devised principles to govern the finance committee's recommendations for the following year. Those principles included the decision to hold institutionally funded financial aid to below 25% of overall tuition but to use grants to attract better students. The board also decided to increase average class size in order to free up resources to enhance learning partnerships, including studentfaculty research projects.

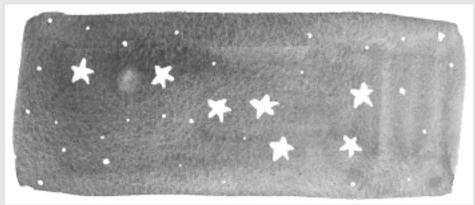
At another university, each of the board's key committees appears once a year before the whole board for a half-day session to present information on a substantive issue or special area. For example, the finance committee led a board session to explain capital budgeting, deferred maintenance, and depreciation of assets. A task force on instructional technology that included faculty and students held a panel discussion to describe the state of the art across the nation and how technology was being used on their campus to transform the learning process. As a result of such sessions, reports the chair, "The whole board becomes more knowledgeable about the issues. The old bean counters on the finance committee now see other aspects of the institution."

We don't know what to do about a current problem. The new work, by definition, grapples with complicated issues that defy easy solutions. Trustees and management must be able to present multiple perspectives and develop solutions that reflect the group's best thinking. A meeting's design is critical to making that happen. Discussion must center on the explicit question at hand, such as, What should be our top three priorities for the capital campaign? or What specific steps can the board take to improve ties to the corporate community?

Small groups create a more comfortable environment for trustees to speak freely. Says one college board member, "I may have a comment worthy of 16 ears, but not one worthy of 60." Small groups provide venues for brainstorming, arenas where there are no dumb questions or insane ideas. A board member of a midwestern university explains, "Before we added small group discussions, all 50 trustees sat passively and listened to a few people impart information. The process was superficial, and substantive participation was limited to the executive committee. Small groups allow everyone to participate genuinely."

We face a crisis. In times of crisis, business-as-usual must be pushed aside to allow the board to concentrate on the matter at hand. Crises

Focus on the Constellation, Not the Stars



Historically, the practice of most large, well-established nonprofits has been to recruit stars as board members. The assumption was that a collection of exceptional individuals would equal an exceptional board. The new work of the board cannot be done by a powerful inner circle. Instead, everyone must get involved. That will set off a chain reaction: the more trustees are involved in meaningful work, the more they will know; the more they know, the more they can contribute to the team; and the more they contribute to the team, the more likely the stars will form a constellation.

Too often, an executive committee makes all the important decisions and expects the rest of the board to comply. As one university trustee reports, "The executive committee is a little closed club of trustees who give lip service to inclusiveness but don't really practice it. It's nice, I know, to have all that control, but it's not good for the rest of the board." In those situations, trustees outside the loop of power lose interest.

To function as a team, board members need equal and timely access to information. Agendas, minutes, and background information from task force and committee meetings should be distributed to all trustees, and the board should use technology –

conference calls and E-mail – to increase timely communication. Executive-committee meetings should be open to all members of the board, and board and committee chairs should be coached to invite reticent trustees to speak, as well as to avoid premature closure of debates.

Given the collaborative character of the new work, prospective trustees should understand that governance is a collective enterprise. They should realize that the board will expect more than attendance, participation, and financial support. The holy trinity of wealth, work, and wisdom (sometimes in just that order!) that has guided the selection of trustees in the past must be changed. Says one trustee of a college in the Midwest, "The operating principle for selection was to add as many friends as you could, in the hope that some of them would turn out to be helpful. That's a poor approach."

A better approach is to engage potential trustees as members of a task force or a committee so that everyone can become better acquainted – a mutual tryout. Rather than extend an invitation to join the board based chiefly on a prospect's track record, arrange a conversation to explore the fit between the individual and the institution and its board. Some entrepreneurs, industrial captains, and self-employed profes-

sionals, for instance, are intolerant of the convoluted decision-making processes and dispersed powers characteristic of most nonprofits. Those individuals, however successful, are unlikely to be effective trustees. Board members should love the organization for what it is as well as for what they hope to make it.

The capacity for team play will be enhanced if new trustees are incorporated as swiftly as possible into the new work of the board. New recruits need to know of recent strategic decisions and current challenges. In addition, the board might accommodate the committee preferences of new trustees so that the rookies can play comfortable positions and thus gain self-confidence and respect from their peers.

A mentoring program that matches a seasoned trustee with a new trustee provides another way to foster fellowship and to engage newcomers faster. On one board, the pair are seated together for the first year so that the mentor can quietly explain the history of issues before the board, answer questions, decipher the board's unwritten rules, and debrief the new trustee after meetings. A more careful approach to the selection of trustees, combined with a mentoring program, can help a board form the constellation it needs to work at peak effectiveness.

might include the loss of a major source of funding, the sudden departure or death of the CEO, the rise of a competitor, or even a split within the board itself.

For example, a local Alzheimer's Association chapter lost a major grant in 1993 and had no immediate prospects for significant new funding. The chair called a special meeting of the board to discuss restructuring the chapter's services. A review of the mission statement reminded trustees of the organization's purpose; an examination of what it would mean to reengineer the organization helped open up discussion of key issues. By the end of the meeting, board members accepted responsibility for specific tasks to help manage the crisis: explaining the chapter's mission to potential sponsors in the community, exploring the restructuring experiences of other chapters, and examining with staff the best ways to smooth the transition to a smaller, more tightly focused organization.

We need to deal with sensitive governance issues. Executive sessions without the CEO present open lines of communication among trustees. "We have an executive session after each board meeting," says one college trustee. "We feel free to bring up anything at all. This is a time for us to really ask questions and probe." Among the questions a board might entertain in an executive session are, Did we deal with important issues? How did the meeting go? Can we better serve the CEO? Differences of opinion among trustees or between the board and the CEO can be treated more candidly in an executive session. Says one board member of a women's college in the South, "If there are sensitive

issues, the executive session gives us a chance to counsel one another."

These examples of the new work and new structures are far from exhaustive. Boards should experiment with different formats for different purposes. Use what works.

Leading the Way

Trustees protest regularly that artists, academics, physicians, and other professionals stubbornly resist change. Yet governing boards are among the least innovative, least flexible elements of many nonprofits. Boards are as reluctant to forsake committees as faculty members and physicians are to eliminate departments. Trustees resist varied formats for board meetings more than musicians resist novel formats for concerts. And board members oppose new membership criteria as strongly as teachers oppose nontraditional certification.

This hypocrisy was plain to the chair of a midwestern university's board. "It's tough for a group like this to be self-conscious. They're classic CEOs. They can tell stories about empowerment and team building, but that's not how they got where they are. They are uncomfortable with questions like How are we doing? and How should we improve? Most of our members are heavy into productivity. The board isn't hesitant to ask faculty and administrators to answer these questions. The board wants everyone else's time to be more efficient and effective, but the board should look for ways to improve, too,"

Too often, trustees assume that organizational success proves that the board has performed well, even when there is little evidence that the board played a significant role, and even when staff members say privately that the success was achieved despite the board. "Most boards have the attitude," a trustee of a women's college notes, "that if it ain't broke, don't fix it, but I think it's better to fix it before it breaks." A sympathetic explanation for the reluctance of most boards to experiment with substantial governance reforms would be the trustees' desire to do no harm. A less charitable explanation would be the trustees' desire to do no work.

Moving to the new work takes work. As the CEO of a midwestern university recounted after the institution's board had changed, "It required getting people out of their little corners, the areas that they had learned and owned. They wanted to work on what they knew best and leave the rest to others. They had to rotate around and learn everything in order to govern the organization. They've moved from being just guardians of the physical plant, overseers of the administration, and suits with deep pockets."

Boards across the nonprofit sector are calling on institutions to change. As trustees demand evidence of productivity gains, efficient processes, and enhanced outcomes, they should model the behavior they seek in others. If boards demonstrate the capacity to discard shibboleths, dismantle old structures, and desert deeply ingrained modes of operation, the professional staff may follow suit. If the board does not do the new work, the trustees' hypocrisy will be blatant, and the value added by the board will be too meager to inspire organizational reform.

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Board Governance as Leadership Summary

Based on work by Chait, Ryan & Taylor

Introduction

The "Governance as Leadership" concept reframes the way we look at Board work with a goal to raising Board work and awareness to a higher standard. By thinking about Board work under three components: Fiduciary, Strategic and Generative, Boards can address their roles and achieve results in new ways.

These three concepts of Board thinking are diagramed below as a triangle, graphically illustrating the landscape of governance. Boards typically work within a preferred position within the triangle. Ideally, a Board would be prepared to shift and to welcome different thinking approaches as the situation warrants. It's a great self-awareness for a Board to realize the variety of choices possible for their leadership and decision-making processes. This concept of thinking styles is in addition to the traditional Board functions, strengthening good practices already in place.



Generative

Many Boards in Canada are working towards updating their thinking with this fresh framing of Board work. Boards who are implementing these ideas are experiencing greater Board engagement and stronger governance, challenging our traditional approaches to Board Governance. CentrePoint has committed to bringing practical aspects of this new Board framework to non-profit organizations, in concert with tried and true Board governance practices.



Summary of the Fiduciary, Strategic & Generative Frames of Governance

Fiduciary: Focus is on "Conformance" - Control Mechanisms

Fiduciary duties and activities embrace the familiar "Board work" found on the agenda of any Board. Once ground level basic board functioning is in place, then in their Leadership role, Boards can take fiduciary governing and stewardship to new and higher levels of thought. Traditional fiduciary roles include:

- Financial oversight
- Legal responsibility and accountability to members, governments & stakeholders, including liability and risk management
- Board role as the permanent entity for the organization (even though Board membership changes)
- Trustee role on behalf of the public, ensuring effective use of resources
- Supervision of the non-profit agency through the one Board employee, the Executive Director or CEO.

Strategic: Focus is on "Performance" - Direction Setting

The Board is responsible for strategic thinking and decision making at the highest levels. Strategic thinking and wisdom can take a Board member beyond the immediate professional skills he/she brings to the table to value-added leadership in:

- Policy Making for Governance Policies
- Problem Solving
- Strategic Planning
- Strategic Decision Making (different from the planning role)

Generative: Board thinking leading to Organizational Robustness – Sense Making

Working in concert with the CEO, generative thinking invites Boards to take a fresh look at opportunities and challenges from a broader perspective. Using knowledge and data plus Board insight, generative leadership provides long term impact and meaning to the non-profit organization by creating a fresh understanding of complex and ambiguous situations. This activity is called "sense-making" or "problem-framing". "When you put it that way, it makes sense".

Generative thinking is characterized by:

- Noticing cues and clues.
- Looking at an issue from different perspectives and viewpoints.
 Reorganizing data into patterns, seeking different frames of reference.
- Thinking retrospectively to uncover patterns and to recognize the compelling organizational stories and history.

Generative thinking is the fun part of governance bringing a deeper meaning and value to Board service. Board members are great resources. They have the passion for the mission combined with objectivity and distance. Their reflections can provide incredibly valuable insight. Too often, decisions come to the Board packaged, digested and all that's left is official Board approval. For major turning points, the Board needs to be involved when the issue is at the level of "Wow, we need to work on this".

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Example:

"Keep it Cool" (KIC) is a small, imaginary charity with a mission to protect and rehabilitate wildlife at environmental spill sites. The hot Board topic this month is the cost over-runs on the cages and equipment to manage wild animals for cleanup. Supplier costs have doubled in the last year and equipment life cycle issues mean upcoming costly repairs on aging equipment. In addition, KIC is being called to an unprecedented number of river pollution/spills in the region. No one had anticipated this.

Fiduciary Discussion: What's the budget for this expense? What can we do within the existing budget? Will we have to cut off our services earlier this year if we no longer have money for supplies? What is our life cycle plan for equipment replacement? Are we getting negative press over our failing services? Why did we not anticipate this?

Strategic Discussion: Is this program a major part of our strategy? Assuming it is, should we be approaching our funder to request additional funds? What are the consequences of going into debt to meet our major strategic initiative this year? If we have to cut off our services early this year for lack of budget, what's plan "B"? How can we position ourselves to meet our mission while keeping an eye on the finances?

Generative Discussion: Why does there seem to be a higher incidence of spills near wildlife corridors? Are the polluting companies even aware that they are on major wildlife corridors? Do we need to have a wildlife awareness program for the polluting companies on wildlife corridors? What are the possible reasons for this sudden increase in pollution? Do we have a role at the municipal planning level?

Summary of Board Behaviour in these forms of Leadership

	Fiduciary	Strategic	Generative
Key Question	"What's wrong?"	"What's the plan?"	"What's the question?"
Board Focus	Define problems Review performance	Solve problems Shape strategy	Frame problems Engage in sense-making
Board Process	Parliamentary procedure	Logical and empirical discussion	More informal and creative
Problems are to Be	Spotted	Solved	Framed
Decision Making	Resolution	Reaching consensus	Framing the question
Board Sees Their Role As	Oversight & authority	Strategist	Fresh perspective
Performance Metrics	Facts, figures, finances, reports	Strategic Indicators, competitive analysis	Signs of learning and discerning

Adapted from: Governance as Leadership: Reframing the Work of Nonprofit Boards. Chait, Ryan & Taylor.



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ACRL Board Ground Rules

Approved Midwinter 2017

- 1. Accept mutual responsibility for quality of meeting and assess effectiveness.
- 2. Be present, attentive, engaged and prepared.
- 3. Avoid side conversations.
- 4. Encourage candor and be forthright in communication.
- 5. Speak up if you have a question or to test assumptions.
- 6. Listen actively and differ respectfully.
- 7. Signal conclusion, identify next steps, and make clear assignments.
- 8. Encourage/Give everyone an opportunity to talk.
- 9. Make knowledge-based decisions using these four questions:

4 Questions for Knowledge-Based Decision Making

- 1. What do you know about our members/prospective members/customers—needs, wants, and preferences, that is relevant to this decision? *
- 2. What do we know about the current realities and evolving dynamics of our members' marketplace/industry/profession that is relevant to this decision?*
- 3. What do we know about the capacity and strategic position of our organization that is relevant to this decision?*
- 4. What are the ethical implications of this decision?

^{*}What do you wish that you knew, but don't?



ACRL Board Social Media Guidelines

Approved Fall Board Meeting – October 19, 2016

This document addresses ACRL Board members' use of their personal social media accounts in sharing information from Board meetings and events.

1. Purpose

Social media offers an opportunity for the ACRL Board to increase two-way communication with members. As such, we recognize the importance of social media not only for sharing information and updates, but in contributing towards greater transparency and member engagement.

2. Guidelines

Board members who engage with social media agree to do so in a professional manner and to act in accordance with the Board's Ground Rules, which are reviewed and updated each year at the Strategic Planning and Orientation Retreat. The following guidelines are intended to assist Board members in determining what type of social media posts are appropriate. Board members may:

- a. use their personal social media accounts to share Board information;
- b. not share information from closed or executive sessions of the Board;
- c. share objective facts without including personal opinions;
- d. include general summaries of Board discussions without including specific comments or attributing those comments to individual Board members;
- e. report on action items;
- f. leverage social media to gather feedback from members.

3. Responsibilities

Board members who choose to share Board information on social media are responsible for following member responses and closing the feedback loop, as follows:

- a. Twitter posts should use the #acrlboard hashtag, along with any individual hashtag(s) for specific discussions.
- b. Board members initiating discussion on social media should summarize and report member responses back to the Board promptly.
- c. Board members initiating discussion on social media should report back to responding members with the results of the discussion.





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www.acrl.org

Plan for Excellence

Association of College & Research Libraries

Approved April 20, 2011 • Effective July 1, 2011 Reaffirmed September 2013. Revised October 2017

Preamble

The strengths and capacities of ACRL have enabled the association to sustain exemplary programs and results for its members and to shape policies and practices of vital interest to higher education. ACRL's Plan for Excellence continues that path and focuses attention on four areas that capitalize on our strengths, deliver high member value, and heighten our impact:

- Value of Academic Libraries
- Student Learning
- Research and Scholarly Environment
- New Roles and Changing Landscapes

These strategic areas will be supported by financial and operational planning, and will guide the development and implementation of programs and services that target education, advocacy and member engagement.

ACRL's leadership views strategic thinking and planning as an ongoing process. Adoption of this plan for excellence affirms the general intent and direction articulated by the association's core ideology, envisioned future, shorter-term goals, and objectives. Progress will be assessed annually and will guide the operational planning process. The plan for excellence will be updated based on achievement of the goals and their continued relevance as new needs and opportunities arise.

Timeless Core Ideology

Core Purpose

To lead academic and research librarians and libraries in advancing learning and scholarship.

Core Organizational Values

ACRL is committed to:

- visionary leadership, transformation, new ideas, and global perspectives
- exemplary service to members
- equity, diversity, and inclusion
- integrity and transparency
- continuous learning
- responsible stewardship of resources
- the values of higher education, intellectual freedom, the ALA Ethics policy, and "The Library Bill of Rights"

Long-term Envisioned Future

Vision

Academic and research librarians and libraries are essential to a thriving global community of learners and scholars.

Vivid Description of a Desired Future

ACRL elevates the position, recognition, and impact of all academic and research libraries and librarians as catalysts in exceptional research and learning. College and university students are information literate, informed scholars and citizens who value the opinions, perspectives, and experiences of others. Facile use of information sources and discovery techniques enables them to succeed in their coursework and future careers; preparing them to lead new national and global initiatives. Partnering with academic librarians to collect and organize research data, faculty break new ground in their respective fields. Academic libraries, constantly transforming to meet the evolving needs of their campuses, are central to educational and research efforts. Academic libraries are equitable communities that promote diversity by ensuring that every member feels they have a rightful place, is welcome and respected, and is supported in their intellectual dialogues and pursuits. Librarians and their colleagues design inclusive services that provide scholars and learners the unfettered ability to create, access, evaluate, and use knowledge on a global scale.

Five-Year Goals and Objectives

Value of Academic Libraries

Goal: Academic libraries demonstrate alignment with and impact on institutional outcomes.

Objectives:

- 1. Cultivate research opportunities that communicate the impact of academic and research libraries in the higher education environment.
- 2. Promote the impact and value of academic and research libraries to the higher education community.
- 3. Expand professional development opportunities for assessment and advocacy of the contributions towards impact of academic libraries.
- 4. Support libraries in articulating their role in advancing issues of equity, access, diversity, and inclusion in higher education.

Student Learning

Goal: Advance innovative practices and environments that transform student learning. *Objectives:*

- 1. Challenge librarians and libraries to engage learners with information literacy skills in a way that is scalable and sustainable.
- 2. Increase the impact of information literacy by forming strategic partnerships with relevant higher education organizations.
- 3. Build capacity for librarians to collaborate with faculty and other campus partners in instructional and curricular design and delivery that will integrate information literacy into student learning.
- 4. Articulate and advocate for the role of librarians in setting, achieving, and measuring institutional learning outcomes.

Research and Scholarly Environment

Goal: The academic and research library workforce accelerates the transition to more open and equitable systems of scholarship.

Objectives:

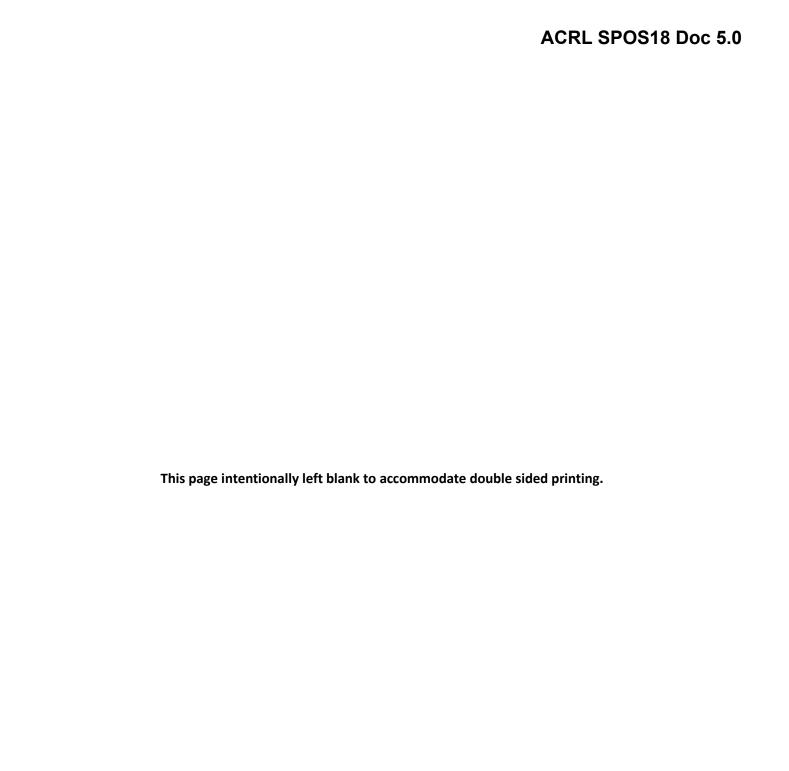
- 1. Increase the ways ACRL is an advocate and model for open dissemination and evaluation practices.
- 2. Enhance members' capacity to address issues related to scholarly communication, including but not limited to data management, library publishing, open access, and digital scholarship.
- 3. Increase ACRL's efforts to influence scholarly publishing policies and practices toward a more open and equitable system.

New Roles and Changing Landscapes

Goal: Academic and research library workforce effectively navigates change in higher education environments.

Objectives:

- 1. Deepen ACRL's advocacy and support for a full range of information professionals.
- 2. Equip library workforce at all levels to effectively lead, manage, and embrace change.
- 3. Expand ACRL's role as a catalyst for transformational change in higher education.



ACRL Planning Cycle at a Glance – (revised 6/11/13)

See ACRL Planning Cycle and Deadlines document for detailed task information and dates

All Committees

Goal Area

Board

Staff Liaisons

*also responsible for All Committees tasks

June - Annual Conference (AC)

All Committees: Review Year-End Report and brainstorm ideas for next year's work plan

Goal Area Committees (GAC) also:

- Participate in Board Meeting
- Review multi-year planning grid

Full Board: Discuss Plan for Excellence: KPIs, multi-year planning prep, gap analysis prep and approve next year's budget

July

All Committees: Draft and submit Annual Work Plans based on AC discussion

GAC also:

• Update multi-year planning grid

Staff:

- Aid in work plan development in consultation with Board liaison
- Coordinate strategic goal area activities

Board Liaisons:

- Review drafts in consult with staff liaison
- Coordinate strategic goal area activities as needed

May

All Committees: Complete work plans

- Draft year-end report of activities
- Draft AC agenda

Staff:

Submit Q4 KPI data

Board: Host Leader Orientation **Board Exec Committee:** Attend Spring Exec. Meeting

February - April

All Committees: Carry out work plans

Staff:

Submit Q3 KPI data

January - Midwinter (MW)

All Committees: Carry out work plans

GAC also: Participate in Board Meeting

Full Board: Meets to discuss Plan for Excellence initiatives

December

All Committees: Carry out work plans and submit Midwinter agenda

GAC also: Submit MW Report

Staff: Submit Q2 KPI data

August

All Committees: Annual work plans finalized

GAC also: Complete Multi-year planning grid

Staff:

- Update strategic initiative planning grid
- Draft Key Performance Indicators (KPIs) for enabling programs & services
- Compile CoPA Plan for Excellence Imp. Reports

President and Goal Area Committee Board Liaisons:

- Conduct high-level review of strategic initiative planning grid & annual work plans
- Prepare for SPOS gap analysis

All Board Liaisons:

Approve Annual Work Plans

October and November

All Committees: Carry out work plans

Staff:

Submit Q1 & Q4 KPI data

Board Exec Committee

- Attend Fall Exec
- Approve budget assumptions

Sept.- Strategic Planning & Orientation Session

All Committees: Carry out work plans

GAC also: Chairs and VC attend SPOS Revise Work plan if needed

Staff: Attend SPOS

Full Board: Discuss multi-year planning grid, and conduct gap analysis



DIVISION-LEVEL COMMITTEE ANNUAL WORK PLAN TIMELINE

Overview

The purpose of the division-level committee annual work plan process is to align division-level committee work with the committee's charge and the ACRL strategic plan. This process also facilitates improved communication between the Board and its committees. Standardized planning practices also improve efficiency, provide greater continuity, and assist Board and staff liaisons in providing support to committees.

In order to ensure that ACRL has concrete plans in place to realize the current strategic plan and provide Committee leaders with clear leadership, the ACRL Board of Directors expects all ACRL division-level Committee chairs and vice-chairs to complete an annual work plan on behalf of their committee. The work plans detail the committees planned tasks for the membership year beginning immediately after the summer ALA Annual Conference Meeting and report on the accomplishments of the current year. Committee chairs and vice-chairs draft annual work plans in collaboration with their Board and staff liaisons before the ALA Annual Conference.

Committee leaders are encouraged to engage all committee members in discussion of the draft annual work plans at their Annual Conference meeting or similarly timed virtual meeting. Board liaisons are responsible for providing committees with feedback and may consult with staff liaisons and the Executive Committee. The Executive Committee is responsible for reviewing annual committee work plans as a collective to review the association's overall planned advancement of the strategic plan.

In addition, ACRL's four goal-area committees: Value of Academic Libraries, Student Learning and Information Literacy, Research and Scholarly Environment Committee, and New Roles and Changing Landscapes are asked to develop multi-year plans and customized report to ensure ACRL has a plan to address all of its objective overtime.

The Board shares annual committee work plans as informational documents publicly online and with the Budget and Finance Committee to ensure the committee is appropriately informed to fulfill its charge. Division-level committees have \$150 of basic services funding available annually. If additional funds are required, committees may request funding from the Board using the Board Action process. The Board will review funding requests received and may allocate funds included in the current budget or authorize an expenditure of the ACRL net asset balance.

Throughout the year, Board liaisons remain informed of the committee progress and assist in supporting the committee as needed/appropriate.



From: tondrla@ala.org <tondrla@ala.org>
Sent: Tuesday, September 18, 2018 3:36 PM

To: Tory Ondrla < tondrla@ala.org; Margot Conahan < mconahan@ala.org;

Subject: TEST: ACRL 2019 Special Offer for Speakers



Hello,

Congratulations again on your acceptance to ACRL 2019. We look forward to your contribution to the program and thank you in advance for your hard work in preparation.

In considering our conference theme of *Recasting the Narrative*, we're offering you the opportunity to *recast* your presentation! **If you have yet to do so, please join us in intentionally seeking out more diversity (e.g., gender/expression, racial and ethnic, sexual orientation, age, ability, geography and/or type of institution) in your speakers.** Consider reaching out to someone outside of your own network and asking them to join you in presenting. Mindfully seek out individuals with expertise on your subject area who may not have presented previously*.

To help you and your potential new speakers (and with appreciation for those of you that have already done so!), we're **extending the ACRL early bird member rate to ALL speakers for the months of October and November! Simply use the code** "CLESPEAKER" when you register. We look forward to seeing you at ACRL 2019 in Cleveland, *Recasting the Narrative*!

Sincerely, Trevor A. Grigoriev Dawes ACRL 2019 Conference Chair tadawes - social media http://orcid.org/0000-0001-9923-4648

PS * To add speaker(s) in the Speaker Service Center, click Session Edit in the left-hand nav, then click on your proposal title. Scroll to the bottom of the page, and click on the button to add speakers. Enter their last name to search the speaker database. You can either select them if they already exist in the system, or click the "Add New Speaker" button if you need to create their record.

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Are you looking for ways to expand your professional network and contribute to ACRL? Committee volunteers help shape ACRL by advancing its strategic plan and influencing the direction of academic and research librarianship. Serving on a committee or editorial board is a great way to become involved and make an impact on the profession.

If you'd like to become more engaged, ACRL Vice-President/President-Elect Lauren Pressley invites you to volunteer to serve on a 2018-2019 division or section committee.

The ACRL committee volunteer form for section and division-level appointments is now open!

If you wish to be considered for a committee appointment, complete the ACRL volunteer form by February 15, 2018. For more information and a link to the volunteer form, visit the **ACRL website**.

Questions about the ACRL appointment process? Please join the ACRL Membership Committee on Wednesday, December 13, 2017, at 1 pm CST, for an **online discussion** on how the ACRL appointment process works for division-level committees, sections, interest groups, and discussion groups.

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Volunteer for the New ACRL Academic Librarians Standards and Guidelines Review Task Force

July 11, 2018 Allison Payne About ACRL, Standards, Guidelines, and Frameworks 0

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The ACRL Board of Directors, at its June 23, 2018, meeting, in New Orleans at the ALA Annual Conference, approved the establishment of the ACRL Academic Librarians Standards and Guidelines Review Task Force to review the proposed <u>Guidelines for Academic Librarian</u> <u>Employment and Governance Systems</u>, to consider the <u>recommendations</u> of a previous task force, to solicit input from a broad group of stakeholders, and to ensure that revisions include readily identifiable procedures for both librarians without faculty status and those with faculty tenure-track appointments. ACRL President Lauren Pressley invites you to volunteer to serve on this newly created task force. If you wish to be considered for an appointment, please review the information below and complete the <u>web form</u> by 5:00 p.m. Central on July 31, 2018.

Charge: The Task Force, following the procedures for the review of standards found in the ACRL Guide to Policies and Procedures, Chapter 14, and pertaining to the six documents from the charge of the original Task Force, is established to: (1) review the work and recommendations of the previous Task Force, (2) recommend changes in text or direction in the work of the previous Task Force as needed, focusing on ease of use of the proposed Guidelines for Academic Librarian Employment and Governance Systems along with specificity on and inclusiveness of non-tenure track faculty procedures in the document, (3) produce a draft document incorporating these changes, (4) seek wide ranging comments and input from stakeholder communities and the general ACRL membership, and (5) incorporate, as appropriate, those recommendations into a final draft, including clearly highlighting revisions to previously existing documents and new content in the guidelines.

Timeline:

• **Date interim report is due:** Interim reports are due to the ACRL Board of Directors at the Fall 2018 Executive Committee Meeting and the 2019 ALA Midwinter Meeting.

• **Date final report is due:** The final document should be submitted for ACRL Board approval within six months of the draft being circulated for comment and no later than the 2019 ALA Annual Conference.

Composition:

- (2) representatives from community/junior college libraries
- (2) representatives from college libraries
- (2) representatives from university/research libraries
- (1) representative of Standards Committee
- (1) board liaison
- (1) staff liaison
- Additional appointments at the discretion of the President/President-elect

The deadline to volunteer for the Academic Librarians Standards and Guidelines Review Task Force is July 31! If you wish to be considered for appointment, complete the <u>web form</u> on the ACRL website (ALA website log-in required).

Note: Due to the timeline of this task force, the process is separate from the annual division-level and section appointments. Information on those appointments will be posted in December.

Equity, Diversity, and Inclusion: ACRL Case Studies and Discussion Questions

How/should EDI be appropriately represented in ACRL curricula?

Scenario A: A member, who had participated in several ACRL professional development events wrote to ACRL and expressed concern that instructors did not mention, "racism as a social construct that works as an institutional structure. Not one of the instructors had the language to talk about white supremacy or white privilege and how that impacts both our experience as instructors and shapes the experience of the students we serve." Although asked to think about our own institutions and contexts, "colonization nor the genocide and displacement of indigenous people" were not mentioned. Instructors should have some language around challenging librarians to think about where they are, and how their institutions came to be." This individual went on to say that "the ACRL Instructors are going around the nation and world but are not talking about the social construct of racism, and the impact white supremacy and white privilege have in have in higher education. Given the political climate of the day, this stance is not only irresponsible, quite frankly it is dangerous." "There is a gaping hole in the way that your curriculum is delivered. The silence around racism as a structure is galling to participants like myself."

Scenario B: At a recent digital library training seminar, participants staged an intervention. They developed a statement and set of questions about race as a foundational social framework and visited each class in person to deliver the document. They asked each instructor to consider the document in the context of their course, to discuss it with students, and to frame a response outlining how they intended to address this in their teaching. Instructors and fellow students responded variously. Some were enthusiastic and energized. Others were confused, offended, or frustrated that their class time was disrupted. Many people on all sides of the conversation shared their comments on Twitter.

Leaders do your own work

Scenario c: An academic librarian of color Tweeted that she was asked by a Dean at another institution to provide citations in support of an EDI project that could have been located via research. The Dean in question identified herself in the subsequent Twitter thread and apologized for taking this approach and appearing to attempt to transfer the work of EDI knowledge to the librarian of color.

Discussion Questions:

- 1. How can ACRL help instructors, facilitators, and providers/developers of ACRL content to be prepared to respond to these concerns?
- 2. How can ACRL help instructors, facilitators, and providers/developers of ACRL content to "walk the talk" of proactively addressing these issues and avoiding expectations that underrepresented colleagues will do this work?
- 3. Can ACRL develop a shared vocabulary and framework of understanding around race, to avoid individual instructors having to "reinvent the wheel" by setting their own norms and expectations every time? Shared vocab and framework would also help create consistency across the ACRL experience.
- 4. Should ACRL consider offering (through subcontracting or developing its own) pedagogical or theoretical training for anyone presenting ACRL materials?
- 5. As EDI is a signature initiative, what responsibility does ACRL have for ensuring that content such as this is included in ACRL curricula?
- 6. If included, what resources does ACRL need to provide to ensure coverage?
- 7. Would this apply to every PD event, e.g., one hour webinars to multi-day workshops?

Volunteer for an ACRL Committee

Are you looking for ways to expand your professional network and contribute to ACRL? Committee volunteers help shape ACRL by advancing its strategic plan and influencing the direction of academic and research librarianship. Serving on a committee is one of the best ways to become involved and make an impact on the profession. If you'd like to become more engaged, ACRL Vice-President/President-Elect Lauren Pressley invites you to volunteer to serve on a 2018-19 division or section committee.

Want to learn more about the ACRL appointment process? On Wednesday, December 13, 2017, at 1 pm CST, the ACRL Membership Committee hosted a webcast on how the ACRL appointment process works for division-level committees, sections, interest groups, and discussion groups. The session was recorded and is available here (https://youtu.be/7l1UhGkOmtY).

The link to the volunteer form is included at the end of this page.

Rewards of volunteering

Volunteers benefit by:

- Building ties with academic and research librarians around the country,
- enhancing their leadership abilities through consensus building and project management,
- · sharing their experience with colleagues,
- developing new expertise or updating knowledge in a current specialization, and
- · advancing the work of the association and the profession.

Volunteer requirements

Certain criteria must be met in order to serve on an ACRL committee. Volunteers must:

- be a member of ALA and ACRL for the duration of the appointment,
- · be willing and able to participate in the activities of the committee, support its mission or concern, and carry out assignments in a timely manner, and
- submit an electronic appointment acceptance form.

Please limit your selections to a maximum of three committees, not including editorial boards.

Additionally, committee members should be aware of ACRL's Conflict of Interest Policy (http://www.ala.org/acrl/resources/policies/chapter15#15three), which can be seen in the ACRL Guide to Policies and Procedures, chapter 15.3.

Appointment Process

Most of these appointments are made in the spring for terms beginning immediately after the ALA Annual Conference.

Division Committees (/acrl/aboutacrl/directoryofleadership/committees): The Appointments Committee recommends to the president-elect of ACRL the names of members who might be suitable to fill the vacancies. The vice-president/president-elect makes the final appointments for the committees.

Volunteer for an ACRL Committee | Association of College & Research Libraries (ACRL)

ACRL SPOS18 Doc 14.0

Editorial or Publication Advisory Boards (/acrl/aboutacrl/directoryofleadership/editorialboards/ebs): The editors or chairs of editorial or publication advisory boards recommend to the Publications Coordinating Committee individuals to fill vacancies. The Publications Coordinating Committee is responsible for approving appointment recommendations and the vice-president/president-elect extends the appointment offer.

Sections (/acrl/aboutacrl/directoryofleadership/sections): Section vice-chairs appoint the members of section committees.

Deadline

The online volunteer form must be completed by February 15, 2018, for consideration for 2018-19 appointments. Most terms begin July 1, 2018.

Questions

For more information, please refer to Volunteer & Appointment Process and Member Service on ACRL Committees (/acrl/membership/volunteer/applicationprocess).

Questions about division-level appointments may be directed to the chair of the Appointments Committee. Catherine Soehner, Associate Dean for Research and User Services, University of Utah, E-mail: catherine.soehner@utah.edu (http://catherine.soehner@utah.edu).

Questions about section appointments may be directed to the vice-chair of each section. Full contact information is available from the section landing page (/acrl/aboutacrl/directoryofleadership/sections).

Questions about the form may be directed to Allison Payne at apayne@ala.org (mailto:apayne@ala.org) or Megan Griffin at mgriffin@ala.org (mailto:mgriffin@ala.org).

Volunteer Now (click here) (http://www.ala.org/CFApps/volunteer/form.cfm)

(You will have to log in to access the volunteer form and may need to refresh or revisit the link once logged in. Volunteer site works best in Internet Explorer, Firefox, and Safari)



Division-level Committee Year-end Report and Work Plan Template

Committee

Visit the <u>ACRL Directory of Leadership</u> to find your charge.

Committee Name: Diversity Committee

Charge/Tasks: To initiate, advise and mobilize support for appropriate action related to issues of diversity in academic librarianship including recruitment, advancement and retention of underrepresented groups to academic and research librarianship and the promotion of library and information services for diverse library users.

Committee leadership

Visit the <u>ACRL Directory of Leadership</u> to find your committee roster. Click the "Next Year" link to view 2017–18 roster information.

- Current Chair (2017–18): Tarida Anantachai
- Incoming Chair (2018–19): Federico Martínez-García, Jr.
- Incoming Vice-chair (2018–19): Mark Puente
- Incoming Board Liaison (2018–19): Faye Chadwell
- Staff Liaison: Ann-Christe Galloway

Submission information

Year-end report written by: Tarida Anantachai

Work plan submitted by: Federico Martínez-García, Jr.

2017-18 Year-end Committee Report

This report will be included in the Committee's official record of activities maintained by the ACRL staff.

What were the major projects/activities accomplished by your committee in the 2017–18 membership year?

A brief bulleted list is suggested here; reference 2017–18 work plan projects

- Continued the revision of Diversity Standards from previous work plan as an ongoing project.
- Collaborated with ACRL University Libraries Section (ULS) Conference Program Planning Committee to submit a joint proposal, and later coordinate the accepted program for 2018 ALA Annual Conference, "Making the Case for Diversity: Grassroots Leadership as a Catalyst for Change."
- Worked with ACRL Board Liaison to make recommendations on the incorporation of equity, diversity, and inclusion (EDI) within ACRL's revised Plan for Excellence.
- Collaborated with ACRL Professional Values Committee Chair to lead a discussion and feedback-gathering session on EDI at 2018 ALA Midwinter Meeting's ACRL Leadership Council session.
- Collaborated with ACRL Board EDI Working Group to analyze responses gathered from the
 aforementioned ACRL Leadership Council session to identify key points for the follow-up <u>ACRL EDI</u>
 Signature Initiative survey.
- Provided feedback for EDI-related lightning round topics for the <u>ACRL/ARL Symposium for Strategic Leadership in Diversity, Equity, and Inclusion</u>.
- Continued the ongoing revisions of the ACRL Diversity Standards from the previous work plan.
- Continued to participate on the ACRL Diversity Alliance Task Force.
- Updated the <u>list of other diversity-related committees and resources on the ACRL Diversity</u> Committee's website.

How did you go about getting them done?

A brief bulleted list is suggested (correspond bullets to those above)

- Established two subcommittees focused on revising the Diversity Standards and on programming/outreach.
- Continued liaison role between the ACRL Diversity Committee and the ACRL Diversity Alliance Task
 Force.
- Invited ACRL Board Liaison to participate in committee meetings to provide updates on the various EDI
 initiatives noted earlier. Continued to share communications and solicitations for committee feedback
 via e-mail between meetings.
- Hosted two meetings at the ALA Midwinter Meeting and ALA Annual Conference, as well as two virtual committee meetings.
- Proposing conference presentation on the work the committee had done and planned on doing regarding the revision of the Diversity Standards.

What were the relevant results for your projects?

A brief bulleted list is suggested that includes assessment as appropriate (correspond bullets to those above). Be as specific as possible. For example: 300 proposals/applications reviewed, 32 selected; Developed and conducted three podcasts (list podcast titles, speakers, etc.) Reviewed ten standards and guidelines (list titles)

- Continue working with Diversity Standards committees on developing a process to revise the Diversity Standards.
- Held two virtual meetings along with a hybrid meeting at ALA Annual and ALA Midwinter.
- Cosponsored a joint program with ACRL ULS on EDI at the 2018 ALA Annual Conference.
- Directly contributed to the ongoing efforts of the ACRL EDI Signature Initiative.
- Directly contributed to the program of the ACRL/ARL Symposium for Strategic Leadership in Diversity, Equity, and Inclusion.

Are any 2017–18 projects ongoing?

A brief bulleted list is suggested here

- Continue with the process of revising the Diversity Standards.
- Continue developing additional programming and outreach opportunities.

What worked well?

A brief bulleted list is suggested here

- The commitment of all of the committee members working within the various sub-groups and as an entire committee.
- The commitment shown to diversity by the Board liaison to attend all of the face-to-face meetings and provide updates and support to the committee.

What could have worked better?

A brief bulleted list is suggested here

- Holding more virtual meetings along with a hybrid meeting for ongoing communication and milestone check-ins.
- The committee attempted to revise all of the Diversity Standards all at once in one year.

How has the work/activities of your committee demonstrated commitment to equity, diversity, and inclusion, within or beyond ACRL?

A brief bulleted list is suggested here

• The focus, charge, and activities of this committee has long been aligned with advancing diversity, equity, and inclusion in our profession and for our libraries. The major projects/activities noted listed at the beginning of this report are just a few examples of this, from our work on the Diversity Standards to our role in contributing to ACRL's revised Plan for Excellence, etc.

What do you wish someone had told you before starting work on this committee? Optional

• The Diversity Committee needed to be in communication with the Standards Committee regarding any revisions being recommended by the committee. Also, the revision timeline for all of the ACRL standards is five years, which the committee was not aware of.

What made this work most rewarding (observations/comments/accolades)? Optional

- The outstanding commitment of the committee members.
- The opportunity to collaborate with other groups on programming and advising on ACRL EDI initiatives.

Any other comments, recommendations, or suggestions?Optional

- The standards need to include contemporary theories and current applications across various institutions. This requires a discussion on bandwidth and expertise within the committee, as well as a discussion on the sequence and process of revision. The expectation is to submit revision recommendations to the ACRL Standards Committee every five years. Since the diversity standards were approved by the board in 2012, they are up for renewal this year. There is a need to bring in more people with expertise into the revision process.
 - One recommendation is to organize the standards by themes and revise a few standards a year based on a theme. The committee can also host a virtual or face-to-face working session with experts where participants and bring in and share ideas based on the theme.

2018-19 Committee Work Plan

Activity/Project Name #1

Diversity Standards Revision Plan

Brief Description

Continue the revision of Diversity Standards from previous work plan.

Goal Area

Select the *single* best connection to the <u>ACRL Plan for Excellence</u> and provide a brief sentence connecting your project to the Plan.

☑ Value of Academic Libraries
\square 1. Cultivate research opportunities that communicate the impact of academic and research libraries in the higher education
environment.
\square 2. Promote the impact and value of academic and research libraries to the higher education community.
\square 3. Expand professional development opportunities for assessment and advocacy of the contributions towards impact of
academic libraries.
△ 4. Support libraries in articulating their role in advancing issues of equity, access, diversity, and inclusion in higher education
☐ Student Learning
\square 1. Challenge librarians and libraries to engage learners with information literacy skills in a way that is scalable and sustainable.
\square 2. Increase the impact of information literacy by forming strategic partnerships with relevant higher education organizations.
 3. Build capacity for librarians to collaborate with faculty and other campus partners in instructional and curricular design and delivery that will integrate information literacy into student learning.
 4. Articulate and advocate for the role of librarians in setting, achieving, and measuring institutional student learning outcomes.
☐ Research and Scholarly Environment
\square 1. Increase the ways ACRL is an advocate and model for open dissemination and evaluation practices.
☐ 2. Enhance members' capacity to address issues related to scholarly communication, including but not limited to data
management, library publishing, open access, and digital scholarship.
☐ 3. Increase ACRL's efforts to influence scholarly publishing policies and practices toward a more open and equitable system
□ New Roles and Changing Landscapes
☐ 1. Deepen ACRL's advocacy and support for a full range of information professionals.
☐ 2. Equip library workforce at all levels to effectively lead, manage, and embrace change.
☐ 3. Expand ACRL's role as a catalyst for transformational change in higher education.
Demonstrating Commitment to Equity, Diversity, and Inclusion within ACRL and/or the Profession.
☐ Enabling Programs and Services (education, advocacy, publications, or member engagement)
Brief sentence connecting your project to the Plan
A revised set of diversity standards would better support libraries that want to focus on issues of equity, access,
diversity, and inclusion within its institution.
Timeline
\square continuous project assigned in charge
\square short-term project that will be completed this membership year
☑ multi-year project continuing past this membership year (expected completion date: TBD)

Outline the steps and intermediate deadlines planned to complete the project.

Specific Action	Due Date	Party Responsible	Resources Needed (e.g., financial*, technology, staff support)
Create proposal for ALA 2019, presenting committee' Standards work and ask for feedback.	August 2018	Chair, Vice-Chair primarily but including all committee members.	
Create proposal for ACRL 2019, possibly on practical applications of incorporating the Standards across various institutions.	October 2018	Chair, Vice-Chair primarily but including all committee members.	
Continue evolving the revision process to the Diversity Standards, including establishing sequence of event, organizing Standards by themes, etc.	December 2018	Entire committee	
Plan a virtual working session with external experts where participants can bring based on Standards themes.	January 2019	Entire committee	Invite representatives from other related groups (roundtables, ethnic affiliates, etc.)
Submit revision recommendations to themed standards to the ACRL Standards Committee for review.	June 2019	Entire committee	

Assessment: How will success be measured?

Feedback will be solicited from concerned sessions attendees, roundtables and ethnic affiliates (e.g. through in person, virtual working session or other individual solicitations for feedback). Longer term success will be measured by revision recommendations presented to ACRL Standards Committee and eventual adoption of the revised standards into library practice.

Activity/Project Name #2

Collaborate with the Board's Strategic Planning in identifying topics on equity, diversity, and inclusion.

Brief Description

Collaborate with Board's Strategic Planning on ACRL initiatives on equity, diversity, and inclusion and how we can define a signature initiative around EDI as well as develop specific strategies for helping members with EDI.

Goal Area

Select the *single* best connection to the <u>ACRL Plan for Excellence</u> and provide a brief sentence connecting your project to the Plan.

□ Value of Academic Libraries
☐ 1. Cultivate research opportunities that communicate the impact of academic and research libraries in the higher education environment.
\square 2. Promote the impact and value of academic and research libraries to the higher education community.
☐ 3. Expand professional development opportunities for assessment and advocacy of the contributions towards impact of
academic libraries.
☐ 4. Support libraries in articulating their role in advancing issues of equity, access, diversity, and inclusion in higher education
☐ Student Learning
 1. Challenge librarians and libraries to engage learners with information literacy skills in a way that is scalable and sustainable.
\square 2. Increase the impact of information literacy by forming strategic partnerships with relevant higher education organizations.
 3. Build capacity for librarians to collaborate with faculty and other campus partners in instructional and curricular design and delivery that will integrate information literacy into student learning.
 4. Articulate and advocate for the role of librarians in setting, achieving, and measuring institutional student learning outcomes.
☐ Research and Scholarly Environment
\square 1. Increase the ways ACRL is an advocate and model for open dissemination and evaluation practices.
☐ 2. Enhance members' capacity to address issues related to scholarly communication, including but not limited to data
management, library publishing, open access, and digital scholarship.
☐ 3. Increase ACRL's efforts to influence scholarly publishing policies and practices toward a more open and equitable system.
 □ New Roles and Changing Landscapes □ 1. Deepen ACRL's advocacy and support for a full range of information professionals.
☐ 2. Equip library workforce at all levels to effectively lead, manage, and embrace change.
☐ 3. Expand ACRL's role as a catalyst for transformational change in higher education.
☑ Demonstrating Commitment to Equity, Diversity, and Inclusion within ACRL and/or the Profession.
☐ Enabling Programs and Services (education, advocacy, publications, or member engagement)
Brief sentence connecting your project to the Plan
Directly engaging in these related initiatives would help to support ACRL's ongoing diversity and advocacy efforts on a
national level.
Timeline
☐ continuous project assigned in charge
☐ short-term project that will be completed this membership year

ACRL SPOS18 Doc 15.0

Note: Multi-year, strategic goal-area projects are tracked in a multi-year planning grid. Expect your staff liaison to follow-up with questions to add this project to ACRL's multi-year planning grid which is reviewed by the Board at its fall Strategic Planning Session and referenced for budget preparation.

Outline the steps and intermediate deadlines planned to complete the project.

Specific Action	Due Date	Party Responsible	Resources Needed (e.g., financial*, technology, staff support)
Gather feedback from committee to define priority topics to bring to the Board's Strategic Planning Session.	October 2018	Entire committee	
Participate in person in Board's Strategic Planning Session.	October 2018	Chair and Vice-Chair	
Share insights to Diversity Committee to start planning next steps.	November 2018	Chair and Vice-Chair	
Work on next steps for the Diversity Committee.	Continuous	Entire committee	

Assessment: How will success be measured?

Feedback will be continually solicited from the appointed liaisons of these group, such as during the Diversity Committee's meetings and other communications.

Activity/Project Name #3

Collaborate with the ACRL President's Program Planning Committee on virtual program highlighting Equity, Diversity, and Inclusion work at libraries.

Brief Description

Collaborate with the ACRL President's Program Planning Committee by presenting at least a virtual program highlighting Equity, Diversity, and Inclusion work at libraries.

Goal Area

Select the *single* best connection to the <u>ACRL Plan for Excellence</u> and provide a brief sentence connecting your project to the Plan.

☐ Value of Academic Libraries
\Box 1. Cultivate research opportunities that communicate the impact of academic and research libraries in the higher education
environment.
\square 2. Promote the impact and value of academic and research libraries to the higher education community.
\square 3. Expand professional development opportunities for assessment and advocacy of the contributions towards impact of
academic libraries.
☐ 4. Support libraries in articulating their role in advancing issues of equity, access, diversity, and inclusion in higher education
☐ Student Learning
\Box 1. Challenge librarians and libraries to engage learners with information literacy skills in a way that is scalable and sustainable.
\square 2. Increase the impact of information literacy by forming strategic partnerships with relevant higher education organizations.
\square 3. Build capacity for librarians to collaborate with faculty and other campus partners in instructional and curricular design and delivery that will integrate information literacy into student learning.
\Box 4. Articulate and advocate for the role of librarians in setting, achieving, and measuring institutional student learning outcomes.
☐ Research and Scholarly Environment
\square 1. Increase the ways ACRL is an advocate and model for open dissemination and evaluation practices.
\square 2. Enhance members' capacity to address issues related to scholarly communication, including but not limited to data
management, library publishing, open access, and digital scholarship.
☐ 3. Increase ACRL's efforts to influence scholarly publishing policies and practices toward a more open and equitable system.
☐ New Roles and Changing Landscapes
\square 1. Deepen ACRL's advocacy and support for a full range of information professionals.
\square 2. Equip library workforce at all levels to effectively lead, manage, and embrace change.
\square 3. Expand ACRL's role as a catalyst for transformational change in higher education.
☑ Demonstrating Commitment to Equity, Diversity, and Inclusion within ACRL and/or the Profession.
☐ Enabling Programs and Services (education, advocacy, publications, or member engagement)
Brief sentence connecting your project to the Plan
Directly engaging in these related initiatives would help to support ACRL's ongoing diversity and advocacy efforts on a
national level.
Timeline
☐ continuous project assigned in charge
☐ short-term project that will be completed this membership year

ACRL SPOS18 Doc 15.0

Note: Multi-year, strategic goal-area projects are tracked in a multi-year planning grid. Expect your staff liaison to follow-up with questions to add this project to ACRL's multi-year planning grid which is reviewed by the Board at its fall Strategic Planning Session and referenced for budget preparation.

Outline the steps and intermediate deadlines planned to complete the project.

Specific Action	Due Date	Party Responsible	Resources Needed (e.g., financial*, technology, staff support)
Create a proposal for a virtual program.	August 2018	Entire committee	
Present virtual program.	Fall 2018	Entire committee	Presentation platform and invite attendees.
Seek program presentation feedback.	Fall 2018	Entire committee	
Plan future virtual programs.	Spring 2019	Entire committee	

Assessment: How will success be measured?

Feedback will be solicited from attendees and ACRL President's Program Planning Committee.

September 23, 2018

Update from EDI working group

The EDI working group proposes areas for action for the EDI Signature Initiative, questions for the ACRL Board related to the proposed areas of action, and suggests a placement for the EDI signature initiative in a revised ACRL Plan for Excellence.

EDI Signature Initiative and areas for action

The August 7, 2018 ACRL Insider post, "ACRL Signature Initiative on Equity, Diversity, and Inclusion Poll Results" provided an update for ACRL members on the results of the two-question poll to help shape and prioritize the work of the EDI signature initiative.

Based on the results of the poll, here are the top 6 areas in which the membership feels that the Board should focus in the Signature Initiative:

QUESTION: Top suggested action items for ACRL to address

- 1. Partner with library schools and/or institutions to support the recruitment of diverse individuals into library/information science programs (12.69% / 509 responses)
- 2. Actively working to diversify ACRL leadership and membership (12.09% / 485 responses)
- 3. Develop a toolkit (e.g. sandbox; resource list; resource repository; etc.) to support EDI training for institutions and individuals (10.55% /423 responses)
- 4. Develop instruction/training on critical pedagogy and social justice issues (9.40% / 377 responses)
- 5. Evaluate existing residency programs, retention initiatives, and best practices in recruitment in academic libraries (9.08% / 364 responses)
- 6. Implement training on using diversity-related competency standards (e.g. Cultural Competencies for Academic Libraries) (8.35% / 335)

Next Steps:

The Board needs to decide whether we will move forward on including all of the above elements as part of the signature initiative or choose a subset from the above list. It may be possible to start with some (Year 1) and then add others later (Years 2, and 3).

The Board also needs to decide on a structure for moving forward on the selected items from the list. Would we create a Task Force, hire a program officer, or designate individuals and existing groups within our organization to take a lead role on parts of it.

Other Comments:

- As there are multiple ways to "partner" with library schools and many library schools around the country, the Board will need to discuss and explore possible options for developing partnerships for diversity recruitment. It may be possible to combine aspects #1 with #2 as an initiative to recruit diverse students to library schools could/should work as a strategy for recruitment to ACRL.
- 2. Perhaps the Diversity Alliance might play a role in either establishing best practices or a broader assessment/evaluation of residency programs (#5)
- 3. Given the conversations about the "Roadshow" as a format, the Board will need to decide on the best model for developing and disseminating learning opportunities associated with the Signature Initiative. Some of these could be in-person opportunities while others might be delivered virtually as webinars. #4 and #6 could be considered along with the list of workshop topics generated from Question 2.

QUESTION 2: Topics members would find of most interest

Below are the top items suggested for EDI related learning opportunities (Roadshows) from Question 2. While developing workshops or Roadshow like activities on EDI topics was not one of the top choices selected from Question 1, we did ask members to identify topics of interest and respondents to Question 1 did suggest "cultural competencies" and "social justice/critical pedagogy" as key options for training.

- 1. Difficult conversations (e.g. microaggressions) 17.02%415
- 2. Cultural competencies 14.15%345
- 3. Guidance on fair recruitment practices/implicit bias 12.76%311
- 4. Creating/defining inclusive spaces and programming 12.26%299
- 5. Specialized recruitment and retention strategies 11.77%287

In addition to fleshing out what some of these topics actually mean, ACRL board might want to get some guidance on which formats the membership would like to receive the instruction/training. Some of the topics (e.g. difficult conversations/microgressions and cultural competencies) could warrant in-person opportunities for practice and conversation, while others (fair recruitment practices/retention strategies) could possibly be done virtually.

Revision to the Plan for Excellence to include Signature Initiative

The March 5, 2018 ACRL Insider post, "ACRL Board to Establish New Equity, Diversity, and Inclusion Initiative" announced the Board's vote to add to the ACRL Plan for Excellence a new signature initiative focused on EDI. The EDI working group suggests adding the EDI signature initiative description at the end of the Long-term Envisioned Future section and just before the Five-Year Goals and Objectives section of the Plan for Excellence.

....

Long-term Envisioned Future

Vision

Academic and research librarians and libraries are essential to a thriving global community of learners and scholars.

Vivid Description of a Desired Future

ACRL elevates the position, recognition, and impact of all academic and research libraries and librarians as catalysts in exceptional research and learning. College and university students are information literate, informed scholars and citizens who value the opinions, perspectives, and experiences of others. Facile use of information sources and discovery techniques enables them to succeed in their coursework and future careers; preparing them to lead new national and global initiatives. Partnering with academic librarians to collect and organize research data, faculty break new ground in their respective fields. Academic libraries, constantly transforming to meet the evolving needs of their campuses, are central to educational and research efforts.

Academic libraries are equitable communities that promote diversity by ensuring that every member feels they have a rightful place, is welcome and respected, and is supported in their intellectual dialogues and pursuits. Librarians and their colleagues design inclusive services that provide scholars and learners the unfettered ability to create, access, evaluate, and use knowledge on a global scale.

Signature Initiative: Equity, Diversity, and Inclusion (EDI)

ACRL has established a signature initiative dedicated to helping the association achieve its stated desired future. As noted in the above passage, academic and research libraries have a critical role to play in fostering equitable communities, developing inclusive spaces and services, and creating the conditions needed to support, promote, and encourage diversity among our learners and within our profession. As a result, ACRL has chosen a focus on Equity, Diversity, and Inclusion as the first signature initiative for the Association.

ACRL SPOS18 Doc 16.0

A Signature Initiative is designed to permeate the work of the Association, cutting across the Goal Areas and inclusive to all ACRL committees and communities of practice. Unlike the existing goal areas, the Signature Initiative is geared toward a longer-term strategic need, that draws on a wide range of stakeholders and topical areas. Additionally, the Signature Initiative on EDI provides an opportunity to direct division-wide attention to one of the Association's organizational values and, further, enables ACRL to examine and garner support for these critical areas at a time when many members feel a threat to our professional values.

2017-2018 ALA CD#35.1 Revised_61418_INF 2018 ALA Annual Conference

American Library Association Organizational Effectiveness Plan

2018 Annual Conference - New Orleans, LA

BACKGROUND:

Following the 2018 ALA Midwinter Meeting, the ALA Executive Board working group on governance and organizational effectiveness—Mary Ghikas, Andrew K. Pace, Lessa K. Pelayo-Lozada and Patricia Wong—transcribed and created a database of feedback from the discussions at ALA Council and at PBA, as well as other feedback received – over 300 documents. Wordles were also created to assist working group members in the analysis. The resulting files were reviewed by members of the working group.

On April 5, the working group met to discuss next steps and to review an initial draft of this document. Based on that discussion and review, at their spring meeting, the ALA Executive Board decided to retain outside consultants to advance this discussion. In addition, ALA President Jim Neal will appoint an ad hoc Steering Committee and Executive Oversight group. What follows is a summary of the Midwinter 2018 feedback, a draft timeline for next steps, a steering committee structure, and structure for facilitated discussions to take place at ALA Annual 2018 in New Orleans.

Attachments:

- (1) APPENDIX 1: Council and PBA feedback on Organizational Effectiveness discussion (Wordles)
- (2) APPENDIX 2: Concurrent Activities
- (3) APPENDIX 3: 2017-2018 ALA CD#35, 2018 ALA Midwinter Meeting American Library Association, Organizational Effectiveness Discussion

ALA Governance Review Process

The following outline attempts to look at the reorganization process from two perspectives: what we know and how we might move forward.

A series of appendices provide additional information, including: (1) Wordle images of what we know, (2) descriptions of related ongoing work that both the ALA Membership and Management will need to be aware of as this process proceeds, and (3) the 2018 Midwinter discussion document.

Purpose and Key Question:

The purposes of the Governance Review were laid out in the Midwinter 2018 document -- 2017-2018 CD#35. (See Appendix 3) CD#35 also positioned the ALA Mission as a central guide for this work, along with a set of "guiding principles."

ALA Mission: To provide leadership for the development, promotion, and improvement of library and information services and the profession of librarianship in order to enhance learning and ensure access to information for all.

To achieve this mission, ALA has defined four strategic directions:

- Advocacy
- Equity, Diversity and Inclusion
- Information Policy
- Professional and Leadership Development

As we think about how we organize to support this mission, these "guiding principles," articulated in the 2018 Midwinter Meeting discussion document, need to be kept in mind:

- 1. We will build upon ALA's strengths
- 2. We will focus on ALA's Strategic Directions—Advocacy; Information Policy; Professional & Leadership Development; Equity, Diversity, and Inclusion
- 3. We will enable open, flexible, and easy member engagement
- 4. We will simplify and streamline process
- 5. We will ensure a governance and coordinating structure that enables members and staff to be effective, engaging in meaningful and productive work
- 6. We will empower member engagement
- 7. We will adopt a new mindset
- 8. We will optimize use of ALA staff time
- 9. We will experiment and try new approaches; we will learn from our experiences and be intentional about assessment
- 10. We hope to be a model of innovation for professional associations

ALA is an association. As such, its primary asset for achieving its mission is its members, working with staff to achieve a shared mission and shared goals. The ALA membership includes over 58,000 individuals, organizations and corporations. Indirectly, through chapters and affiliates, which typically have overlapping memberships with ALA, the reach is significantly larger. Collectively, membership and those associated through chapter or affiliate membership represent librarians, a wide range of other individuals with many specializations who work in or for libraries, trustees, friends and advocates for libraries, corporate leaders invested in the library ecosystem, content creators, and others.

While the mission and membership focus remain, the question implicitly posed by the document developed for the 2018 Midwinter Meeting discussion was: "How can ALA best organize itself to fulfill its mission in the 21st century?"

What We Know Now: Midwinter 2018 feedback

Feedback from discussion with Council and other active members during the 2018 Midwinter Meeting, as well as some email feedback, largely confirmed the "findings" of the Kitchen Table Conversation. (see Appendix 3) But, as would be expected from a largely more active and ALA-experienced group, extended them in some respects. (see Appendix 1)

ALA needs to be relevant to those with an MLS – and to those without an MLS who work in libraries,
do work related to libraries; and, focus on or support libraries and their missions. There is also a desire
for clearer, stronger focus on the needs and interests of library workers, which suggests that a

comprehensive look at ALA may necessarily involve a close look at ALA-APA, and at potential funding mechanisms.

- Given the experience of many participants and the complexity of the organization, unsurprisingly one focus of attention was figuring out where to start. Which thread do you pull? Where are the innovative opportunities? Can we look at the question from an "issue perspective" not a "type of library perspective"?
- There was significant emphasis echoed in internal (staff) discussions about focus on advocacy, or perhaps on advocacy and education.
- There was strong focus on mindful, consistent relationship development encompassing ALA Chapters and other state associations (e.g., AASL and ACRL-affiliated organizations, ALA Affiliates, and other organizations, both within ALA's unique areas of focus and broader areas representing member values).
- In both the discussions on advocacy and on relationships, there is interest in stronger collaboration between ALA and chapters/state associations and in being able to act locally.
- Feedback echoed the Midwinter document's focus on reduced complexity and reduced redundancy but both complexity and redundancy are to some extent in the eye of the beholder. Comments included the need to "force prioritization," "focus on what matters," disband groups are "aren't effective," and shift to a more "as needed" structure, rather than so many standing bodies.
 - There is a perceived tension between resolving complexity/reducing or eliminating silos and the desire to find "my place," "my home." This tension will have to be addressed.
- Clarity in both structure and communications was a strong focus. Members want to "feel impassioned, invested, and relevant." As was clear in the Kitchen Table Conversation findings, they want "clear pathways to engagement." Other comments focused on member ROI; a collective and sustainable focus; a member-centric vs. member-led organization and enabling "complete and robust participation."
- There is recurring interest in investing in IT including the technology for "virtual" or digital participation and learning.

Moving Forward: 18-month timeline

The question then is "what are the next steps?" While the Midwinter Meeting largely confirmed many aspects of the diagnosis, and suggested <u>elements</u> of a solution, the difficult work of negotiating a "solution" in a highly participative and complex organization, with interests that sometimes compete, remains to be done.

For that purpose, the Board wishes to retain a consultant. While consultants coming from the library arena, with ALA experience, will bring knowledge of ALA's culture(s), consultants coming from the association arena will bring knowledge of the wide array of models among associations – and their relative success in achieving specified aims. Management and the Board recommend a consultant from the Association or nonprofit environment, knowledgeable in the variations and purposes of association governance structures. Given the

demands of the process, consultation and member facilitation of the change management process itself may be highly desirable. Since consultation with a deep understanding of current ALA organization and governance is also desired, the Board is recommending a Steering Committee to work closely with the outside consultant to guide what is likely to be a complex process, extending over 12-18 months, followed by an implementation phase.

A working calendar is outlined below – primarily to show the feasibility of the time frame proposed. It is highly likely that the specific approaches and intermediate steps within the timeline will change as ALA begins working with specific consultants and establishes the steering committee.

(1) Now – Through Annual Conference 2018

Conduct a series of facilitated focus groups or discussions built around some of the specific questions sitting behind many of the comments/concerns raised in both the Kitchen Table Conversations and at the 2018 Midwinter Meeting. These facilitated discussions will take place at ALA Annual and virtually. These may be structured around several "what if" scenarios, for instance:

- A shift from a structure largely based on standing committees to one largely based on as-needed groups, with a (small) core of "standing" committees.
- A shift from a "governance" model to an "engagement" model for many specialty groups, e.g. Round Tables. (see, for example, http://growglobally.org/?p=1394)
- A stronger ALA-Chapter/State Association structure.
- A different Board/Council composition/structure/relationship
- A potential change in or streamlining of the current ALA/Division relationship

(2) Annual Conference 2018 to Fall 2018 Board meeting

Based on feedback to date, work with consultant(s) to create multiple versions of a "new" ALA.

(3) 2018 Board Meeting to Midwinter 2019

Review scenarios at Fall Board meeting. Adjust scenarios based on Board feedback. Distribute adjusted scenarios for member/potential member feedback. Prepare discussion documents for 2019 Midwinter Meeting discussion.

(4) Midwinter 2019

Hold facilitated discussions (National Issues Forum-style discussions) at Midwinter 2019, aimed at identifying "common threads" in member response. The objective is to arrive at a "new ALA" model.

(5) Midwinter 2019-Spring 2019 Board Meeting

Prepare draft "new ALA" scenario (single) and related discussion materials for discussion at Spring 2019 Board meeting.

(6) 2019 Spring Board Meeting - 2019 Annual Conference

Adjust scenario and related materials based on Board discussion. Distribute widely for consideration prior to the 2019 Annual Conference.

(7) 2019 Annual Conference

Hold series of facilitated discussions on proposed model. Continue to develop model, based on feedback.

(8) 2019 Annual to 2020 Midwinter Meeting

Develop action document(s) for Council/membership. Develop potential implementation plan/schedule. Develop FAQ.

(9) 2019 Annual to Spring Election

Share information widely. Schedule online discussion sessions. Develop spring ballot materials. Refine implementation plan based on feedback.

Spring 2020 Election and forward.

Based on Spring 2020 election plan, begin implementation.

Guiding the Process

2017-2018 ALA President Jim Neal has committed to leading this process through to completion – at least completion of the design and initial decision process. Vice President / President-elect Loida Garcia-Febo has already indicated that President Neal will continue in an oversight/leadership role after his presidential term ends in 2018. The Executive Board has approved this structure to guide the process.

Executive Oversight Group: Jim Neal (2017-2018 ALA President; Past President, 2018-2019)

Mary Ghikas (ALA Executive Director) TBD, Steering Committee Chair

Consultant (s)

Steering Committee: Executive Board (2) (including Chair)

Council (2)

Division Leadership (2) Round Tables (1) Chapters (2)

ALA Ethnic Affiliate (1)

Emerging professional (e.g. NMRT, Emerging Leader, Spectrum Scholar) (1)

At-large (1) ALA Staff (1)

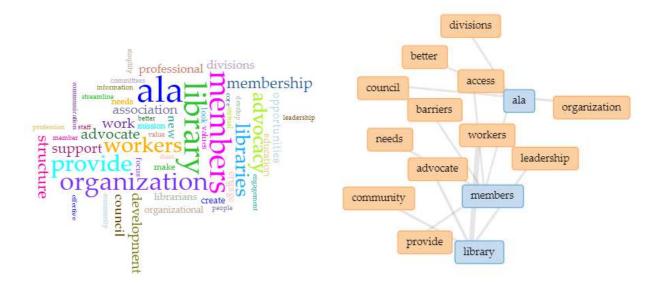
There should be significant attention to diversity of all types – including diversity in length of membership – in forming the steering committee.

This work is also taking place within the context of multiple "streams" of change (see Appendix 2). It will be important for the Board, Management and, to a lesser extent, the Steering Committee to remain aware of these additional change streams and to consider their potential impacts.

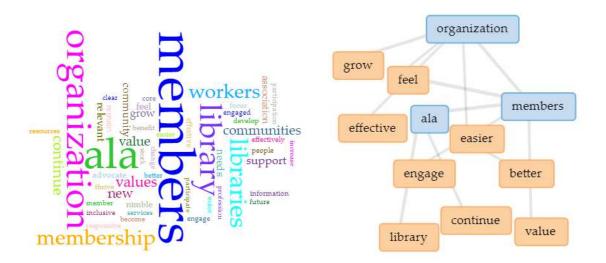
APPENDIX 1: Council and PBA feedback on Organizational Effectiveness discussion

A consolidated view of the written feedback forms was processed using <u>Voyant</u> analysis tools. This tool created the following Wordle-like graphical representations. It's clear that the feedback received puts members, library works, and the health of the organization at the center of our thinking. While the feedback and the analysis tools don't generate automatic answers to our problems, they do shed light on a path forward.

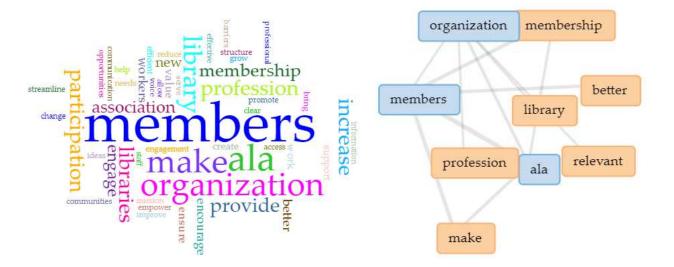
We will...



in order to...



so that...



APPENDIX 2: Concurrent Activities

Operational Report on Concurrent Activity

There is significant ongoing change activity. Any or all of these may impact or be impacted by the Governance Review. Again, this suggests close involvement by the ALA Executive Board as well as Management. The Board is the <u>only</u> single group with a reporting relationship through staff leadership to <u>all</u> of these activity streams. These activities place a significant, ongoing burden on both the Board and Management to remain cognizant of all change streams, to identify the connections between them and to articulate potential impacts. The Executive Oversight group and the Chair of the Steering Committee—both comprised of Board members—will ensure maintenance of these connections.

1. Membership and Communications Study

Avenue M – a Chicago-based company with significant association experience – has been awarded a contract to complete two related studies. The Goals and Outcomes outlined in the original RFPs are as follows, in brief:

Membership

- o Identify barriers that prevent individuals from joining and renewing.
- Recommend alternative membership models that might better respond to the needs of current/prospective members, including membership types, dues amounts and associated member benefits.
- o Refresh and refocus the membership messaging framework and value propositions.
- o Recommend strategies/tactics for improving member engagement.
- o Propose new/evolved staff positions/consultants to expand ALA's member-focused expertise/abilities.

Communications

- o Develop an overall, high-level strategy leading to more consistent, higher quality communications.
- o Refresh and refocus the messaging framework.
- Suggest ways to leverage existing staff, e.g. capitalize on specific skills/expertise, change/clarify roles; improve coordination and collaboration across units.
- Suggest new positions/consultants to expand ALA's capabilities and expertise.
- o Prioritization or other considerations ALA should make regarding specific types of communications.

Based on work done during the process set up to select one or more firms, it became clear that these two studies were closely related – and that outcomes might be improved by combining them. A cross-association staff committee was formed for the selection process and will work with the consultant; remote ALA offices (including both Washington Office and United for Libraries) are involved, as well as Chicago-based units, both General Fund and Divisions.

It will also be essential to keep this consulting firm updated on the Governance Review status.

2. Internal Reorganization

The necessity for internal reorganization was signaled by Management in discussions with the ALA Executive Board at the Fall 2017 Meeting. Reorganization is essential to (a) permit reallocation of scarce staff resources to critical development areas – including IT, Development and Advocacy – and to (b) support changing workflows and new approaches in critical mission areas. The ALA General Fund has lost 49 positions since the 2008 recession. (Experience in the Divisions varies significantly from division to division.) While changes are still very much in process, the following shifts have been made and have been incorporated into the FY19 proposed budget:

- ALA will run with one fewer Management position in the General Fund. With Cathleen Bourdon's
 (Associate Executive Director, Advocacy and Member Relations Department) retirement in July 2018,
 Lorelle Swader has been appointed Associate Executive Director, ALA Offices and Member Relations,
 taking the budget line previously occupied by Mary Ghikas.
 - AED-OMR reporting group: ALA Library & Research Center, ALA Public Programs Office, ALA Member and Customer Service, ALA Membership Development, ALA Office for Accreditation, ALA Office for Diversity/Literacy/Outreach, ALA Office for Human Resource Development & Recruitment, ALA Office for Intellectual Freedom; ALA-APA.
 - Danielle Alderson will remain in the new Offices and Member Relations Department, taking on Round Table liaison, with the aim of increasing consistency in information delivery.
 - The ALA Office for Library Advocacy will report to Kathi Kromer, AED ALA Washington Office; personnel in that office will remain in Chicago.
 - Other positions in both the AED, AMR and Senior AED, MPS reporting lines will shift to or remain with the ALA Executive Director: ALA International Relations Office/Chapter Relations Office, ALA Communications and Marketing (currently Public Awareness Office), ALA ITTS, ALA Conference Services, ALA Divisions. The Governance Office, Development Office and Center for the Future of Libraries were already reporting to the Executive Director, along with the Senior Managers (AEDs) in Finance, HR, Marketing, Publishing, Washington, and now OMR. Additional future changes should be anticipated.
 - With the departure of Jeff Julian, the Public Awareness Office will become ALA Communications and Marketing.
- The ALA Library and ALA Office for Research have been combined. There is a combined staff of 3 (vs. 5 previously), including 2 librarians and 1 library assistant. The focus of the reorganized unit will be special library services in support of ALA and its members, research guidance (e.g., for ALA groups wanting to survey members), and research review and curation (e.g., reports such as *The State of America's Libraries*). Significant research projects will require contractual services.
- The ALA Governance Office will work with a staff of 3 (vs. 4.5 previously). This will require process streamlining, as well as effective collaboration between staff and member leaders.
- Reallocated positions have been shifted in the proposed FY2019 budget to ITTS and Development. The ALA Washington Office has made internal shifts, reducing from 3 groups to two; positions have been shifted within the ALA Washington Office.
- Additional changes are probable as Management seeks to address the needs in areas such as IT and Marketing, and as the outlines of recommendations related to Membership, Communications and Organization Review become clearer.

Internal changes made to date are generally "neutral" in their impact on both the membership/communications study (just beginning) and the ongoing organizational review. That is, there is no particular "solution" or set of recommendations <u>assumed</u> by any change to date. There is, however, an underlying assumption that some improved level of organizational simplicity and clarity must be achieved.

3. Aligning Advocacy and Stronger Chapter/State relationships

ALA has a long and honorable history of work at the national policy level, focusing on areas including appropriations, copyright, first amendment-related issues (including privacy), government information, and telecommunications (particularly as it pertains to equitable and open access to information). Over many decades, ALA has developed the critical top-level infrastructure needed to focus and support this work: the ALA Committee on Legislation and its related subcommittees, the ALA Washington Office; a range of national-level collaborations; an extensive and constantly evolving series of policy statements.

From its inception, ALA's governance structure has also recognized the critical role of state and regional associations. ALA current has 57 Chapters, representing all U.S. states as well as the District of Columbia, Guam, the U.S. Virgin Islands, and regional library associations in the Mountain Plains, New England, Pacific Northwest and Southeastern regions. In addition, the AASL Affiliate Network includes 48 organizations representing school librarians, of which nine are part of an ALA Chapter, 38 are separate from ALA's chapters, as is one "regional" affiliate (New England). ACRL also has 44 chapters, of which 13 are separate are separately incorporated, and the remaining 31 are part of the state association. While each of these individual (and legally-separate) associations has its own mission, each has at its core the support of libraries and the people who work in them, and the essential roles they play in their communities, universities and schools. Governance links with ALA are currently situated in ALA Chapter representation on the ALA Council, as well as in the ALA Chapter Relations Committee, in the AASL Affiliate Assembly, and the ACRL Chapters Council.

Across the Association, as members and staff worked together to achieve or advance the mission of the Association, other collaborative groups, often informal, have evolved. These include such groups as the network of statewide intellectual freedom committees (ALA Office for Intellectual Freedom) and others.

Internally, chapters and state affiliates have developed state legislative committees. Looked at collectively, this array of groups represents significant power – both realized and potential – to affect change for libraries and for the communities, schools, universities and businesses they serve.

Over the past decade, this wide array of state and regional groups has been supported by the ALA Office for Advocacy, working with the Chapter Relations Office and other ALA groups -- including the ALA Office for Intellectual Freedom and AASL, among others. OLA is guided and supported in this work by the ALA Committee on Library Advocacy. As at the national level, work is guided by an evolving series of policies, ranging over the breadth of the Association's interests. Advocacy training has been a core focus.

This current structure has been effective in responding to a broad range of initiatives and crises, from local to national. The present political and social environment, however, presents extreme challenges – challenges for which libraries, library people and the collaboratively-developed values of ALA and its members offer responses situated in both the shared and the unique needs of each community, campus and school.

Proposal for a Ground-Up Advocacy Structure

<u>Summary Proposal:</u> That ALA build – over the next 5 years – a national network of key advocates, at least one in each Congressional district, supported by ALA core resources in both Chicago and Washington DC, linked to and collaborating with – but not subsuming – the state networks existing within the various states, as well as a variable array of other ALA-based (or state-based) special focus networks.

This network structure will build on – and more effectively utilize – ALA's most significant strength: a national membership reaching into communities of all sizes and characteristics, supported by core resources – including governance structures, staff and communications infrastructure. This network structure will ground ALA's

advocacy in community-based relationships and knowledge, and also magnify that impact through the network and through national communications. This recognizes a key factor: While ALA and the library ecosystem are bound together by essential values and a fundamental belief in the importance of libraries to learning, libraries themselves are rooted in a local community – whether it be large or small – that shapes their application of broad principles and that is, in turn, shaped by the library.

Basing a national advocacy structure firmly on this local base is an approach to stability in an increasingly unstable world. It strengthens the focus on local relationship-building, providing a solid foundation for national advocacy while strengthening libraries at the local level.

The National Network:

Key to the development of the network is the designation of a "Key Advocate" in each of the 435 Congressional District in the U.S. and the development and maintenance of a communications network that links each of them with core resources and each other, <u>and</u> with other networks and advocates within the district. Specifying a "key" advocate in each district creates a national network that is manageable in size. Connecting the national network to a state/local and specialized networks builds a rich environment in support of libraries and library workers, encourages the development of strong local ties – which benefits not only ALA and its national advocacy interests but individual libraries and state and local interests.

The proposed national network largely builds on (a) ALA's strengths, (b) the collaboration of ALA Chapters and other statewide organizations and (c) the ground-up strategy that has been successful for a broad range of national organizations. It also builds on the often-expressed desire of many ALA members to be able to learn, network and participate locally -- and still feel like an essential and active part of a national association.

Key Advocate (ALA member)

The critical roles of the key advocate are:

- Receive information policy and other related resources from ALA. These may include background documents on library funding, information policy issues, intellectual freedom and privacy or other "values" issues. Background materials are developed by the ALA Washington Office, Office for Intellectual Freedom, Office for Library Advocacy, Office for Diversity, Literacy and Outreach, and others, as appropriate to the issue being raised.
- Receive information on training, including training from the ALA Washington Office, Office for Library Advocacy and others, as appropriate.
- Build a relationship at the Congressional District Office level to benefit your library and other libraries in the District (in collaboration with others at the local and state level) and to support national advocacy. The first priority is to be sure that District Office staff (and the Congressional representative if possible) understand what the library(s) in the District do/can do for the District the community at large, students of all ages, seniors, businesses, etc. and what they need to be even more successful for their community. The second priority, necessarily building on the first, is to advocate on funding and issues relevant to all/many libraries.

- Build relationships with other advocates in the District. Share background and training information where you can. Be known as an individual who is likely to have information and tips to share.
- Contribute stories illustrating library impact on the community/campus/school/business and the members of that "community," however defined. (see ALA role – CRM)
- Alert ALA when issues arise within your District.
- Attend statewide legislative days, ALA's national legislative days and other state and national events when it is possible for you.

ALA Resource Hub

Critical ALA roles are:

- Maintain a current and open relationship with ALA Chapters, other statewide library groups (e.g., AASL Affiliates), other national groups within the library ecosystem, to enable collaboration on a broad range of issues, at various levels, depending on the mutual interests of the impacted organizations.
- Provide appropriate background documents, working with other groups as appropriate.
- Provide varied training and educational resources. Training events/products may be offered at no-charge, on a direct cost-recovery basis or on a revenue basis to support other functions.
 There will be a mix available, depending on the intensity and duration of training, the scope, the costs involved and other factors.
- Implement and maintain a CRM software designed to track and support relationships. The CRM will enable ALA to capture information that is valuable in the advocacy process that cannot currently be contained in ALA's association management system. The CRM will also enable ALA to maintain the network structure the web of relationships. CRM packages currently being used extensively in the association environment already include APIs or web services to enable connections to the various association management systems (like ALA's iMIS) currently being used. The CRM can/should include relationships within ALA (using the iMIS link) and relationships that extend beyond ALA.
- Provide a point of contact a primary staff contact and core resource contacts for the "Key Advocate" in each District.

State Networks

The ALA's national advocacy network will work most effectively if developed collaboratively with the ALA Chapters and other statewide networks. In some states, there will be a single chapter. In others, there may be multiple groups. Some states will also be participants in regional associations.

To use one example:

Ohio has 16 Congressional Districts – and in the same geography 33 State Senate Districts and 99 State Representative Districts. There are 3 primary statewide associations:

- The Ohio Library Council is the official ALA Chapter. Its focus is on public libraries.
- The Ohio Educational Library Media Association is an AASL Affiliated association focused on school libraries.
- The Academic Library Association of Ohio is an ACRL affiliate, focused on academic libraries.

Other National and State Networks

Within most states, there will also be other networks. Staying with the Ohio example, for instance, there is an Ohio Health Sciences Library Network. While not within ALA's core membership area, health sciences library networks – to use just one example – may be valuable allies on certain issues and have a shared focus on the well-being of the community. ALA itself has developed other networks. The network of State Intellectual Freedom committees and supporters is a significant example.

Local Groups

At the local level, Boards of Trustees and Friends are fundamental to state and national advocacy. United for Libraries, an ALA Division, provides extensive resources to support local groups, as well as training and networking.

<u>Implementation</u>

ALA has many members who have expressed interest in engaging with their communities and advocating on behalf of their library and community. Many have engaged in professional development and training that provides a foundation in process and theory for this work. This base of interested and informed members is a <u>significant</u> national asset. Examples of contributing groups and programs are:

- Over 700 individuals in 15 states, plus the 2018 Midwinter Meeting and a New England regional group, have participating in Advocacy Boot Camps, developed and delivered by the ALA Office for Library Advocacy and the ALA Office for Intellectual Freedom. There are Boot Camps scheduled in 5 more states.
- Over 2,000 libraries or other organizations nationwide have participated in training focused on "turning outward" to the community and its needs, using a variety of methodological approaches, in trainings coordinated and delivered by the ALA Public Programs Office.
- Over 9,000 libraries and library staff are currently signed on to and active participants in the Libraries Transform campaign.
- Thousands of libraries and library staff have participated in major PLA programs (funded by the Bill & Melinda Gates Foundation) that focused on developing skills to tell the library story and to build local networks to support libraries. (Turning the Page, Project Outcome and others)
- On average, over 400 individuals participate annually in the ALA Library Legislative Day, organized and facilitated by ALA's Washington Office. Many others participate virtually.
- 12 carefully-selected individuals spread across the country participated in the initial class of the Policy Corps, sponsored by 2017-18 ALA President Jim Neal, the ALA Washington Office and ALA Divisions. http://www.ala.org/advocacy/ala-policy-corps
- Still others are active participants in various state Intellectual Freedom Networks.

 Yet others – some of whom will be ALA members – are active in state legislative committees and other groups.

On the ALA staff side of the equation, two connected groups will take the coordinating responsibility: the ALA Washington Office (in DC) and the ALA Office for Library Advocacy (in Chicago). Support will also come from the ALA Chapter Relations Office; the Office for Intellectual Freedom; Office for Diversity, Literacy and Outreach Services; the ALA Public Awareness Office; United for Libraries; AASL; ACRL; and, PLA.

Potential Governance Review Impact

Current modeling assumes the continued, important participation of current ALA committees: The Committee on Legislation, the Committee on Library Advocacy, and the Public Awareness Committee. Interaction between these core committees would be highly desirable. Other groups may be involved selectively in relation to specific issues or concerns – e.g., the Intellectual Freedom Committee, Committee on Diversity and ALA Divisions.

While planning is in the early stages, and still requires extensive consultation, two specific recommendations are currently being considered.

- Based on the experience of a variety national advocacy organizations which successfully manage ground-up networks, individual staff will be assigned "primary" responsibility for specific geographic pieces of the network, to support relationship and knowledge-building.
- Development of an initial "proof of concept" approach in 4-6 states is recommended. These should involve both states with full-time ALA State Chapter staff and states without.

Member surveys have consistently shown a desire by members to participate in ALA – but to do so more locally. This is responsive to that interest. As this work moves forward, however, there remain questions to be explored:

- What is the potential impact on membership structure and participation?
- Will this approach—as we think likely—drive deeper engagement with the Association?
- Can we create and curate both free and fee content to support continual development?
- Where will we need to develop additional internal/external organizational and communications protocols to guide a dispersed network?

APPENDIX 2: Midwinter 2018 Discussion Document (with 6 additional appendices)

American Library Association Organizational Effectiveness Discussion

2018 Midwinter Conference - Denver, CO

In the <u>November/December issue of American Libraries</u>, ALA President Jim Neal called on members of the association to consider the 21st century effectiveness and agility of an organization whose constitution, bylaws, and policies date back over 140 years. President Neal suggested a review of ALA's organizational effectiveness with the goal of revitalizing the association.

A process of review must incorporate the perspectives, interests, and contributions of a wide variety of stakeholders and affiliated groups. It must be mission-driven and embrace our core values. It must focus on member development and engagement, and on encompassing the complexity of voices that enrich ALA.

-Jim Neal, American Libraries, Nov. 1, 2017

The ALA Executive Board calls upon ALA Council, Committees, Round tables, Divisions, and the myriad of Communities of Practice inside and outside the association to consider what it would take to align ALA's organizational structure, policies, and rules with the Association's 21st century values, key action areas, and strategic directions.

The Executive Board is indebted to the excellent work of the Library Leadership and Management Association Division (LLAMA) whose recent re-organization helped create some guiding principles and templates for an ALA-wide effort.

ALA's Mission

"To provide leadership for the development, promotion and improvement of library and information services and the profession of librarianship in order to enhance learning and ensure access to information for all."

Guiding Principles of Our Work

- 1. We will build upon ALA's strengths
- 2. We will focus on ALA's Strategic Directions—Advocacy; Information Policy; Professional & Leadership Development; Equity, Diversity, and Inclusion
- 3. We will enable open, flexible, and easy member engagement
- 4. We will simplify and streamline process
- 5. We will ensure a governance and coordinating structure that enables members and staff to be effective, engaging in meaningful and productive work
- 6. We will empower member engagement
- 7. We will adopt a new mindset
- 8. We will optimize use of ALA staff time
- 9. We will experiment and try new approaches; we will learn from our experiences and be intentional about assessment
- 10. We hope to be a model of innovation for professional associations

Why Address ALA Governance, Bylaws, and Policies?

- 1. Members are confused by the structure and feel disconnected from the association.
- 2. New members are equally confused and intimidated by ALA's monolithic structure and practices that favor established, well-connected, and well-funded members. They don't see entry points for participation and question the value of membership.
- 3. ALA has suffered significant membership declines since the 2008 recession, falling 17% from 2008 numbers of 61,262 personal members to 50,570 personal members in December 2017 (these numbers do not include organizational and corporate memberships, which put the overall decline at 13%).
- 4. Employment in the library sector (defined by the Bureau of Labor Statistics) declined by approximately 15% between 2007 and 2013 a loss of 60,000 jobs, of which 20,000 were degreed librarians.
- 5. The structure has become overly complex:
 - 37 ALA and ALA Council Committees
 - 29 Round Tables and Member Interest Groups
 - 56 Chapters, 27 Affiliates, and 4 Related Groups
 - 11 Divisions with their own Committee, Section, Task Force, and Community of Practice structures

6. The ALA Constitution, Bylaws, and Policy Manual that govern our process and organizational procedures have not kept pace and are misaligned with ALA Core Values, Strategic Directions, and Key Action Areas.

ALA Council Discussion

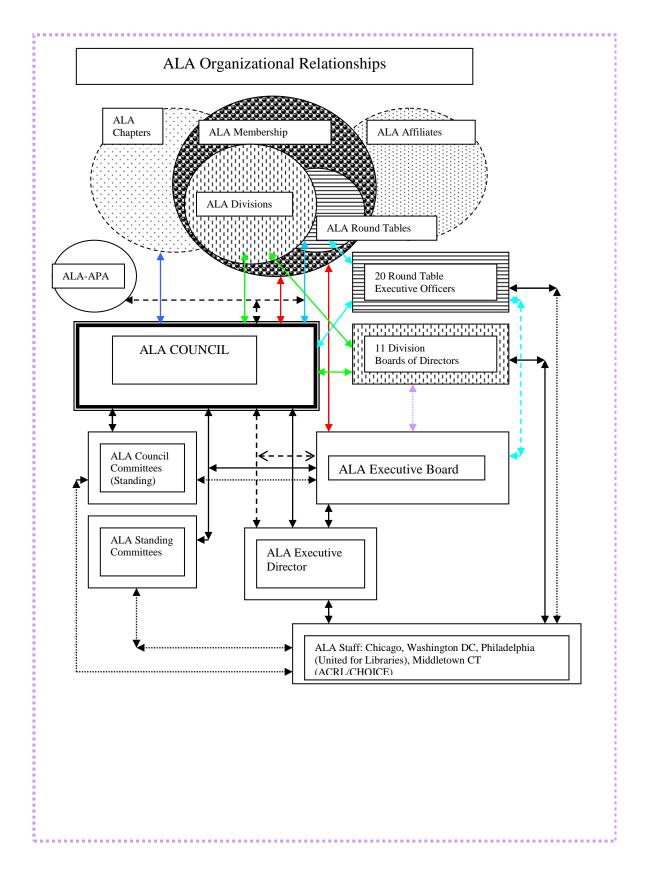
For the purposes of discussion, Council members should consider three aspects of reorganization—**Goals**, **Specific Activities or Actions**, and **Expected Outcomes**. It's best if the actions and outcomes are aligned.

Discussion Questions

- 1. What does our ideal organization do?
- 2. What does our ideal organization look like?
- 3. What are 3 ways we can get there?

Using the above questions, fill in the blanks for your 3 ways we can attain our ideal organization:				
"We will do	, in order to	, so that	<u>.</u> "	

APPENDIX 1 - ALA Organizational Relationships



APPENDIX 2 - ALA and ALA Council Committees

ALA COMMITTEES

Accreditation

American Libraries Advisory

Appointments

Awards

Chapter Relations

Conference

Constitution & Bylaws

Diversity, Literacy, & Outreach Services Advisory

Election

Human Resources, Development & Recruitment Advisory

Information Technology Policy

Literacy

Membership

Membership Meetings

Nominating

Public & Cultural Programs Advisory

Research & Statistics

Rural, Native, & Tribal Libraries of All Kinds

Scholarship & Study Grants

Training, Orientation, & Leadership Development

Website Advisory

ALA COUNCIL COMMITTEES

BARC

Committee on Committees

Committee on Diversity

Committee on Education

Committee on Legislation

Committee on Library Advocacy

Committee on Organization

Committee on Professional Ethics

Committee on the Status of Women in Librarianship

Council Orientation Committee

Intellectual Freedom Committee

International Relations Committee

Policy Monitoring Committee

Public Awareness Committee

Publishing Committee

Resolutions Committee

APPENDIX 3 - ALA Divisions, Round Tables, and Member Interest Groups

Divisions

American Association of School Librarians (AASL)

Association for Library Collections and Technical Services (ALCTS)

Association for Library Service to Children (ALSC)

Association of College & Research Libraries (ACRL)

Association of Specialized & Cooperative Library Agencies (ASCLA)

Library & Information Technology Association (LITA)

Library Leadership & Management Association (LLAMA)

Public Library Association (PLA)

Reference & User Services Association (RUSA)

United for Libraries (Trustees, Friends, Foundations)

Young Adult Library Services Association (YALSA)

Round Tables

Ethnic & Multicultural Information Exchange Round Table (EMIERT)

Exhibits Round Table (ERT)

Federal and Armed Forces Libraries Round Table (FAFLRT)

(At the 2018 MW, ALA Council approved the dissolution of the Federal and Armed Forces Libraries Round Table, FAFLRT, and its subsequent merger with the Association of Specialized and Cooperative Library Agencies, ASCLA, to form the Association of Specialized, Government, and Cooperative Library Agencies, ASGCLA. The anticipated merger date is September 1, 2018.)

Games & Gaming Round Table (GAMERT)

Gay, Lesbian, Bisexual, and Transgender Round Table (GLBTRT)

Government Documents Round Table (GODORT)

Intellectual Freedom Round Table (IFRT)

International Relations Round Table (IRRT)

Learning Round Table (LearnRT, formerly CLENERT)

Library History Round Table (LHRT)

Library Instruction Round Table (LIRT)

Library Research Round Table (LRRT)

Library Support Staff Interests Round Table (LSSIRT)

Map and Geospatial Information Round Table (MAGIRT)

New Members Round Table (NMRT)

Retired Members Round Table (RMRT)

Round Table Coordinating Assembly

Social Responsibilities Round Table (SRRT)

Staff Organizations Round Table (SORT)

Sustainability Round Table (SustainRT)

Video Round Table (VRT)

(During the 2018 ALA spring election, the VRT membership voted to change its name from Video Round Table, VRT, to Film and Media Round Table, FMRT.)

Member Interest Groups (MIGs)

Diversity

Entrepreneurship and Maker Spaces

Graphic Novels & Comics in Libraries

Librarians Build Communities Libraries Foster Community Engagement Programming Librarian Interest Group (PLIG) STEM in Libraries Virtual Communities and Libraries

APPENDIX 4 - ALA Chapters, Affiliates, & Related Groups

ALA AFFILIATES	Georgia Library Association
American Association of Law Libraries	Hawaii Library Association
American Indian Library Association	Idaho Library Association
Association for Information Science and Technology	Illinois Library Association
American Theological Library Association	Indiana Library Federation
Art Libraries Society of North America (ARLIS/NA)	Iowa Library Association
Asian/Pacific American Librarians Association	Kansas Library Association
Association for Library and Information Science Education	Kentucky Library Association
Association for Rural and Small Libraries	Louisiana Library Association
Association of Bookmobile and Outreach Services	Maine Library Association
Association of Jewish Libraries	Maryland Library Association
Association of Research Libraries	Massachusetts Library Association
Beta Phi Mu	Michigan Library Association
Black Caucus of ALA	Minnesota Library Association
Catholic Library Association	Mississippi Library Association
Chinese American Librarians Association	Missouri Library Association
The Joint Conference of Librarians of Color	Montana Library Association
<u>Latino Literacy Now</u>	Nebraska Library Association
Library and Information Association of New Zealand Aotearoa	Nevada Library Association
Medical Library Association	New Hampshire Library Association
Music Library Association	New Jersey Library Association
National Storytelling Network	New Mexico Library Association
Online Audiovisual Catalogers	New York Library Association

ACRL SPOS18 Doc 18.0

Patent and Trademark Resource Center Association

ProLiteracy Worldwide

REFORMA

Seminar on the Acquisition of Latin American Library Materials

Theatre Library Association

ALA RELATED GROUPS

ALA Allied Professional Association

Freedom to Read Foundation

Merritt Humanitarian Fund

Sister Libraries

ALA CHAPTERS

Alaska Library Association

Arizona Library Association

Arkansas Library Association

California Library Association

Colorado Association of Libraries

Connecticut Library Association

Delaware Library Association

District of Columbia Library Association

Florida Library Association

Guam Library Association

North Carolina Library Association

North Dakota Library Association

Ohio Library Council

Oklahoma Library Association

Oregon Library Association

Pennsylvania Library Association

Rhode Island Library Association

South Carolina Library Association

South Dakota Library Association

Tennessee Library Association

Texas Library Association

Utah Library Association

Vermont Library Association

Virgin Islands Library Association

Virginia Library Association

Washington Library Association

West Virginia Library Association

Wisconsin Library Association

Wyoming Library Association

Mountain Plains Library Association (MPLA)

New England Library Association (NELA)

Pacific Northwest Library Association (PNLA)

Southeastern Library Association (SELA)

APPENDIX 5 - ALA Kitchen Table Conversations

ALA Kitchen Table Conversations: Narrative Summary - Midwinter 2017

Beginning at the Annual Conference 2013, ALA has held a series of kitchen-table style conversations, to increase our understanding of member and attendee aspirations for the "ALA community." Feedback from those conversations has been summarized in narrative form and shared back with members of the community. Each successive cycle of conversations has contributed to this shared or **public knowledge**.

People want a welcoming, inclusive, engaged, relevant and supportive organization. **But they're concerned** that ALA's complexity makes it difficult to navigate and that ALA needs to be more welcoming to new members and new ideas. **As people talk more about these concerns, they talk about** silos, having too many choices and too much "noise," and about bureaucracy. They say we need to concentrate on building relationships and on developing a sense of community; we need more focus; and we need to continue the conversations.

They say members need flexible ways to participate meaningfully and that ALA should be a "safe place" to learn and grow. If we worked on this together – ALA leadership, Division leadership, Round Table leadership, and staff – they would be more likely to trust the effort and step forward to help. People are more likely to trust leaders who can work together collaboratively in stressful times. Overall, people believe we are stronger together and have more in common than we realize; but, at the same time, they want their differences heard and acknowledged. (Fall 2014)

By June 2015, these themes were still important. Conversation participants noted that the kitchen table conversations are helping. Conversations notes indicate they know that ALA is listening and taking action, and change is beginning to happen. There was also acknowledgement that given the size and complexity of the ALA community, change will happen in different places and at different rates as community members work together. Sharing stories of progress and lessons learned will be essential to moving the whole community forward. People indicated that they have a sense of hope and recognize that their aspirations require big change – and big changes take some time.

In the June 2015 conversations in San Francisco and January 2016 in Boston, participants were asked to be very specific about <u>ways</u> that would help members connect and engage more simply. Several major themes or "findings" emerged. The following "Finding Statements" summarize each of those themes.

Finding Statement 1: People who have found their place in the ALA community frequently reference the importance of a mentor or experienced peer in their engagement process:

• Participants recognized that mentoring every member is not a feasible goal, but substantive connections with peers, welcoming them to the ALA community, are desired.

- People talk about the moment they found their community within the ALA membership and how
 energizing that is. Once they find their first community, they see opportunities to connect with other
 ALA groups. This metaphor suggests the importance of the pathways priority described above.
- The more membership opportunities are tailored to the member, the more welcoming the association feels. For targeted communications to happen, members are willing to provide additional personal communication.
- Greater transparency in the committee appointment process and access to committee work opportunities are desired.

Finding Statement 2: Members are also looking for more direct relationships with staff across the organization.

- There is a lack of understanding about what specific ALA staff do (aside from conference planning).
- Recognizable staff help give members a greater sense of access.
- ALA staff are accessible, easy to approach.

Finding Statement 3: Some members don't feel they are on the membership map in a meaningful way (e.g., paraprofessionals and library support staff, the unemployed and job seekers, consultants) and are searching for their pathways to participation.

- "We could use more round table dedication to support staff and more mentoring among non-librarians around ALA, career development within specific contexts, being respectful of career choices and why some people don't want to get an MLIS."
- Participants urged more attention to those in "less traditional job paths," including more inclusive language, inclusion on "drop-down" menus and wider participation pathways. These were also mentioned in relation to job seekers, free-lancers and support staff.
- Find ways to integrate chapter members; to bring them into ALA membership.

Finding Statement 4: People want to be more personally engaged but are unsure about how to make the connections between themselves, the organization, and the field.

- We need more stories about libraries having [community] conversations that made a difference; doing things differently and the results (what changed).
- Reporting out on the Kitchen Table Conversations will help advance the change conversation.
- Specific outreach to library school faculty may help with perceptions of ALA and pathways to engagement for members.
- "Help us navigate." What are the priorities? What should we pay attention to across our various interest groups?
- Participants recognized there is a "lot of CE out there," but also believe that ALA "hasn't done a great job integrating it." It does not seem to them to be well coordinated. There doesn't appear to be a "CE plan." Participants wanted more structure, more depth and less "scattershot."
- Involvement in ALA should not be equated with serving on a committee. There should be multiple ways to contribute.
- There is interest in more venues for informal connection and social activities.
- Try pre-recorded welcome & orientation webcasts for new members to access ALA and Divisions.
- Can we consider holding KTCs in an "open area" e.g., the Uncommons rather than a closed group so people could "drop in"?

Finding Statement 5: People acknowledge the changes within ALA but they don't quite see a clear direction yet. They value the variety of perspectives. They see a need to balance institutional memory and future forward change.

- The feedback loop is critical.
- Many people are trying but it sometimes seems like "throwing spit balls and seeing what sticks."
- "We need to hold together or we're all going to fall apart."
- "I like ALA because I like to stretch out and get perspective that I would never get in my tiny little bubble."
- We need to do a better job of reporting out about the conversations.
- A positive cultural change in ALA Council was noted -- "more respectful and mission aligned."

Finding Statement 6: When asked about sharing personal information "upfront" in order to get targeted information more quickly, responses are ambivalent.

- Privacy is a clear concern.
- "Fraught relationship with vendors."

Finding Statement 7: There is a strong consensus that a "simpler" ALA would be desirable – but not yet a clear consensus around what "simpler" would look like.

- Persistent use of acronyms is "off-putting."
- There is a lot of duplication and fragmentation.
- Various parts of the Association aren't familiar with what the other parts are doing.
- We need to think of the organization "like a Prezi presentation."
- "Integrate the organization of ALA into the information architecture of the website." Make it graphical if possible.
- All relevant information should be linked in one place.
- More standardization including pricing.
- Make it easier to get involved.
- Create clear pathways to leadership.
- Provide a "snapshot" of ALA organization.
- Consider a password that isn't the membership number.
- There is a sense of not knowing "the rules" of conference, of ALA.

In the Midwinter 2016 cycle of Kitchen Table conversations, participants were asked to be very specific about ways they believe ALA can be more "welcoming, inclusive, engaged, relevant and supportive." Some additional themes are "finding statements" emerged.

Finding Statement 8: Community building is a critical, ongoing activity.

- Members see in the ALA Community a way to "move the profession forward continuously."
- We should work more closely with graduate LIS programs, with a clear plan for communication and integrating students into the profession.
- The Kitchen Table Conversations are positive. They should be easier to stumble across.
- Acronyms are barriers to someone seeking to enter the community.
- We should consider doing "virtual" Kitchen Table Conversations so more members can participate.

- Members of the ALA Community like feeling "a part of something bigger."
- Members want a "community of friends."
- "Members need to be stakeholders."
- "We need to hold together or we're all going to fall apart."

Finding Statement 9: There needs to be a pathway to participation and leadership for every member.

- There needs to be a clear process that is accessible to all members, "an even path for all members."
- ALA's organizational diversity is a strength but also creates confusion.
- There is "too much duplication and fragmentation now."
- "I need a snapshot of how ALA is organized."
- We need to "go to" place for new members at conferences.
- It's too hard to find all the information you need to work within ALA. "Seems like everything is in different places."
- Leadership training is inconsistent.

Finding Statement 10: We need to balance face-to-face and virtual connection and community building.

- ALA needs to help employers see the value in supporting participation.
- Differences between groups make it hard to work.
- Sometimes when groups decide not to meet at conferences, people who had participated feel they lose connection. At the same time, people understand that many people aren't able to participate face-to-face, at least not consistently. Some bridging is desired.
- Hold a digital Activities Fair.
- There are still barriers to digital participation inconsistent quality and content, different platforms, lots of "red tape," lack of coordination across units.
- The website should help members understand the organization.

At the 2017 ALA Midwinter Meeting in Atlanta, there will be four Kitchen Table Conversations. They will focus on a key aspect of inclusion: accessibility for people with physical, mobility, visual, auditory or cognitive disabilities. How do we create products, services and environments that are usable by people with the widest possible range of abilities, so that people with disabilities may participate fully in the life of the ALA community?

- 1-24-2015mg
- 5-3-2016mg
- 1-14-17mg

APPENDIX 6 - ADDITIONAL RESOURCES

ALA Constitution - http://www.ala.org/aboutala/governance/constitution/constitution

ALA Bylaws - http://www.ala.org/aboutala/governance/constitution/bylaws

ALA Policy Manual - http://www.ala.org/aboutala/governance/policymanual

ALA OrgChart

LLAMA Reorganization Information

- LLAMA 101 Presentation (LLAMA 101 Presentation.ppt)
- LLAMA Task Force Guiding Principles (LLAMA TF Guiding Principles.doc)
- LLAMA Town Hall Reorg Handout (LLAMA MW17 Reorg Town Hall Handout.doc)



PLA Response to ALA Investment Plan (FY19-21) May 22, 2018

ALA FY19-21 Investment Budget Plan

Over the next three years, ALA is proposing an \$8.8 million investment strategy in light of changing markets and evolving member requirements, as well as unrealized opportunities for investment and innovation since the recession. The strategy is to make substantial investment and structural changes that will position the Association for success and financial sustainability going forward. During FY 2019-2021, these investments will require use of the net asset balance that ALA has built. There will also be a review of other options including a recommendation as to the "highest and best use" of ALA's Chicago real estate, as well as use of ALA Endowment funding. See ALA Board documents 14.9 and 12.36.

PLA Board Response

ALA members deserve an effective, high performance organization. The PLA Board has reviewed and discussed the proposed FY19 ALA investment budget. The Board fully supports ALA's strategy to make needed major investments and the proposed FY19 investment budget. The Board understands the factors that brought us to this point and the urgency driving the budget and governance review plans (see financial talking points attached).

Oversight is needed to ensure return on this significant investment. Along with the PLA Board's support comes a strong conviction that there must be clear operating and financial outcomes established with careful review and monitoring of operating and financial measures related to investments over time versus the baseline pre-investment. ALA must monitor and account for ROI via identification of clear indicators, both operating and financial. ALA and division leadership, along with the membership in general, must be kept apprised in a transparent manner on a regular basis. Oversight should include review and monitoring of IT, development, advocacy and other areas with strong revenue impact potential such as conference. Specifically:

IT (proposed investment over three years = \$6.8M)

The PLA Board has particular concern about IT's ability to manage and implement this significant investment. Concern stems from multiple past issues, which seem to indicate an inability to prioritize projects, including:

- multi-year delay on new ALA Connect launch, poor coordination and communication internally and externally
- multi-year delay on responsive web design and website security (https)
- lack of coordination and communication regarding internal protocols for e-mail marketing practices
- slow response to impact of GDPR on ALA privacy policy and data management
- the <u>ITTS Technology Investment</u> plan recognizes that ALA needs to reduce the number of internal hierarchies and that more resources are needed. However, ITTS is unable to articulate what a fully functional IT department will mean for members and staff.

Some of these issues are the result of the technology debt ALA ITTS has experienced for the last several years but the PLA Board feels the technology debt alone may not fully account for the underperformance of ALA ITTS over time. To insure the best possible results, we strongly encourage:

- Comprehensive review of IT staff and operational performance conducted by an outside firm to
 evaluate current IT resources, equipment, capacity, networking and best practices to provide a
 technological assessment and recommendation for moving forward. An audit by an IT consulting
 firm that can assess against current standard association IT practice will insure creating a best
 practices strategy and optimal return on investment and realignment as dictated by review.
- 2. Clearly defined performance indicators and schedules that are regularly tracked.
- 3. Clear communication and accountability related to implementation and adjustments.

Development (proposed investment over three years = \$744K)

The ALA Development Office has made significant progress over the last year and has reached out to ALA units to insure coordination toward successful fundraising. The PLA Board commends Development staff for their accomplishments with limited capacity. Supporting this positive trajectory makes good sense. ALA Development should be supported in its work by both ITTS and Finance so that accurately documenting donations is a simple, centralized process. ALA Development should continue to:

- 1. Provide clear and regular donation tracking.
- 2. Communicate regularly regarding goals and progress.
- 3. Work toward educating and increasing a culture of giving at ALA as evidenced by more staff/members involved in fundraising.

Advocacy (proposed investment over three years =\$1.3M)

PLA supports the changes the ALA Washington Office has identified as critical to libraries' future advocacy success and has these recommendations:

- 1. Sharing of the CRM resource with relevant ALA units where possible to maximize return of investment potential.
- 2. Clear communication on goals and monitoring on progress of goals.
- 3. Coordination and involvement of ALA units with aligned advocacy goals to insure consistency, reduce redundancy and for best outcomes.

ALA Conferences

PLA Board members would rather allocate their libraries' resources to send more people to ALA Annual and PLA conferences than to Midwinter. PLA members, including the PLA Board, can do their association work virtually and a focus on higher quality education at the summer meeting is a better investment than the Midwinter meeting, which diverts limited resources. One board member stated: "The value and purpose of Midwinter are no longer evident."

The Board questions why investment in Conference is not included in the ALA plan. ALA Annual Conference is a major revenue source and a driver of member engagement and learning. ALA Conference Services is not sufficiently supported or organized to allow ALA to maximize the educational, networking, and financial potential of the conference and members lose out as a result. While good progress has been made on reducing its footprint, PLA encourages investment in the Annual Conference to insure the highest quality programming, better overall coordination, and improved marketing.

Currently, Annual produces net revenue as well as overhead for the association. Overhead is used to support operations in mission-driven services like OIF and ODLOS. Midwinter does not produce revenue over and above overhead it generates. Improvements to Annual Conference could offset the overhead loss if Midwinter is eliminated. Additionally, eliminating Midwinter would reduce costs across multiple

ACRL SPOS18 Doc 19.0

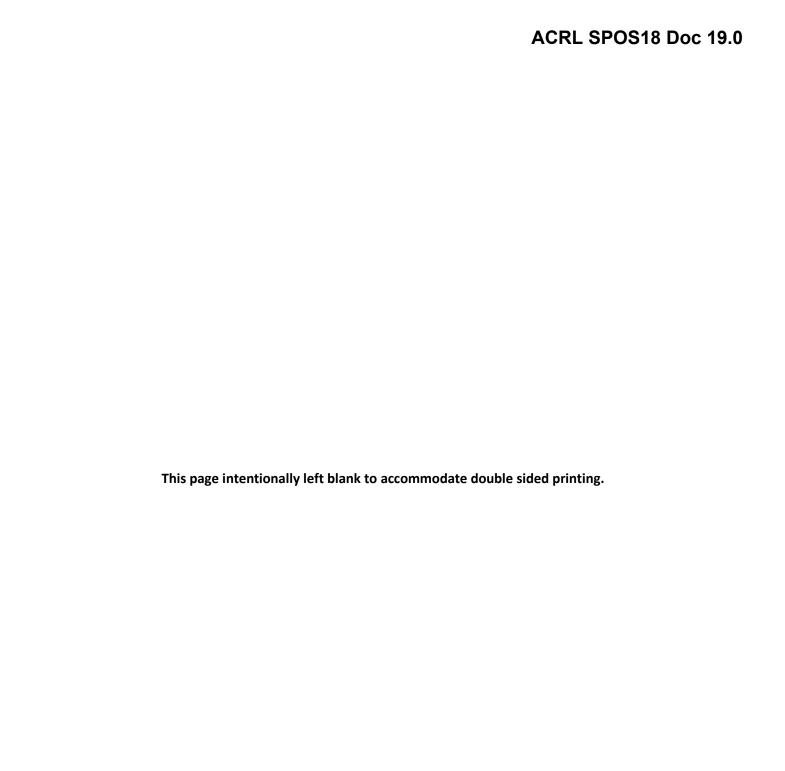
units of the Association that could be used for investment in current successful or promising new ventures. From the PLA Board's perspective, ALA should strongly consider the elimination of the Midwinter Meeting.

Attachment-Financial Talking Points

Financial Talking Points

- 1. The **2008 recession** challenged associations *and* libraries to make hard decisions, be innovative, and to change. In intervening years, while many libraries and associations adjusted, ALA did not.
- 2. To deal with **decreasing revenue**, ALA implemented a series of **across-the-board budget cuts** in the 2-5% range/year for general fund units.
- 3. **ALA's governance organization** exacerbated the impact of strategy-less budget cuts. Smaller units were cut to bare bones with reduced capacity but the same or increased expectations for output. Overall, the organization's composition did *not* change. This meant that administrative units (IT, Finance, HR) had no reduction in their burden while their budgets also were cut or kept flat at best.
- 4. For larger units, across-the-board cuts diminished the very offices ALA relies on for revenue and member services and programs, especially **conference and publishing**.
- 5. **Lack of IT investment** hurt the association in ways that are apparent to members, stakeholders, and current and potential supporters: lack of quality, easy-to-use technology for engagement and transactions; confusing, antiquated web presence, etc. Internally, staff do not have the IT tools they need to run a 21st century association and this results in waste and poor outcomes.
- 6. At the same time, the **pace of change** continued to accelerate, requiring strategic thinking and constant innovation in order to be successful. ALA's technology debt grew even faster in the face of rapid, on-going change.
- 7. The **ALA budget has continued to struggle**. Ten year financial data shows flat or declining revenues in major business areas. Over the last two years, ALA has run a deficit (-\$1M in FY16 and -\$1.6M in FY17).
- 8. While ALA's balance sheet is strong with \$72M in assets, continued deficits will decrease assets.
- 9. Without investment in ALA's IT infrastructure (staff and systems) and in revenue-producing, mission-focused opportunities, ALA is not sustainable for the long term.
- 10. ALA board is working on a **governance review** to address its problematic organization and is considering various efforts to increase access to cash such as monetizing ALA real estate. This must be undertaken in conjunction with the recommended financial investments.
- 11. Holding ALA to a balanced general fund budget without strategic investment will quicken of the rate of decline and further reduce ALA's capacity to address member need to support the work of libraries.
- 12. The **window to take action is open for only a short while**, while the balance sheet is strong and relative capacity exists.
- 13. If we continue to forego substantial, focused investment in ALA's infrastructure and capacity and follow our historical strategy of cost reduction while traditional lines of revenue decline, it's likely that we will continue to see operating deficits similar to those seen in FY16 and FY17 as traditional revenues continue their current trajectory. While the Association's Net Asset balance of \$40M provides some cushion, lack of action in the next 1-3 years will only increase the infrastructure and business investment debt that started during the recession and require drastic cuts in mission related and member support capacity;

- 14. If the requested investment isn't made in FY19, a one conference year when the General Fund has \$500k less in overhead to support its activities, the traditional strategy to balance the GF through expense cuts will require not only further deferment of sales and marketing, staff training, and new product development activities but also continued staff reductions, resulting in either the closure of mission related offices or continued reduction of the capacity of existing offices and support services.
- 15. ALA needs to track the success of the investments by closely reviewing operating and financial measures related to those investments over time versus the baseline pre-investment. ALA will monitor "return on investment" via identification of clear indicators, both operating (e.g. % of IT projects completed on time and budget resulting from the Project Manager) and financial (e.g. additional \$ raised by new Prospecting manager for Development) that is reviewed by ALA management and the Board.



EBD #5.8

2017-2018

American Library Association

Equity, Diversity, and Inclusion Recommendations Report II

January-December 2017

Submitted by: Jody Gray, Director, ALA Office for Diversity, Literacy and Outreach Services

1-30-2018



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EQUITY, DIVERSITY, AND INCLUSION TIMELINE

JUNE 2016, ALA ANNUAL CONFERENCE, ORLANDO, FL

The Task Force on Equity, Diversity, and Inclusion (TF-EDI) presented their final report to the American Library Association (ALA) Executive Board. The report included 58 recommendations that covered six areas:

- 1. Conference Programming Planning
- 2. ALA Action for All Annual Conferences
- 3. Working with Community for ALA Host Cities
- 4. Association Priorities and Planning
- 5. Membership and Participation
- 6. Recruitment, Education, and Retention

The Executive Board accepted the final report and referred the recommendations to a newly established Equity, Diversity, and Inclusion Implementation Working Group (EDI-IWG).

JULY 2016, EQUITY, DIVERSITY, AND INCLUSION IMPLEMENTION WORKING GROUP

CHARGE

The EDI Implementation Working Group will work to implement the recommendations of the Task Force on EDI with the units designated by the Task Force final report. Units charged with a recommendation that do not have an official representative on the Implementation Working Group shall be appointed a liaison from the Working Group. The Implementation Working Group shall explore partnerships with the ethnic affiliates of the Association and other related groups as needed to implement the recommendations, and may consider appointing liaison to other groups, such as the ethnic affiliates, to facilitate communications as needed.

SUMMER 2016, ALA UNITS

After ALA Annual 2016, Keith Michael Fiels (ALA Executive Director), Mary Ghikas (ALA Associate Executive Director), and Jody Gray (ALA Director, Office for Diversity, Literacy and Outreach Services) reviewed the recommendations and came up with a preliminary plan for addressing the recommendations. All the recommendations remain, but a couple of the recommendations were broken down further, bringing the total up to 61.

JANUARY 2017 FIRST EDI RECOMMENDATIONS REPORT, ALA MIDWINTER, ATLANTA, GA

The first Equity, Diversity, and Inclusion Recommendations Report was submitted to the ALA Executive Board at the Midwinter Meeting in Atlanta, GA. EBD #5.8 2016-2017

http://www.ala.org/aboutala/sites/ala.org.aboutala/files/content/governance/officers/eb_documents/2016_2017 ebdocuments/ebd5_8_tf-edi_recommendations_rpt.pdf

This report covered the period between June 2016-December 2016

FEBRUARY 2018, SECOND EDI RECOMMENDTIONS REPORT, ALA MIDWINTER, DENVER, CO

Attached is the second EDI Recommendations Report. It covers the period between January 2017-December 2017.

NOTE ON CONTENTS OF REPORT

The recommendations do not live in a vacuum and may relate to parts of the Association differently. There may be opportunities to address one recommendation from many angles. We will be doing all we can to make sure that the progress is shared with our membership and encourage members to use these recommendations in their future planning activities.

This report is meant to be a snapshot of work happening across the association, NOT a comprehensive listing of all activities.

SUMMARY OF REPORT

- 5 Divisions are represented
 - o AASL
 - o ALCTS
 - o ALSC
 - o PLA
 - o YALSA
- 5 Offices are represented
 - o HRDR
 - Member & Customer Service
 - o ODLOS
 - o Public Programs Office
 - Washington
- Center for the Future of Libraries Represented
- 44 of the 61 Recommendations are represented
- The recommendation addressed the most often in this report is **Recommendation 6.4 Explore expanded** training and continuing education, so ALA members can easily educate themselves about (1) diverse groups, (2) building connections between people who are not like themselves.

AMERICAN ASSOCIATION OF SCHOOL LIBRARIANS

SPEAKERS

- AASL, Opening General Session, Jaimie Casap, "My mother is from Argentina and my father is from Syria. Being raised by a single mother on welfare have me a unique understanding and appreciation of the power of education has on changing the destiny of a family in just one generation."
 - o EDI 1.2
- AASL, Author General Session, Jason Reynolds, is a New York Times bestselling author, a National Book Award Honoree, a Kirkus Award winner, a Walter Dean Myers Award winner, an NAACP Image Award Winner, and the recipient of multiple Coretta Scott King honors. His debut novel, When I Was the Greatest, was followed by Boy in the Black Suit and All American Boys (cowritten with Brendan Kiely); As Brave As You; For Every One; Long Way Down; and the Track series.
 - o EDI 1.2

AASL National Conference – session topics were decided and then authors selected

- Innovation, Risk, Rebellion: Young Adult Fiction, Change is inevitable and not always easy. For young adults; innovation, risk, and rebellion temper that change with a twist. In this panel; authors Alexandra Bracken, Daniel José Older, and Mindy McGinnis share how they create books with a voice so readers can relate to characters who overcome adversity in their own way. Mirror, Mirror: Reaching All Readers, Mirror, mirror, who do you see in your books? Hear from authors who put themselves into their work to engage all readers. Go beyond Diversity 101 learn how to take action and become a partner in the conversation about meeting the needs of all readers. Authors include Bill Konigsberg, Irene Latham, Ellen Oh, Icy Smith, Charles Waters, and Carole Boston Weatherford.
 - o EDI 1.8

STATEMENTS

- AASL is developing a program content statement and instructions for 2019 conference that will include an
 overall message regarding content, messaging and content that is not acceptable and a checklist for
 submissions.
 - o EDI 1.10

DIVERSE COLLECTIONS

- AASL is working with Booklist to re-run the Mirror, Mirror: Reaching All Readers program through a free webinar.
 - o EDI 2.7

OUTREACH

- AASL, working with the Public Awareness Office (PAO), did an extensive media outreach, working with the local affiliate, to highlight the inequity of school library funding and access to a certified school librarians.
 - o EDI 3.3
 - o EDI 3.4

ASSOCIATION FOR LIBRARY COLLECTION & TECHNICAL SERVICES

CONFERENCE PROGRAMMING PLANNING

- ALCTS held the Midwinter Symposium <u>Equity</u>, <u>Diversity</u>, <u>and Inclusion</u>: <u>Creating a New Future for Library Collections</u>. Spectrum Scholars were invited to attend at no cost, which enriched the experience of all attendees.
 - o EDI 1.3
- The <u>ALCTS/LLAMA Presidents' Program speaker was Dorri McWhorter</u>, CEO of the YWCA Metropolitan Chicago. The YWCA takes eliminating racism and empowering women as its mission. This sociallyconscious business and social change sector leader spoke on how to turn that mission inward, and to create a workplace where everyone has value.
 - o EDI 1.3
- ALCTS groups held a multiple conference events with EDI topics in 2017:
 - Competencies and Education for a Career in Cataloging (Midwinter 2017)
 - Working Within and Going Beyond: Approaches to Problematic Terminology or Gaps in Established Vocabularies (Midwinter 2017)
 - Diverse, Inclusive, and Equitable Metadata (Annual 2017; virtual preconference)
 - Diversity, Inclusion, and Social Justice in Technical Services (Annual 2017)
 - Power That Is Moral: Creating a Cataloging Code of Ethics (Annual 2017)

Other continuing education events with EDI topics in 2017 included:

- ALCTS Exchange
- Cataloging, Gender, and RDA Rule 9.7 (webinar)
- Equity, Diversity, and Inclusion in Library Technical Services (e-Forum)
- Power that is Moral: Cataloging and Ethics (e-Forum)
 - o EDI 1.3
- Each year during the ALA Annual Conference, the Preservation and Reformatting Section (PARS) holds a day-long preservation project in the local community where the conference is held. In its second year, Preservation in Action volunteers worked at the Rebuild Foundation's Stony Island Arts Bank, a "hybrid gallery, media archive, library and community center" in Chicago. The group helped the Arts Bank preserve two collections comprising papers, photographs, ephemera, and vinyl albums:
 - Edward J. Williams Collection: 4,000 objects of "negrobilia" mass cultural objects and artifacts that feature stereotypical images of black people
 - Frankie Knuckles Records: "Godfather of House Music," Frankie Knuckles' vinyl collection The event was covered by the Chicago Tribune.
 - o EDI 1.14
- While not free, ALCTS held a Virtual Preconference in June entitled: <u>Diverse, Inclusive, and Equitable Metadata</u>. Themes in this preconference included Outreach and Inclusivity in Digital Libraries and Institutional Repositories, and Metadata Creation and Remediation in Zine and Digital Library Collections. Spectrum Scholars were invited to attend at no cost.
 - o EDI 1.14

ASSOCIATION PRIORITIES AND PLANNING

• In consultation with ODLOS, ALCTS adopted the <u>ALCTS Diversity Statement</u> in June 2017 to stand alongside its current Strategic Plan and Mission Statement. ALCTS will continue to examine issues of equity, diversity, and inclusion as it drafts an updated strategic plan in 2018.

o EDI 4.4

MEMBERSHIP AND PARTICIPATION

- The Cataloging and Metadata Management Section (CaMMS) created the <u>Lois Mai Chan Professional Development Grant</u> in 2017, with the first grant to be awarded in 2018. This grant provides librarians and paraprofessionals from under-represented groups who are new to the metadata field with the opportunity to attend a professional conference, and encourages professional development through active participation at the national level.
 - o EDI 5.3
- ALCTS already has an appointments process that does not require conference attendance to be appointed
 to a committee. All ALCTS award juries meet virtually. ALCTS also allows for interns on committees which
 gives service opportunities for less experienced members without a lot of pressure.
 - o EDI 5.3
- The first ALCTS Exchange online forum took place in May. Over three hundred user accounts were created, providing access to the archived livestreaming content, discussion forums, and presenter materials. ALCTS encouraged participation from those involved in a variety of areas of the profession, and sought out presenters with diverse backgrounds and viewpoints. A special invitation was sent out to library school students to participate in the poster sessions. Presenters were also able to pre-record sessions, which allowed for a presentation from a librarian in Nigeria.
 - o EDI 5.6

RECRUITMENT, EDUCATION, AND RETENTION

- After years of planning, ALCTS created a Mentoring Program in 2017. 41 pairs were created in this
 inaugural year of the program. Special attention was paid to match mentors and mentees with their
 experience and areas of interest. When a new librarian was looking for mentor in Middle Eastern
 Librarianship, the committee was able to take extra steps to find an appropriate match. A first assessment
 of the program will be made in summer 2018.
 - o EDI 6.2

ASSOCIATION FOR LIBRARY SERVICE TO CHILDREN

ALSC has actively worked to deliver on its commitment to diversity and inclusion, an objective of the ALSC Strategic Plan, adopted in February 2017.

ALSC SPECTRUM SCHOLAR

- ALSC worked to expand the Spectrum Scholar program and will increase the Spectrum Scholar award from one to two Scholars each year for applicants who expresses an interest in library service to children.
 - o EDI 6.1

ALSC VOLUNTEER FORM AND MENTORING PROGRAM APPLICATION

- ALSC incorporated a demographic section on the volunteer form to allow members to self-identify under several underrepresented groups. The ALSC Mentoring Program application form was updated to include demographic information to improve the mentor/mentee match with respect to their demographic preferences
 - o EDI 5.2C

PROMOTE DIVERSE COLLECTION DEVELOPMENT

- Stories of Immigration Booklist and Notable Books for a Global Society Webinar
 - o EDI 4.12
- The Pura Belpré Award (PBA) 2018 Selection Committee promoted a list of past Belpré winners, where
 the titles address the immigration experience, in response to the Administration's earlier decision to
 repeal DACA.
 - o EDI 4.12
- The Education Committee supported the development of a free webinar, titled, "Introducing the Notable Books for a Global Society Collection: Promoting Understanding of Diversity" to bring book by and about all people to student readers.
 - o EDI 4.12

EQUITY, DIVERSITY, AND INCLUSION WITHIN ALSC IMPLEMENTATION TASK FORCE (SEE RECOMMENDATIONS)

- Equity, Diversity, and Inclusion within ALSC Implementation Task Force (see Recommendations)
- The Equity, Diversity, and Inclusion within ALSC Implementation Task Force has met with the ODLOS
 Director to learn more about the ALA vision of EDI and consider its relationship to upcoming ALSC
 projects and programming. The task force will partner with the Education Committee to create a series of
 cultural competency webinars. The task force has also been in discussion about improving pathways for
 participation in ALSC activities and committees.
 - o EDI 4.6
 - o EDI 5.3

ALSC NATIONAL INSTITUTE (HYPERLINKED TO EVENT PAGE)

- The 2018 ALSC National Institute was designed with equity, diversity and inclusion in mind throughout the
 program. The program will include an ALSC Connection Reception at the National Underground Railroad
 Freedom Center engaging members and invited guests from local organizations as well as keynote
 speakers and programs that represent an inclusive and diverse group of individuals, topics and
 viewpoints.
 - o EDI 1.3
 - o EDI 3.2

2017 ALA ANNUAL CONFERENCE AND COMMUNITY FORUM (HYPERLINKED TO FORUM PAGE)

- At the 2017 ALA Annual Conference, the Leadership & ALSC meeting included a presentation by Dr. Nicole
 Cooke, Assistant Professor and MSLIS Program Director at the School of Information Sciences, at the
 University of Illinois, Urbana-Champaign that discussed diversity and social justice research in
 librarianship. The presentation was followed in August by a community forum that expanded on the topic
 and was delivered virtually to share this relevant information with the larger ALSC membership.
 - o EDI 1.2

PUBLIC LIBRARY ASSOCIATION

PLA 2018 CONFERENCE PROGRAM PLANNING

• The PLA 2018 Conference Program Subcommittee added an Equity, Diversity, and Inclusion component to its rubric for reviewing and rating all program and preconference proposals. As a result, sessions

addressing EDI topics and/or reflecting a commitment to EDI in speaker selection received a higher rating than those that did not. New EDI language was also added to the PLA 2018 Conference call for proposals: "PLA is exploring how to make our conference more equitable, diverse, and inclusive. Our first step includes seeking and strongly encouraging submissions from marginalized groups including women, people of color, the LGBTQ community, and people with disabilities. PLA may be able to provide support in completing the proposal form and/or mentoring for first-time presenters." Also, the PLA 2018 Conference website allows for searching and browsing to identify sessions related to equity, diversity, and inclusion.

- o EDI 1.3
- o EDI 1.6
- o EDI 1.8

PLA STRATEGIC PLANNING

- The PLA Board of Directors held a strategic planning session in September 2017. Following a presentation by the co-chairs of the PLA Task Force on Equity, Diversity and Inclusion, the board agreed to incorporate EDI in a new set of goals for the 2018-2020 plan. Goals and activities are being drafted and will be finalized in the spring of 2018. Once approved, PLA will monitor progress in addressing the strategic plan and share information with ODLOS and ALA when relevant.
 - o EDI 4.4
 - o EDI 4.11

PLA TASK FORCE ON EQUITY, DIVERSITY AND INCLUSION

- The PLA Board of Directors formed the Task Force on Equity, Diversity and Inclusion (EDI) in January 2017. The charge of the Task Force is "to develop a strategic and coordinated approach for PLA related to issues of equity, diversity and inclusion" and "to explore methods and consider resources to be developed that will allow PLA to take a multifaceted approach." Seventeen members were appointed for roughly two-year terms to end June 30, 2019. They are convening monthly, creating e-mail updates for PLA members, planning local/regional educational efforts, and more. They held a webinar, "Understanding Power, Identity, and Oppression in the Public Library," for over 200 attendees in December 2017, and they are sponsoring a full-day preconference on EDI at the PLA 2018 Conference in Philadelphia, PA. They have discussed and/or initiated collaboration with other relevant groups, such as the Arcus Center for Social Justice Leadership, the Joint Council of Librarians of Color, and the Government Alliance on Race and Equity.
 - o EDI 4.8
 - o EDI 5.3

PLA INCLUSIVE INTERNSHIP INITIATIVE (III)

• In spring 2017, PLA received an out-of-cycle Laura Bush 21st Century Library Program grant, directed at pre-professional candidates for careers in librarianship (grant RE-00-17-0129-17). Through the Inclusive Internship Initiative (III), PLA provided paid internships for 50 high school students at 35 public libraries this summer. The program introduced students from diverse backgrounds to careers in librarianship as they are making decisions about educational and career paths. III also sought to broaden and accelerate awareness of librarianship as a profession, and to test approaches that may be adopted for future cohorts. Preliminary data indicate III is meeting its stated goals related to increasing interns' skills and

knowledge about the profession, supporting the mentoring librarians and libraries, creating new audiences and programs for libraries, and generating awareness and positive attitudes about public librarianship as a career option.

- o EDI 6.1
- o EDI 6.2

YOUNG ADULT LIBRARY SERVICES ASSOCIATION

CONTINUING EDUCATION

- YALSA is partnering with ODLOS on a continuing education project funded by ALA's Strategic Initiatives
 effort. ODLOS/YALSA will offer a free, full-day preconference focusing on cultural competence at the
 2018 ALA Annual Conference, then used the curriculum and materials developed for that to create a
 webinar series and a toolkit.
 - o EDI 6.4
- YALSA is offering a free webinar series in 2018 that include topics such as cultural competence and equity
 of access. www.ala.org/yalsa/onlinelearning/webinar/free competencies webinars
 - EDI 6.4
- The theme for YALSA's 2018 summer issue of Young Adult Library Services is restorative justice and cultural awareness
 - o EDI 6.4
- In Jan. 2018 YALSA applied for an IMLS grant to implement a train the trainer program that would help library staff build skills to serve underrepresented and non-dominant youth via programs and services focusing on computer science and computational thinking skills.
 - o EDI 6.4

CURRICULUM/LIBRARIAN PREPARATION

- Updated YALSA's competencies guidelines to be more inclusive of EDI issues. *Teen Services Competencies for Library Staff* was published in Nov. 2017: www.ala.org/yalsa/guidelines/yacompetencies2010
 - o EDI 6.3
- Beginning in 2017, YALSA has expanded its Spectrum Scholar support from one scholar per year to two
 - o EDI 6.1

MEMBER AND COMMUNITY ENGAGEMENT

- Completed a transition of YALSA's selection committees to an all-virtual format. Of YALSA's 30+ member groups, only 6 still require conference attendance.
 - o EDI 5.6

- In Feb. 2018 YALSA is bringing forward an agenda item to the ALA Executive Board proposing stronger ties between ALA, its units, and Affiliate organizations
 - o EDI 4.6
- YALSA is working with other ALA units to include ALA EMEIRT, GLBTRT and ethnic Affiliates' book awards into the ALA Youth Media Program
 - EDI 4.6
- Working with education focused organizations to release a statement on countering hate in education
 - o EDI 4.6

MEMBER RECRUITMENT

- YALSA's Organizational Plan has a three-year goal of diversifying our membership by 20%. An Advancing Diversity Taskforce has recently completed a survey of nonmembers to explore ways to make YALSA more welcoming to people from diverse backgrounds. The taskforce is expected to present recommendations to YALSA's Board of Directors in Feb. 2018.
 - o EDI 4.9
 - o EDI 4.15
 - o EDI 5.3
 - o EDI 5.5

READERS' ADVISORY & COLLECTION DEVELOPMENT

- Working with ALSC and REFORMA to expand the Pura Belpré Award to include young adult titles
 - o EDI 4.6
 - o EDI 4.8
- Working with ALA EMEIRT, GLBTRT and ethnic Affiliates to expand YALSA's Teen Book Finder Database
 and mobile app to include Round Table and Affiliate book award winners that are for teens. The project is
 funded by ALA's Strategic Initiatives effort. http://booklists.yalsa.net/
 - o EDI 4.6
- Changed YALSA policy for selected lists and book awards so that publishers can send e-books and e-ARCs
 instead of only print copies. Doing so allows for smaller imprints, who often focus on diverse titles, to
 participate more fully in YALSA's recommended reading program
 - o EDI 2.5

RESEARCH

- YALSA updated its National Research Agenda to be more inclusive of EDI issues: www.ala.org/yalsa/guidelines/research/researchagenda
 - o EDI 4.12

CENTER FOR THE FUTURE OF LIBRARIES

- The Center uses seven key categories to organize its trend collection, including Demographic changes (other categories include Society, Technology, Education, the Environment, Politics and Government, and Economics). As of this reporting, four trends (Aging, Digital Natives, Emerging Adulthood, and Urbanization) are specifically categorized as Demographic trends. Of the remaining 26 trends in the current collection, thirteen include equity, diversity, or inclusion in their discussion of the trend's development or its implications for libraries. Diversity, equity, and inclusion remain a primary lens for how each new trend is evaluated in the context of librarianship. The Center's regular trend scanning through the Read for Later e-newsletter and blog posts includes a Communities and Demographic heading to feature news stories and articles that focus on changes in community composition, equity, diversity, and inclusion. Through public presentations, the Center reaffirms the importance of contextualizing trends through the lens of library values, including equity, diversity, and inclusion and the Center's "From Futuring to Innovation" activity asks users to create positive innovations by aligning trends with our professional values, including diversity and equity of access.
 - o EDI 4.3

HUMAN RESOURCE DEVELOPMENT AND RECRUITMENT

- On behalf of the ALA HRDR Advisory Committee and the ALA Recruitment Assembly, the ALA Office for Human Resource Development and Recruitment (HRDR) exhibited at the National Association of Workforce Development Professionals (NAWDP) 2017 Youth Development Symposium, Oct. 30 – Nov. 1, 2017 in Chicago.
 - Nearly 600 youth-focused workforce professionals attended the conference. Conference
 participants serve youth between the ages of 16 24 from underserved groups. Attendees
 represented the full scope of the workforce development profession (WDP) including:
 - One-Stop Center Staff
 - Youth Build Grantees
 - Job Corps Professionals
 - Community College Representatives
 - Career and Guidance Counselors
 - Juvenile Justice Specialists
 - o WDP who work with Rural Youth
 - WDP who work with Tribal Youth
 - WDP who work with Migrant Youth
 - Educators and Other Youth Development Practitioners

The experience was valuable, and we plan to exhibit at the conference again next year.

o EDI 6.1

MEMBER AND CUSTOMER SERVICE

MEMBERSHIP COMMITTEE REPORT

- Membership Volunteer Infographic and Members from underrepresented groups The Membership
 Committee launched an infographic, video, and support campaign to encourage a greater cross-section of
 members to volunteer with ALA. One of the short "white board" videos is about the ALA journey of
 former ALA present Courtney Young, with emphasis on her role with the New Member Round Table
 (NMRT). A second video highlights the member journey of Gina Persichini, with an emphasis on what to
 do if you want to get involved but are not sure how to get started.
 - o EDI 5.4
- Members from underrepresented groups and Dues Structure The Membership Committee reviewed an
 analysis done by the Office of Research and Statistics showing relevant membership trends and had staff
 develop an infographic, short video, and related communications campaign to encourage people to join
 and members to renew by highlighting the equity offered by the availability of a wide variety of
 membership/dues categories to fits most budgets.
 - o EDI 5.5

OFFICE FOR DIVERSITY, LITERACY AND OUTREACH SERVICES

RESOURCES

- With the ODLOS Advisory Committee- working on a vocabulary resource to be housed on the ODLOS website: http://www.ala.org/aboutala/odlos-glossary-terms. The definitions developed by the Task Force on Equity, Diversity, and Inclusion are maintained on this resource page.
 - o EDI 1.1
 - o EDI 4.2a
- Continued promotion of the hashtag #LibrariesRespond. Libraries Respond web resources are maintained by the ODLOS and updated when necessary. In 2017 the following pages were created and can be found at http://www.ala.org/librariesrespond
 - Hate Crimes and Libraries
 - Hate Groups and Violence
 - National Day of Healing
 - Natural Disaster
 - Protections for our Nation's Transgender Students.
 - EDI 3.6
- ODLOS has participated in several continuing education opportunities across the association in the past
 year. In addition, the ODLOS staff have begun to provide in person workshops across the country. In
 addition, the Literacy Officer position has been promoted to become the Assistant Director for Literacy
 and Continuing Education. This role will have the responsibility to lead planning efforts for continuing
 education for members.
 - o EDI 6.4

CONFERENCE PLANNING

• ODLOS sponsored a low cost pre-conference at Annual 2017 in Chicago, titled, "Everybody's Everyday Work: Diversity and Inclusion Foundations. This pre-conference will examine the concepts of diversity and inclusion from a social justice framework. Join us for the day long-intensive workshop on the fundamentals of diversity and inclusion, including microaggressions, privilege, and inclusive communication strategies. The session will be led by Anne Phibbs, PhD from

Strategic Diversity Initiatives (http://strategicdi.com) Sponsored by the Office for Diversity, Literacy and Outreach Services.

- o EDI 1.5
- Collaborated with Conference Services to identify and tag all programs under the subject headings of
 Diversity or Equity of Access. Send out instructions on how to find Diversity related events at the Annual
 and Midwinter conferences.
 - o EDI 1.6
- Developing a diversity speaker's bureau. Worked with an Emerging Leaders group to develop a
 clearinghouse for EDI Speakers. A platform has been identified, as well as a process for soliciting speakers.
 Currently this project is on hold, but will be taken up by the ODLOS Advisory Committee. It is an ongoing
 project.
 - o EDI 1.9
- With the Equity, Diversity, and Inclusion Implementation Working Group- have developed a
 microaggressions pre-conference to be hosted at the ALA Midwinter Meeting 2018 in Denver, CO. Will be
 facilitated by Dena Samuels, PHD.
 - o EDI 1.12
- Since Annual 2016, ODLOS has created a resource for each city that highlights minority and women owned businesses.
 - o EDI 2.1
- ODLOS hosted a Midwinter Town Hall at the 2017 Midwinter in Atlanta. This event was well attended, and the feedback from the discussions was used to help develop priorities for the office in the following year. Due to some unplanned staffing leaves, the Town Hall for Midwinter 2018 has been postponed until 2019.
 - o EDI 5.1
- The EDI-IWG has updated the ALA Code of Conduct to address equity, diversity, and inclusion. Currently.
 The ALA Executive Board has supported the changes. Waiting on feedback from Executive Director.
 Should be in place for the Annual 2018 Conference.
 - o EDI 2.2

ASSESSMENT

- EDI-IWG is working with ODLOS and the Office for Research and Evaluation to find ways to include
 questions that address EDI in conference. This is an ongoing project.
 - o EDI 2.4

COMMUNITY PARTNERSHIPS

- A member of the Librarians Build Community (LBC) Member Interest Group was appointed to the EDI-IWG. ODLOS has been working with LBC to find ways to support group. LBC Member Interest Group opted to not renew their Member Interest Group Status. Many of their resources have moved over to the Libraries Respond (ala.org/librariesrespond) resources. The EDI-IWG hosted a discussion at Annual 2017 in Chicago to address how to best address ways for ALA to include local support and a presence in the cities that host the ALA Conferences. Staff from ODLOS and Chapter Relations will continue to take the initiative to develop programming for the various cities going forward.
 - o EDI 3.1
 - o EDI 3.2
- Since Annual 2016, ODLOS has collaborated with the American Indian Library Association to develop resource pages that give context for the indigenous communities that reside in the region where Annual

and Midwinter Conferences occur. These are housed on the official conference website and promoted through social media and the ODLOS newsletter.

- o EDI 3.7
- EDI-IWG is in the process of soliciting feedback from other national associations to share checklists, clearinghouse, information, etc. This is an ongoing project.
 - o EDI 48

STAFF AND LEADERSHIP

- ODLOS and the Public Programs Office are working with the W.K. Kellogg Foundation to bring in
 opportunities for ALA staff and leaders in the association to participate in racial healing practices. This is
 part of the Truth, Racial Healing, and Transformation Great Stories Club Grant that was given to ALA by
 W.K. Kellogg.
 - o EDI 4.13

PUBLIC PROGRAMS OFFICE

GRANT INITIATIVES

- In partnership with ODLOS, PPO launched the Truth, Racial Healing & Transformation Great Stories Club
 (TRHT GSC) in October 2017. The 30-month project will provide grants to up to 125 libraries to convene
 reading, discussion, and racial healing programming for young adults. The reading lists and supporting
 materials developed for the project will address issues of Narrative Change, Separation, and Racial
 Healing and Relationship Building.
 - o EDI 4.6
 - o EDI 4.9

PROFESSIONAL DEVELOPMENT OPPORTUNITIES

- ALA PPO and ODLOS are co-sponsoring racial healing sessions at ALA Annual Conference (2017 & 2018), offering attendees the opportunity to work with racial healing practitioners affiliated with the W.K.
 Kellogg Foundation's Truth, Racial Healing & Transformation process.
 - o EDI 6.4
- A half-day racial healing session will be offered for the ALA Executive Board and senior managers in April 2018, with session moderators provided by the W.K. Kellogg Foundation
 - o EDI 4.13
- As part of the Truth, Racial Healing & Transformation Great Stories Club, representatives from up to 125
 libraries will participate in a 2-day orientation workshop. This training will support their efforts convening
 reading and discussion programs with underserved teen audiences that address issues of race and equity,
 and include racial healing sessions led by an experienced practitioner.
 - o EDI 6.4
- ALA PPO co-sponsored a free preconference at the 2017 ALA Annual Conference with PLA. This
 workshop, attended by 100 public library professionals, was presented by Everyday Democracy as a part
 of Libraries Transforming Communities (LTC): Models for Change. Models for Change is an initiative of the
 American Library Association (ALA) and the National Coalition for Dialogue & Deliberation (NCDD) that
 seeks to strengthen libraries' roles as core community leaders and agents of change. Participants in this
 session learned the basic principles of Everyday Democracy's Dialogue to Change community engagement

process including organizing strategies for building strong community coalitions, trust and relationship-building, recruiting diverse dialogue participants, facilitator training, planning for sustainable action, and bringing an "equity lens" into community engagement work. LTC: Models for Change receives funding support from IMLS.

- EDI 4.6
- o EDI 4.9

MEMBER PARTICIPATION

- Established the TRHT GSC Implementation Team and National Advisory Committee, working closely with ODLOS staff to recruit applicants and invite participants.
 - o EDI 5.2a
 - o EDI 5.2b

WASHINGTON OFFICE

- In October 2017 the Washington Office hosted ODLOS Director Jody Gray and Kristin Pekoll, who gave a presentation on the mission of ODLOS and ALA's vision for EDI to all staff members. ALA President Jim Neal and Policy Director Alan Inouye briefed the ODLOS director on the ALA Policy Corps presidential initiative in advance of its October launch, requested that ODLOS publicize the announcement to solicit applicants from diversity-focused ALA committees and affiliate organizations, and provided advance notification of a selected cohort member who was from the American Indian Library Association. The Washington Office regularly reaches out to consult with ODLOS on draft legislation, including most recently the Museum & Library Services Act reauthorization bill introduced in December. During the process of writing the Tribal Connect Act with Senator Heinrich (D-NM) in November, the Washington Office sought and received feedback from the ODLOS director, who co-authored an American Libraries blog post highlighting the bill's introduction in December. In addition, the Washington Office consults with ODLOS when working with its allies on diversity-related projects. During National Hispanic Heritage Month 2017 the Washington Office solicited input from the ODLOS director on a video script for ALA President-elect Loida Garcia Febo, who promoted the new Latino Cultures platform for longtime Washington Office collaborator Google, Inc. The Washington Office also requested and used recommendations from the OLDLOS director for the initial advisory committee for Phase One of the Libraries Ready to Code project. ODLOS provided valuable recommendations on framing the grant proposal that funded subsequent stages of the project to ensure diverse audiences were included.
 - o EDI 4.1

TASK FORCE ON EQUITY, DIVERSITY, AND INCLUSION RECOMMENDATIONS

CONFERENCE PROGRAMMING PLANNING

Rec#	Recommendation
1.1	Plan a discussion on definitions of diversity where people who are doing diversity programming shall have a consistent message.
1.2	Engage in diversity with "big name" speakers, even when controversial, and have speakers represent underrepresented constituencies.
1.3	Encourage grassroots efforts to push for equity, diversity and inclusion (EDI) programming at all levels of ALA, including Division presidents' programs, and encourage all program selection committees to consider inclusion of EDI as part of the [selection] process.
1.4	Develop a conference theme related to EDI matters/issues typical of the [host] region/area.
1.5	Offer a free pre-conference on diversity issues.
1.6	Add a section to the conference program that identifies all events related to equity, diversity, and inclusion; create a process to ensure that the tagging system is used to identify all relevant events.
1.7	Make entire conference more participatory e.g. "walk-through" exhibits, "tunnels of oppression," partnerships with local groups.
1.8	Create a vision statement for EDI inclusion in conference programming; share statement with publishers (as main source of big name speakers)
1.9	Create a clearinghouse (speakers bureau) of people with expertise in equity, diversity, and inclusion to aid program planners in choosing speakers.
1.10	Create an EDI programming checklist informed by all groups that includes guidelines on content, presenters, advertising, etc.
1.11	Have a COD representative on the conference planning committee.
1.12	Create a scenario-based session on micro-aggressions that addresses how allies of targeted people can use the situations as teaching moments to help change behavior.
1.13	Build in a thoughtful reflection at the start of every EDI-related program; create scripts/prompts for program hosts.
1.14	Conduct a session on archival projects that provide context on the history of local areas

ALA ACTIONS FOR ALL ANNUAL CONFERENCES

Rec#	Recommendation
2.1	Create a list of local minority owned businesses & cultural institutions with a focus on issues
	related to EDI for conference attendees to frequent/support

Rec#	Recommendation
2.2	Create EDI statement that is included in the registration process, similar to the Code of Conduct, that outlines the Association's commitment to EDI principles; or, incorporate EDI principles into existing Code of Conduct
2.3	Make wifi hotspots available to committees and other groups to enable virtual participation.
2.4	Create and distribute a pre- and post-conference survey to attendees about experiences related to equity, diversity, and inclusion at the conference.
2.5	Encourage diversity among exhibitors and their representatives participating in ALA Annual Conference and/or Midwinter Meeting and/or other ALA activities, in alignment with ALA's policy on equity, diversity and inclusion (B.3).
2.6	Identify and implement an incentive program for vendors who strive to meet the diversity goals of recommendation 2.5 in a meaningful way.
2.7	Establish a robust virtual option for conference attendance (e.g. main speakers, key workshops, membership meetings, Council sessions) that allows members and non-members to participate at a reasonable cost in real time.

WUKKIN	WORKING WITH COMMUNITY FOR ALA HOST CITIES	
Rec#	Recommendation	
3.1	Provide additional staff support for the Libraries Build Communities Member Interest Group to enable them to carry out the work being suggested in the TF report.	
3.2	Research and collaborate with local community organizations who are doing work on equity, diversity, and inclusion; ask them what types of support they would like from ALA conference attendees.	
3.3	Research the local community perspective on equity, diversity, and inclusion and share with attendees in order to build understanding before going to a city for a conference.	
3.4	Make connections to local media outlets, and release press statements on how librarians support the local organizations advocating equity, diversity, and inclusion.	
3.5	Create programming open to the local community centered around equity, diversity, & inclusion.	
3.6	Create and distribute a T-shirt, Hashtag, or a tag that supports equity, diversity, and inclusion	
3.7	Honor local culture (Native and other) by inviting presenters to be part of the opening of the	

ASSOCIATION PRIORITIES AND PLANNING	
Rec#	Recommendation
4.1	Establish a process for consulting with COD and ODLOS on how to respond when issues arising related to equity, diversity, and inclusion that impact members.
4.2a	Add the definition of EDI developed by the TF to the ALA Policy Manual.

conference,

Rec#	Recommendation
4.2b	Audit all definitions of equity, diversity, and inclusion across the Association to ensure the broadest possible understanding and explore core values and roles and responsibilities statements to assess equity, diversity and inclusion.
4.3	Task the Center for the Future of Libraries with inclusion of trends illustrating equity, diversity, and inclusiveness within the profession as part of their work.
4.4	Strongly encourage all offices, divisions, and round tables within ALA to audit their goals, strategies and outcomes for diversity and inclusion every three years.
4.5	Expand ALA marketing to include promotion of librarians and library works, in addition to libraries.
4.6	Assess ALA equity, diversity, and inclusion activities across the Association to look for synergies
4.7	Consider creating a diversity and inclusion top ten [issues] list (similar to LITA's and ACRL's) to aid in research, program planning, etc.
4.8	Work with other national associations to share checklists, clearinghouse information, etc.
4.9	Seek benchmarks and best practices to determine paths to increase the Association's diverse membership, diversity programming, etc.
4.1	Expand advertising and discussion for the ODLOS "Discovering Librarianship" initiative
4.11	Maintain ongoing audits of goals, strategies and outcomes to ensure diversity and inclusion is present, with an annual report to Council on these issues.
4.12	Design a research agenda for equity, diversity, and inclusion that could include diverse collection development, models for delivery of reference services in general, as well as specific to individual minorities.
4.13	Explore training for ALA staff and officers, etc. re organizational culture for diversity, equity and inclusion.
4.14	Increase the capacity of the Diversity Research Grants program.
4.15	Survey the membership on a triennial basis about issues related to EDI, using the TFs surveys as examples of the topics to be explored.
4.16	Conduct interviews and focus groups around the country on EDI issues within the association and the profession, using the model of the Kitchen Table conversation but expanding their reach beyond conference attendees.

MEMBERSHIP AND PARTICIPATION

Rec#	Recommendation
5.1	Revive the Diversity Town Hall at Midwinter Meetings
5.2a	Provide guidance for committee appointments to include and increase diversity and inclusion by including a representative from the Committee on Diversity {on one or both appointment committees?]
5.2b	Assess ALA office advisory groups to determine if advisory groups are present and diverse enough.
5.2c	Add a demographic section to the volunteer form to allow members to self-identify as belong to an underrepresented group

Rec#	Recommendation
5.3	Assess existing pathways to professional success within the organization for underrepresented groups; make suggestions to fill gaps
5.4	Create an infographic to advertise committee appointment process, understanding that involvement [in this case] encompasses just "committees" Develop a "how to get involved in ALA" campaign
5.5	Determine the numbers of members from underrepresented groups within the association and increase representation of these populations within membership to match the proportions found in society. Use the TFEDI demographic questions as a model for collecting the information.
5.6	Develop uniform modes for member involvement in committees, task forces, and other Association activities that does not require conference attendance; look at division initiatives in this area as a starting point.
5.7	Investigate alternative dues structure, including salary-based categories and options to include an initial division and round table membership without additional costs.

RECRUITMENT, EDUCATION, AND RETENTION

Rec#	Recommendation
6.1	Develop and implement a long-term library profession recruitment plan; increase changes of recruiting professionals from diverse backgrounds through recruitment in high schools and undergraduate institutions to increase LIS school retention; design a plan for providing library experiences and career information early from childhood forward
6.2	Assess ALA's mentor programs for equity, diversity, and inclusion.
6.3	Ensure equity, diversity, and inclusion (and overall cultural competence) is integrated into every part of every library school class and training and is not a separate training.
6.4	Explore expanded training and continuing education so ALA members can easily education themselves about (1) diverse groups, (2) building connections between people who are not like themselves
6.5	Audit the definitions of and track the levels of professional success that affect the retention of LIS workers from underrepresented groups during their education and their career advancement, given the variety of acceptable education for library professionals.
6.6	Investigate a model for requiring continuing education (in relation to equity, diversity, and inclusion) and development throughout a career
6.7	Assess education and accreditation standards in order to holistically include the profession's values of equity, diversity, and inclusion, from various historical, theoretical, and practical perspectives



EQUITY, DIVERSITY, AND INCLUSION

Office for Diversity, Literacy and Outreach Services

KEY MESSAGES

- The ALA Office for Diversity, Literacy, and Outreach Services supports equity, diversity, and inclusion in the library profession through a variety of scholarships, recruitment efforts, grants, and partnerships.
- Our office develops resources to support libraries in creating responsible and all-inclusive spaces.
- We use a social justice framework to facilitate conversations about access and identity
- Through our Spectrum Scholarship Program, we work to recruit and retain a diverse workforce and develop leadership skills and opportunities for recipients of the scholarship.
- Support all library workers from traditionally under-represented groups through continuing education, programmatic support, community building, and leadership development and opportunities
- We strive to create an association culture where equity, diversity, and inclusion are incorporated into everyone's everyday work.
- We approach literacy and outreach through a social justice lens with priorities towards access and distinct community outreach efforts.





LITERACY & CONTINUING EDUCATION INITIATIVES

PARTNERSHIPS

- American Dream Literacy Initiative New partnership with the Public Programs Office (PPO) to manage this grant that provides \$10,000 grants to public libraries to support their adult literacy programming. The grant is provided by the Dollar General Literacy Foundation.
 - Will present a 10 years of the American Dream program at Annual 2018, that will include findings from a multi-year retrospective evaluation.
- Adult Literacy through Libraries continuing our partnership with ProLiteracy that includes an online course for developing adult literacy in public libraries.

CONTINUING EDUCATION

- Kristin Lahurd, Assistant Director for Literacy and Continuing Education. Prioritize continuing education efforts for the office.
- Examples
 - Joint webinar with ACRL on "Addressing cultural humility and implicit bias in information literacy sessions"
 - Committee on Literacy will work on updating the toolkit Literacy for All: Adult Literacy
 @ your library
 - Literacy Assembly current initiative around services to incarcerated adults and their families taking shape as a fact sheet/resource list of effective programs, materials, and resources
 - Literacy Clearinghouse http://literacy.ala.org/

EQUITY, DIVERSITY, AND INCLUSION

2017

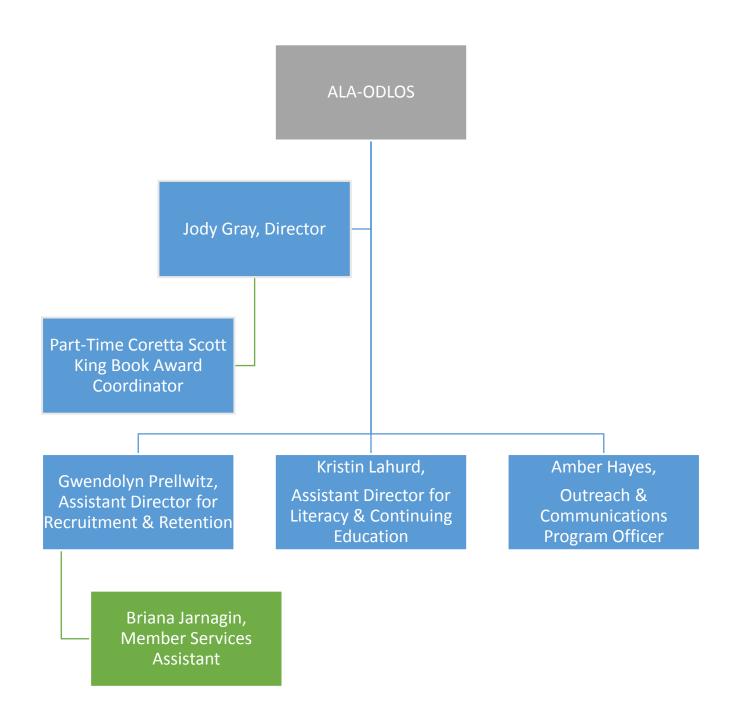
- Completed the Implementation Plan for the Strategic Direction on Equity, Diversity, and Inclusion in fall of 2017
- Created a sub-committee for Services to Refugees, Immigrants, and Displaced Persons (SRIDP) within the ODLOS Advisory Committee at Annual 2017

2018-2019

- Staffing changes and new roles designed to be more responsive to recruitment, retention, continuing education, communications, and member engagement
- Revisit Diversity Counts and strategize best way to capture useful metrics for ALA around EDI and seek funding resources
- Intellectual Freedom and Social Justice dialogues and Hate Crime/Speech FAQ partnerships with the
 Office for Intellectual Freedom



ACRL SPOS18 Doc 21.0







ACRL Board to Establish New Equity, Diversity, and Inclusion Initiative

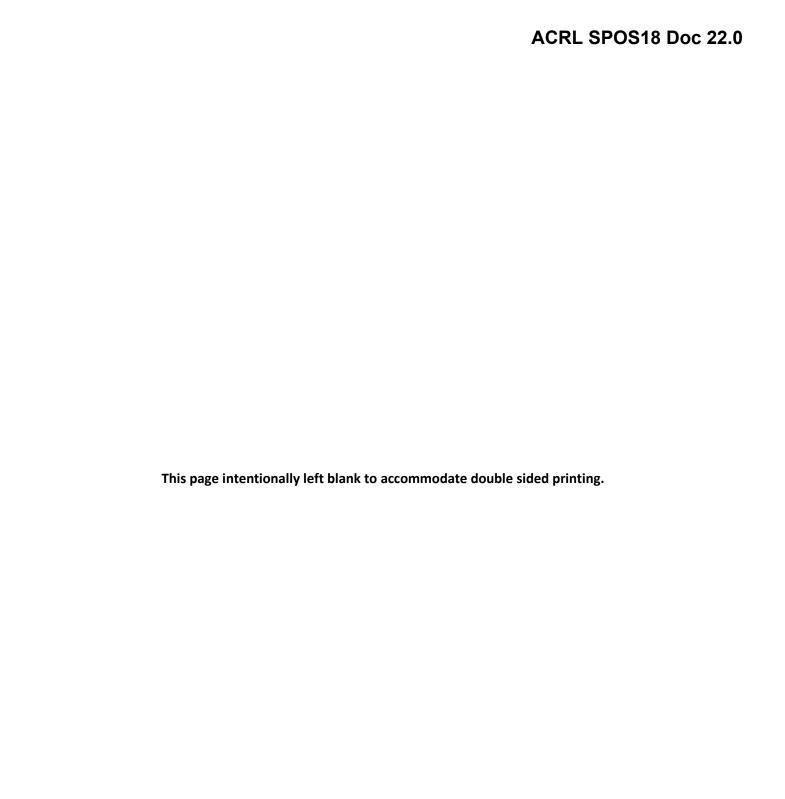
March 5, 2018 ACRL Board of Directors About ACRL, Equity, Diversity, and Inclusion 0

At the 2018 ALA Midwinter Meeting in Denver, the ACRL Board of Directors voted to add to the <u>ACRL Plan for Excellence</u> a new signature initiative focused on the areas of equity, diversity, and inclusion (EDI). The creation of a signature initiative is distinct from the goal areas currently highlighted in the Plan for Excellence, which are meant to be re-examined for continuance every 3-5 years. As such, a signature initiative represents a strategic priority designed to permeate the work of the Association, cutting across the four established goal areas, as well as all ACRL committees and communities of practice.

Building on work over the course of the past year, the signature initiative on EDI provides an opportunity to convene a division-wide focus on one of the Association's core values. Establishing this initiative will enable the Association to further examine and develop support in these critical areas at a time when many in our profession regularly express concern and feel a threat to our core values.

The Board has recently undertaken a variety of steps to reinforce and reinvigorate the core values of the Association, and has released numerous statements on issues ranging from the condemnation of white supremacy and racism to support for Deferred Action on Childhood Arrivals (DACA) students. The Board also endorsed the Diversity Standards: Cultural Competency for Academic Libraries in 2012 and has actively supported and promoted the ACRL Diversity Alliance, which was formed in 2016 and currently has 38 members.

During the Midwinter Meeting, the ACRL Board reviewed the updated language around EDI in the <u>Plan for Excellence</u> and charged a Board working group to explore ways to address these issues effectively and strategically across the Association. Additionally, ACRL leadership began an important conversation on EDI during the Leadership Council meeting with Communities of Practice and general membership, offering suggestions on what directions the Association might take that would be of most benefit to the membership. The Board will review these ideas and looks forward to continuing the conversation at the 2018 ALA Annual Conference. The Board is committed to devoting resources to carry out new, high-impact EDI initiatives.



AMERICAN LIBRARY ASSOCIATION STRATEGIC DIRECTIONS

Mission

The mission of the American Library Association is to "provide leadership for the development, promotion and improvement of library and information services and the profession of librarianship in order to enhance learning and ensure access to information for all."

Core Organizational Values

The Association is committed to:

- Extending and expanding library services in America and around the world
- All types of libraries academic, public, school and special
- All librarians, library staff, trustees and other individuals and groups working to improve library services
- Member service
- An open, inclusive, and collaborative environment
- Ethics, professionalism and integrity
- Excellence and innovation
- Intellectual freedom
- Social responsibility and the public good

Key Action Areas

Advocacy for Libraries and the Profession

ALA actively works to increase public awareness of the crucial value of libraries and librarians, to promote state and national legislation beneficial to libraries and library users, and to supply the resources, training and support networks needed by local advocates seeking to increase support for libraries of all types.

Diversity

Libraries play a crucial role in empowering diverse populations for full participation in a democratic society. In the library workforce, programs of recruitment, training, development, advancement and promotion are needed in order to increase and retain diverse library personnel who are reflective of the

society we serve. Within the Association and in the services and operations of libraries, efforts to include diversity in programs, activities, services, professional literature, products and continuing education must be ongoing and encouraged.

Education and Lifelong Learning

ALA provides opportunities for the professional development and education of all library staff members and trustees; it promotes continuous, lifelong learning for all people through library and information services of every type.

Equitable Access to Information and Library Services

ALA recognizes the critical need for access to library and information resources, services, and technologies by all people, especially those who may experience language or literacy-related barriers; economic distress; cultural or social isolation; physical or attitudinal barriers; racism; discrimination on the basis of appearance, ethnicity, immigrant status, housing status, religious background, sexual orientation, gender identity, gender expression; or barriers to equal education, employment, and housing.

Intellectual Freedom

Intellectual freedom is a basic right in a democratic society and a core value of the library profession. ALA actively defends the privacy and right of library users to read, seek information, and speak freely as guaranteed by the First Amendment.

Literacy

ALA assists and promotes libraries in helping children and adults develop the skills they need, including the ability to read and use technology, understanding that the ability to seek and effectively utilize information resources is essential in a global information society.

Organizational Excellence

The association is inclusive, effective and responsive to the needs of ALA members.

Transforming Libraries

ALA provides leadership in the transformation of libraries and library services in a dynamic and increasingly global digital information environment. Every library is a hub of community engagement, innovation and continual learning.

Strategic Directions

Advocacy

ALA and its members work with libraries, the broader library community and members of the public to advocate for the value of libraries and for public support for libraries of all types at the local, state, federal and international level.

This work includes a broad continuum of activities, including raising public awareness of the value of libraries, training and supporting library advocates, advancing legislation and policies that support information and library services in all types of libraries, and effectively responding to specific opportunities and threats.

Advocacy efforts support ALA's core values, provide a vision of innovation, focus on the impact of libraries and librarians, enable the future of libraries and promote libraries as centers of community engagement, lifelong discovery, and learning.

Goals

- There is deep public understanding of the value and impact of libraries of all types on the communities they serve, the broad range of services offered by libraries, and the indispensable role of the librarian and library staff in providing these services.
- Decision-makers and stakeholders see a nationwide network of library advocates, advocating for libraries of all types.
- The library is a hub of community engagement and continual learning: a place to form the critical thinking skills fundamental to learning in a technologically evolving world, to access information, and to create and share new knowledge.
- Libraries are funded with staff and resources to meet the needs of their communities.
- Across a diverse library community, there is a shared focus and common understanding of advocacy and a sustained commitment to work collaboratively to reach common advocacy goals.
- Advocacy is integrated into the daily work of librarians and library staff.
- Advocacy is part of educational preparation for librarians and library staff.
- All libraries and all states have an advocacy plan.
- ALA plays a key role in formulating legislation, policies, and standards that affect libraries and is recognized in the U.S. as the voice for libraries and librarianship.
- ALA works with a wide range of partners and stakeholders to achieve library advocacy goals.
- ALA equips the library community with resources and training, available in a wide variety of formats and venues.

Strategies

- 1. Develop a sustained national advocacy campaign to increase public awareness of the value, impact and services provided by librarians and libraries of all types.
- 2. Provide coordinated resources and training to keep library advocates informed and engaged.
- 3. Recruit, mobilize and inspire a growing network of library advocates at the local, state, national and international levels.
- 4. Gather, develop, and disseminate research documenting the value, outcomes and impacts of libraries of all types.
- 5. Explore funding, organizational and governance structures and their impact on libraries of all types in order to ensure the sustainability and future of libraries.
- 6. Identify advocacy best practices, using research and evidence to increase support and funding for libraries of all types.
- 7. Identify and work with partners and stakeholders to achieve advocacy goals for all types of libraries.

Information Policy

ALA's information policy efforts empower people to use libraries and information based resources to improve their lives and communities. Information policy comprises laws, regulations, court decisions,

doctrines, and other decision-making and practices related to information creation, storage, access, preservation, communication, accessibility, and dissemination.

ALA advocates in diverse policy areas including intellectual freedom, privacy, civil liberties, telecommunications, funding for education and research programs, funding for libraries, copyright and licensing, open access, government information, and literacy. Progress in these policy areas enables libraries to advance important societal goals such as employment, education, entrepreneurship, equity, personal empowerment, community engagement, creation of new knowledge, literacy, and civic participation. ALA's interests reside at the local, regional, state, national, and international levels. ALA serves as a knowledgeable resource and advocate on policy issues within these areas for ALA members, library professionals, decision makers and influencers, the media, and the public.

Goals

- ALA is among the first tier of groups that governments and other organizations turn to and trust on information policy issues.
- Treaties (and other international statements), legislation, regulation, court cases, corporate policies, and other important information policy outcomes incorporate ALA positions.
- ALA policy positions are easily available, accessible and comprehensible to all audiences.
- ALA leaders have sufficient understanding of information policy so that they may be effective
 policy advocates. Some of these leaders are cultivated as national policy champions. The ALA
 and library communities at large understand the basics of information policy and why it is
 important for libraries.
- The requisite structures (including social media and other technology) are in place for ALA to engage in effective advocacy on information policy in the long run.

Strategies

- 1. Develop and revise positions and strategies for each information policy issue based on ALA values and priorities and substantive (facts and data) and analysis of threats and politics.
- 2. Develop and maintain information policy messaging and mechanisms to communicate with all relevant audiences.
- 3. Lead and participate in effective coalitions, with member participation, to take action in addressing information policy issues.
- 4. Initiate policy advocacy (including research) towards the attainment of ALA information policy goals.
- 5. Develop and maintain a process for coordinating information policy activities across policy topics and ALA units.

Professional and Leadership Development

Recognizing that the professional and leadership development of all who work in libraries is essential to high-quality professional practice and the future of libraries and information services, ALA will:

- Provide professional development opportunities appropriate to all levels of experience and expertise, in multiple formats/venues, with diverse presenters and educators;
- Provide leadership development opportunities both within the Association and for the field;
- Maintain strong but flexible accreditation standards and processes;

- Coordinate the multiple opportunities available throughout ALA to provide coherent and accessible continuing education frameworks for all members;
- Attach meaningful recognition to learning opportunities;
- Increase diversity and inclusion within the field;
- Provide clear pathways that help members set and meet professional and leadership development goals;
- Develop a pervasive culture that encourages continuous learning based on content and forms of recognition provided by ALA;
- Align leadership development and continuing education with the best thinking about the changing information environment and ALA's Center for the Future of Libraries.

Goals

- ALA is a premier provider of quality professional development, including continuing education, for a global membership.
- All library staff and trustees have the education and training they need to be successful in a
 disruptive environment, with pathways and a suite of options that meet them where they
 are
- There is a commitment to ongoing professional development and continuing education with formal, meaningful recognition (e.g., certification, digital badging, micro-credentialing).
- It is easy for members to get involved in ALA.
- Association-wide mentoring engages emerging leaders and supports diversity. Paths to leadership within the Association are clear, and people at all levels want and are helped to be library leaders. Leadership is recognized as both formal and informal, managerial and non-managerial.
- Peer-to-peer learning/interaction facilitated by ALA helps members reach their goals.
- Librarianship and library leadership reflect the communities they serve as well as the world around them.
- The outcome of learning is knowledge supporting positive individual and organizational change.
- The MLIS curriculum addresses changing 21st-century library and information services and community needs.
 Library administrators and trustees value and support all library staff having professional and leadership development opportunities.
- Libraries are viewed as exciting places that offer various career paths for people who want to work in them.

Strategies

- Develop the ALA professional development space as one centralized online space to search and discover all ALA learning options (all formats, all topic areas, all levels, all ALA sources) and related tools including self-assessment, recognition, and tracking. Integrate face-to-face, online and blended learning.
- 2. Develop pathways to support and guide networking, professional development, continuing education, and mentoring.
- 3. Develop clear education tracks and streams of content for continuing education, with formal, meaningful mechanisms to recognize achievement.

- 4. Articulate the role of engagement within the Association in professional and leadership development.
- 5. Facilitate and increase opportunities for informal, collaborative, and peer-to-peer, member-to-member learning/activity at face-to-face events and in online spaces.
- 6. Develop an association-wide mentoring/ peer-to-peer network, building on components throughout the Association, its division and round tables, affiliates and chapters, to engage emerging leaders and support diversity and inclusion.
- 7. Enhance recruitment/retention for diversity across the profession.
- 8. Focus on changing practice in a rapidly evolving environment; adjust competency statements, standards, and content to the skills and knowledge needed in libraries as they continuously evolve.
- 9. Work with graduate programs in LIS to rethink and reenergize LIS curricula and accreditation and improve the connections with changing workforce skill requirements.

Equity, Diversity, and Inclusion

The American Library Association recognizes that equity, diversity, and inclusion (EDI) impacts all aspects of work among members of the Association, within the field of librarianship, and within the communities served by libraries. This work includes addressing, dismantling, and transforming policies, structures and biases throughout the organization and the field of librarianship. ALA, through its actions and those of its members, is instrumental in creating a more equitable, diverse, and inclusive society.

Goals

- Commit to ameliorating marginalization and underrepresentation within the Association and the communities served by libraries through increased understanding of the effects of historical exclusion.
- Expand the work of ALA and its allies in building a diverse and inclusive profession.
- Provide context and understanding of the concepts of equity, diversity, and inclusion and recognize their intersectional and complex nature.
- Empower ALL ALA members to participate in the life of their organization.
- Establish resources and support so libraries and librarians can be effective advocates for the inclusion of all individuals in the life of their community.
- Establish ALA as a major voice for the values of equity, diversity, and inclusion in all areas of information policy.
- Provide safe, respectful space for diverse voices and perspectives.

Strategies

- 1. Conduct or provide professional development opportunities that address issues of equity, diversity, and inclusion.
- 2. Review ALA alliances and coalitions to increase focus on equity, diversity, and inclusion.
- 3. Build a national advocacy campaign based on existing advocacy assets which focus on the values of equity, diversity, and inclusion; empower all ALA members to advocate within their workplace, their community and beyond.
- 4. Gather, develop, and disseminate research documenting the value of equity, diversity, and inclusion.

- 5. Review information policy positions and strategies and revise as needed to clearly articulate the values of equity, diversity and inclusion.
- 6. Work with graduate programs in Library and Information Science (LIS) to increase focus on equity, diversity and inclusion within LIS programs and within the subject matter of the curricula.
- 7. Enhance recruitment, mentoring and networking activities by all parts of ALA (including ALA Chapters) building on and expanding all components of the Association (including Spectrum), as well as its affiliates and chapters to build a diverse and inclusive leadership for the Association and the profession.
- 8. Ensure that the values of equity, diversity and inclusion are embedded in all continuing education, including ALA and ALA Division conferences, relating to all aspects of the profession and its practice.
- 9. Develop continuing education specifically focused on understanding and addressing unconscious bias, power dynamics, microaggressions, white privilege and other topics related to equity, diversity and inclusion.
- 10. Critically examine the way that equity, diversity, and inclusion are addressed and coordinated throughout the Association.

The key actions areas are approved by the ALA Council as programmatic priorities on an annual basis. The strategic directions, goals and strategies represent areas of intense focus for the next 3- 5 years. The goals articulate the outcomes we would like to achieve and answer the question: "what would success look like?" The strategies articulate how we would move toward the achievement of these goals. For each of the strategic directions, an implementation plan outlines objectives that support each strategy and tactics to achieve these objectives. These are updated on an ongoing basis as part of a continuous process of assessment and evaluation, and are reflected in the Association's annual action plan and budget. Adopted by ALA Council June 28, 2015

Equity, Diversity, and Inclusion strategic direction was adopted by ALA Council at 2017 Midwinter Meeting in Atlanta, GA.



2017-2018 ALA CD#14.1_61918_ACT 2018 ALA Annual Conference

Committee on Diversity (COD) Report to Council 2018 Annual Conference New Orleans, LA

Submitted by Martin L. Garnar, Chair

Committee members: Martin L. Garnar (Chair and ODLOS Advisory Rep), Mrs. Shauntee Burns-Simpson, Ms. Virgen Milagros Gonzalez, Sukrit Goswami, Ms. Amiya P. Hutson (PBA Rep), Rebecca J. Kemp, Kelsey Dawn McLane, Ms. Ella Mae Mulford, Miriam C. Nauenburg, Ms. Satia Marshall Orange, Mr. Jose Miguel Ruiz, Mr. Jesse Bernard Sanders, III, Ms. Nichole Lynn Shabazz, Mr. Stewart A. Shaw, Ngoc-Yen Tran, Ms. Tinamarie Vella, Sara Ahmed (Intern), Tiana Trutna (Intern), Gwendolyn Prellwitz (Staff Liaison)

Accomplishments:

- COD has voted to endorse the following resolutions coming to Council at the Annual Conference: Resolution honoring African Americans who fought library segregation and Resolution on Cessation of Family Separations for Refugees Arriving at the United States Borders (endorsed in principle)
- ALA CD#44.1, Definitions of Equity, Diversity, and Inclusion: ALA Council, VOTED, to add the definitions of Equity, Diversity, and Inclusion developed by the Task Force (2015-2016 ALA CD#38_61316_INF, Recommendation #4.2) to the ALA *Policy Manual*; and to audit all definitions of equity, diversity, and inclusion across the association to ensure the broadest possible understanding; and explore core values and roles and responsibilities statements to assess equity, diversity, and inclusion. The Policy Monitoring Committee (PMC) decided to place the language below in Section of B.3.1.1 of the Policy Manual which will be updated after Annual Conference. PMC also distributed a survey in June to all ALA units asking to review any definitions of these terms in their materials.

Definitions of Equity, Diversity, and Inclusion.

The American Library Association believes that everyone deserves equitable rights and opportunities. The goal is to create a just and equitable Association, profession, and society where everyone has access to social power, resources, and physical and psychological safety. ALA has chosen to define "diversity" in all its complexity in order to recognize and honor the uniqueness of each ALA member, all members of our profession, and our very diverse communities. ALA believes that, to be inclusive, our association, profession, and society must recognize the inherent worth and dignity of

- every member of the community; involve and empower all members to participate and contribute; promote and sustain a sense of belonging; and value and practice respect for the talents, beliefs, backgrounds, and ways of living of all members.
- ALA CD#44.2 Resolution on Libraries as Responsible Spaces: the Committee on Diversity presented Transforming Community Relationships through Dialogue on 6/23/2018 from 10:30 to 11:30am and will work on creating an online resource.
- A group of members currently editing the Extending Our Reach toolkit has requested COD's review and revision of ALA Policy B.8.10, the old Policy 61, "Library Services to the Poor" for more inclusive language. The Policy was written in 1990. A draft of a revised Policy was shared with COD for initial feedback in May. COD will work to finalize the revision over the summer to share for member feedback before a Council vote.
- At the 2018 ALA Midwinter Meeting, Council proposed ALA CD#37_21218_INF Resolution on Addressing Roadblocks to Diversity in the Leadership Pipeline. The resolution calls for the American Library Association, on behalf of its members to "1) Commission a research study to determine barriers to producing a diverse leadership pipeline within the field of librarianship, 2) Explore external opportunities for funding such a study, and 3) Communicate strategies and best practices for breaking down said barriers in effective and timely ways." On Tuesday February 13, 2018, the ALA Council after discussion moved to refer the Resolution on Addressing Roadblocks to Diversity in the Leadership Pipeline to the Committee on Diversity (COD) and to BARC.

BARC ACTIONS: For the primary parties involved in the work, an initial investment of \$400,000 was identified as being necessary to address the issue. Much of the work and research highlighted in the resolution is already exists and or is currently being addressed in various units across the Association. Since much of the work already exists, the committee suggests that a communication piece be developed to inform the membership of the work that is currently being done to address the issue. BARC presented this summary at the Saturday 6/23/2018 Information Session.

COD ACTIONS: Those involved with the resolution and the Committee on Diversity convened by email from February 13-20th to discuss the Council Forum feedback at Midwinter which included requests to add LGBT+ concerns to the resolution. Based on the discussion, COD unanimously upholds that actions taken in response to this resolution will focus on racial and ethnic diversity. Councilors involved with the Resolution met two more times with the Committee on Diversity. Councilors shared that they did not have a specific research question developed while crafting the resolution. COD noted that there is an existing body of research on barriers that prevent people of color from advancing to leadership roles in libraries of all types. COD identified that one way forward would be to form a group that would identify the existing research, analyze the findings, and draft the recommendations to be implemented at the local and national level. This would save time (no new study needed) and money (no new study to fund); however, volunteers would be required to

do this work. In a desire to understand better how the resolution is informed by the ongoing work of ODLOS, the conversation asked for those involved with the resolution to share more about the desired outcomes. The group recognized the work of ODLOS but identified that there is no Association-wide mandate encouraging libraries to look at the racial and ethnic diversity of their institutions; and that there is no single framework that is positioned as a requirement not a recommendation for ALA units. Planned Future Actions:

- Continue efforts to increase visibility of EDI work across association and profession to bridge divides.
- Evaluate existing frameworks (see Advancing Racial Equity in Public Libraries: Case Studies from the Field: https://www.racialequityalliance.org/resources/advancing-racial-equity-in-public-libraries-case-studies-from-the-field/).
- ODLOS generated report mapping existing efforts, actionable next steps and required resources will be shared with Committee on Diversity, ODLOS Member Groups and BARC at the 2019 Midwinter Meeting.

Planned Activities:

- COD will develop an online resource explaining Responsible/Safer Spaces that identifies materials, programming, marketing/outreach, and staff training and other best practices to help libraries establish themselves as safer spaces.
- COD will finalize the revision to ALA Policy B.8.10, the old Policy 61, "Library Services to the Poor" and present the revision to ALA Members for feedback by September. COD will notify PMC about the upcoming revision. The revised Policy will be taken to Council for a vote at ALA Midwinter.
- COD will review its charge. The ODLOS Advisory committee was restructured in 2015 (includes representatives from all the groups with which ODLOS liaisons, including groups that historically the Office for Diversity worked with, the Chair of COD represents the committee on it). Prior to the merger of the Office for Diversity with the Office for Literacy and Outreach Services, the Office for Diversity did not have a separate Advisory Committee hence when Committee on Diversity changed its name and last rewrote its charge (2002) the request to also serve in advisory capacity to the ALA office was included in the charge. Now that both groups work with one office and the Advisory Committee is charged with advising the office the Committee is looking its charge in the context of how COD might focus its work on its relationship to Council, ALA Policy, and the new EDI Strategic Direction.
- COD will continue efforts to assist the Diversity Councilors Caucus with convening and improve communications between the Councilors on the Caucus and the Committee between conferences.

Interactions with other units within ALA:

- Diversity Councilors Caucus: Committee meets with the Diversity Councilors Caucus. The
 Committee is interested in supporting new Councilors in joining the Diversity Councilors
 Caucuses and in hearing from more experienced Councilors about their expectations for
 the Committee.
- The Committee continues to support OIF's development of a Hate Speech FAQ.
- The Chair of the Committee is an ex-officio member of the ODLOS Advisory Committee and also serves on the EDI-IWG.

Relationship of the committee's work to the ALA strategic plan:

The Committee supports various strategies under the initial three Strategic Directions and is working closely with the implementation and ongoing measurement of the fourth strategic direction: Equity, Diversity, and Inclusion.

Current level of committee members' involvement:

The group is active in attending committee meetings and providing feedback as requested although the changes to ALA Connect have interrupted committee voting leading into ALA Conference.

Committee self-check on its value and viability:

• COD would like to continue to strengthen its visibility to Council and Membership.

Other issues: None at this time.

2017-2018 ALA CD#37_21218_INF 2018 ALA Midwinter Meeting

On Tuesday, February 13, 2018, the ALA Council *REFERRED* this resolution to the Budget Analysis and Review Committee and the Committee on Diversity

RESOLUTION ON ADDRESSING ROADBLOCKS TO DIVERSITY IN THE LEADERSHIP PIPELINE

Whereas, the American Library Association has proclaimed diversity as one of its strategic priorities for more than fifteen years;

Whereas, the United States is projected to become a "minority-majority" country by 2040, ten years earlier than initially predicted by the US Census Bureau;

Whereas, the American Library Association has invested significant financial and human resources into developing a diverse talent pool through efforts such as the Spectrum Scholarship fund and the ACRL Diversity Alliance;

Whereas various libraries across the US have independently created diversity fellowship programs to cultivate and increase compositional diversity within librarianship;

Whereas, in spite of these important efforts, librarianship generally remains more than 85% white with few people of color^{1 2} reaching the managerial ranks in libraries of all kinds;

Whereas, development of a "leadership pipeline" of people of color encouraged and prepared to lead is ineffective without data to inform and a strategy to support, retain, and promote people of color into middle management and senior managerial ranks;

Whereas, research shows compositional diversity sends critical non-verbal cues about the importance of diversity to community members whether they be the community-at-large or campus members at colleges and universities;

Whereas, further research is needed_to understand workplace structural and systemic barriers that produce challenges for people of color to succeed in librarianship; and

¹ For example, the *ARL Annual Salary Survey 2015-2016* shows that in ARL libraries: 11 of 95 Directors, 25 of 280 Associate Directors, and 34 of 317 branch heads are people of color. See Tables 32 and 33 in. http://publications.arl.org/ARL-Annual-Salary-Survey-2015-2016/

² ALA produced a diversity in libraries report *Diversity Counts* in 2007. http://www.ala.org/tools/research/librarystaffstats/diversity

RESOLUTION ON ADDRESSING ROADBLOCKS TO DIVERSITY IN THE LEADERSHIP PIPELINE/2

Whereas, it appears highly unlikely that we will produce a compositionally diverse leadership pool for the hundreds of anticipated retirements in the leadership ranks in the next five to ten years; now therefore be it

Resolved, that the American Library Association, on behalf of its members:

- 1) Commissions a research study to determine barriers to producing a diverse leadership pipeline within the field of librarianship,
- 2) Explores external opportunities for funding such a study, and
- 3) Communicates strategies and best practices for breaking down said barriers in effective and timely ways.

Mover:

Aaron Dobbs <aaron@thelibrarian.org>

Seconders:

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Version: 2018.02.12 11:40am

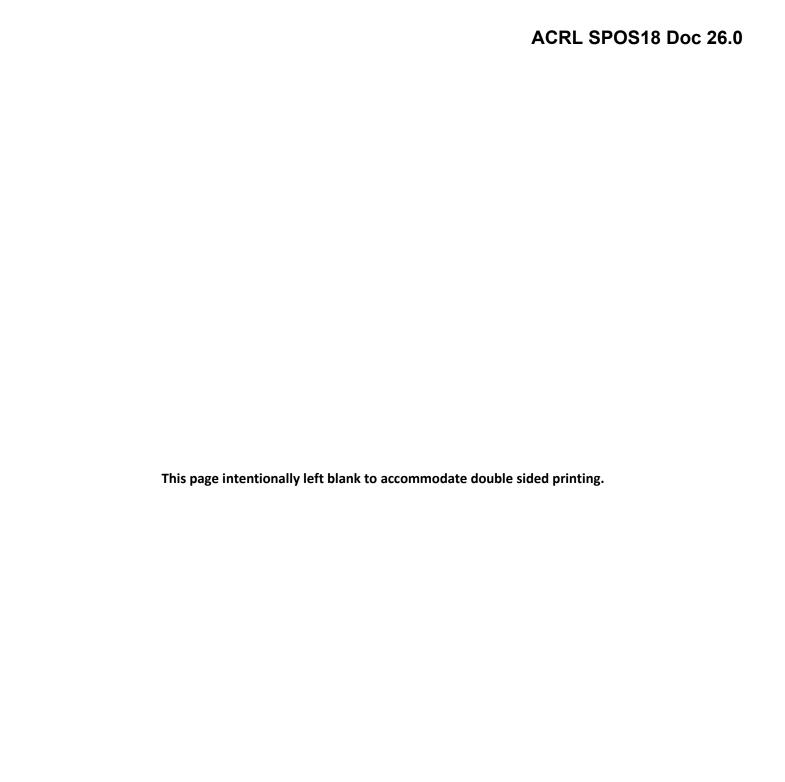
ACRL Division-level Committee 2017-18 Year-End Reports & 2018-19 Work Plans

The following reports and work plans can be found on **ALA Connect**.

Committee
Academic/Research Librarian of the Year Award
ACRL/LLAMA Interdivisional Committee on Building Resources
Budget & Finance Committee
Diversity Committee
(Dr. E.J.) Josey Spectrum Scholar Mentor Committee
Government Relations Committee
Leadership Recruitment and Nomination Committee
Liaisons Coordinating Committee
Liaisons Grants Committee
Membership Committee
Section Membership Committee
New Roles and Changing Landscapes Committee
Professional Development Committee
ACRL 2018 President's Program Planning Committee
Professional Values Committee
Publications Coordinating Committee
Academic Library Trends and Statistics Survey Editorial Board
C&RL Editorial Board
C&RL News Editorial Board
Publications in Librarianship Editorial Board
RBM Editorial Board
Resources for College Libraries Editorial Board
Research Planning and Review Committee
Research and Scholarly Environment Committee
Standards Committee
Information Literacy Frameworks and Standards Committee
Student Learning and Information Literacy Committee
Value of Academic Libraries Committee

Chapters Council
Chapters Council

Red=report only





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VALUE OF ACADEMIC LIBRARIES

Goal: Academic libraries demonstrate alignment with and impact on institutional outcomes.

VALUE OF ACADEMIC LIBRARIES OBJECTIVE 1: CULTIVATE RESEARCH OPPORTUNITIES THAT COMMUNICATE THE IMPACT OF ACADEMIC AND RESEARCH LIBRARIES IN THE HIGHER EDUCATION ENVIRONMENT.

Anthropology and Sociology Section (ANSS): The liaison committee cultivates research opportunities that communicate the impact of academic and research libraries in the higher education environment.

College Libraries Section (CLS): The Medium-Sized Academic Libraries Discussion Group, which takes place during both Midwinter and Annual ALA meetings, provides an opportunity for librarians at like-minded institutions to talk about how existing research can be utilized to promote the value of academic and research libraries.

Distance Learning Section (DLS): November 8, 2017: The DLS Instructional Committee facilitated a Fall Forum round table discussion titled "Building Accessibility Into Distance Learning." Approximately 30 attendees participated in five moderated conversation/break out rooms.

Education and Behavioral Sciences Section (EBSS): During ALA Annual 2018, the EBSS Research Committee hosted our annual Research Forum. During this event, academic librarians gave lightning talks about their research. Topics covered included (1) The relationship between advertising database subscriptions and advertising job ads, (2) How partnerships can mitigate information literacy transfer shock among transfer students, (3) Research support for academic librarians, and (4) Assessing the effectiveness of student-generated PR campaigns for libraries.

European Studies Section (ESS): At Annual, the Automated Bibliographic Control Committee reported updates on bibliographic projects, including the Slavic Cataloging Manual, an online tool maintained by the Committee for best practices in cataloging of Slavic, East European, and Eurasian materials useful for catalogers, reference librarians and researchers.

Literatures in English Section (LES): The Literatures in English Section cosponsored an Emerging Leader with the Digital Scholarship Section, Lindsay Inge. Lindsay's work as an Emerging Leader involved her in research projects as well as opportunities to attend ALA meetings that supported her work.

Politics, Policy and International Relations Section (PPIRS): Techniques and Approaches: Librarians on Information Credibility and "Fake News" (PPIRS and the ACRL Plan for Excellence Discussion). Meeting focused on current topics and attendees shared resources.

Rare Books and Manuscripts Section (RBMS): RBMS has not officially put forth a research agenda.

Science and Technology Section (STS): The STS Publications Committee has been investigating the move of Issues in Science & Technology Librarianship (ISTL), the STS journal, to a more sustainable platform. ISTL currently is, and has always been, entirely open access, and a valuable platform for research and communication. Our goal is to improve access, and create a more appealing interface and features for readers, authors and editors. Ideally, this will help the journal have an enduring presence as a model of what a quality Open Access journal can be. The STS Research Committee provides outlets for STS members and other science librarians to communicate their research findings. The STS Research Forum provides researchers with the opportunity to present research papers in progress to an audience of their peers and to receive constructive feedback from the moderator as well as the audience. Papers presented focus on a range of topics including an analysis of disciplinary use of a pre-print

repository for biology articles, reports on how student researchers from elementary to graduate school evaluate science news stories, and a look at graduate student use of mobile devices in their academic workflow. In addition, the STS Research Committee selects poster presenters to showcase their research projects in conjunction with the STS program. Poster presentations included a range of topics including systematic reviews outside of health sciences, citizen science support in libraries, integrated information literacy for science majors, and the inclusion of virtual reality technologies as a library service.

Women and Gender Studies Section (WGSS): The section's Research Committee maintains the Bibliography of Scholarship on Women & Gender Studies Librarianship and the Research Agenda for Women & Gender Studies Librarianship.

Academic Library Services to Graduate Students Interest Group: Put out a call for proposals for ALA Midwinter and ALA annual for librarians/researchers interested in the field to present and share their research, ideas, and knowledge to others interested in serving graduate students.

Library Marketing and Outreach Interest Group: The Library Marketing and Outreach Interest Group (LMOIG) provides a forum to help academic librarians better communicate and reach students, faculty, staff, and administration at their libraries. LMOIG largely operates through its Facebook group where members can share research related to academic library marketing and outreach work or post surveys or other research instruments related to this work. For example, librarians from Virginia Commonwealth University have sought members to participate in the Social Media Best Practices in Academic Libraries survey in 2015, 2016, and 2018. The librarians conducting this research have also shared their results from 2015 and 2016, which can help inform social media strategy for academic libraries.

Virtual Worlds Interest Group: The Community Virtual Library participated in the Dickens Project 2017 with three virtual builds: A Community Virtual Library "Shoppe", A Dickens Research Center, and a Dickens Library with a collection of Charles Dickens' works. Research presentations include food, clothing, medicine, and information from the Victorian era. The ACRL Virtual World Interest Group had a tour on Dec. 3, 2018 See http://connect.ala.org/node/271192

Alabama: In collaboration with the Alabama Library Association's College, University and Special Libraries section, the Alabama ACRL chapter assessment committee completed a pilot project identifying data collected by the institutions. This pilot project provided a way to test methods for gathering and sharing assessment outcomes across Alabama academic libraries.

Georgia: Georgia ACRL chapter conducts annual research paper annual competition to cultivate research opportunities that communicate the impact of academic and research libraries in the higher education environment. The competition's goal is to encourage scholarly research and writing by academic librarians and library school students and to introduce participants to the process of scholarly review. Academic librarians from different institutions evaluate each submission through a double-blind review. To help new researchers become more comfortable with the scholarly writing process, the ALD introduced two new elements in 2017: a hands-on online workshop to assist in scholarly writing and the option for peer-review prior to submission. Georgia Library Association awards a cash prize for the paper selected as the top entry and complimentary Georgia Library conference registration for the second and third entry. The three top papers are presented at the annual Georgia Libraries Conference. The winners also offered an opportunity to submit their papers for publication to the Georgia Libraries Quarterly. 2017 winners were the following papers: "Are Electronic Based Reference Collections Really a Good Idea for Academic Libraries?" and "The Academic Library's Challenges with Stakeholder's Influence in a Digital Age."

Greater Metro New York: The theme of ACRL/NY's 2017 Symposium was "The Mission: The Academic and Research library in the Twenty-First Century Information Environment." The 200-seat event was sold out. This raised signicant funds for the chapter and also satisfied us as the organizers that the theme was one of wide relevance. The event, which included over 2 hours of interactive time (an hour and 10 minutes for lunch and an hour-long breakout session), was attended by an almost equal number of college and university librarians. Most attendees were from the Tri-State Area, but the event did draw participants from Pennsylavnia, Massachussetts, New Hampshire, Alabama, Florida, and Washington State. The program included speakers from major private research univerities (the AUL for Collection Development from Princeton, the Director of Collections Initiatives for the Ivy Plus Libraries); public universities (the Media Librarian at LIU Brooklyn, the Head of Resource Sharing at the CUNY Graduate Center, the CIO for Assessment and User Engagement at SUNY Albany, the Instructional Outreach Librarian at SUNY Binghamton); a liberal arts college (the Humanities Librarian from Bates College); and organizations outside the academy that parter with college and research libraries (the Managing Director of Portico and the Executive Director of ConnectNY). In the end the organizers were satisfied that our theme received intensive consideration by a large and diverse group of academic and research librarians. The premise of our program was that explosive and destabilizing developments in the twenty-first century information and mass communication spheres, coupled with erosion of disciplinary boundaries and diversification of research and teaching purviews in the academy, have occasioned far-reaching and to some degree divergent reimaginings of the institution of the academic library. The sheer diversity of these seems at times almost to stretch the identity of the institution and our profession beyond the point of cohesion. The academic library's role as center of information stewardship and expertise is perhaps more crucial in the current environment than in any previous period, but its uncomfortably rapid evolution to adapt to accelerated development in the information world has led to something of a crisis of identity. This crisis of identity has been perceived by some external stakeholders as evidence of the library's waning relevance to the academy, and a preoccupation with change and flexibility in our professional discourse may have exacerbated this. The professional literature has in recent times emphasized that academic libraries and librarians can be and do other things: "the library as safe place," "the library as incubator for multicultural awareness and engagement," the library as learning space," "the library as publisher," "library as makerspace," "the library as classroom," "the library as laboratory," "the library as place," "the library as fundraiser and campus community builder," "the library as collaborative and community space," "the librarian as teacher," "the librarian as researcher," "the librarian as IT expert," "the librarian as change agent." This has the effect of seeming to dissolve academic librarys' and librarians' role in the varied functions of the academy as a whole. The program was designed as a day to reflect on our profession, to take stock of its history and its contemporary challenges and opportunities, and to revisit the original academic and research library core mission of mediator between student, faculty and researcher populations and the wider information world. The day was directed towards a formulation of the way in which our traditional mission —stewardship and guidance in the exploration of corpora of recorded knowledge and experience valuable for higher learning — must be adapted for the twenty-first century research, teaching, publishing and mass communication environments. The Symposium's main objective was advancement towards a definition of a diverse but still integral identity for the institution of the academic and research library and for academic librarianship. The event engaged participants in critical reflection on and conceptualization of our responsibilities vis-à-vis our user populations and the contemporary spheres of information and mass communication, and worked towards the expression of a flexible but distinct identity which can be projected to our parent institutions and the wider world.

lowa: • Continue to offer a biannual Research Award. • Continue study of information literacy skills of students as they transition into college.

Louisiana: Our chapter is in the preliminary planning stages for a virtual conference with the Louisiana Library Association. This conference would be separate from the larger annual state conference and would focus entirely on topics relevant to Louisiana academic libraries.

Michigan, MI-ALA: As part of the MiALA Annual Conference, we hosted the ACRL Standards Workshop as a preconference. This program, titled "Planning, Assessing, and Communicating Library Impact: Putting the Standards in Higher Education into Action" was well attended by members, and encouraged members to explore how to convey the important of libraries and their work on their own campuses.

Michigan, MLA: Michigan Library Association (MLA) offers academic libraries presentation opportunities to communicate research impact at the 3 day annual conference and other various workshops held throughout the year.

Nebraska: "Surveying Digital Stewardship in Nebraska." Research Grant awarded by Nebraska Chapter to Professors Jennifer Thoegersen and Blake Graham (UNL) Research project is employing both a questionnaire and interviews to learn from libraries, archives, and museums (LAMs) about their tools and general practices, and both the internal and external variables they deal with, all toward "building a digital preservation educational program for cultural heritage professionals in Nebraska."

New England: With the rollout of our new website, we have started discussing the possibility of hosting a 'research/interest collaboration platform' to aid in Chapter members' pursuit of research projects and potential publications. Additionally, our new website will allow us to communicate funding and research opportunities, in the profession of academic librarianship and in higher education, in a more timely fashion.

New Jersey: 2018 VALE Users'/ACRL-NJ/NJLA CUS Conference theme, "Innovate, Create, Collaborate: Moving Libraries Forward." It is a most appropriate theme that reflects our scholarship, services, and activities as we transform student learning at our respective institutions and in our wider library community.

North Dakota/Manitoba: The annual symposium showcases research done at academic and research libraries, and this year, in particular, with its theme based around library contributions to dispelling false information and assistance with information literacy, as well as related topics, the value of academic and research libraries is particularly clear. The symposium theme this year was "Truth" and "Proof": Fake News, Information Literacy, Retractions, Reproducibility, and New Scholarly Communications. The symposium was held on May 14, 2018 at St. John's College in Winnipeg, Manitoba. The symposium was attended by 32 people. The keynote address was given by Dr. Jason Hannan, of the Department of Rhetoric and Communication at the University of Winnipeg. His talk was entitled Trolling Ourselves to Death: Social Media and Post-Truth Politics. The symposium featured papers on diverse topics related to the theme, including: • Informing Health Professionals About Predatory Journals – by Maureen Babb and Orvie Dingwall, of the University of Manitoba; • Reference Conundrum: The Broad Definition of Peer Review – by Cody Fullerton, of the University of Manitoba; • Lessons Torn from the Headlines – by Beth Twomey, of North Dakota State University; • Assessing Information Reliability through Snapchat: An Alternative Means for Social Media – by Amanda Wheatley, of the University of Manitoba; Library Collection Development in the Age of Open Access and Research Sharing – by Ryan Regier, independent researcher; • Institutional Repositories and Open Access Misconceptions at UND – by Holly Gabriel and Zeineb Yousif, of the University of North Dakota; We also had two round table discussions, and the annual business meeting was held at the symposium.

Ohio: The 2017 ALAO Conference, Libraries Act. Respond. Transform: the ART of Empowerment was held in Columbus, Ohio on October 26, 2017. Featuring 28 breakout sessions, 15 roundtables, and 14 posters, the

conference brought together librarians, faculty, administrators, and vendors for a full day of presentations and discussions. April Hathcock, Scholarly Communications Librarian at New York University, delivered a keynote address focusing on building an antiracist praxis for our libraries.

VALUE OF ACADEMIC LIBRARIES OBJECTIVE 2: PROMOTE THE IMPACT AND VALUE OF ACADEMIC AND RESEARCH LIBRARIES TO THE HIGHER EDUCATION COMMUNITY.

Anthropology and Sociology Section (ANSS): With the help of the ANSS liaisons, ANSS has outreached to the American Anthropological Association (AAA), the American Sociological Association (ASA) and will begin outreach to the American Society of Criminology (ASC). The anthropology liaison has focused on building connections between professional associations with a particular goal toward-student learning and research in the scholarly environment. She has been part of AAA's Publishing Futures Committee and has contributed on a team that reviews the taxonomy for AAA's major database resource, Anthrosource. The sociology liaison has focused on bringing themes of information literacy to the ASA conferences. She has presented a poster on fake news in 2017 and has another poster coming at the 2018 conference. The criminal justice/criminology liaison has collaborated with others in the field to complete reviews for two of the major criminal justice databases, Criminal Justice Abstracts & Sage's Criminal Justice & Criminology. Her initial goal was to reach out the American Criminal Justice Society but believes there will be more response from the American Society of Criminology.

College Libraries Section (CLS): The "Your Research Coach program," coordinated by the Research for College Librarianship Committee, provides support and encouragement for research and scholarly projects. The resulting publications and presentations help promote the impact and value of academic libraries. We also raise the profile of academic libraries through Leadership Committee and its management of the CLS Innovation Award. This year the award went to Teresa D. Williams, business librarian at Butler University, for her work on the Business Research Workshop.

Community and Junior College Libraries Section (CJCLS): Our section is actively engaged in planning the ACRL 2019 conference. Jose Aguinaga is chairing of poster sessions at the Conference, other members are involved in program planning.

Distance Learning Section (DLS): June 24, 2018: The DLS Executive Committee adopted a new Strategic Plan after the Strategic Planning Committee surveyed its members and after they conducted three focus group forums (for proposed update to the Strategic Plan) on April 11, 2018, at the 18th Distance Library Services Conference, San Antonio, Texas, April 11-13, 2018.

https://docs.google.com/document/d/10vjKqNretpT4Ked5Fccz9FcrXUQOQIf1O1XFu0ilaqk/edit?usp=sharing

Education and Behavioral Sciences Section (EBSS): The EBSS Curriculum Materials Committee published their updated Guidelines for Curriculum Materials Centers.

Instruction Section (IS): Awards Cmte: The committee selected a recipients for the Ilene F. Rockman Instruction Publication Award, the Innovation Award, and the Miriam Dudley Instruction Librarians of the Year Award. For the Rockman Award, the committee narrowed down submissions to approximately 30 finalists and the Innovation Award received ten nominations. The committee also piloted a new set of rubrics for the Rockman and Innovation Awards. The committee spent a substantial amount of time this year re-envisioning the way IS award winners would be celebrated in an all-virtual section including a set of interviews of the winners published in the IS Newsletter and a celebratory event at the

upcoming ACRL national conference. Winners announced on the IS website: https://acrl.ala.org/IS/instruction-section-2018-award-winners/ Research and Scholarship Cmte: The committee updated an annotated bibliography that helps librarians to stay abreast of the broader scholarly literature in teaching and learning while helping them find publishing opportunities beyond librarian-focused journals for their instructional research. The last revision was completed in 2013-2014. The committee also moved the bibliography from a separate WordPress site onto the current IS website: https://acrl.ala.org/IS/is-committees-2/committees-task-forces/research-scholarship/bibliography-of-research-methods-texts/ Research and Scholarship Cmte (2): The Research Agenda Conversations blog

https://acrl.ala.org/IS/is-committees-2/committees-task-forces/research-scholarship/bibliography-of-research-methods-texts/ Research and Scholarship Cmte (2): The Research Agenda Conversations blog provides an opportunity for leading scholars in the field of Information Literacy to talk about their own research and how they approach the issues and topics covered in the ACRL Research Agenda for Library Instruction and Information Literacy. This year, the committee conducted and posted conversations with Nicole Cooke and Lili Luo. https://acrl.ala.org/IS/is-committees-2/committees-task-forces/research-scholarship/research-agenda-conversations/

Literatures in English Section (LES): The Literatures in English Section provided financial support for the ACRL liaison to the Modern Language Association, Sarah Wenzel. The support from LES was essential to enable Sarah's work as an active ambassador for academic libraries to a major professional scholarly association in our disciplinary area.

Politics, Policy and International Relations Section (PPIRS): Section members are continuing to discuss plans to reach out to political science faculty to see what information literacy means to them, and what kinds of student outcomes would be desirable. Plans also include curriculum mapping and studying the role that libraries play in Political Science Education.

Rare Books and Manuscripts Section (RBMS): RBMS commits promotion of the value of academic and research libraries via its active committees that produce guidelines, best practices, and projects intended to support and inspire our membership with local promotion of our work.

Science and Technology Section (STS): STS Program Planning Committee at ALA Annual 2018 in New Orleans, LA had the following learning objective. Attendees will be able to recognize and help forge connections between librarians, science communication professionals, scientists, and students.

Women and Gender Studies Section (WGSS): This year, we obtained sponsorship from Duke University Press - the Career Achievement Award and the Award for Significant Achievement in Women and Gender Studies Librarianship.

Academic Library Services to Graduate Students Interest Group: Used the listserve as a way to communicate new ideas, news, etc. to academic and research librarians.

Library Marketing and Outreach Interest Group: Through the listserv and Facebook group, LMOIG members share best practices for marketing services and resources. By giving librarians space to share ideas for events and program and communication strategies, members are able to learn new ways to tell the story of the work we do in academic and research libraries. For example, through the Facebook group, our membership has shared resources that can help I librarians create infographics. These can be included in assessment and annual reports to better share what libraries are doing with our campuses and the larger higher education community. Co-convener Jennifer Park and past co-convener Chris Davidson also served as LMOIG liaisons (ex-Efficio mebers) for the academic Libraries Transform

Implementation Task Force. This group is charged with creating a marketing toolkit similar to that of ALA's Libraries Transform toolkit but that is specific to academic libraries. This resource, when it becomes available, will help academic and research libraries promote their impact to stakeholders, including administrators.

Residency Interest Group: ACRL RIG seeks to garner interest and support for members' activities through the production of research projects related to library residency programs. ACRL RIG strongly supports research on library residency programs and the impact they have on academic libraries as well as the library profession. This year RIG has connected researchers with current and former library residents to discuss the issues around residency programs and their value and impact on academic libraries. In addition RIG has coordinated a panel presentation at ALA Annual and sponsored an Emerging Leaders Project to further disseminate and promote research surrounding library residency programs.

Virtual Worlds Interest Group: An example of promoting academic research (at the Dickens Project 2017) was archived through a machinima video at A machinima video archived the project: https://youtu.be/xT-vgR7eXU4

Alabama: Alabama ACRL chapter continues to evaluate outcomes and data obtained through the assessment pilot project, so we may assist members in demonstrating the value of libraries to the academic institutions.

Delaware Valley: On April 20, 2018, the Chapter hosted a full day program on developing partnerships and building institutional & community alliances to transform research & learning. Our keynote speaker was ACRL President Cheryl Middleton. Presenters were Elise Ferer from Drexel University presenting "Learning Alliances for Students' Academic Success;" Deborah Gaspar from Rowan University presenting "Building Partnerships around Student Needs;" Chava Spivak-Birndorf, Katherine Ahnberg, and Meagan Moody Stalnaker from University of Pennsylvania presenting "Bridging Learning Communities with Scratch and Makey Makey;" and Rachel Hamelers, Susan Falciani Maldonado, and Kelly Cannon from Muhlenberg College presenting "Collaborations with Faculty: Reaching Outside of the Classroom."

Eastern New York: Working in collaboration with other similar groups to help plan a conference to be held in October 2018 called "The Library is Open" for academic libraries. ENY/ACRL may also financially contribute to the conference.

Greater Metro New York: See response under objective 1.

Indiana: Indiana Library Federation (ILF) Executive Director, who is registered to lobby in Indiana, regularly communicates with policymakers, higher education leaders and the fellow lobbyists for higher education institutions, helping elevate academic libraries. ILF is the state library association that includes academic, public, school and special libraries and the people who work in and support them. Our cross-sector work aims to elevate all libraries, and has specific focus for each library type. For example, part of our communications campaign includes strategies for each of the types libraries.

lowa: • Spring Conference Keynote speaker Loretta Parham spoke on her experiences as CEO & Library Director of the Robert W. Woodruff Library of the Atlanta University Center, Inc., an independent entity operating as the single library shared by its four member institutions--Clark Atlanta University, the Interdenominational Theological Center, Morehouse College, and Spelman College. • Conference

sessions on a wide range of topics such as: Fake News and Information Literacy in the 21st Century, Privacy, Teaching Students to Confront Logical Fallacies, Residency Programs, Cancelling a For Credit Class and Picture Books in the College Classroom • Continue to offer biannual Public Relations/Marketing Award • Hold annual spring conference with programming designed to meet professional development needs.

Michigan, MI-ALA: MiALA continues to engage with institutional and individual members to promote the impact and value of academic research libraries, including networking opportunities. MiALA Board of Directors has reached out to potential new institutional members, and in our membership renewal letter, we highlighted MiALA's 2017-2018 accomplishments. These are tailored for each director or dean, and signed by the President-Elect. We also have identified and highlighted individual MiALA members and their participation in the Association (presentations, webinars, etc.)

Michigan, MLA: Michigan Library Association (MLA) offers academic libraries opportunities to contribute towards several online newsletters. MLA has several specificly titled newsletters (networking, advocacy, etc.)

New England: Through our chapter's Special Interest Groups, our Leadership Development Committee, and our Annual Conference we offered eleven events and conferences providing opportunities to hundreds of our region's members to discuss, present, and bring back to their campuses the most impactful and current ideas about the value of academic and research libraries. New this year, we began offering free webinars to Chapter members, also providing open access to archived event recordings.

New Jersey: NJLA CUS/ACRL NJ Newsletter is published twice per academic year; Fall and Spring. It is distributed via a statewide listserv. The Fall issue prominently features the NJLA Conference and also highlights librarian/library accomplishments across the state.

North Dakota/Manitoba: The research showcased at the annual symposium all highlights the impact and value of academic and research libraries in higher education.

Ohio: Each year, ALAO awards up to \$2,000 to support and encourage research projects proposed by ALAO members.

South Dakota: We were fortunate to have ACRL President Cheryl Middleton present at our South Dakota Library Association (SDLA) Annual Conference, September 27-29. She delivered a valuable overview of tools and resources available from ACRL including ACRL Top Trends; the Environmental Scan for 2017; the VAL Project; and the Scholarly Communication Toolkit.

VALUE OF ACADEMIC LIBRARIES OBJECTIVE 3: EXPAND PROFESSIONAL DEVELOPMENT OPPORTUNITIES FOR ASSESSMENT AND ADVOCACY OF THE CONTRIBUTIONS TOWARDS IMPACT OF ACADEMIC LIBRARIES.

Anthropology and Sociology Section (ANSS) ANSS' Publications Committee maintains a robust website with announcements of meetings, current and archived publications, and "toolkit" documents for carrying out ANSS functions. They post bibliographies of resources, including materials from ANSS' annual programs. Each committee of ANSS has a libguide page, most of the guides are still unpublished but many committees look forward to making their content public soon such as a page for subject-focused information literacy. Our listsery, ANSS-L is a source for job postings, announcements, and

discussions of issues facing information professionals in the social sciences. We are also active in Facebook and Twitter.

College Libraries Section (CLS) Much of the Section's work falls into this category. For instance, the two CLS Discussion Groups (Medium-Sized Academic Libraries Discussion Group and Leadership and Management Issues in College Libraries Discussion Group) selected discussion topics which reflect the issues faced by college libraries and which touch upon some of the strategic areas identified in the ACRL Plan for Excellence. These discussion groups provide both a professional development opportunity and creates a community of practice in which participants can share best practices. In addition, the Research for College Librarianship Committee has a robust and popular Peer Writing Circle program to support academic librarians who wish to research and to publish. In many ways we provide opportunities for academic librarians to engage in continuous learning, research, developing best practices, and engaging in both practical management and in scholarly conversation with peers.

Community and Junior College Libraries Section (CJCLS) Section member Michael Miller, (Bronx Community College) is working with Northern Virginia Community College and other community college librarians on an IMLS Grant in collaboration with ITHAKA S & R, that will develop a tool to assess and improve library services to support student success.

Distance Learning Section (DLS) June 24, 2018: The DLS Executive Committee accepted the Standards Committee's recommendation to include a standards worksheet to the DLS website and to ACRL's official page on the standards. The document is helpful to any librarian or library personnel interested in assessing their library in relation to the DLS Standards. The Standards Committee also brainstormed marketing ideas to promote the newly revised standards which will be shared with the 2018-2019 committee.

Literatures in English Section (LES) LES designated a memorial scholarship for the ACRL 2019 conference in honor of long-time member David Oberhelman, who passed away in January 2018. We hope that this scholarship will support one or more deserving librarians who can attend this rich professional development opportunity and gain knowledge to advocate for the impact of academic libraries.

Rare Books and Manuscripts Section (RBMS) RBMS members/committees have partnered with affinity groups in the Society of American Archivists and groups within ACRL to bridge the assessment of student success across all information resources including those typically held in special collections and archives. Moreover, we are committed to offering programming and workshops at our conference in order to enable our members to promote other areas of impact to which academic libraries contribute for their communities, such as diversity in our field, collection development, archival description, and others.

Science and Technology Section (STS) The STS Assessment committee is working to re-create the survey from 2010 to develop a longitudinal view of the activities of science librarians and how they have changed over the last decade. This information should help tailor STS programming and professional development towards identified needs of our members, as well as developing a broader view of science librarianship, which should help this section become more competitive as of venue for science librarianship practice. The STS Hot Topics discussion group delivered a program at Midwinter 2018 focused on the changing roles of science liaisons, including additional responsibilities that science librarians are taking on as a way to demonstrate the increasing value of science liaisons. This program

included assessments of science liaison responsibilities, which ties to librarians' impact at their institutions and beyond.

Women and Gender Studies Section (WGSS)

Academic Library Services to Graduate Students Interest Group This interest group has given opportunities to others to expand their professional development by allowing them to present at and attend these meetings. A survey was distributed after the ALA midwinter session to evaluate the success of these presentations and how this session was organized. We also sought input on what the attendees would like to see at future meetings.

Access Services Interest Group In its second year, the Access Services Interest Group has grown significantly and been recognized for its activities both within the specialization of Access Services and externally to other ACRL areas and leadership. The convener and incoming convener have participated extensively in ACRL leadership activities such as the Leadership meeting at Midwinter and Annual and seeking collaborative opportunities with the Committees on the Value of Academic Libraries and New Roles and Changing Landscapes.

Library Marketing and Outreach Interest Group During ALA Midwinter 2018 (31 attendees) and ALA Annual 2018 (75 attendees), LMOIG held discussion meetings in which one of the topics related to assessment. The prompt invited attendees to share how they are assessing the marketing and outreach efforts at their respective institutions. This year, LMOIG and the University Libraries Section (ULS) Academic Outreach Committee (AOC) also worked together to provide a program at ALA Annual, "We're All in It Together: Focusing Outreach & Assessment to Your Institution's Strategic Goals." The panelists shared strategies for aligning outreach efforts to institutional goals and methods for evaluating outreach activities in light of these goals. Aligning outreach in this way further demonstrates how libraries contribute to wider university goals. Over 235 people attended this program. It also received attention via American Libraries' The Scoop blog and the Credo Reference blog.

Virtual Worlds Interest Group Librarians, in collaboration with ACRL, presented at the Virtual Worlds Best Practices in Education Conference held in March 2018 to expand and network through professional development. Dr. Valerie Hill and Robin White-Siebert shared Innovative Virtual Libraries- Research and Design. The presentation included the planning for the move of the Community Virtual Library to a new location with numerous innovative library areas: an auditorium, book orchard, poetry garden, reference desk, main library, art study campfire, literary study campfire, and other areas for immersive learning. See https://wwbpe.org/event/innovative-virtual-libraries-research-design?instance_id=212

Alabama Alabama ACRL chapter continuously queries members about issues they are facing and how the chapter can help academic librarians achieve their professional goals.

Eastern New York This year saw ENY/ACRL propose, vote, and pass a change to our leadership structure. We split the Program Chair/Vice President/President elect into a two year Program Chair and a seperate VP/President-elect position. This is to encourage more members to get involved, allow the VP to be more help looking for ways for ENY/ACRL to do new and different "things" and assist when needed. We felt it too much to have Program Chair work tirelessly all year on the programming and pay little attention to the roles coming next (President then Past-President) which did not set ENY/ACRL up effectively to lead change and growth.

Greater Metro New York This objective as formulated is incomprehensible to me.

Iowa • Hosted a Twitter chat on November 1, 2017 on fake news. • Hosted ACRL Webinars

Kentucky --Keynote at state's spring conference discussed the topic of design thinking. Speaker was Dr. John Nash from UK's Laboratory on Design Thinking --theme of the state's spring conference was "user experience" and several sessions focused on assessment of users, including software applications for tracking user experiences

Louisiana The chapter hosted the webinar, "Fighting Fake News with the ACRL Framework," on November 30th from 1 PM to 2:30 PM Central Time. This webcast is provided through ACRL's eLearning program. The webinar was simulcast at three locations: Louisiana State University's Middleton Library, University of Louisiana-Monroe's Library and Frazar Memorial Library at McNeese University.

Maryland Cosponsored March 23, 2018 ACRL Assessment in Action Workshop, 98 registered attendees.

Michigan, MI-ALA The Advocacy Committee created opportunities for provided members with ways to engage with legislation, public library initiatives, and other opportunities within Michigan. They sent emails informing membership of advocacy opportunities. MiALA also reiterated our support for public libraries through a statement of support.

Michigan, MLA Michigan Library Association (MLA) is the advocate for libraries of all types in the state of Michigan.

Missouri The Missouri Association of College and Research Libraries (MACRL) serves as a unit of the Missouri Library Association. During the Missouri Library Association (MLA) Annual Conference held October 4 – 7th in St. Louis, MO, MACRL sponsored presentations that highlighted how academic libraries are proving their impact to their institutions. In one such program, "Assessing our Learning Commons Implementation with Library Data", presenter Shelly McDavid related how data was obtained, analyzed, and interpreted to guide decision making in a multi-year project. In the case of the Curtis Laws Wilson Library, multiple types of data were used to inform the development of a learning commons, as well as substantiate its positive effects on student library usage. Judy Geczl helped attendees grapple with an often problematic assessment tool in another MACRL sponsored program called "What are They Thinking? Tips on How to Build an Effective Survey." This session walked attendees through the process of planning this form of assessment, as well as ways to draft effective survey questions that lead to meaningful results.

New Jersey Assessment committee and User Education held the 3rd annual summer workshop in July 2017: "Diving Deep: Exploring New Possibilities in Information Literacy and Assessment." The workshop is open to all academic librarians in the state. Lightening talks and roundtables on topics pertaining to information literacy instruction, reference, and assessment are invited.

New Mexico Over the past year, our chapter worked to make academic librarians in the state more aware of professional development opportunities through disseminating information on workshops, webinars, and other resources at our annual conference and through our list-serv.

North Dakota/Manitoba Our annual symposium is the main professional development opportunity for the chapter. The theme also highlighted the importance of assessment, critical thinking, and

information literacy. This annual symposium is a rare opportunity for small groups of library and information professionals from two countries to get together to share their research and network.

South Carolina The Section is again partnering with the Information Literacy Roundtable of our state organization to present a day-long workshop for teaching librarians. Iteach5 will be held on July 25, 2018. The theme "iSpeak, iPresent, iTalk" is intended to encourage South Carolina librarians from any type of library at any point in their careers to be better presenters and advocates of information literacy.

Western Pennsylvania/West Virginia Sponsored a Shut-up-and-write event to allow members of the Chapter an open environment to work on aspects of research. Annual conference for WPWVC ACRL Chapter. Theme of conference was What's to Fear? Learning from Failure.

Wisconsin Our annual 2 day conference held several assessment and advocacy focused sessions such as, "Getting Plugged In: Joining a Campus Learning Analytic Initiative," and "Student Success 1:1."

VALUE OF ACADEMIC LIBRARIES OBJECTIVE 4: SUPPORT LIBRARIES IN ARTICULATING THEIR ROLE IN ADVANCING ISSUES OF EQUITY, ACCESS, DIVERSITY, AND INCLUSION IN HIGHER EDUCATION.

Anthropology and Sociology Section (ANSS): a. Our 2018 Annual Program, "Southern Food Culture & Politics" featured local expert panelists discussing the political and cultural issues related to food policy and preservation of knowledge about food in the south. Our panelists were Liz Williams, a founder of a museum focused on southern food and beverages and Susan Tucker, an archivist who oversees a culinary collection that documents the influence of women and the diverse cultural heritage of the region's culinary history. We also created a LibGuide with information on the social and cultural politics of food in the South.

College Libraries Section (CLS): Each of the CLS committee chairs have been asked to report on EDI initiatives and to look for ways to infuse EDI principles into our committee work. For example, the Leadership and Management Issues in College Libraries Discussion Group chose "how to be inclusive in hiring practices" as a discussion topic.

Education and Behavioral Sciences Section (EBSS): The EBSS Program Planning Committee hosted the forum, "Safe space: Hate has no home in the library" during ALA Annual 2018.

European Studies Section (ESS): At Annual, the Cataloging Issues Discussion group held a presentation by Rachel Tillay (Tulane U) "Metadata, Diversity, and the Future" who demonstrated the solutions used in "Free People of Color in Louisiana" statewide collaborative digital project, followed by general discussion of opportunities and challenges of current metadata for catalogers interested in collections that involve cultural, linguistic, and other identity-related diversity.

Instruction Section (IS): Instruction for Diverse Populations Cmte: The committee promoted the Library Instruction for Diverse Populations Bibliography, a resource for instructional librarians to find information about teaching diverse populations within college and university settings including African American students, first-generation college students, Hispanic and Latino students, students with disabilities, and more. https://acrl.ala.org/IS/library-instruction-for-diverse-populations-bibliography/ Instruction for Diverse Populations Cmte (2): The committee reviewed and updated the Multilingual Glossary for Today's Library Users, a tool librarians can use to assist ESL or non-English speaking library users including a list of common library terms translated into six different languages, and English

definitions for each of those terms. Maintaining and updating this resource adds to librarians' capabilities to be inclusive in our services and allow equitable access to information for our diverse users. Vietnamese translations obtained and added to Glossary (Fall '17) and new workflows and documentation created (ongoing through June '18). promotional announcement posted to IS website (6/6/18), social media posts (6/6 and 6/7/18), https://acrl.ala.org/IS/multilingual-glossary-for-todays-library-users/ Instruction for Diverse Populations Cmte (3): The webinar "Instruction and Outreach for Diverse Populations: International Students" arose due to a need to provide dynamic and interactive avenues of support for librarians serving diverse populations. This webinar was envisioned as the first in a series of webinars focusing on target populations (e.g., international students, undocumented students, nontraditional students, etc.), and was executed in partnership with the ACRL Library Marketing and Outreach Interest Group. Experiences shared by presenters results in practical takeaways for attendees regarding equity, diversity, and inclusion. 154 webinar attendees. The recording has 307 views as of 7/16/18 (less than four months out from the webinar date). https://www.youtube.com/watch?v=zdgpnhoGeF0&feature=youtu.be

Literatures in English Section (LES): The ACRL program organized and sponsored by LES at 2018 ALA Annual conference, "Zine Cultures as Critical Resistance: A Hands-On Workshop to Build Community engagement and Student Learning" highlighted the powerful effectiveness of 'zines in building diversity in library collections, outreach engagement, and user experiences in our libraries.

Rare Books and Manuscripts Section (RBMS): While RBMS has a very dedicated and active Diversity Committee, we are strongly in support of the issues to be present in all of our areas of focus. We have realized this in our conference programming that commits an overarching approach to highlighting concerns of inequities and historical erasures in our collections and field. In doing so, we endeavor to empower our members to better advocate for diversity, equity, access, and inclusion in higher education.

Science and Technology Section (STS): The STS Hot Topics discussion group delivered a program at Annual 2019 focused on STEM librarian equity, diversity, and inclusion initiatives. These presentations included topics such as strategic EDI collection development, creation of a female-focused coding group on campus, and and Wikipedia hack-a-thon for Chicago-area STEM women profile pages.

Women and Gender Studies Section (WGSS): Our ALA Annual program was "Social Justice at the Intersection of Arts and Librarianship". The panel consisted of librarians who work as artists as well as those who work extensively with artists or arts practitioners discussing the intersection of their work as librarians with their artistic practice, including the role that social justice, with an emphasis on feminism, plays in both arenas and the significance of the arts in contentious times.

Library Marketing and Outreach Interest Group: Many academic libraries design events, programs, displays, and programs related to issues of equity, access, diversity, and inclusion. Some libraries also partner with programs or student groups focused on specific identities, such as LGBTQ, undocumented, international, first-generation, and transfer students, to list a few. Members of our group often share what they have been working on to support diverse student groups. A good example of this is a recent thread in which a member announced that she would like to work on a collaborative project with a campus program for LGBTQ+ students during National Coming Out Day this fall. This member canvassed the group for ideas and received many examples of programs and activities from other academic libraries. In 2018, LMOIG also began partnering with the Instruction Section Instruction for Diverse

Populations (IS-IDP) committee, which is responsible for maintaining the Instruction for Diverse Populations Bibliography and Multilingual Glossary. The bibliography is divided into a variety of student groups, such as students with disabilities, nontraditional students, African-American students, etc. In order to better market the work of IS-IDP, LMOIG and IS-IDP have teamed up to offer 3-4 webinars a year related to instruction and outreach for diverse populations. The first webinar, "Instruction and Outreach for Diverse Populations: International Students," was given in March. It was highly attended, and the recording boasts 300+ views on YouTube so far. The next webinar is slated for August and will feature either students with disabilities or undocumented students.

Residency Interest Group: RIG's core values are centered on advancing issues of diversity and inclusion. One of RIG's goals is to support the development of early career librarians, particularly from underrepresented groups. Throughout the year, the interest group regularly distributes information to members on related topics, including scholarships, publications, research surveys, and other professional opportunities focusing in these areas. Additionally, since 2016, RIG has participated in the ACRL Diversity Alliance Task Force. The taskforce seeks collaboration between ACRL RIG and ACRL's Diversity Alliance to commit to mentoring underrepresented populations, establishing a networked cohort of early career librarians and forming a community for residency coordinators.

Universal Accessibility Interest Group: Through the uniaccess listserv, a heavily-used and very active communication tool, as well as other discussion forums the UAIG advocates for inclusion for students with disabilities, and provides information to librarians that will help them promote and advance accessibility and inclusion for students with disabilities at their institutions.

Virtual Worlds Interest Group: As a partner of The Community Virtual Library, the ACRL Virtual World Interest networks with several affiliates such as the Nonprofit Commons (NPC) in Second Life. NPC includes virtual communities that advocate equity, access, diversity, and inclusion. One such community helps individuals with disabilities (Virtual Ability). Through collaboration with these diverse affiliates, librarians can advance the advocacy of social issues. (NPC and other affiliates)

Eastern New York: Our annual spring conference theme was Data, Libraries, and Justice which talked a lot about patron privacy and rights and equality. The theme touched on ways librarians could advance education on these topics and even what our role is, and how it related to bigger campus-wide, higher-education wide, and even real life situations/events. This conference was held May 23, 2018 at Colgate University. Additionally, vendors were present as well as poster sessions.

Greater Metro New York: Issues of equity, access, and diversity are frequently addressed by the many events sponsored by the chapter and its sub-bodies. The theme for the 2018 Symposium — Libraries in Direct Action — aims to address issues of the core values of librarianship, defined as "social responsibility, education, democracy, and intellectual freedom." In December 2017 our Professional Development Committee co-sponsored an event with the Library Association of the City University of New York entitled "Integrating Multicultural Elements in Library Instruction to Cultivate Information Literacy Skills in Students." The invited speaker was Bernadette M. López-Fitzsimmons, Associate Librarian for Instruction, Research, and Outreach at the O'Malley Library at Manhattan College in Riverdale, New York.

Iowa: ILA/ACRL member is Chair of ILA ad hoc Committee for Diversity & Inclusion

Kentucky: --A session at the state's spring conference covered Section 508

Maryland: In order to engage new segments of the academic library profession in ACRL MD activities, membership and leadership, incorporating strategies to enhance diversity, inclusion, and succession planning, our chapter: Invited volunteers through new communication channels, beyond Marylib, blog, social media; Provided recommendations to state association leadership regarding membership barriers (cultural and financial) identified in forum feedback; Provided opportunities for networking and social connections among attendees.

Michigan, MI-ALA: MiALA created a scholarship specifically for LIS students to attend the Annual Conference, and is exploring other statewide association models to ensure diverse representation within MiALA.

Michigan, MLA: Michigan Library Association (MLA) includes programing and workshops with diversity as a focus throughout the year.

Minnesota: -Daniel Gullo, Eileen Smith, and David Calabro from the Hill Museum & Manuscript Library (HMML) received the 2018 ARLD Academic Innovators Award. This award recognizes academic librarians who have made outstanding contributions to advance the missions of academic libraries in Minnesota through innovative projects, programs, or services. Since August 2016, Gullo, Smith, and Calabro have developed a method to establish new authorities for underrepresented communities not commonly found in Library of Congress and VIAF authority files including authorities for authors and titles from early modern and medieval Eastern Christian and Islamic writers, especially those from Syria, Iraq, Lebanon, Mali, Turkey, India, Malta and the Western Mediterranean where HMML continues to digitize previously uncatalogued manuscript and rare book collections. -ARLD hosts 1-2 "ARLD Dialogues" annually. The dialogues are an opportunity for academic librarians from various institutions to gather and discuss a particular aspect of librarianship. On April 5, 2018 the dialogue topic was #LibrarianshipSoWhite, facilitated by Amy Mars and Deborah Torres from St. Catherine University. The event included small group discussions focused on what we should stop doing, what we should keep doing, and what we should start doing to de-center whiteness and cultivate inclusive libraries. annual "ARLD Day" one-day professional development conference included sessions addressing: inclusivity through documentation gender, technology, and libraries -ARLD's annual poster session at the Minnesota Library Association annual conference included posters on topics including: diversity resident librarian positions #critlib: critical librarianship and social justice microagressions

Nebraska: "Access to Think: Applying the NLA Intellectual Freedom Manual at your Library". Workshop presented by Michael Elsener (Southeast Community College), Todd Schlechte (Southeast Library System) & Tim Lentz (UNL). Nebraska Library Association Annual meeting workshop explained to members how to use the IF manual to create policies, defend the first amendment, protect privacy, provide access to resources, fight fake news and disinformation as well as how to deal with law enforcement. "Many Languages, Many Cultures: Responding to Diverse Health Information Needs". Presented but Annette Parde-Maass (National Network of Libraries of Medicine) and Christian Minter (UNMC). Nebraska Library Association Annual meeting session provided materials to improve cultural awareness and communication skills to health providers and librarians.

New England: Our New England Library Instruction Group (NELIG) hosted an event focusing on the development of critical thinking beyond information literacy, which included sessions on information

skepticism and critical cartography, speaking to the inherent biases in a profession dominated by white voices. Our Annual Conference also included several papers on diversity and inclusion in higher education, including the ongoing development of fellowship and post-baccalaureate programs to address the 'pipeline' issue in an overwhelmingly white profession. Our Chapter's use of an open access repository for all conference materials provides open access to these essential conversations.

North Dakota/Manitoba: The discussions of Open Access at the annual symposium touch on access and equity.

Ohio: ALAO sponsors the Diversity Scholarship for current library science students; this award includes \$1,500.00 for tuition, free registration to the ALAO Annual Conference, and a year of mentoring by an ALAO member. The October 2017 ALAO Annual Conference (Columbus, OH) included the session "What We (don't) Talk About When We Talk About Diversity". The abstract read: In 2012, ACRL issued a document outlining eleven diversity standards for academic libraries to use in developing the skills and competencies that are necessary to serve diverse populations. ALA lists "diversity" as one of its 11 core values. Lately, the rhetoric around "diversity" has expanded to include the terms "inclusion" and "equity." Typically, when we use the word "diversity" we refer to specific categories of identity: race, gender, ability, and sexual orientation, to name a few. As colleges and universities engage in more diversity initiatives, how is the conversation around diversity, equity, and inclusion taking shape? What do we mean when we talk about diversity in academic libraries? What is left unsaid when these conversations take place? Focusing on race, this session will challenge attendees to unpack, rethink and reframe the diversity conversation. The presenter will share findings from a content analysis project of academic library diversity plans, provide a brief overview of critical race scholarship in the field, and challenge attendees to think critically about current library rhetoric around race. Attendees will come away from this session with new frameworks to consider as the foundation for anti-racist work not just in academic libraries but higher education as a whole.

Oklahoma: The Oklahoma chapter of ACRL held its annual conference on November 10, 2017 at Oklahoma State University, Tulsa Campus. The conference title was "Reaching Toward the Margins: Critical Librarianship in Academia." The conference focused heavily on serving marginalized groups and why it is important for equity of education.

South Dakota: Several ACRL members participated in developing the program for annual conference that included a diverse group of presenters and speakers from South Dakota include native American, Asian American, and African American.

Virginia: The Virginia ACRL chapter hosted a Spring 2018 Program in Williamsburg, VA on the topic of "Critical Librarianship in Higher Education." The event included a nationally recognized author/speaker on the topic of critical librarianship, Eamon Tewell, and affinity groups (ex: instruction, collection development, technical services, hiring and management, etc...) discussions on critical librarianship topics central to each group. The event was attended from librarians around the state as well as from bordering states.

Wisconsin: Our annual 2 day conference featured session focused on equity, diversity, access, and inclusion such as "Structures of Whiteness: Colonialism and Diversity in Academic Libraries," "Equity, Diversity, and Inclusion: Charting the Course for Justice and Excellence in Academic Libraries," "Academic Freedom and the Library: Employing a Social Justice Lens for Understanding Intellectual

Freedom," "All Hands on Deck: Social Justice, Empathy in the Age of Information Literacy," "LGBTQ+ Archives in Wisconsin," and "Integrating social justice in policy, practice, and culture: A panel discussion."

STUDENT LEARNING

Goal: Advance innovative practices and environments that transform student learning.

STUDENT LEARNING OBJECTIVE 1: CHALLENGE LIBRARIANS AND LIBRARIES TO ENGAGE LEARNERS WITH INFORMATION LITERACY SKILLS IN A WAY THAT IS SCALABLE AND SUSTAINABLE.

Anthropology and Sociology Section (ANSS): a. All of the ANSS liaisons have been involved with spreading information to academics about the values of information literacy through posters, conversations, and reviews. b. The instruction and information literacy committee of ANSS has been developing an information literacy toolkit through the ANSS libguide platform. This guide will soon be an essential tool for any anthropology, sociology, and criminal justice librarians and/or instructors.

College Libraries Section (CLS): Our Innovation Award recognizes librarians and institutions where this is happening in innovative and scalable ways.

Community and Junior College Libraries Section (CJCLS): Program presented at the Annual Conference entitled "Making the Framework Work: adapting the ACRL Framework for Information Literacy in Community College Instruction". Program provided community college librarians with practical ways to use the framework in instruction, particularly with one-shot sessions. The presenters were offered a book deal following the event, which was attended by over 120 people.

Distance Learning Section (DLS): March 30, 2018: the DLS Discussion Group facilitated a Spring forum, "'But I've Never Met You!': Serving Graduate Students From A Distance," that featured keynote speaker, Johanna Tunon (San Jose State University and University of Maryland University College) who addressed trends and changes in services to graduate students.

Education and Behavioral Sciences Section (EBSS): The EBSS Electronic Resources in Communication Studies Committee has been working on creating LibGuides describing and evaluating resources in various areas of their field. Both the EBSS Communication Studies Committee and Psychology Committee are working on developing subject-specific companion documents to the Framework for Information Literacy for Higher Education.

and the ACRL Standards Committee to work toward finalizing the committee's last years work on revising the "Characteristics of Programs of Information Literacy that Illustrate Best Practices: A updating the Information Literacy in the Disciplines Guide which brings together resources for librarians and instructors who are interested in incorporating information literacy skills into an existing disciplinary curriculum. These resources include standards or guidelines related to information literacy from accrediting agencies and professional associations; research relating to the roles and pedagogy of information literacy within disciplines; and adaptable assignments, exercises, and tutorials for practical applications. Through the curation of this collection, the project connects teaching librarians with standards- and evidence-based resources for information literacy instruction across over 40 disciplines. https://acrl.ala.org/IS/is-committees-2/committees-task-forces/il-in-the-disciplines/informationliteracy-in-the-disciplines/ Instructional Technologies: The committee wrote and published two articles for the Tips and Trends series, a publication focused on trends in instructional technology. The articles provide information to alert librarians of new tools, or new ways of using technology in the classroom. "Digital Texts and and Reading Strategies" https://acrl.ala.org/IS/wp-content/uploads/Tipsand-Trends-Sp18.pdf "Frameworks for Blended and Online Design" https://acrl.ala.org/IS/wpcontent/uploads/Tips-and-Trends-W18.pdf Instructional Technologies (2): The committee uses Twitter to keep Instruction Section members and others in the profession informed about instructional technologies and the impact of technology on instruction. The feed includes articles, tools, and reports designed to generate conversations among library professionals on enhancing their teaching (in physical and virtual environments) with digital technologies. These strategies can also be used to enhance conversations with faculty members and other campus partners such as instructional designers, student life coordinators, and more. The Twitter account stayed active and consistent throughout the year. The number of followers increased to 883, and the account consistently receives retweets and profile visits, indicating regular engagement and interest in the content. Mentoring Cmte: Matching mentors and mentees creates a platform for sharing knowledge and teaching skills between more experienced librarians and newer librarians. The program provides an opportunity for discussion and growth as librarians look for ways to engage every student with information literacy skills and in a way that is scalable and sustainable. The prompts provide opportunities for discussion and growth as librarians look for ways to engage every student with information literacy skills and in a way that is scalable and sustainable. Monthly prompts are updated each year based on feedback. This year's program included 23 mentors and 23 mentees; 46 program participants total. PRIMO Criteria Revision Task Force: The TF revised the criteria of the PRIMO submissions process and worked with a database developer to make recommended changes. The database developer was successful in revising the criteria and completed the revisions by March 2018. Although offered from IS funds, the developer declined payment/honorarium for her work. A side note - the PRIMO database has been struggling the past couple of years with malware and GoDaddy as a platform service. For now, all is resolved but we may need to make a change in the future. PRIMO Cmte: The PRIMO committee identifies excellent online instructional material in terms of design and delivery under two rounds of review. Selected materials are added to the PRIMO database and provide instruction librarians with models of excellent online instructional material from which they can draw. Fall 2017: 31 submissions, 11 sent to committee for review, 4 accepted. Spring 2018: 29 submissions, 20 sent to committee for review, 0 accepted. https://acrl.ala.org/IS/instruction-tools-resources-2/pedagogy/primo-peer-reviewed-instructionmaterials-online/ PRIMO Cmte (2): In order to increase awareness of PRIMO and highlight

instructional design and execution, the four highest rated projects from each round of reviews were profiled in the Site of the Month interview series. Following the review process, the authors of the highest-scoring projects are invited to supply site of the month interviews. Fall 2017: 4 interviews. Spring 2018: 3 interviews. https://acrl.ala.org/IS/category/committees/primo/ Teaching Methods Cmte: The committee hosted a virtual panel with Veronica Arellano Douglas and Joanna Gadsby titled, "Gendered Labor and Library Instruction Coordination." The online event examined the structures and expectations inherent in the role of instruction coordinators through a critical feminist lens. Survey responses from the evaluation confirm that the event was well-received. The webinar included 75 attendees and 244 views on YouTube as of July 26, 2018. https://youtu.be/5Q3ZTNU4kGY Teaching Methods Cmte (2): The committee featured five (5) outstanding teaching librarians. A subcommittee solicits nominations, chooses librarians to showcase, and then works with the full committee on the final selection decision including interviewing the chosen librarians and posting the interview to the IS website. Features were also posted on the site and announced via listery: https://acrl.ala.org/IS/category/istm/featured-teaching-librarian/ Teaching Methods Cmte (3): The Committee published Selected Resources: Teaching Methods and Instructional Design in Library Instruction; Assessment of Library Instruction, a digestible summary of the literature in the highlighted areas, focusing on the work of our colleagues and sharing their publications on public platforms. This year, the committee selected nine (9) articles from the area of teaching and instructional design, and six (6) in the area of assessment. Selected resource lists were publicized via listsery, as well as posted in

Literatures in English Section (LES): The LES Working Group for Revised Research Competencies for Literatures in English has drafted a full set of competencies that will guide humanities librarians in information literacy instruction and curricular collaborations. The document will retain language similar to learning objectives, but will be aligned with Framework knowledge practices and dispositions.

Zotero: https://www.zotero.org/teach_bibliography/items/collectionKey/N2Z3XAK8

Politics, Policy and International Relations Section (PPIRS): Techniques and Approaches: Librarians on Information Credibility and "Fake News" (PPIRS and the ACRL Plan for Excellence Discussion) Meeting held at ALA Annual 2018. Shared teaching ideas and resources. Also Ad Hoc Committee on Information Literacy was formed and met 4 times to lay groundwork for future efforts

Politics, Policy and International Relations Section (PPIRS): Activities relevant to addressing this objective include: Sponsoring a PPIRS "Fake News" workshop at the ALA 2018 Annual Conference in New Orleans Devising a section-specific Framework for Information Literacy that would focus on law, politics and policy.

Rare Books and Manuscripts Section (RBMS): With the creation of the Instruction and Outreach Committee, and previous successes with partnerships with affinity groups in ACRL and SAA, we have already begun to see the fruit of our efforts with contributions to guidelines for information literacy as well as a stronger commitment to instruction with primary source materials. These bridges are essential to scaling the efforts and importance of academic libraries.

Science and Technology Section (STS): The STS Information Literacy Resources sub-committee manages a guide of resources on science information literacy, which is available at https://acrl.libguides.com/sts/scienceinfolit. This year the committee began the early steps of removing old and irrelevant content from the guide. In particular we have removed many broken links, and, due to difficulty in identifying useful tutorials related to STEM disciplines, closed the guide's tutorial page.

Some steps have also been taken to update the Framework page to include new resources. The subcommittee's other major achievement this year was in moving the guide from its prior location on the Indiana University East LibGuides into the ACRL LibGuides instance. This will allow us to get easier access to the guide for editing, and enable the sub-committee to have more than one person editing the guide. We offer our thanks to Sue McFadden and IU East for hosting our guide for the last few years. The STS Information Literacy - Chat sub-committee is responsible for holding regular chats online. These onehour chats are expected to feature topics related to science information literacy that may be of interest to STS members, but are open to all for attendance. Sub-committee members moderate the chats. A survey was sent out seeking proposals from potential speakers on chat topics around the ACRL framework. Due to a low response rate (3 proposals) the committee decided to approach volunteers from the last year that had not been selected for a chat to see if they were still interested. This brought the total chats for the 2017 - 2018 year to 6. Additionally the chat libguide was moved from its former home to the ACRL libguides instance (https://acrl.libguides.com/sts/ilchat). This move will make accessing the guide for editing easier for committee members. STS Program Planning Committee at ALA Annual 2018 in New Orleans, LA had the following learning objective. Attendees will be able to help students navigate the primary research behind popular science media and journalism

Universal Accessibility Interest Group: The UAIG holds virtual and in-person discussions that help librarians improve engagement for students with disabilities. In 2018 the UAIG held an in-person meeting at ALA Midwinter and two virtual meetings. The virtual meetings included discussions on the accessibility of LibGuides, an important tool for helping students with disabilities engage with library content.

Virtual Worlds Interest Group: One of the most important challenges facing everyone today is digital citizenship because at all age levels we now live in digital culture. ACRL Virtual World Interest Group works with the Community Virtual Library to promote information literacy at the new Digital Citizenship Museum in the virtual world of Kitely. A tour was help at the Virtual Worlds Best Practices in Education Conference on March 23, 2018. See (Digital Citizenship Museum Tour VWBPE https://vwbpe.org/event/digital-citizenship-museum-in-kitely?instance_id=186) Also, the ACRL VWIG meeting for Mar 18, 2017 was a tour of the Digital Citizenship Exhibit in Second Life. The new DC Museum in Kitely sprung out of the ideas at the exhibit which included many elements of digital citizenship. See machinima https://youtu.be/oMdkFubBQaU

California: Southern California Instruction Librarians (a CARL interest group), held SCIL Works 2018 -- Where virtual meets reality: The intersection between instruction and our virtual campus communities. This one day mini conference highlighted scalable online instruction at various institution types from around California.

Delaware Valley: On November 17, 2017, the Chapter hosted a full day program on news literacy with keynote speaker Dr. Pamela Newkirk from NYU. Newkirk presented her research on race and the news and discussed current trends and issues in the field of journalism. A panel discussion followed with Tom Ipri from St. Joseph's University (Moderator); Mark Dent, a reporter for Billy Penn and Politifact: Pennsylvania Edition; Sarah Hartman-Caverly, a Reference and Instruction Librarian at Delaware County Community College; Vanessa Schipani from Annenberg Public Policy Center and Science Writer for FactCheck.org, and John L Sullivan, Associate Professor of Media & Communication at Muhlenberg

College. The program concluded with a lighting round session featuring presentations from 10 librarians who shared their approaches and methods for teaching news literacy.

Georgia: ALD and ACRL GA chapter organized the viewing of the ACRL webinar "Fighting Fake News with the ACRL Framework" The viewing was held simultaneously in six locations across the state (n Athens, Augusta, Carrollton, Cartersville, Decatur, and Savannah) in August 2017. In addition, the Savannah and Decatur location held one-hour post-webinar workshops.

Idaho: ACRL Idaho offered a free, online class on how to identify and teach patrons about the 'fake news' phenomenon.

lowa: Conference sessions: Joint conference with Iowa Private and Academic Libraries featured an Information Literacy Interest group.

Kentucky: --several sessions at the state's spring conference and annual fall conference discussed approaches to information literacy education

Michigan, MI-ALA: MiALA has been working with MAME (Michigan Association for Media in Education) to create partnerships and programming opportunities. The Advocacy Committee has worked with MAME to promote opportunities to support statewide and local initiatives, and educate members. The Information Literacy and Instruction Interest Group is working with MAME to present a panel in October focused on the transition from high school to college.

Michigan, MLA: Information literacy is a topic at the MLA annual conference on a regular basis. Submission for presentations and interactive exercises and workshops on this topic is encouraged by MLA to libraries of all types.

Minnesota: ARLD promoted "23 Framework Things" an exploration of the Association of College & Research Libraries' Framework for Information Literacy for Higher Education. This academic librarian-focused, self-paced program encourages participants to read, reflect, and respond to prompts and big questions surrounding the implementation of the Framework at their institutions. https://23frameworkthings.wordpress.com/about/ Creators Trent Brager, Amy Mars, and Kim Pittman were selected to receive the 2018 Association of College and Research Libraries (ACRL) Instruction Section (IS) Innovation award for their work on 23 Framework Things.

Missouri: MACRL again took advantage of the MLA Annual Conference to sponsor multiple presentations related to maximizing student learning. Amanda Albert broached student learning from a different angle in her session "Building Bridges: Using Learning Theory as a Foundation to Teach ESL Learners to Frame Information Creation as a Process." This session drew upon established pedagogical theory to develop student's curiosity around information creation, information resources, and their role as information creators. In yet another MACRL sponsored session, "Library instruction at the crossroads: Focusing your instruction to meet students' needs" Robert Hallis reported on a study he conducted utilizing students' interaction with newspaper opinion pieces to reveal the information skills students need, as well as how best to teach them. In a final sponsored session, "Exploring Primary Source Materials: The Library of Congress," presenters Jane Theissen, Peggy Ridlen, and Justin Megahan demonstrated how the Library of Congress digital collections can be used to generate understanding and interest in the role primary sources bring to Information Literacy. In addition to sponsoring sessions, MACRL held a luncheon at the MLA Annual Conference which allowed librarians to learn how

we can effectively engage students with their own learning from Kevin Fosnacht, a researcher and faculty member at the University of Indiana Bloomington's National Survey of Student Engagement. In March of 2017, MACRL invited academic librarians from across the state to the University of Missouri in Columbia in order to explore effective student learning activities related to fake news. The workshop included a viewing of the ACRL webinar "Fighting Fake News with the ACRL Framework" followed by a group discussion.

Nebraska: "Getting Real Law: Navigating the Internet for Reliable Sources of Law and Legal Materials". Presented by Richard Leiter (NE College of Law) Nebraska Library Association Annual meeting workshop provided attendees with resources on how to help users navigate online legal research. "Information Literacy at your own pace". Presented by Center Community College Librarians: Dee Johnson, Dixie Codner & Sherrie Dux-Ideus. Nebraska Library Association Annual meeting session provided an overview of how to develop self-paced online information literacy tutorials. "Research Goals: Providing Students with the workshops they want". Presented by Monica Maher (UNO). Overview of how UNO developed and refined a series of research workshops to help students develop their skills. Included information on planning, how to assess and incorporate feedback and instruction pedagogy needed.

New England: The New England Library Instruction Group (NELIG), our Chapter's most active Special Interest Group (SIG), held three meetings this year, including their annual conference that drew 100+ attendees. NELIG programs provide multiple ways for attendees to swap lesson plans, present the latest ideas, and discuss issues from the Frameworks, to growing programs, to assessment. These events provide incredible opportunities for teaching librarians to network and become invigorated with new ideas. Additionally this year, a newly formed SIG was approved and provided funding to create programming for the coming fiscal year; the New England Education and Curriculum Librarians (NEECLIG) aims to "provide the first Northeast network for education and curriculum librarians who are serving academic teacher education programs. This network will improve communication and collaboration between specialized librarians in the region."

North Dakota/Manitoba: The Chapter sponsored one e-learning webcast for our chapter members entitled "Creative Instructional Design in Academic Libraries." For those who were not able to attend at the time of the webcast, we shared the archived link. This webcast focused on instructional design and information literacy.

Ohio: The October 2017 ALAO Annual Conference (Columbus, OH) included the session "A Flipped Classroom is an Inclusive Classroom: Accessibility in Online Content". The abstract read: Using digital flipped classroom activities for one-shot sessions allows us to address two major instructional challenges: time constraints and inclusion of diverse learners. Though the flipped classroom has been a staple in library instruction for several years, the increasing sophistication of eLearning tools mean new opportunities for developing effective activities. Not only do videos, interactive tutorials, and pre-class surveys help make the most of limited face-to-face time, they can also greatly increase accessibility. Using the Universal Design for Learning (UDL) framework, we seek accommodations that benefit multiple types of learners. In the online environment, this means making the most of tools like subtitles, screen reader integration, dyslexia-friendly fonts, high-contrast design, and even pause buttons for students feeling overwhelmed. Accessibility through subtitles on instructional videos, for example, makes content available for hearing impaired students, but also better for ESL students who benefit

from language reinforcement and those who are some place they cannot have sound. When we adopted a UDL mindset for library instruction, we quickly discovered that making our flipped classroom activities available for more students allowed all students to better engage with the material. Most importantly, the level of work and discussion in our classes significantly improved.

Oregon: sponsored pre-conference session for state library association conference on "Metacognition and Reading Strategies to Bridge Students Towards Inquiry." This pre-conference was created in collaboration with and at the impetus of the Information Literacy Advisory Group of Oregon (ILAGO) and the Library Instruction Round Table, a unit of the Oregon Library Association.

South Dakota: ACRL members developed two presentations for annual conference focused on engaging learners with information literacy: "Health Issues in the Headlines" and "Implementing Fake News Evaluation into Information Literacy Instruction."

Virginia: The Virginia ACRL chapter sponsored "The Innovative Library Classroom," a local conference held each May dedicated to sharing innovative practices surrounding teaching, learning, and information literacy.

Wisconsin: Our 2 day conference featured information literacy focused sessions such as, "Charting the Voyage: Information Literacy in Curricular Design," "Info Lit Instruction for the Remedial English Course: A Golden Opportunity," "Reading, Writing, Research: Laying Information Literacy Foundations across 100-Level Courses," and "Re-Imagining instructional content: Embedding information literacy in open education course design."

STUDENT LEARNING OBJECTIVE 2: INCREASE THE IMPACT OF INFORMATION LITERACY BY FORMING STRATEGIC PARTNERSHIPS WITH RELEVANT HIGHER EDUCATION ORGANIZATIONS.

Anthropology and Sociology Section (ANSS): a. The ANSS liaisons have created partnerships with their member organizations and discussed themes of information literacy. b. The chair of the ANSS also serves of the board of the Society for Applied Anthropology's Anthropology of Higher Education Topical Interest Group. For the past four years, she has served on a librarian panel of presentations.

College Libraries Section (CLS): CLS sponsors the ACRL liaison to the Council of Independent Colleges (CIC), the major national service organization for all small and mid-sized, independent, liberal arts colleges and universities in the U.S. Liaisons are responsible for outreach, education, and communication between CIC and ACRL in order to form strong relationships and advance the interests of ACRL and CLS.

European Studies Section (ESS): This year with the Literatures of English Section (LES), we sent out a call for applicants for a new ACRL MLA liaison. The ESS membership of what was SEES have strong ties and partnerships with the Association of Slavic East European and Eurasian Studies (ASEEES). We are having preliminary discussions of exploring having a new ACRL ASEEES liaison.

Instruction Section (IS): IS Vice-Chair, Jennifer Knievel, served as the Instruction Section liaison to the ACRL Student Learning and Information Literacy Cmte. In summer 2017, IS submitted a co-sponsored program with DLS Conference Program Planning Committee. Unfortunately the program was not selected but IS will continue to look for opportunities to work to connect with other ACRL sections. IS Chair, Merinda Hensley, held a phone conversation with Rare Books and Manuscripts Section (RBMS) chairs of the new RBMS Information Literacy and Outreach Cmte, Heather Smedburg and Anne Bahde

on Friday 3/16/2018. The group discussed the possibility of combining expertise from IS to assist RBMS with the pedagogical design and technological implementation of professional development learning online. Merinda contacted ACRL to work out the details of forming a task force between the two sections. It was decided by RBMS to table the conversation temporarily. In mid-July 2018, the new chair of the RBMS committee contacted Merinda and they decided to move forward with creating an cross-sectional task force to pilot an online learning opportunity for RBMS members. Tiffany Hebb, DePauw University, finished a three year terms as ACRL liaison to National Resource Center for the First-Year Experience and Students in Transition (NRCFYEST). The Executive Committee is working during summer 2018 to assign a replacement as well as choose a new ACRL liaison to Conference on College Composition and Communication (CCCC), in partnership with the Literatures in English Section.

Literatures in English Section (LES): LES has launched a collaborative proposal with the Instruction Section to co-sponsor an ACRL liaison to the Conference on College Composition and Communication. At 2018 ALA Annual, a LES working group was appointed who will work with representatives from the Instruction Section to select a co-sponsored ACRL liaison to the Conference on College Composition and Communication, ideally beginning in 2019. Additionally, the Revised Competencies document draws language and content from the Writing Program Administrator's Framework for Success in Postsecondary Writing.

Politics, Policy and International Relations Section (PPIRS): Ad Hoc Committee on Information Literacy to develop resources and materials for PPIRS members to assist with teaching information literacy, include reaching out to other higher education organizations..

Rare Books and Manuscripts Section (RBMS): We have offered workshops and sessions at our conferences to engage our members in building or reinforcing their skills in information literacy. We celebrate recent collaborations between RBMS and affinity groups to engage in practical and theoretical dialogues regarding information literacy. In the future, RBMS looks forward to the advice and recommendations of our Instruction and Outreach Committee in support of advancing our role in information literacy.

Virtual Worlds Interest Group: The ACRL VWIG partnership with the Community Virtual Library has expanded to a partnership with the International Society for Technology in Education (ISTE). ISTE and CVL now hold a monthly Literary Study Group which meets around a virtual campfire to discuss literature and information literacy, including metaliteracy and elements of the ACRL Information Literacy Standards. (ISTE collaboration)

Iowa: Joint ILA/ACRL/IASL (Iowa Association of School Librarians) College Readiness Committee: The committee continues its collaborative efforts to support information literacy and to advocate on behalf of school libraries. The committee completed an analysis of school library survey data from public high schools between 2009 and 2015; a decrease in hours/week spent on information literacy and collaboration efforts was calculated and mapped. The committee is working on an advocacy toolkit website for school librarians; website includes sample first-year college-level papers and suggestions for how these might be used in school librarians' work with high school teachers.

Kentucky: --Keynote speaker at state's annual fall conference came from the Center for News Literacy. Richard Hornik gave a presentation on "libraries in the post-truth era"

Michigan, MI-ALA: MiALA entered into an agreement with MIX, the Michigan Information Exchange. MIX is a gathering of instruction focused librarians who meet yearly to discuss information literacy outreach and ideas within an academic setting.

Michigan, MLA: Michigan Library Association (MLA) has a close working relationship with Michigan Association of Media in Education (MAME) our state's school media specialist group.

Nebraska: "Partnering with Rural Libraries to Increase Accessibility of Health and Safety Information". Presented by Ellen Duysen (UNMC) Nebraska Library Association Annual meeting workshop provided attendees with strategies to develop partnerships between rural libraries and health libraries to provide access to medical information.

New England: The NELIG and NEECLIG SIGs provide the most prominent connections to higher education, via their focus on instruction and curriculum development. However, our Leadership Development Committee has also made significant inroads with the higher education profession, providing opportunities for programming focusing on accreditation, leadership and management theory, and student retention. Information on these important topics are provided by partners garnered by collaborative relationships forged by this committee.

North Dakota/Manitoba: Last year's symposium was entirely on collaboration, and highlighted numerous collaborations within libraries, among different libraries, among libraries and other campus entities, among libraries and other community entities, and more.

Ohio: The October 2017 ALAO Annual Conference (Columbus, OH) included the session "Empowering Partnerships: Exploring the School Library Environment to Promote College Student Success." The abstract read: Student college readiness is a concern in higher education, particularly in the Appalachian region where secondary students, teachers, and school districts may face a variety of challenges. To bridge the college readiness gap, the presenters visited the school libraries of each high school in one Appalachian Ohio county. The goal of the project was to examine the physical space and explore the resources and experiences available to high school students. The project enables school and academic librarians to understand students' library environments and experiences. This understanding helps align student preparation and maximize success in the post-secondary environment. The presentation will share photos and high findings about resources and student experiences from the high school library visits. The presenters will compare and contrast the high school library and postsecondary library environments to deepen the understanding of the spaces in which students form expectations of and gain experience with libraries. Attendees will take away an expanded perspective of the environments and resources students may experience in high school libraries. The presenters will engage the audience in discussion to create academic library action items based on the findings from high school libraries.

Oregon: ACRL-Oregon representatives were requested and attended a meeting with the Oregon Writing and English Advisory Committee (OWEAC) on Feb. 2, 2018. OWEAC "a permanent advisory committee serving college and high school English faculty in Oregon." This meetings was about the integration of the Information Literacy Framework into teaching in WR 115, 121, and 122 as OWEAC is in the process of revising their learning outcomes for these courses. This revision work is a collaboration between OWEAC and the Information Literacy Advisory Group for Oregon .

South Carolina: We continue to develop membership and increase participation in Section activities through the SCLA website, associated social media outlets, the Section member listserv and state library consortium listserv

South Dakota: Our ACRL chapter has a long partnership with special libraries and health science libraries within our state. In fact, years ago, we renamed our chapter as the Academic/Health/Special Libraries Section of SDLA to make it more inclusive for SD librarians who serve students, faculty and researchers.

STUDENT LEARNING OBJECTIVE 3: BUILD CAPACITY FOR LIBRARIANS TO COLLABORATE WITH FACULTY AND OTHER CAMPUS PARTNERS IN INSTRUCTIONAL AND CURRICULAR DESIGN AND DELIVERY THAT WILL INTEGRATE INFORMATION LITERACY INTO STUDENT LEARNING.

Anthropology and Sociology Section (ANSS): a. The discussions groups of ANSS have often delved into information literacy-related topics. The criminal justice/criminology discussion group dedicated a session to information literacy and how librarians in the room were applying the new framework.

College Libraries Section (CLS): Both the work of the CIC liaison and the recognition that comes with the Innovation Award foster the development of partnerships between librarians and faculty to help integrate information literacy into student learning.

Education and Behavioral Sciences Section (EBSS): The EBSS Reference Sources and Services Committee created and distributed an online survey about the use of education-related library resources to be completed by education faculty and education majors.

Instruction Section (IS): 2018 Conference Program Planning: "Curricular Mapping – From Planning to Practice" Description: Join the ACRL Instruction section for its virtual annual program to discuss four stages of curriculum mapping. Curriculum mapping is a systematic approach to reviewing curriculum and identifying of areas in which information literacy instruction would have a high impact. Library instructors across the country are examining impact, developing outreach strategies, and communicating with both internal and external stakeholders. Learn how strategic use of curriculum mapping can help you advance both your teaching and instruction program. Panelists will showcase the: History of this practice, Strategic programmatic approaches, Project management processes for mapping, Working with campus partners and stakeholders, Communication practices for sharing and using the curriculum map results. Panelists include: Merinda Kaye Hensley, Host and 2017-2018 Instruction Section Chair, Lisabeth Chabot, College Librarian, Ithaca College Library, Susan Gardner, Head of Reference & Instruction, William H. Hannon Library Loyola Marymount University, Laura Kuo, Health Sciences Librarian, Ithaca College Library, Kacy Lundstrom, Head of Learning & Engagement Services, Utah State University Libraries, Sara Maurice Whitver, Coordinator of Library Instruction, University of Alabama Libraries. Thursday, May 31, 2018 1:00-2:00 (EST) Nearly 300 attendees, up exponentially from our last in-person Annual Conference Program and nearly 200 views on the YouTube link as of July 26, 2018. Archived webinar: https://www.youtube.com/watch?v=dJgt8ncmRPw&feature=youtu.be Discussion Group Steering Cmte: The Committee sponsored two online discussions this year, a forum around the time of Midwinter and a panel at the time of Annual. 2018 IS Midwinter Virtual Discussion Forum, "Embedding Scholarly Communication in Your Instruction Practice: A Coordinated Approach" Description: How can we best integrate scholarly communication into today's academic library instruction? While scholarly communication and content creation have impacted some areas of library services, these developments often overlook instruction aimed at undergraduate students. Join the

ACRL Instruction Section's 2018 Midwinter Virtual Discussion Forum to delve into current efforts to integrate issues such as content creation, intellectual property rights, and the scholarly conversation into undergraduate instruction practice. The ACRL IS Discussion Group Steering Committee presents: A virtual discussion led by Rebecca Lloyd (Reference & Instruction Librarian), Kristina De Voe (English & Communication Librarian), and Annie Johnson (Library Publishing and Scholarly Communications Specialist) from Temple University on Wednesday, January 24th, 2018 from 1:00pm-2:00pm Central Standard Time. Find out more by reading the discussion digest: http://acrl.ala.org/IS/2018-ismidwinter-virtual-discussion-forum-2/ Recording: http://ala.adobeconnect.com/p67gc2v8k4eo/ Chat Transcript: https://docs.google.com/document/d/1yB93qJlynvGa50pOU2BT6 c4colrz0TzblYsSX8LBU/edit?usp=sharing RSVPs: 99. Attendees: 40. 2018 IS Annual Virtual Discussion Forum, "Critical Reading for Learning and Social Change: A Panel Discussion" Description: Critical reading is defined as reading for a "... deeper understanding of how information is constructed, valued, and embedded within larger conversations." But how can we best integrate critical reading into our professional practice? Join the ACRL Instruction Section's 2018 Annual Virtual Discussion Forum for a panel discussion on defining, teaching, and promoting critical reading. This panel will view the issue from a variety of perspectives including: teaching critical reading to different student groups, using effective teaching strategies for credit-bearing versus one-shot instruction, supporting critical reading in the university curriculum, and understanding research on critical reading. The ACRL IS Discussion Group Steering Committee presents: Hannah Gascho Rempel, College of Agricultural Sciences Librarian & Graduate Student Services Coordinator, Oregon State University; Anne-Marie Deitering, Associate University Librarian for Learning Services, Oregon State University; Anne Jumonville Graf, First Year Experience Librarian/Associate Professor, Trinity University; Rosemary Green, Graduate Programs Librarian/Adjunct Professor, Shenandoah University; and Stephanie Otis, Associate Dean for Public Services, University of North Carolina at Charlotte. Wednesday, June 6th, 2018 from 1:00pm-2:00pm Central Standard Time. More information is available on the ACRL IS discussion digest: https://acrl.ala.org/IS/2018-is-annual-virtual-discussion-forum-2/ RSVPs: 319. Attendees: 140. Management and Leadership Cmte: The committee continued a series of online professional development by experts in areas that support instruction coordinators to forge campus partnerships and integrate information literacy and assessment of information literacy into the campus curriculum. The committee organized three (3) online presentations and discussions of use to instruction coordinators and librarians about mentoring, curriculum mapping, and communities of practice in order to improve librarians' ability to engage learners with information literacy skills. "Be Your Own Mentor: Take Control of Your Professional Development" http://ala.adobeconnect.com/pjzcgra7y9qt/ "Creating the big picture: Improving instruction programming through curriculum mapping" materials: https://tinyurl.com/vtlibmapping "Collective Learning: Developing an Instruction Community http://acrl.ala.org/IS/wp-content/uploads/laying_the_groundwork_brown_mccartin.pdf and http://acrl.ala.org/IS/wp-content/uploads/instructor college peters bradley.pdf Attendance: Mentoring webinar: 26, Curriculum mapping: 184, Communities of practice: 150. Research and Scholarship Cmte (3): The committee compiled an annotated bibliography on Asset-Based Teaching for the Five Things You Should Read About... series. https://acrl.ala.org/IS/wp-content/uploads/isresearch_5Things_asset-based-teaching.pdf

Literatures in English Section (LES): The LES Virtual Participation Committee hosted a virtual webinar forum on April 10, 2018 that focused on information literacy, the Framework, and integration with humanities librarainship. Guest speakers were experts Kim Pittman, Amy Mars, and Trent Brager, the creators of 23 Things about the Framework. The webinar was well attended with 44 participants. Following the webinar, the group hosted weekly Twitter chats around humanities librarianship, 23 Framework Things, and Digital Humanities (#leschat on Twitter). There were at least 3 participants each week, and in particular, the discussion about #23fwthings and innovative ways the ACRL Framework was implemented into classroom instruction on May 23 was seen 742 times on Twitter and had 21 interactions. These social media events increased the Twitter following of @LES ACRL.

Politics, Policy and International Relations Section (PPIRS): Ad Hoc Committee on Information Literacy aims to achieve this objective

Rare Books and Manuscripts Section (RBMS): We have offered workshops and sessions at our conferences to engage our members in building or reinforcing their skills in information literacy. We celebrate recent collaborations between RBMS and affinity groups to engage in practical and theoretical dialogues regarding information literacy. In the future, RBMS looks forward to the advice and recommendations of our Instruction and Outreach Committee in support of advancing our role in information literacy.

Science and Technology Section (STS): The STS Professional Development Committee manages the Science Librarian Bootcamp website, which enables librarians to expand their knowledge across curricula in the sciences and enables participants to interact in a deeper, more meaningful way with faculty and their course content.

Women and Gender Studies Section (WGSS): The WGSS instruction committee is developing a companion to the ACRL Framework that will provide information literacy criteria specifically mapped to Women and Gender Studies disciplinary standards.

Library Marketing and Outreach Interest Group: Outreach activities are also important to reach faculty groups and academic support units. If we do not demonstrate our value as educators or show how we can contribute to student learning, it is challenging to build capacity for instructional and information literacy programs and initiatives. Effective liaison work is essential. Members of LMOIG frequently use the Facebook group to ask questions and ask for advice regarding how to better reach faculty and units like writing and tutoring centers.

Virtual Worlds Interest Group: The ACRL VWIG collaborates with San Jose State University School of Library and Information Science. SJSU has a virtual group called VCARA: Virtual Center for Archives and Records Administration. Several librarians presented at the VCARA 2018 Conference on the theme of "Passion for Truth- Trusting Information in the Fake News Era. See https://ischool.sjsu.edu/vcara-blog/9th-annual-vcara-conference-april-18-2018

Florida: On Friday, October 20, 2017, the Florida Chapter of ACRL held its annual conference with the theme "Fake News and Digital Literacy: The Academic Library's Role in Shaping Digital Citizenship." The description of the program was as follows: "As proven authorities on information literacy, librarians are well positioned to lead learners through a politically and digitally polarized environment and advocate for the development of digital citizenship. Make plans to attend the 2017 FACRL Annual Conference to

explore digital literacy in higher education and the library's responsibility to lead the charge toward the creation of learners with the requisite skills to engage critically and ethically with information in an open knowledge society." The conference was well-attended, with 89 attendees participating in several engaging programs. Participants left with specific plans for combating our students' tendency to accept news stories at face value.

Georgia: Carterette Series Webinars (CSW) free webinar sessions conducted bi-monthly. In 2017/18 many sessions were devoted to student learning. Examples include: Engaging Students Through Images: Visual Literacy as Active Learning in Library Instruction (May 2, 2018), From Information Literate to Information Fluent: The Role of Libraries in Preparing 21st Century Citizens (February 21, 2018)

Greater Metro New York: A significant quotient of the chapter's efforts are directed at information literacy and library instruction. By way of example I'll mention the following. The chapter has an Information Literacy and Instruction Discussion group. One of the discussion topics for the 2017 Symposium's breakout session was "Undergraduate education, information literacy instruction, and crises of authority in the contemporary information world." The Graduate Services Discussion Group held a meeting in June where a variety of strategies for achieving faculty investment in library instruction were discussed. This meeting also discussed the need to "meet graduate students where they are," i.e. to adjust the scheduling and venues of instruction and other library interventions to coincide with students' own scheuldes and study habits, with the times and spaces (physical or virtual) Professional Development Committee sponsored an event titled "Developing Credit-Bearing Information Literacy Courses." The session featured two invited-speaker presentations: "Advocating for Credit Bearing Information Literacy Courses: Reflections and Lessons Learned" — Mark Aaron Polger, Assistant Professor and Instruction/Reference Librarian, CUNY College of Staten Island; and "Being Seen: Moving Beyond the Library to Mix, Connect, and Promote" — Charles Keyes, Instructional Services, and Alexandra Rojas, Head of Reference and Public Services, CUNY LaGuardia Community College. The program was moderated by Dr. Kanu Nagra, Electronic Resources Librarian, Borough of Manhattan Community College.

Idaho: ACRL Idaho offered a free, online class on how to identify and teach patrons about open education resources.

Indiana: Information literacy is one of the 6 goal areas of the ILF Strategic Vision adopted by the ILF Board August 2017. While nothing tangible was achieved in ACRL FY18, plans are underway for FY19.

Iowa: Conference session: One and One is Three: A Team Approach to Outreach

Maryland: Hosted group viewing and discussion of ACRL Webcast "Critical Thinking About Sources: Lessons and Activities for First-Year Students" May 2, 2018.

Michigan, MI-ALA: Our 2018 Annual Conference, held May 16-18 featured many breakout sessions and posters that addressed issues of instructional and curricular design, as well as outreach and creating relationships with campus partners (among many other topics). We had over 240 attendees, and the reaction to our annual conference was exceptional-many said the programming was more applicable than many large, national conferences.

Missouri: MACRL sponsored an MLA Conference session presented by MACRL board member, Kimberly Moeller, who outlined her approach to integrating information literacy into the curriculum in the session "Curriculum Mapping Lite: A Strategic Approach to Information Literacy in Course Progression." The presentation called for collaboration between librarians and faculty to integrate information literacy outcomes and curriculum into disciplinary programs.

Nebraska: Nebraska ACRL Scholarly Communication Roadshow Hosted at UNL Featured information on how to partner with campus stakeholders on the integration of OERs, issues in copyright, and trends in research metrics (ORCID) "How To Choose Your News: Educating College Students on Identifying Bias" Presented by Erin Painter (UNO) Creation of an online learning module and workshop designed to help students across campus and disciplines to understand how to be more sophisticated consumers of information. This module can be incorporated in to courses by faculty to integrate this informacy literacy skill into student learning.

New England: NELIG provides strong leadership in this area, and NEECLIG will be making inroads to develop similarly impactful programming in the coming year. Highlighting not only partnerships amongst librarians from partner institutions, presentations showcased at NELIG and the Annual Chapter Conference provide a wide array of collaborative working examples, across disciplines and throughout higher education institutions.

New Jersey: In April 2018, the User Education Committee hosted the ACRL Framework Toolkit Workshop. It was open to all committees of the NJLA CUS/NJLA NJ section/chapter.

North Dakota/Manitoba: Last year's symposium was on collaboration, and this was a large part of several presentations; see 2016-17 report.

Ohio: The October 2017 ALAO Annual Conference (Columbus, OH) included the session "#FakeNews: Ohio Libraries Take Action on MisInformation". The abstract read: The 2016 Presidential election increased the visibility of, engagement with, and production of "fake news" – satirical, false or wildly distorted stories shared as true and manufactured for profit. This panel will feature presentations from five Ohio academic libraries that have responded to this deluge of misinformation with information literacy efforts on their campuses. A librarian from a large public university will discuss her experiences hosting a panel of faculty speakers for a high-profile, campus wide discussion series held post-election, as well as facilitating a faculty learning community on fake news and misinformation. A first-year experience librarian will discuss the course-integrated instruction her institution has done on this topic, a staff workshop she facilitated, and partnerships with faculty designed to inspire critical thinking on campus. Two librarians from another large institution will share the outcomes inspired by a communitywide event they hosted that included local activists, public librarians and other invested community citizens. A public services librarian at a branch campus library will share a LibGuide, workshop and panel her institution has developed. And a librarian at a small private college will share the results of an information literacy class's research on fake news.

Oklahoma: The Community of Oklahoma Instruction Librarians (COIL) and interest group of OK-ACRL held their annual workshop on July 28th, 2017 entitled "Mission Critical: Laying the Groundwork for Understanding and Implementing Critical Pedagogy in the Library Classroom." The workshop focused on making academic librarians aware of what critical pedagogy is and what tools and techniques they could utilize to implement critical pedagogy.

South Carolina: Done institutionally, but not via the state chapter

Virginia: The Virginia Chapter hosted two (free) summer programs on the topic of "Library and Campus Partnerships for Student Success." These events brought together librarians with successful campus partnership stories to share, and librarians who were interested in learning more about working with partners across campus to support student success. The events were held at two locations, one in central Virginia and one in eastern Virginia, to accommodate as many people as possible.

STUDENT LEARNING OBJECTIVE 4: ARTICULATE AND ADVOCATE FOR THE ROLE OF LIBRARIANS IN SETTING, ACHIEVING, AND MEASURING INSTITUTIONAL STUDENT LEARNING OUTCOMES.

College Libraries Section (CLS): The CLS liaison to the Council of Independent College (CIC) presents to College Deans/VPs of Academic Affairs in order to promote understanding of information fluency and its centrality to student learning.

Education and Behavioral Sciences Section (EBSS): The EBSS Communication Studies Committee sponsored a tour of the New Orleans Times-Picayune during ALA Annual 2018. As part of the tour, the group discussed shared concerns about information literacy outcomes.

Literatures in English Section (LES): The Revised Competencies document provides learning outcomes that are capable of being measured.

Rare Books and Manuscripts Section (RBMS): 5. We have offered workshops and sessions at our conferences to engage our members in building or reinforcing their skills in information literacy. We celebrate recent collaborations between RBMS and affinity groups to engage in practical and theoretical

Virtual Worlds Interest Group: An example of utilizing virtual world librarianship to help advance student learning opportunities was a presentation at the Virtual Worlds Best Practice in Education Conference. TITLE: Improving Digital Literacy- A Solvable Challenge Using Virtual Worl

Alabama: Building on the strengths and expertise of members provide resources to colleagues through networking opportunities, webinars and a planned expansion of the tools, techniques that have been identified by the joint assessment committee that will help libra

Florida: On May 25, 2018, FACRL sponsored a conference presentation at the Florida Library Association's Annual Conference held at the Caribe Royale Hotel in Orlando, Florida. The program, entitled "Telling Our Story: Methods for Providing Academic Impact at the

Greater Metro New York: See the response under Objective 3. In March ACRL/NY's Professional Development Committee also sponsored an event titled "Enhancing Impact of Library Instruction on Student Learning and Success." The program featured presentations by two speakers: "Motiv

Michigan, MI-ALA: The Assessment Interest Group hosted a one-day pop up conference at the University of Michigan in November. Members were able to discuss assessment methodology in libraries, and presentations by members encouraged conversation and professional development

Nebraska: "Small Lessons, Big Impact:How to Develop Effective Learning for Minimal Timeframes". Presented by Steven McGahan (University of Nebraska-Kearney). Nebraska Library Association Annual meeting workshop provided attendees strategies to develop information

New England: NELIG provides strong leadership in this area, and the Leadership Development Committee also connects chapter members with essential programming related to assessment and student retention.

North Dakota/Manitoba: Information literacy is a portion of this year's symposium.

South Dakota: ACRL members helped plan and participated in SDLA Library Legislative Day at our state capitol, February 13, 2018.

RESEARCH AND SCHOLARLY ENVIRONMENT

Goal: The academic and research library workforce accelerates the transition to more open and equitable systems of scholarship.

RESEARCH AND SCHOLARLY ENVIRONMENT OBJECTIVE 1: INCREASE THE WAYS ACRL IS AN ADVOCATE AND MODEL FOR OPEN DISSEMINATION AND EVALUATION PRACTICES.

Anthropology and Sociology Section (ANSS): a. The SBAC Cataloging Q/As support student learning, because they encourage librarian understanding of appropriate and useful access points for anthropological and sociological works. b. The Anthropology Librarians Discussion Group topics support librarian engagement with the Research and Scholarly Environment because they provided fascinating opportunities for librarians to delve into discussions of current research with scholarly experts.

College Libraries Section (CLS): The Best Practices Committee is creating guides and toolkits using LibGuides, which will allow the information to be easily and freely disseminated.

Digital Scholarship Section (DSS): The inaugural year of the Digital Scholarship Section has first been focused on gathering input from section membership to inform the structure of the section, then identifying volunteers to serve in new roles. Open advocacy intersects with much of the work supporting digital scholarship that the section is now poised to build on. DSS will undoubtedly have additional specific examples of advocacy for open dissemination and evaluation in subsequent years. We do have one early example of the Executive Committee's dedication to putting open dissemination into action. Members of the Executive Committee developed and delivered a half-day preconference called "Deconstructing Digital Scholarship Consultations in the Library," which we presented at ALA Annual. We chose to model openness by releasing all materials under a Creative Commons Attribution 4.0 International License (CC BY). Additionally, we chose to use a platform regularly used by scholars to share code and documentation, Github - thereby exposing anyone accessing our preconference materials to a useful research tool as a bonus. Preconference materials can be accessed here: https://acrldigschol.github.io/deconstructing-consultations/. As a bonus, we will be able to share future DSS materials in this manner through the associated ACRL Digital Scholarship account page: https://github.com/ACRLDigSchol.

European Studies Section (ESS): During the ESS Germanists and Romance Languages Discussion Group facilitated small group discussions about foreign language ebooks, and their experiences collecting and using them in their roles as practitioners within their institutions. This sometimes led to discussion of open access publications and questions about publisher's processes and topics such as licensing.

Literatures in English Section (LES): The LES Collection Development discussion group led virtual discussion at Midwinter meeting about electronic materials and accessibility of collections in different formats, thus promoting these issues among the membership.

Rare Books and Manuscripts Section (RBMS): RBMS supports this goal more generally by charging task forces that are examining our metrics and assessment of collections and instruction. This translates broadly to better awareness of how we make accessible collections in areas that are typically closed-stack settings. We have our own annual assessment of each conference we offer to ensure that we, among other activities, are providing settings within our own Section for understanding the landscape of collections and access.

Science and Technology Section (STS): Issues in Science & Technology Librarianship (ISTL), the STS journal, is and has always been, entirely open access.

Residency Interest Group: RIG serves as an information clearinghouse and resource for institutions planning, managing or researching library residency programs. The RIG website provides a list of resources in which we strive to include as much open content as possible. Notably, RIG has worked to make much qualitative data available for researchers interested in library residency programs. Additionally, RIG sponsored a cohort of Emerging Leaders this year that investigated pursuing an oral history project in which residents' experiences would be recorded and shared, while protecting an individual's right to privacy.

Virtual Worlds Interest Group: A virtual world database is being created to help curate virtual world learning spaces and communities. All are welcome to collaborate. At the VWBPE 2018 Conference, Alyse Dunavant-Jones, a recent MLS graduate, shared: (VWBPE 2018 Virtual World Database: Crowdsourcing our Worlds. See https://vwbpe.org/event/virtual-worlds-database-crowd-sourcing-our-worlds?instance_id=196) The form for submitting to the database can be accessed at https://docs.google.com/forms/d/e/1FAIpQLSemL-YGBPu5g6nvnNxdeuEcnknt9TrNUbf25tBK7OjYrDfFvg/viewform

Alabama: The chapter disseminates information through newsletters, webinars and keynotes from the chapter's one-day conference, recordings of these are available on the Alabama ACRL website at http://aacrl.org.**California:**

Indiana: Indiana Library Federation(ILF)-IN Academic Library Association (IALA) held a "virtual exchange" about Open Education Resources (OERs) on 1/31, where we are promoting the exploration, adoption or expansion of OERs in school and academic libraries. This session was led by an academic librarian from lvy Tech Community College.

Iowa: Conference Session: Research and Scholarly Environment

Michigan, MI-ALA: In addition to many other MiALA Interest Groups that address and discuss open dissemination and evaluation, this year saw the development and growth of the Open Educational Resources Interest Group, an incredibly popular interest group with over forty members. The goals of the OER Interest Group is to "to advocate for the adoption of free, openly-licensed textbooks and teaching materials. This IG hopes to enable librarians to support faculty in finding, selecting, adapting, and curating OER."

New England: This year, the development and release of our new website has been our largest effort toward the open and effective dissemination of our own materials. Additionally, this year was also the pilot of our open repository for the submission, bind proposal review, and hosting of all Annual Conference materials. In the coming year, we will continue to develop our online toolset to make us more effective in communication and have intention to diversify the membership of our Web & Communications Committee, to provide greater opportunity for members to learn new skills in their volunteer roles.

North Dakota/Manitoba: This year's symposium includes discussions of open resources, dissemination of scholarship, open access, and how libraries are dealing with things to be cautious about in such arenas (such as predatory journals, misconceptions about Open Access, and other issues of information reliability). Last year's annual symposium featured a presentation on how librarians at the University of North Dakota are collaborating with the Center for Instructional and Learning Technologies, the Office of Extended Learning, the Office of Instructional Development, and student government in a campus working group to help faculty adopt open education resources (OERs).

South Dakota: Our ACRL Chapter organized a Poster Session for annual conference to provide a venue for librarians to disseminate their research.

RESEARCH AND SCHOLARLY ENVIRONMENT OBJECTIVE 2: ENHANCE MEMBERS' CAPACITY TO ADDRESS ISSUES RELATED TO SCHOLARLY COMMUNICATION, INCLUDING BUT NOT LIMITED TO DATA MANAGEMENT, LIBRARY PUBLISHING, OPEN ACCESS, AND DIGITAL SCHOLARSHIP.

Anthropology and Sociology Section (ANSS): a. Our newsletter, ANSS Currents, is available as an open access publication. b. The ANSS liaison committee enhances members' capacity to address issues related to scholarly communication, including but not limited to data management, library publishing, open access, and digital scholarship

College Libraries Section (CLS): The LIS Publications Wiki, run by San Jose State University professor Laurie Putnam, is an excellent resource for librarians seeking publishing opportunities. CLS has worked in the past to help enrich this resource.

Community and Junior College Libraries Section (CJCLS): The Open Educational Resources Task Force was formed to determine the role community college librarians could play to support their institutions in the acquisition or participation in OER initiatives.

Digital Scholarship Section (DSS): Much of the work of our inaugural year as a section involved laying a strong foundation for the section to be able to engage members on these topics. In addition to establishing a standard set of committees to further section business, we created the following discussion groups (DGs) and editorial board to delve into topics of importance to section membership:

- DataQ Editorial Board: A collaborative platform for librarians to ask and answer questions related to research data support in academic libraries. - Data Information Literacy DG: A collaborative forum for discussion about data information literacy in academic and research libraries. - Digital Collections DG: A collaborative forum for discussion about digital collections and related topics, including how academic and research libraries create digital collections, make them accessible as data, and support the creation of digital collections by faculty and students. - Digital Humanities DG: A collaborative forum aiming to (1) cultivate a community of practice that develops guidance, practitioner resources, and professional dialogues around digital humanities librarianship and related roles; (2) identify, encourage, and

disseminate approaches to Digital Humanities service design, research, and pedagogy through sponsored programming, training, and other initiatives; and (3) build and maintain partnerships with organizations that encourage inter-professional as well as multidisciplinary approaches to the digital humanities. - Numeric and Geospatial Data Services DG: A collaborative forum to bring together individuals who are actively engaged in the planning for, oversight of, and/or provision of data services within academic libraries. - Open Research DG: A collaborative forum for discussing support for open research and reproducibility within academic and research libraries. - Research Data Management DG: A collaborative forum for developing innovative ways of supporting the research data lifecycle within academic and research libraries. - Visualization DG: A collaborative forum for discussion about data visualization and related topics, including how academic and research libraries provide support for visualization. These discussion groups were formed in early spring 2018 and their progress to date is encouraging. Conveners for each DG maintain and grow an email list of interested members. Additionally, five of the discussion groups had a presence at ALA Annual 2018 where they offered programming, most often in the form of guest presentations and group discussions on relevant topics.

Distance Learning Section (DLS): April 24, 2018: the DLS Instruction Committee hosted an invited speaker event titled "Using Open Educational Resources for Information Literacy Instruction." Approximately 30 attended the event. June 25, 2018: DLS co-sponsored with ALTS and the CMS Collection Development Librarians of Academic Libraries Interest Group, "Open Education Resources (OER): Where Libraries Are and Where We Are Going." A capacity crowd heard four professionals' perspectives on current and evolving initiatives in OER Adoption and collaborative usage across academic libraries and campuses.

Education and Behavioral Sciences Section (EBSS): In celebration of International Open Access Week, the EBSS Scholarly Communication Committee shared weekly messages via the EBSS listserv and Facebook page throughout October to help our community answer questions about what benefits open access offers. EBSS hosted an online presentation and discussion titled, "Digital Scholarship and Libraries: Mission and Models" EBSS hosted an online presentation and discussion about practical data management with Abigail Goben, MLS and Spencer Acadia, PhD, MA, MLS as presenters.

Literatures in English Section (LES): The LES Membership Forum at ALA Annual discussed new roles for liaison librarians, particularly in the areas of scholarly communication and digital scholarship, and further raised awareness of humanities librarians' growing roles in working with faculty and students on services for scholarly communications and digital scholarship.

Politics, Policy and International Relations Section (PPIRS): Following a 2013 survey conducted by LPSS (predecessor of PPIRS), which showed that section members viewed data reference skills as the most important way that the section could contribute to their professional success, ongoing plans involve pursuing professional development in this area for PPIRS members. Work continues on updating the Grace York statistical archives from the University of Michigan and make this resource accessible on the internet.

Rare Books and Manuscripts Section (RBMS): RBMS conference programming and meetings at ALA has begun to address these issues in our topics for presentations and discussions.

Science and Technology Section (STS): The STS Publication committee has been maintaining sts-listserv, and publish newsletters for member to use to address these issues. The STS Scholarly Communications

committee achieves this objective by organizing informal discussion and engagement session at midwinter 2018 (with ACRL RsSEC) entitled: Bootstrapping a scholarly communication program for your campus. The Science Resources: Discovery and Access Committee maintains the blog Insidescienceresources.wordpress.com to communicate science and technology tips on library resources. Many are open access. Primary audience is to expand librarians' knowledge but can also be useful to researchers. Eleven posts in the last year with links distributed on the STS listserv, Facebook and Twitter. STS Program Planning Committee at ALA Annual 2018 in New Orleans, LA helped attendees to identify and utilize tools and resources to improve science communication skills in their communities.

History Librarians Interest Group: Our session at the 2018 Midwinter Conference focused on the ways history librarians can contribute to Digital Humanities programs

Library Marketing and Outreach Interest Group: Similar to the goal and objectives related to student learning, LMOIG fulfills this goal and objectives by discussing new and helpful ways to build relationships with faculty through outreach and communication. By supporting our members to create more opportunities to engage with faculty and build strong liaison relationships, they can more actively engage with faculty on topics related to scholarly communication. LMOIG members also plan for events related to Open Access Week and develop and market workshops related to data curation, scholarly publishing, signing up for ORCID, etc. Members often ask for ideas and feedback about their plans.

Universal Accessibility Interest Group: The UAIG is active in advocating for database vendors and other publishers to make their content accessible and to provide VPATs (voluntary product accessibility templates) to libraries that support their products. The collection of VPATS supported by the UAIG is available online at https://vpats.wordpress.com/

Virtual Worlds Interest Group: Librarians in virtual worlds are partnering on a global scale. Example: New Media Arts, Inc has connected the Community Virtual Library with colleagues in the Netherlands and other countries. See http://www.newmediaarts.org/home/ Projects include the Antique Pattern Library.

California: At the CARL 2018 Conference, SCORE (Scholarly Communication and Open Resources for Education Interest Group) held a panel titled "The right to be forgotten: Scholarly communication and ethics." SCORE asked: scholarly communications often values free access above all else, but what happens when that drive for openness conflicts with ethical issues of consent and ownership? In this CARL IG Showcase panel, members of SCORE discussed some of the thorny issues of ethics and scholarly communication, including: consent (particularly among diverse communities outside of the institution) and digital collections, students as information creators / library as publisher, and decolonizing who we consider scholars and what we consider scholarship. This panel featured speakers who shared current discussions and personal stories on issues pertinent to scholarly communication and ethics.

Georgia: GLA ALD and ACRL GA Chapter sponsored a pre-conference at the Georgia Libraries Conference in October 2017. The pre-conference topic was "Open Access: Advocacy and Action". It was led by Jennifer Townes, Fred Rascoe, Mariann Burright. The workshop covered open access action and advocacy efforts in the United States. It helped participants to develop confidence in their ability to act as a catalyst for open access, and develop a network of colleagues with whom to share ideas and issues. This workshop focused on developing a "stealth" advocacy plan for open access action. During the

workshop, participants identified strategic partners at their respective institutions and worked on conversation starters.

Greater Metro New York: The December 2017 Symposium was centered around the distributed execution of the academic library mission in the twenty-first century, and much of the program was devoted to how academic libraries — in partnerships with each other, with commercial players in the academic information and publishing spheres, and with not-for-profit entities such as Ithaka, OCLC and the Center for Research Libraries — can address contemporary scholarly communication challenges, including things like data management, publishing models (open access and not), and digital scholarship.

Idaho: ACRL Idaho offered a free, online class on how to identify and teach patrons about OER.

Indiana: ILF-IALA held a "virtual exchange" about "Working with Faculty" on 2/28, where we discussed best practice strategies for engaging with faculty--both to support them and to support the students in their classes. This was led by an academic librarian at University of Southern IN.

Kentucky: --Sessions on state conferences addressing repositories and OERs

Louisiana: The chapter continues to edit and publish the Codex, which is a peer-reviewed journal examining academic libraries and librarianship. The journal provides immediate open access to its content upon publication.

Michigan, MI-ALA: The STEM Interest Group hosted a webinar in April 2017, titled "Research Data Services in Academic Libraries: Overview and Case Studies from Two Universities" that educated members about many of the issues related to scholarly communications.

Michigan, MLA: Data management and digital scholarship are topics often requested by members are possibilites for the 2019 spring Academic Libraries workshop.

Minnesota: -ARLD's annual "ARLD Day" one-day professional development conference included a session on self-publishing called "Reclaiming scholarship: why you should become a publisher for your community." Presenters at this session shared their experience in library publishing initiatives, including creating open textbooks, scholarly monographs, and journals.

Nebraska: "The Ethics of Access:Engaging Critically with Digitization Goals and Challenging Content"

Presented by University of Nebraska Lincoln Library faculty Dr. Liz Lorang, Asst. Professor; Mary Ellen Ducey, University Archivist and Pete Brink, Assistant Archivist. Nebraska Library Association Annual meeting pre-conference workshop focused on a range of ethical issues surrounding the digitization and accessibility of archival content. "Integrating Open Access Resources into your Collection and Community". Poster session presented by Ann Erdmann, eResources Librarian, Nebraska Wesleyan University. Presented ways libraries can provide access to open access content. "Low Cost VHS and Cassette Digitization to Provide Access for All". Presented by Laurinda Weisse, University Archivist (UNK) Nebraska Library Association Annual meeting workshop provided attendees with practical strategies to provide access to obsolete media formats.

New England: Our Chapter hosted ACRL's "Scholarly Communications Roadshow" at Bates this year, providing opportunity for Chapter members to engage in topics related to scholarly communications at all levels. https://libguides.bates.edu/acrlscholcomm

Ohio: The October 2017 ALAO Annual Conference (Columbus, OH) included the session "Project STAND: A Collaborative Initiative to Highlight Acts of Social Justice Through Archives". The abstract read: Project STAND (STudent Activism Now Documented) is a collaborative effort starting with various Ohio universities to create an online clearinghouse where academic institutions can provide researchers access to historical and archival documentation on the development and ongoing occurrences of student dissent. Project STAND will focus on the digital and analog primary sources that document the activities of student groups that represent the concerns of historically marginalized communities (e.g. African American, Latinx, LGBTQ, religious minorities, disabled), while also highlighting the work of others (e.g., faculty, staff, and administrators) who advocate for or support the interests of those communities. The presentation will provide insight into the catalyst for this project, it's long-term goals/objectives, and how this initiative will help participating repositories feel empowered and engaged in discourse regarding equity and social justice within their local communities and at the national level. The presentation will also discuss efforts to address ethical concerns and the impact of social media in archiving as it relates to student organizations and their political/social actions. The presentation and efforts of Project STAND is timely with projects such as Documenting the Now and various efforts to capture student activism, past and present.

Oklahoma: On March 16th, 2018 OK-ACRL provided a free webinar via ACRL entitled "Excavating Research Data Management from Library Data." This webinar was hosted on 2 campuses in the Edmond, OK and Tulsa, OK areaa with attendees from 8 different libraries. We scheduled time for discussion after the webinar and focused on how to start data management plans for our libraries and how these strategies could be applied to helping faculty do the same.

RESEARCH AND SCHOLARLY ENVIRONMENT OBJECTIVE 3: INCREASE ACRL'S EFFORTS TO INFLUENCE SCHOLARLY PUBLISHING POLICIES AND PRACTICES TOWARD A MORE OPEN AND EQUITABLE SYSTEM.

Anthropology and Sociology Section (ANSS): Our newsletter includes reviews of current information resources, reports from our liaisons, information about members' professional activities, and relevant postings for events (such as pre-conferences) presented by other ACRL sections. b. ANSS keeps publishers and resources accountable by providing reviews in our ANSS Currents Newsletter. The Resource Review and Bibliography Committee recruits ANSS members to write up reviews about resources relevant to the fields of anthropology, sociology, and criminal justice.

Digital Scholarship Section (DSS): As a section, we aim to support an open and equitable system of research through all the work that we do. As we finish up our first year, two groups within the section stand out as especially important for this work. The Equity, Diversity, and Inclusion (EDI) Committee focuses on "identify(ing) and advocat(ing) for appropriate action related to issues of equity, diversity, and inclusion in academic librarianship, including: recruitment, advancement, and retention of underrepresented groups to digital scholarship roles; advising the Executive Board on programming and engagement in support of diverse perspectives and experiences; and encouraging active participation by DSS membership in anti-oppressive practices in the digital scholarship community." While this committee is looking at EDI issues more broadly than just scholarly publishing practices, they are making strong headway in developing section values that will likely incorporate specific principles that can apply to the research landscape. The Open Research Discussion Group broadens the scope of openness to include the entirety of the research lifecycle and encompasses consideration of a variety of outputs

beyond traditional publications. The discussion group also focuses on reproducibility as an important emerging area of support within academic libraries.

Rare Books and Manuscripts Section (RBMS): RBMS by nature is committed to as much open access to our collections as possible. Therefore, we support the efforts designed by ACRL to commit to this, as well. Further, we are very supportive that the ACRL journal directly related to our field (RBM: A Journal of Rare Books, Manuscripts, and Cultural Heritage) is an OA journal.

Science and Technology Section (STS): A Sub-Committee of the STS Scholarly Communications Committee continued to publish SCI posts to educate members on issues relating to scholarly communication issues. The SCI posts are now housed on a libguide on STS webpage. The STS Publisher/Vendor Relations Discussion Group sponsored a session at ALA Midwinter on "Measuring Research Impact: What Really Counts?" Over 45 people came for a discussion of the roles that libraries and librarians can play in assessing research impact. The panel featured three speakers, including a representative from Clarivate Analytics, another from Altmetrics.com, and a librarian from the United States Geological Survey. The session provided examples of the many ways scholarly research is generated and its impact can be measured.

Virtual Worlds Interest Group: A partnership with Rockcliffe University and the Rockcliffe Library in Avacon has begun. The Rockcliffe Avacon Library is filled with open access research materials. The ACRL VWIG and the Community Virtual Library support the academic research services provided by Rockcliffe and are building a portal to promote collaboration. See https://urockcliffe.com/service/content-curation/

Greater Metro New York: Every year, the event that represents the culmination of the work of ACRL/NY's calendar year — the annual ACRL/NY Symposium — is sponsored by several vendors. The event attracts these sponsors because it is well attended (it has a capacity of 200 and in most years sells out) and represents a good marketing opportunity for library vendors. The sponsors also see the event as a reconnaissance oppurtunity, and send representatives who attend and report back about the program. The December 2017 Symposium was sponsored — and attended by representatives from — Elsevier, Emerald, Gale, Gobi, HeinOnline, Taylor & Francis, Waldo, Wolters Kluwer, and Spingshare. The program included two panel sessions that involved discussion of the role of external commercial entities in the fulfillment of the academic library mission in the twenty-first century "The Distributed Execution of the Twenty-First Century Academic Library Mission" and "Rescue Mission: Adapting to Preserve Endangered Content in the Twenty-First Century Information World." The event therefore served as a venue for librarians to present their view of a healthy academic library ecosystem and the proper place of external commercial partners in that ecosystem — a crucial early step for restoring balance in the often problematic academic library-vendor relationship.

Maryland: Bimonthly journal club allows members to gather virtually and discuss 2 selected articles from the most recent CRL journal issue.

Michigan, MI-ALA: Another webinar was hosted by the eResources Interest Group, titled Libraries and Vendors: Colleagues in Collections that encouraged librarians and vendor relationships with an eye towards scholarly publishing practices and how librarians can influence the conversation with vendors.

Michigan, MLA: Michigan Library Association (MLA) is interested in additional articles written by members on this topic for the various online newsletters. This is in the works.

New England: Our Chapter continues advocacy for open access to information and resources, via our use of openly accessible web tools and our OA repository. In the coming year, we aim to encourage great membership participation for contribution of new ideas for outreach programming, via tools now available on our new website.

North Dakota/Manitoba: As noted, open access and scholarly publishing-related topics were highlighted in both last year's symposium and this year's symposium. These are major areas of discussion for our chapter members.

Wisconsin: This year, the Wisconsin ACRL chapter representative was a founding member of a new interest group for the statewide library association. This new group, Community for an Open Wisconsin, hopes to connect people around the state and advocate for open educational policy and practice. We have connected K-12 schools and state department of instruction, public and private higher educational institutions, and other organizations to work toward this goal.

NEW ROLES AND CHANGING LANDSCAPES

Goal: Academic and research library workforce effectively navigates change in higher education environments.

NEW ROLES AND CHANGING LANDSCAPES OBJECTIVE 1: DEEPEN ACRL'S ADVOCACY AND SUPPORT FOR A FULL RANGE OF INFORMATION PROFESSIONALS.

Anthropology and Sociology Section (ANSS): a. We have held joint Socials at Midwinter and Annual meetings with other ACRL sections, and are working to enlarge our focus on criminal justice and criminology in our discussion group and our publications. This past year our program and social event was co-sponsored by PPIRS.

Community and Junior College Libraries Section (CJCLS): The Community College Engagement Task Force completed its work to determine how ACRL can better support community college librarians. Based on the McKinley Advisors Survey results, the task force made recommendations to the ACRL Board. Two of which were accepted and are being acted upon. The ACRL Community College Engagement Task Force completed its work. Based on the results of the McKinley Advisors Survey three recommendations were made to the ACRL Board in support of community and junior college librarians, two of which were accepted. Work on the recommendations has begun. Completion date for the initial phase is the end of 2018.

Distance Learning Section (DLS): April 12, 2018: at the 18th Distance Library Services Conference, DLS presented a career and mentoring Q&A forum and in a video booth, taped testimonials from DLS Conference attendees who shared their conference experiences. The testimonials (https://drive.google.com/open?id=11EsW454w0A63VCTwv5uEgs94PUa4Syt0) will be used to recruit librarians and information specialists to the profession and to promote attendance at upcoming conferences.

European Studies Section (ESS): As of September 1, 2017, WESS and SEES merged to become the European Studies Section (ESS). In September 2017, the co-chairs led an ACRL webcast in which all members were invited for a forum type of discussion to review the transition, governance documents and ask questions. As the section is in its first year of this merge, there has been a particular focus on ensuring that all members are supported in their professional and intellectual development, building community.

Literatures in English Section (LES): The LES Membership Committee conducted active recruitment among library graduate students, leading to an increase in student membership to 139 members, compared to 102 members in 2017. The section also saw an increase in organizational membership, with 14 libraries joining this year compared to 11 libraries last year. The Membership Committee is now exploring strategies for programming and mentoring to address the growing diversity in membership.

Rare Books and Manuscripts Section (RBMS): RBMS has been committed in its conference programming and organizational structure (committees, discussion groups, and task forces). We offer workshops at our conferences that address new skills and reinforce changes in historical roles so that we maintain an awareness of shifts in higher education as it relates to different roles our members hold.

Science and Technology Section (STS): The Membership & Recruitment Committee used the STS list to "Spotlight" selected STS members; this helped to form connections among members and additionally with non-members. Also, communications sent from the Membership & Recruitment Committee to new, renewing, and dropping members helped to show support to those individuals and appreciation for their part in the community. The Annual Conference STS Happy Hour, sponsored by the Membership & Recruitment Committee, was another effort to help build community. The STS 2018 Annual Conference Program in New Orleans, LA had a diverse attendance including public librarians and archivists.

Women and Gender Studies Section (WGSS): The WGSS Career Achievement Award and Award for Significant Achievement in Women and Gender Studies Librarianship recognize and promote the work of many different information professionals. Diedre Conkling, this year's winner for Career Achievement, was honored for her work with women's, feminist, leadership, and social responsibilities groups in ALA. Shirley Lew and Baharak Yousefi received the Significant Achievement Award for their book Feminists Among Us: Resistance and Advocacy in Library Leadership

Access Services Interest Group: The Interest Group focused this year in creating and executing a charge for the development of the Framework for Access Services Librarianship. In consultation with the membership, a charge was created, disseminated, refined, and finalized in the first part of the fiscal year. A call was put out for participation in each of the four Focus areas for both participants and chairs. 28 participants, including 4 chairs were identified and began initial discussions with the Interest Group membership at ALA Midwinter in January 2018. These four groups completed a first draft of the framework for distribution and discussion at Annual in June 2018. These activities represent a culmination of hours of conversation and dialogue with Access Services professionals that, even in its draft format, have been invaluable to these professionals as they discuss and refine their roles in their home libraries, create, refine, describe and advertise for new positions across the country, and fulfill a core mission of the Interest Group to ensure that Access Services Librarianship is defined, articulated, and promoted to a wider library audience.

Digital Scholarship Centers Interest Group: Rather than renew our three-year term as a stand alone Interest Group, we surveyed our members about their interest in transitioning to a Discussion Group under the new Digital Scholarship Section. We believe that joining the DSS as a Discussion Group will enrich our members by expanding access to participation and connecting us to a broader range of topics and programs. The ACRL Board of Directors, at its April 3, 2018 virtual meeting, approved the dissolution of the Digital Scholarship Centers Interest Group, and for the Digital Scholarship Centers Discussion Group to become part of the Digital Scholarship Section (DSS) as of September 1, 2018.

Library Marketing and Outreach Interest Group: As an interest group, LMOIG seeks to provide platforms for members to share their experiences, expertise, successes, and failures related to outreach and marketing. We do this primarily creating a welcoming Facebook group environment where we encourage and celebrate each other in the work we are doing to connect with our campus communities. Discussion group meetings and programs at ALA Annual also support this objective. Working with the knowledge that many information professionals are charged with creating marketing materials but do not have the professional background to support this work, the LMOIG conveners designed a LibGuide with resources and wrote "Marketing for the Beginner" for CR&L News, which was published in December 2017. The article and guide include information about groups to join, blogs and websites to read, free and low-cost graphic design tools, collections of free images and icons, and other online resources that can help spark inspiration. Since December 2017, the article has been viewed 1,920 times. The LibGuide also serves as a growing repository for marketing plans and contains links to the social media accounts of individual libraries, relevant conferences, and provides links to books related to marketing and outreach. The guide and article can be accessed for free online, which expands the reach of these resources.

Residency Interest Group: Residencies themselves are constantly evolving and often require great flexibility (both from the institution and the Resident). RIG's mission is to support the creation, implementation, research and management of library residency programs. The interest group has significantly focused on helping residents succeed in their career through networking and professional development. We support potential residents, new graduates, and early career librarians in their professional development by creating opportunities by facilitating panels at local and national conferences (Library Residency Roadmap, panel discussion at ALA Annual 2018) as well as inviting guest posts on RIG's blog and webinar series. All of the RIG-created content follows an open model.

Universal Accessibility Interest Group: UAIG seeks to make conferences and other venues accessible for librarians with disabilities, improving support for library professionals.

Virtual Worlds Interest Group: The Community Virtual Library has a reference desk where librarians can serve individuals while learning innovative virtual world skills. CVL Reference Librarians hold office hours. See https://communityvirtuallibrary.wordpress.com/virtual-reference/

Delaware Valley: In November, Abigail Shelton, a recent graduate from Drexel University's MLIS program, was awarded the Chapter's annual \$1000 student stipend, created to support the education of future library professionals. For her application, Shelton wrote an essay relevant to the theme of the Chapter's fall program, describing how the IL framework can be used to address the challenges of a post-truth society.

Eastern New York: Continued dissemination of our Professional Development Grants. Open to all ENY/ACRL members, this grant provides up to \$300 to support a member's professional development activities. An online form is available for submission on an ongoing basis. The applications are reviewed by a panel of volunteers from the membership. Grantees must agree to write up a summary of their experience for our newsletter in order to be eligible for the reimbursement. In 2017-18 we awarded five (5) grants.

Greater Metro New York: The chapter maintains several active discussion groups aimed addressing the interests and challenges of different academic librarian and library-user populations: the Distance Learning Discussion Group, the First Year Experience Discussion Group, the Graduate Services Discussion Group, the Information Literacy/Instruction Discussion Group, the Management and Leadership Development Discussion Group, the New Librarians Discussion Group, the Special Collections and Archives Discussion Group, and the User Experience Discussion Group. The chapter also runs a Mentoring Program. This Program contributes to the professional development of academic librarians by pairing experienced academic librarians with LIS students or those new to the field. The program creates a formal and informal forum for the exchange of ideas between paired mentors and mentees, provides them with opportunities for a shared learning experience, and makes available the benefits of networking within the academic librarian community. Mentors and mentees are paired based on expertise and need. Most communication is done via email and encouraged by monthly discussion topics (program participants should be able to commit to communicating with their mentee/mentor at least two times per month). The Mentoring Program also develops in-person programs in conjunction with the New Librarians Discussion Group. In May ACRL/NY's New Librarians Discussion Group and Mentoring Program co-sponsored an event called "Developing a Vision & Cultivating a Career Path." This was a directed-contemplation workshop for librarians at various stages in their careers. It included a number of exercises for formulating long-range career objectives and articulating shorter-term goals leading to achievement of those objectives.

Illinois: This year, IACRL has chosen to devote it's time to building connections. Illinois academic libraries are clustered in two areas -- around Chicago, and further downstate. The result of this geographic difference is that librarians rarely interact beyond their immediate area. IACRL VP Eric Edwards has initiated a series of webinar watches at colleges and universities across the state, followed by a networking event. Additionally, IACRL has been working with other library groups in the state (RAILS, CARLI, IHLS) to develop partnerships in the hopes of creating not only professional development opportunities but collaborations among institutions.

Indiana: ILF took many steps in this area in ACRL's FY18 (our FY is Jan-Dec), including: filing official comments related to FCC rules on the internet fall 17; embracing all types of libraries and types of positions in ILF's vision and work plan adopted 8/17; held a "Library Day at the Statehouse" to showcase libraries and meet with legislators; and research about the staffing and features of Indiana's school libraries (report issued in ACRL FY18).

Iowa: Two members participated in National Library Legislative Day.

Michigan, MI-ALA: The Board of Directors has been tasked with developing scholarships for a range of information professionals, including MLIS students, para-professionals, and staff at all levels within libraries. We have also developed a retiree and student membership option, to encourage participation and advocacy regardless of background.

Michigan, MLA: Michigan Library Association (MLA) is the state's library association for all libraries of all types and all positions. We maintain a mentoring program for new professionals, and encourage presentation submissions from all types of library personnel.

Minnesota: -ARLD members participated in a strategic planning session for St. Catherine University's Master of Library and Information Science program.

New England: Our Chapter has eight special interest groups covering a wide range of professional interests: Instruction, Electronic Resource Management, Women's Studies, Access Services, Leadership, Information Technology, etc. All SIGs hold unique programming throughout the year providing opportunities to professionals in all aspects of librarianship. This past year, we increased programming for electronic resource management, given increased interest expressed by our membership.

New Jersey: ACRL NJ members support MentorNJ: Linking Library Staff Statewide (an initiative funded by Library LinkNJ and the NJ State Library and host Job Shadowing activities at our respective institutions.

New Mexico: Over the past year, our chapter actively tried to engage and increase communication between library professionals across the state. We had our annual meeting at the state library conference and asked for ideas from the academic librarians in attendance about the kinds of resources they would like to see. We offered a pre-conference workshop on copyright as a professional development opportunity. We offered an ACRL-NM-sponsored poster session to allow academic librarians opportunities to learn and also contribute to the conference. We opened up our blog to allow librarians who were not currently in an ACRL-NM office to contribute posts. This allowed members to write about interesting activities and events happening at their libraries to increase communication and involvement and to share their work.

North Dakota/Manitoba: Please see "Education" section and "Member Engagement" section for details on webinars and engagement opportunities

Ohio: ALAO supports a mentoring program from interested members, allowing librarians and support staff to work towards common professional goals.

Oregon: An ACRL chapter in a neighboring state (Idaho) hosted their first state conference. ACRL-Oregon promoted this conference to Oregon academic librarians working east of the Cascade mountain range in Oregon. Librarians working in this sparsely populated portion of Oregon often find it difficult to make the long journey to conference in the more populated areas of Oregon, and in some ways have stronger connections and access to cities and services in neighboring Idaho. Promoting this conference was both a way to better serve a sub-population of Oregon academic librarians and a way to help support and foster the growth of this fledgling effort by the Idaho ACRL chapter.

Virginia: The Virginia Chapter supported the Virginia Library Association's engagement in National Library Legislative Day. Several Virginia Chapter members participated.

Wisconsin: The Wisconsin ACRL Chapter offers a scholarship to attend the conference to paraprofessional library employees. This past year we worked with library employees to improve the application process and change the requirements to make them more achievable for paraprofessionals.

NEW ROLES AND CHANGING LANDSCAPES OBJECTIVE 2: EQUIP LIBRARY WORKFORCE AT ALL LEVELS TO EFFECTIVELY LEAD, MANAGE, AND EMBRACE CHANGE.

Anthropology and Sociology Section (ANSS): a. We contributed unused funds from our Basic Services grant for 2016-2017 to the ACRL scholarship fund. We are discussing ways to create scholarships or other awards that will allow ANSS to use as a recruitment tool.

College Libraries Section (CLS): Our discussion group topics address change management often, including changing positions to align with current needs and managing change in general. The Library Technical Education Committee has moved its content to the ACRL Libguides, and has produced a newsletter. These changes will allow easier access to information about Library Technician education programs.

Community and Junior College Libraries Section (CJCLS): The Library Technical Education Committee produced a newsletter this year, and moved its content from the Wiki to the ARCL Libguides. This will provide easy access to

European Studies Section (ESS): During the Social Sciences and History Discussion Group, Naresh Agarwal presented and there was discussion about knowledge retention and transfer in academic libraries and strategies to conserve it.

Instruction Section (IS): Building Virtual Community Task Force: The committee is charged to examine the best mechanisms for moving forward as an all-virtual section. This includes virtual tools for professional development, examining current leadership and committee structure for opportunities to better serve the IS membership, searching for new avenues for in-person and virtual social connections, updating the Instruction Section website and policy language to reflect the work of an all virtual section, promoting transparency and aiding the decision-making process by consulting IS members as well as leaders within and outside the field to solicit ideas and feedback, and communicating updates via the ILI-L listserv. The co-chairs held focus groups to gather ideas from the membership and will be sharing a mid-charge report in late summer 2018. https://acrl.ala.org/IS/is-committees-2/committees-task-forces/current-task-forces/

Literatures in English Section (LES): The LES mentorship program was revived this year with 10 participants, 5 mentors and 5 mentees. The Mentoring Program enables experienced members to share information about their work with new and prospective librarians, and conversely, new LIS professionals can share the newest trends in the fields, which enables members at all levels to be responsive to change.

Rare Books and Manuscripts Section (RBMS): RBMS supports this goal by offering mentorship and an active network for our members to discuss issues of succession planning and leadership in our field.

Science and Technology Section (STS): The 2017/2018 STS Awards Committee assisted the chair of the Executive Committee to select the section's ALA Emerging Leader, providing ranked recommendations according to ALA Emerging Leader Selection Jury guidelines. By helping to sponsor and plan the STS General Membership Meeting -- Poster Session and Breakfast at ALA Annual in New Orleans, the Membership & Recruitment Committee worked in support of building member skills and personal connections.

Access Services Interest Group: The Interest Group was successful in holding 4 virtual forums in the past year that were of interest and relevance to the membership. The Fall series focused on lively and controversial presentations on rethinking core service areas such as Circulation Policies and Resource Sharing. Both presenters and participants engaged in a lively discussion whose purpose was to challenge long-held views and standards of how to manage and engage with the public in the use of library collections that promoted openness, entrepreneurial-ship, and change to ensure that these services remain relevant and useful for scholars. These topics were chosen because of their high interest and need for continual discussion within Access Services. The roundtable discussion at the 2017 ACRL conference on circulation policies was attended by over 50 people and was the highest attended virtual forum in FY18. The need to rethink and evaluate usage of print collections is still relevant and necessary to ensure that our users can be fully engaged with our suite of services and collections. The forum on Resource Sharing, with a particular focus on the Big Ten Academic Alliance white paper, "Next Generation Discovery to Delivery Systems: a Vision," was a timely discussion as academic librarians wrestle with the concepts of access vs. ownership and concerns about how the technology that underpins these services may be falling short of our needs and expectations in the near future.

Digital Scholarship Centers Interest Group: In lieu of holding a meeting, we proposed a program with the Digital Scholarship Section titled "Bridging the gap: supporting subject liaisons to become ambassadors for digital scholarship in academic libraries", which was held at the ALA Annual 2018 conference. This panel discussion explored how academic librarians can prepare to develop and deliver digital scholarship services to support new modes of research and teaching. We discussed the types of skills that digital scholarship support needs, and how to acquire those skills in formal and informal ways. Panelists contemplated best practices for internal collaborations between subject liaisons and functional specialists; explored implications for internal and external communication so that emerging services are legible and make sense to external researchers; and discussed the roles managers and library administrators can play in supporting new research services, whether adapting the liaison model, or moving beyond it. We solicited five case studies of subject librarians who had moved into functional roles to support digital scholarship. Our panelists were Jean Ferguson, Learning and Research Communities Librarian at the University of California, Berkeley; Pamella Lach, Digital Humanities Librarian at San Diego State University; Brianna Marshall, Director of Research Services at the University of California, Riverside; and Rita Vine, Head, Faculty & Student Engagement at the University of Toronto Libraries. 103 participants indicated an interest in attending on the ALA Annual scheduler. Slides are available at: http://ucblib.link/dss-ala-slides

Library Marketing and Outreach Interest Group: While LMOIG is an official ACRL interest group, our Facebook group is open to all who have an interest in academic library marketing work, which includes librarians and library staff from all kinds of libraries, library school students, and those who would like to become outreach or student engagement librarians. As marketing, outreach, and engagement are all rapidly evolving areas in the library field, being able to share with fellow academic library marketers is highly beneficial for our membership. For those not currently engaged in this sort of work, the conversations and questions via the Facebook group help these members learn about pressing issues, trends, and the current landscape of library marketing and outreach. All members, no matter their affiliation, benefit by learning from each other.

Virtual Worlds Interest Group: CVL Reference Librarians includes training from a professional librarian. See https://communityvirtuallibrary.wordpress.com/about/get-involved/

California: The CARL 2018 Conference was themed "The Academic Library in Times of Change". The conference covered a wide variety of topics affecting academic libraries today. The conference description is below: Change is an inevitable and can be a welcome part of our jobs. In this everchanging landscape, libraries are feeling pressure to provide solutions to many and various challenges: shifts in access to our resources, "evolving" ideas of credibility and authority, increasing threats to our patrons' civil liberties, a movement to "all-things-digital", staff/library reorganization, and more. How can libraries rise to the challenges of engaging our students and colleagues, advocating for our communities, and protecting our democracy? The CARL 2018 Conference builds upon the CARL 2016 Conference, "What we talk about when we talk about value..." by asking: How will we, as libraries, navigate change, reassert and use our core values to ground our everyday work, strengthen our advocacy, and buoy our hopes in times of uncertainty? From a March 2017 article in American Libraries, trends to watch include: entrepreneurship, civic engagement and innovation, school libraries as global educators, sustainability, virtual reality, welcoming communities, accessibility, academic tech focus, and 21st century ethics. What do these trends look like on a more local level, and how can we translate them into the work we do on a day-to-day basis?

Delaware Valley: In March, the Chapter's Executive Board voted to create a new professional development award in which the Chapter allocates up to \$2000 annually to members in support of their participation in professional workshops and conferences. This June, 4 librarians were awarded travel grants: Emma Antobam-Ntekudzi, Reference & Instruction Librarian from (CUNY) Bronx Community College, was awarded funding to attend the Joint Conference of Librarians of Color; Carol Howe, Science Librarian from Haverford College, was awarded funding to attend the Special Libraries Association (SLA) Annual Conference; Tatiana Pashkova-Balkenhol, Undergraduate Research and Instruction Librarian from Millersville University, was awarded funding to attend the Council on Undergraduate Research (CUR) Biennial Conference; and Karen Sheldon, Electronic and Instructional Services Librarian from Delaware Valley University, was awarded funding to attend the NASIG Conference: Transforming the Information Community

Florida: The FACRL Board approved an increase in the amount given to student scholarships, beginning with the 2017 conference.

Greater Metro New York: ACRL/NY has a Management and Leadership Development Discussion Group, which organizes meetings and other events for academic librarians who currently find themselves in — or are interested in assuming — a management or leadership role in research libraries. The meetings raise some of the philosophical and practical questions associated with leadership and management in contemporary academic libraries. This includes visions people would like to realize or priorities they would like to advance as leaders or managers in research libraries — as well as the practical realities of how someone achieves a management or leadership role within these kinds of organizational structures. The group also discusses strategies for librarians at all organizational levels to effect changes they think are important and to influence the evolution of their institution and the research library professions. The group is planning an event for Fall 2019 centered around the recent article "Responding to and Reimagining Resilience in Academic Libraries" published in the Journal of New Librarianship this year. One of the articles authors, Eamon Tewell, will be a guest at this meeting.

Illinois: One of IACRL's major projects is an unconference held during Illinois' state library conference. Previously, IACRL had held its own bi-annual conference. However, budget cuts meant fewer travel and

professional development opportunities for librarians. As a result, it was decided that IACRL would eliminate their standalone meeting and work to incorporate more academic library programming into the state library conference. One of those programs is the IACRL Unconference. Designed to bring together academic librarians from all areas, technical services to reference to instruction, as well from all types of positions. Having public-facing staff, catalogers, faculty librarians, department heads, and deans and directors all in the same room allows for rich and meaningful conversations. The Unconference is intended to support, generate resources and ideas, act as a networking tool, and give a voice to those who may not always be heard. Attendees who are not in leadership positions are encouraged to return to their institution with suggestions for adjustments or changes. Leaders leave with a new perspective. IACRL has received great feedback about the Unconference, and looks forward to offering it on a regular basis.

Indiana: ILF held many related sessions about change management, leadership and the future of libraries at its Children's/Teen Librarian Conference 8/17 where 250 attended; Annual Conference 11/17 where 700+attended; and at its five regional conferences throughout the state where 537 attended. Additionally, ILF communicates with the college-preparation programs for the LTA, BS and MLS programs in library and information science, as ILF explores ways to address the librarianship pipeline.

Iowa: Continue to offer Fall Conference Scholarship Award.

Kentucky: --ALA president Jim Neal spoke at the state's fall conference on key trends/changes transforming libraries

Michigan, MI-ALA: We have several active Interest Groups that address these issues, including Mid-Level Leadership, Critical Librarianship, and Cataloging and Metadata Interest Groups.

Michigan, MLA: Michigan Library Association (MLA) holds an annual leadership summit and a leadership academy. These opportunities are available for librarians at all stages of their career.

Nebraska: "Project Management SKills for Better Library Service" by Emily Clasper. Nebraska Library Association Annual meeting pre-conference workshop gave attendees hands-on project management training.

New England: In general, Chapter's programming encourages all levels of library staff to attend, present, and take on leadership at any and all levels of the chapter. More specifically, the Leadership Development Committee has focused on change management and leadership programming this year, including their offered session "Managing vs. Leading: Identifying Strategies for Success," at Bryant, which was incredibly well-received.

New Jersey: Guided by our Legislative Representative, a Civic Engagement and Academic Libraries Roundtable Workshop was held in April 2018. This was open to academic librarians in the state with the goal of sharing activities related to civic engagement.

North Dakota/Manitoba: Please see "Education" and "Member Engagement" sections. Also, the annual conference had many discussions of change and leading change.

Ohio: ALAO sponsored workshop on June 15, 2018 titled "Speaking Up for Libraries" The abstract read: Learn how to effectively communicate the value of your library to a variety of stakeholders. Develop a

"pitch" that you can adapt to fit within the time constraints of daily life. Everyone can and should be an advocate for libraries. Learn how to craft a powerful message about why your library matters.

Oklahoma: Each year OK-ACRL gives an Outstanding Service Award to someone who makes outstanding contributions to OK-ACRL. The recipient is normally recognized for their service and help in planning the annual conference as well as contributions to OK-ACRL interest groups. By making this recognition each year, OK-ACRL makes it known that we value leadership skills. OK-ACRL contributes to teaching the library workforce in Oklahoma how to lead, manage, and embrace change with the annual conference and interest group workshops. Finally OK-ACRL gives away prizes at each years annual conference designed to help librarians keep up with technological change. This past year we gave away 2 webcams to be used for online meetings.

Virginia: The Virginia Chapter sponsors a "Conference Within a Conference" during the Virginia Library Association conference each October. The preliminary program for the 2018 VLA Conference, "Revolution" was just released, and there over 15 sessions devoted to this "Conference Within a Conference."

Western Pennsylvania/West Virginia: During conference: What's to Fear? Learning from Failure, we discussed ways in which programs, ideas, and initiatives may not have worked as planned but with the building of relationships were able to learn and create better options.

NEW ROLES AND CHANGING LANDSCAPES OBJECTIVE 3: EXPAND ACRL'S ROLE AS A CATALYST FOR TRANSFORMATIONAL CHANGE IN HIGHER EDUCATION.

Anthropology and Sociology Section (ANSS): a. ANSS as a part of ACRL provides opportunities for members to network with other librarians who share similar roles. This provides collaborative publishing, presenting, and project opportunities.

College Libraries Section (CLS): The CLS liaison to the Council of Independent College (CIC) is able to get an audience with change-agents (Deans, Provosts, etc.) and thus can positively influence institutional decisions regarding the role of academic libraries.

Community and Junior College Libraries Section (CJCLS): Presentation by our liaison to the American Association of Community Colleges entitled "Getting Started using Open Educational Resources" and representation in the National Council for Learning Resources, solidifies the importance of community college librarians as change agents in education. Our Open Educational Resources Task Force conducted a survey to determine how CJCLS can support community college librarians who are either involved with OER, or plan to become involved with OER programs at their institutions.

Science and Technology Section (STS): The STS Membership & Recruitment committee representation at ACRL 101 in New Orleans at the Annual Conference helped to show potential members the many opportunities within ACRL and within ALA. In support of this, Membership revised and made available the STS Membership brochure.

Access Services Interest Group: The Spring series focused on how to use data for the assessment of Access Services and operations. Presenters discussed how to use visualization tools to analyze trends in facilities usage and core services to better understand how users are engaging with these services to make data-driven decisions from that information. The other virtual forum discussed the use of data and business systems analyst techniques to describe problems, seek iterative improvements, and use

reporting and simple presentation tools to drastically improve the efficiency of back-end library operations. It should also be noted that in the past year, virtual forums had attendance numbers between 100 and 300 attendees with global participation and engagement. While data-driven decision making is not a new idea or topic area, it is of significant value to transforming how access services professionals approach, assess, and rethink core services that lead to drastically improved services, reducing unnecessary barriers to how users seek and access information, and ensuring that colleges and universities can seek access to information as a more cost effective solution to ownership of resources for sustainability and meeting the inormation needs of their constituencies.

Digital Scholarship Centers Interest Group: In lieu of a face to face meeting and program at the ALA MidWinter meeting, we held a webinar titled "Building a Digital Scholarship Program with Limited Resources". This webinar explored approaches for mid-size and smaller libraries and library experts to support digital scholarship given staffing and other resource limitations. Webinar panelists included Roopika Risam, Assistant Professor of English at Salem State University; Susan Edwards, University Archivist and Special Collections Librarian at Salem State University; and Janelle Wertzberger, Assistant Dean and Director of Scholarly Communications at Gettysburg College. There were approximately 173 registrants, 94 attendees, and 177 views on Youtube of the recording: https://youtu.be/uOVeScBtJRg

Library Marketing and Outreach Interest Group: LMOIG was established in 2014 to meet the needs of librarians engaged specifically in marketing and outreach work. Communicating and demonstrating the value of academic libraries to our campus stakeholders is crucial for advocating for our budgets, spaces, and workforce. The group has grown exponentially and continues to inspire and educate members about this challenging but rewarding work. The ultimate goal of all of our activities is to show that libraries are relevant and crucial to colleges and universities.

Universal Accessibility Interest Group: The UAIG serves as a resource for librarians who are working to make their web and electronic resources fully accessible to all their users, helping to expand ACRL's role as a leader in web accessibility.

Virtual Worlds Interest Group: For a decade, the Community Virtual Library has been home to the ACRL Virtual World Interest Group, providing a space for monthly meetings and presentations. In January 2018, CVL moved to Library Land on Cookie Island, designating a meeting space for the ACRL group in Selby Park (named for Virtual World Champion Selby Evans).

Maryland: In order to hold high impact, in-person educational program on the theme of change, our chapter: Took advantage of ACRL National Speakers Bureau to provide high quality keynote programming from ACRL leadership; Collaborated with Delaware Valley Chapter of ACRL to cross promote programming, solicit speakers, and offer reciprocal member pricing at program.

Michigan, MI-ALA: MiALA worked with Mid-Michigan Digital Practitioners (MMDP) to host their Spring Meeting as a pre-conference option to our Annual Conference, offering members an opportunity to engage in new and innovative conversations with those working in and outside of libraries in digital environments.

Michigan, MLA: Members and staff are encouraged to use ACRL statements and papers as reference points to address change, advocacy, when appropriate.

New England: Whether it's encouragement for of use of the Information Literacy Frameworks through NELIG, or our Annual Conference, or the programming provided by our Leadership Development Committee and SIGs, we offer opportunities for engagement in meaningful conversations for all our members.

Ohio: The ALAO Diversity Committee sponsored a workshop on May 10, 2018 titled "Actively Inclusive: Libraries Speak Up!". The abstract read: Spend a day with colleagues sharing libraries' efforts toward reaching underserved and diverse populations, participating in challenging conversations in our communities, and promoting equity and inclusive practice. Attendees will: Learn from library outreach programs focusing on diverse academic audiences and community populations. Learn about inclusive practices related to serving library personnel, as well as recruitment and retention of a diverse workforce. Hear about professional development opportunities that help participants increase their understanding of power and privilege

Oklahoma: This year OK-ACRL is exploring options for starting an endowment and creating a 3-5 year strategic plan for not only the organizations continued existence, but to eventually provide regional and national professional development scholarships to academic librarians. Considering the continuing budget crisis in libraries and the worsening budget crisis in Oklahoma, we feel it is imperative that we support and encourage professional development activities and scholarship outside the state of Oklahoma.

ENABLING PROGRAMS AND SERVICES

EDUCATION

College Libraries Section (CLS): The discussion groups provide informal educational opportunities.

Community and Junior College Libraries Section (CJCLS): CJCLS has partnered with the ACRL Information Section to sponsor a librarian in the Emerging Leaders program.

European Studies Section (ESS): ESS proposes a program for every annual conference in addition to the presentations made. This year, with the Literatures of English (LES), ESS co-sponsored the program, "Zines Cultures as Critical Resistance: A Hands-On Workshop to Build Community Engagement and Student Learning." At Annual, the Research and Planning Committee held three presentations of works in progress: "The Nazi Conspiracy: German Fantasies and Jewish Power between Weimar and the Third Reich -- Brendan Fay, Emporia State University; The Otto F. Ege Digital Collection: Fifty Original Leaves from Medieval Manuscripts -- Dana Haugh, Stony Brook University; Reading for your Life: The Impact of Reading and Writing During the Siege of Sarajevo -- Natalie Ornat, University of North Carolina at Charlotte. Afterwards, there was about 30 minutes for questions, discussion and feedback about their work.

Instruction Section (IS): Information Gathering and Exchange Cmte: The committee conducted an annual survey ascertaining the continuing education needs and interests of instruction librarians. The survey is sent to all Section members and is used to identify needs and inform future roles of the organization and its participating Committees. The committee received input from participating committees and reformatted the previous survey to make it shorter and more relevant. The 2018 survey received 281 responses, 100% increase from the 2017 survey. The committee also shared data from the annual survey with participating Committees. The Exec Liaison & vice-chair are currently preparing

Executive Summary of the survey and recommendations to the Section to be publicized summer 2018. Information Gathering and Exchange Cmte (2): The committee worked to create a Google calendar as a tool to enable committees to advertise IS events to our members and beyond and to avoid scheduling events/webinars/professional education activities at conflicting times. The Chair of IS, Merinda Hensley and the Chair of SLILC, Elizabeth Berman agreed to populate a single calendar administered by SLILC with the Information Gathering and Exchange Cmte sending regular items for the calendar.

Literatures in English Section (LES): The Virtual Participation Committee's webinar featuring the 23 Framework Things authors had 44 participants, followed by week's of active Twitter discussion. We had three virtual discussion group meetings for Midwinter. The program submitted by LES was accepted for ALA Annual 2018 in New Orleans. The Program was a co-sponsored by ACRL European Studies Section, and unofficially co-sponsored by the Zine Pavilion.

Women and Gender Studies Section (WGSS): WGSS sponsors poster presentations at the Annual conference. In past years, they were presented at our general membership meeting. This year, we had the opportunity to also be included as part of the overall ACRL call for poster proposals and to have a presentation slot in the main hall. This greatly increased the number of poster proposals and the number of people coming to view them. We had 18 posters in total, with many of them presenting a second time at our general membership meeting. The National Women's Studies Association (NWSA) Librarians' Task Force (chaired by WGSS Liaison Jennifer Gilley) sponsored a workshop on "Coalition Building Between Librarians and Activists: Navigating Race in Feminist and Social Justice Movements" and a panel on "Archiving Black Feminism" at the NWSA conference.

Digital Badges Interest Group: The Digital Badges Interest Group (DBIG) offered two virtual presentations, one in the fall (November 2017) and one in the spring (February 2018). Our fall presenters were Megan Heuer, Head of Information Literacy and Communication Arts Librarian at Southern Methodist University, and Amanda Rose Fuller, Digital Badge Partner for Aurora Public Schools. Each shared their experiences implementing innovative badging programs and presented on how badges can be used to showcase learning experiences, unlock opportunities, and prepare students for the workplace. In the spring we were excited to host Nate Otto, Director of Open Badges at Concentric Sky, who conducted the first live demo of some new features related to Open Badges and Open Pathways. His engaging presentation considered how Open Badges might "contribute to informed public understanding of the quality/credibility of information, news, and credentials that circulate online" (Nate's description).

History Librarians Interest Group: Our session at the 2018 Annual Conference offered attendees guidance in using the archives of NATO and the League of Nations, both important sources for research into international history

Virtual Worlds Interest Group: Educators in virtual worlds are exploring opportunities for immersive learning in all subject areas with librarians "embedded" in the virtual world to support learning. Examples include ACRL VWIG programs on archaeology and genealogy. July 16, 2016 Speaker: QVINTVS PETILIVS SECVNDVS (Severus Alexander) provided a presentation and tour. Topic TITLE: Museums of Archaeology In October 2017 and March 2018, presentations on genealogy were presented for the ACRL Virtual World Interest Group. Oct 15, 2017 Speaker Kilandra Yeuxdoux Topic TITLE: Genealogy in Virtual Worlds See http://connect.ala.org/node/269535 March 18, 2018 Speaker: Cheri Daniels Topic TITLE: Fostering Genealogy Literacy through Virtual Engagement See

ACRL SPOS18 Doc 27.0

https://slvirtualgenealogy.org/ http://genealogyliteracy.com/ Cybersecurity, a critical issue for both individuals and organizations, was the subject of the February 18, 2018 ACRL VWIG meeting. Speaker: Erik Moore is an Internet Security Specialist. Topic TITLE: Cybersecurity See https://connect.ala.org/events/event-description?CalendarEventKey=F2BD4CCD-EFC0-4635-BBF8-CB77F7B367D5 Learning to archive virtual worlds and provide access to them can be challenging. The November 19, 2017 ACRL VWIG meeting was on the topic of portable virtual worlds. Speaker: Camie Rembrandt Topic TITLE: Using Sim on a Stick to Create Portable Virtual Libraries See http://connect.ala.org/node/270958 Artificial intelligence may impact information in the near future. Two presentations on artificial intelligence included a demonstration of an AI robot who answered questions for the ACRL Virtual World Interest Group. April and August 2017 See http://vwig.blogspot.com/2017/04/ Also https://connect.ala.org/acrl/communities/community-home/digestviewer/viewthread?MessageKey=e5c2d191-835c-4a2d-9f39-ba924ae102ca

Alabama: Hosted/provided members an opportunity for moderator led professional discussion at the Alabama ACRL annual business meeting. Also, hosted a series of best practices sessions on timely topics (e.g., predatory publishing, information literacy, etc.) at the Alabama Library Annual Convention in April, 2018.

California: CARL and its interest groups engaged in the following PD activities this year: -CARL Conference 2018, The Academic Library in Times of Change -ALIGN (Academic Librarians Interest Group North) coordinated a field trip to Cal Poly SLO to observe student-staffed Library Research Assistant Technician program, LibRATs -SCIL (Southern California Instruction Librarians) held a one-day mini conference that focused on the intersection between instruction and our virtual campus communities - SCORE (Scholarly Communication and Open Resources for Education) hosted a webinar on the topic of OA monograph initiatives

Delaware Valley: On March 20, 2018 the Chapter co-sponsored a group viewing of the ACRL webcast "Applying Information Literacy to Digital Humanities Projects," presented by Caitlin A. Bagley, Assistant Professor and Instruction librarian at Gonzaga University with Drexel's Library & Archives Student Association (DULASA). Three other member libraries hosted group viewings of the webcast. On August 2, 2018, the Chapter plans to host another group viewing of the ACRL webcast, "Framing Information Literacy Series Webcast 6: Authority is Constructed and Contextual."

Florida: A. FACRL sponsored regional viewings in southeast, southwest, and central Florida, of the ACRL live e-learning webcast, "Fighting Fake News with the ACRL Framework," presented on July 20, 2017.

Georgia: The Carterette Series Webinars are free professional development webinars hosted by the Georgia Library Association which highlight trends, best practices, and innovation in libraries. GA ACRL Chapter and Academic Library division sponsor programs during annual Georgia Libraries Conference (October) Georgia ACRL chapter organizes viewing of two ACRL webinars. The ALD conducted a survey of its members to select webinar topics that were most relevant for academic librarians in Georgia and locations that would ensure opportunities for professional development across the state. This year webinars were held in Athens, Augusta, Carrollton, Cartersville, Decatur, and Savannah.

Greater Metro New York: In addition to the Mentoring Program described in the response under Objective 1 for New Roles and Changing Landscapes, ACRL/NY offers 3 categories of scholarships: scholarships for current MLIS students, scholarships for early career librarians and scholarships for midcareer librarians. Awardees receive a free registration for the ACRL/NY Symposium (a \$110.00 value).

Idaho: An ACRL Idaho unconference was held in July 2017, and another will be held this year.

Iowa: Continue to offer Fall Conference Scholarship Award.

Kansas: Organized a luncheon including a keynote speaker for the KLA Annual Conference held in October 2017. We also held a day and a half conference in April 2018.

Maryland: June 28, 2018 Leadership Handoff event hosted at University of Baltimore.

Michigan, MI-ALA: We created and awarded several travel scholarships for conferences, including for National Library Legislative Day, the MiALA Annual Conference, and plan to offer ACRL scholarships in years when ACRL is held.

Minnesota: -ARLD hosts an annual conference (ARLD Day) that allows academic librarians the chance to learn about new research, stay updated on trends in the field, and to network with colleagues. ARLD Day 2018 was held on April 27 at the Minnesota Landscape Arboretum. 110 academic librarians attended. Our keynote speaker, Andrew Asher, Assessment Librarian at Indiana University, spoke about utilizing anthropological research techniques to understand and contextualize libraries and information practices. Several diverse breakout sessions followed. Topics included podcasting, visualizing contacts using NodeXL, library website redesign, student library advisory boards, creating reflection spaces, and primary source sets, among others. It was a beautiful day to enjoy the spring flowers of the Arboretum while sharing and learning. -We also host poster sessions during our business meeting at the annual state conference.

New England: A major initiative this year is to begin to develop institutional members at the local level. During this year's ALA Annual Conference, we connected with leaders in the Ohio chapters, to help move this conversation forward. We have also, for several years, been rotating the location of our Annual Conference to different areas of our region. This year our Annual Conference was held in Plymouth Massachusetts and we were able to attract a wide range of members who are not typically able to attend our Annual Conference due to distance.

North Dakota/Manitoba: One ACRL e-learning webinar was made available through the chapter (see earlier notation, regarding webcast on Instructional Design) and access was provided to previous webinars. The webinar was offered at three different institutions: the University of Manitoba, University of North Dakota, and the North Dakota State University. This webinar also served as a Chapter promotional tool to non-members of ACRL who were also invited to the webinar. Chapter members could view the webinars live or could access the recording later.

Ohio: ALAO awards the Continuing Education Grant each year to support the cost of participating in professional development opportunities. ALAO also sponsors the Support Staff Presenter Grant and the Student Presenter Grant, providing support for a student and a support member to present at the ALAO Annual Conference.

Oregon: ACRL-Oregon continued our practice of providing a set of archived ACRL webinars at no charge to ACRL-Oregon membership. Webinars provided this program year included: Applying Information Literacy to Digital Humanities Projects (recorded 3/20/2018) and Fighting Fake News with the ACRL Framework (recorded 07/20/2017).

South Carolina: Sponsored two ACRL e-learning webcasts at 4 sites throughout the state; provided access to recorded session to registered Section members. Partnered with SCLA Information Literacy Roundtable to offer one-day IL workshop applicable to all librarians.

PUBLICATIONS

College Libraries Section (CLS): CLS publishes a newsletter twice a year. In addition, the CLIPP Committee is responsible for developing and publishing works under the CLIPP publication series. These are practical manuscripts that are geared toward college and small university libraries. Topics are varied and relate to policy and procedures. The committee puts out call for proposals, reviews submissions, selects authors, and assigns editors to go through the writing process with the authors.

Distance Learning Section (DLS): •Instead of an annual annotated bibliography, the Research & Publications Committee selects a quarterly topic and after careful evaluation of the literature, posts a list of the top five articles on the topic which provides DLS members with timelier educational content. The list is linked on the DLS webpage, the listserv, the twitter account page, and wherever else the committee can reach DLS's membership. The Committee's entire bibliography (2014-present) is available on their Zotero library site: https://www.zotero.org/dlsbibcomm/items. • The DLS Manual was updated and posted to the Section's website. http://acrl.ala.org/DLS/wp-content/uploads/2017/11/dls-section-manual-2017.pdf

Education and Behavioral Sciences Section (EBSS): EBSS published an electronic newsletter twice this year

European Studies Section (ESS): With the merge of WESS and SEES, ESS currently publishes two separate newsletters. The SEES Newsletter is published once a year and the WESS Newsletter is published twice a year. After this first year, the ESS Publications Committee initiated conversations in which they are beginning to think of the future of the Newsletters, their purposes, where they differ and intersect, so as to streamline communications and make them more efficient. This work will continue into the new year.

Instruction Section (IS): Instruction Section Newsletter - The Communication Cmte has two newsletter editors who worked to publish Fall 2017, Volume 34, Number 2 and Spring 2018, Volume 35, Number 1. https://acrl.ala.org/IS/about-is-2/instruction-section-newsletters/

Literatures in English Section (LES): Two issues of Biblio-Notes were published (one in Fall 2017, one in Spring 2018). Contributors included Brian Flota, Liorah Golomb, Arianne Hartsell-Gundy, Hillary A.H. Richardson, Aline Soules, Sarah G. Wenzel, and the Chair of LES, Harriett Green. Brian Flota will be succeeded as editor by Stacey Reardon and Matthew Roberts. The LES Bibliography contains 1462 citations with current quantity/year of update per subsection listed below. Ownership of the Zotero group and the designated subsection editors is in transition, and the Publications Committee is exploring options for transitioning organization of the bibliography. 2017 – 2 entries 2016 – 13 entries 2015 – 28 entries 2014 – 33 entries 2013 – 532 entries Collections Collection Development and

Assessment -109 (2017) Electronic Texts, Books, and Journals -47 (2013) General -9 (2013) Miscellaneous -27 (2013) Special Collections -20 (2013) English in Higher Education Canon Formation -79 (2013) Composition Studies (Tech. Writing, Rhetoric Studies, Prof. Communication) -70 (2013) Digital Humanities -282 (2014) English Studies -123 (2013) Graduate Education -107 (2012) History of the Book -68 (2017) Reference, Research, and Instruction Database Searching -53 (2016) General -4 (2011) Literary Research Tools -86 (2013) Reference -5 (2011) Research and Information-Seeking Behaviors of Humanities Scholars -116 (2012) User Education -57 (2015) Technical Services Cataloging and Indexing -62 (2013) Preservation -9 (2013) Uncategorized -129 entries

Politics, Policy and International Relations Section (PPIRS): The section produces a newsletter 2 times per year to foster communication and a sense of community among members.

Science and Technology Section (STS): In addition to other entries, the STS Publications Committee distributes a twice annual newsletter, STS Signal, to inform members of conference events, committee activities, and messages from officers.

Women and Gender Studies Section (WGSS): The section produces a semi-annual newsletter. An archive is available on the section website.

Library Marketing and Outreach Interest Group: Davis, L., Park, J., Dantus, S., Davidson, C., Cohen Lafazan, B., & Petit, J. (2017) "Marketing for the beginner" C&RL News, (78)11. Retrieved from https://crln.acrl.org/index.php/crlnews/article/view/16839/18439

Residency Interest Group: RIG continues to populate their website and blog (http://acrl.ala.org/residency) with content throughout the year, including job postings, updating the residents and programs directory, and adding readings of interest to its resources page. Many of these are also distributed through its active listserv (acrl-rig@lists.ala.org). The RIG Officers and the Web Team have also solicited and published more of its members' personal experiences, through RIG's monthly blog series: Resident of the Month where past and current residents discuss their background, career achievements, and tips to early career librarians. RIG has been cited in a resource in research of residency programs in three distinct peer-reviewed articles this year: Donaldson, K.S. (2018) Recruiting diverse librarians: Residency programs as an entry point to the academic librarian profession in the United States. Paper presented at IFLA WLIC 2018 – Kuala Lumpur, Malaysia – Transform Libraries, Transform Societies; Pickens, C., & Coren, A. D. (2017). Diversity residency programs: strategies for a collaborative approach to development. Collaborative Librarianship, 9 (2), 104–108; Boyd, A., Blue, Y., & Im, S. (2017). Evaluation of academic library residency programs in the United States for librarians of color. College & Research Libraries, 78 (4), 472–511.

Virtual Worlds Interest Group: Educators in virtual worlds are exploring opportunities for immersive learning in all subject areas with librarians "embedded" in the virtual world to support learning. Examples include ACRL VWIG programs on archaeology and genealogy. July 16, 2016 Speaker: QVINTVS PETILIVS SECVNDVS (Severus Alexander) provided a presentation and tour. Topic TITLE: Museums of Archaeology In October 2017 and March 2018, presentations on genealogy were presented for the ACRL Virtual World Interest Group. Oct 15, 2017 Speaker Kilandra Yeuxdoux Topic TITLE: Genealogy in Virtual Worlds See http://connect.ala.org/node/269535 March 18, 2018 Speaker: Cheri Daniels Topic TITLE: Fostering Genealogy Literacy through Virtual Engagement See https://slvirtualgenealogy.org/ http://genealogyliteracy.com/ Cybersecurity, a critical issue for both

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individuals and organizations, was the subject of the February 18, 2018 ACRL VWIG meeting. Speaker: Erik Moore is an Internet Security Specialist. Topic TITLE: Cybersecurity See

https://connect.ala.org/events/event-description?CalendarEventKey=F2BD4CCD-EFC0-4635-BBF8-CB77F7B367D5 Learning to archive virtual worlds and provide access to them can be challenging. The November 19, 2017 ACRL VWIG meeting was on the topic of portable virtual worlds. Speaker: Camie Rembrandt Topic TITLE: Using Sim on a Stick to Create Portable Virtual Libraries See

http://connect.ala.org/node/270958 Artificial intelligence may impact information in the near future. Two presentations on artificial intelligence included a demonstration of an AI robot who answered questions for the ACRL Virtual World Interest Group. April and August 2017 See

http://vwig.blogspot.com/2017/04/ Also https://connect.ala.org/acrl/communities/community-home/digestviewer/viewthread?MessageKey=e5c2d191-835c-4a2d-9f39-

ba924ae102ca&CommunityKey=257a19fa-6ef1-4ab3-b447-

8c4440ad8354&tab=digestviewer#bme5c2d191-835c-4a2d-9f39-ba924ae102ca ACRL VWIG Pinterest Board: https://www.pinterest.com/acrlvwig/acrl-vwig-virtual-worlds-interest-group/ ACRL VWIG ALA Connect: https://connect.ala.org/acrl/communities/community-

home/librarydocuments?LibraryKey=b93a5669-da69-4556-8ce9-90da4d74ff86 Twitter: ACRL_VWIG Facebook: https://www.facebook.com/CommunityVirtualLibrary/ Google Plus: https://plus.google.com/u/0/communities/114378264274239664816

Alabama: Newsletters

California: CARL publishes 4 newsletters a year. The archive can be found here: http://www.carl-acrl.org/archives/newsletter/

Delaware Valley: The Chapter maintains a blog to promote engagement and disseminate information about services, programs, and professional development opportunities. Presentation materials and summaries of the fall and spring programs were published on the Chapter's blog.

Eastern New York: A newsletter available is published in the fall and the spring. This is disseminated through our listserv as well as published on our website.

Florida: A. This year, the Board approved the creation of a new committee for Marketing and Communications. This committee will foster dialogue among members pertaining to the issues and trends in academic librarianship, as well as market FACRL programming and promote the benefit of Association membership.

Georgia: The Georgia Library Association's peer-reviewed journal is called Georgia Library Quarterly.

Greater Metro New York: The chapter recently decided to migrate its newsletter — formerly published in PDF format — to a blog: https://acrlnyconnections.wordpress.com.

Illinois: Twice-annual newsletter

Indiana: ILF publishes a monthly e-newsletter (https://www.ilfonline.org/page/focus) and an advocacy update e-newsletter (https://www.ilfonline.org/page/ILFLegislativenews). For many reasons, ILF paused its publication of its academic journal and may resume it in the future.

lowa: Blog posts to promote committee activities and current topics: http://www.iowaacrl.org/content/blog

Kansas: The Kansas chapter proceedings are published annually and indexed in EBSCOhost research databases.

Kentucky: --chapter blog and state's IN-FO-CUS publication

Louisiana: The chapter continues to edit and publish the Codex, which is a peer-reviewed journal examining academic libraries and librarianship.

Maryland: Duckpin Bowling Fun with ACRL MD by Sara Arnold-Garza - The CRAB Volume 48, Number 3. "Shape Shifting": ACRL MD Fall Program Embraces Change by Sara Arnold-Garza and Robert Miller - The CRAB Volume 48, Number 2. Association of College and Research Libraries of Maryland Division Updates by S. Mike Kiel and Claire Holmes - The CRAB Volume 47, Number 4.

Michigan, MI-ALA: Our Communications Committee publishes an electronic newsletters monthly.

Michigan, MLA: Various online newsletters (membership, advoacy, etc.)

Minnesota: ARLD had our slideshow on member engagement published in the ACRL Chapter Topics Newsletter.

New England: Following our pilot year of hosting conference materials on our new OA repository, we can now continue the exploration of using this platform for future Chapter publications. Additionally, we have been taking advantage of our new website to post more timely notifications in blog form to our membership.

New Jersey: Agostinelli, Theresa. Using Data to Guide Future Decision-Making in Libraries, NJLA NEWSletter Winter 2018 https://njla.org/sites/default/files/NEWSLetterWINTER2018 0.pdf Berg, C., Donohue, M., & Malvey, D. (2018). Without Foundations, We Can't Build: Information Literacy and the Need for Strong School Library Programs. In The Library With the Lead Pipe. Published. Retrieved from http://www.inthelibrarywiththeleadpipe.org/2018/strong-school-library-programs/ Berg, C. (2017, October). Enhancing the assignment: Using the Framework for student learning and assessment in a Business Law class. College And Research Libraries News, 78(9), 502-. https://doi.org/https://doi.org/10.5860/crln.78.9.502 Berg, C. (2017). "Ready-to-Go Assessment: The Design and Implementation of a General Assessment Tool". Reference Services Review, 45(2) p. 201-210. Charles, L. (2017). Embracing Challenges in Times of Change: A Survey of the Readiness of Academic Librarians in New Jersey for Transition to the ACRL Framework. Communications in Information Literacy, 11 (1), 221-245. https://doi.org/10.15760/comminfolit.2017.11.1.43 Dalal, H. A., O'Hanlon, R., & Yacobucci, K. L. (2017). Video marketing for libraries: A practical guide for librarians. Lathan, MD: Rowman & Littlefield. https://rowman.com/ISBN/9781442269491/Video-Marketing-for-Libraries-A-Practical-Guide-for-Librarians DeCoster, D., & Naatus, M. K. (2017). Experiential Learning In Digital Marketing: A Library Social Media Takeover. Business Education Innovation Journal, 9(1), 84-88. Eleonora Dubicki, Susan Bucks, (2018) "Tapping government sources for course assignments", Reference Services Review, Vol. 46 Issue: 1, pp.29-41, https://doi.org/10.1108/RSR-10-2017-0039 Eleonora Dubicki, (2017) Carnegie Libraries of New Jersey: 1900-1923. New Jersey Studies Journal: An Interdisciplinary Journal, Vol. 3, No. 2. DOI: http://dx.doi.org/10.14713/njs.v3i2.85 LaBrake, M., Piekart, A., Regan, M. (2018). Interactive eLearning: Designing the Immersive Course-Integrated Online Library Orientation. In K. Bailin, B. Jahre, & Sarah Morris (Eds.) Planning Library Orientations. Elsevier.

New Mexico: ACRL-NM blog: https://acrlnewmexico.wordpress.com/

North Dakota/Manitoba: We have not done any publications through this chapter this year.

Ohio: Publications by ALAO members are recognized in the quarterly newsletter.

Oregon: ACRL-Oregon continued maintain our active ACRL-OR blog (https://acrloregon.org/). ACRL-Oregon board members were tasked with providing specific content throughout the year, and one member of the board is specifically assigned as communications coordinator, managing blog content in addition to other communications and publicity responsibilities

South Carolina: Section activities are posted and prominent on SCLA website.

Western Pennsylvania/West Virginia: Created semi-annual Chapter newletter. Articles in newsletter included developments within member libraries, programs members were involved with, and article about librarianship.

Wisconsin: The Wisconsin ACRL chapter has decided to partner with the Wisconsin Library Association to do a joint newsletter in hopes of reaching a wider audience and informing others of the work being done in WAAL. Prior to that we published our own newsletter.

ADVOCACY

Community and Junior College Libraries Section (CJCLS): Bucks County Community College (PA) was presented with the EBSCO Community College Learning Resources Programming Award, as selected by our Awards Committee.

Science and Technology Section (STS): Members attended a second March for Science in 2018, STS has an official liaison to the March for Science (Aimee Sgourakis).

Women and Gender Studies Section (WGSS): Jennifer Gilley served as the section's liaison to the National Women's Studies Association (NWSA) and as chair of their Librarians' Task Force.

Virtual Worlds Interest Group: Many people still find virtual worlds too complex and too difficult to enter. Librarians are exploring easy access web-based virtual worlds as a gateway entry point. CybaLOUNGE (an easy to enter web-based world created in Germany) was explored in Septemb

Alabama: The chapter legislative liaison provides members with regular and special updates of legislative activities, topics, concerns, etc. through the association's listserv. A LibGuide on library advocacy has been created and is maintained by the legislative I

Delaware Valley: Sarah Wingo, Humanities Librarian at Villanova University, serves as the Chapter's Legislative Liaison.

Eastern New York: ENY/ACRL has a Government Relations Chair who sends important/timely information to our membership via our listserv.

Florida: A. In October 2017, Craig Amos, Legislative Liaison, distributed information via the FACRL listerv about the "2017 Days in the District," an event launched by the Florida Library Association, which provided members an opportunity to promote the ACRL Legi

Georgia: Georgia Library Day is held each year during the legislative session. The Georgia Library Association, in cooperation with the Georgia Library Media Association and the Georgia Association for Instructional Technology, holds this event for librarians and

Greater Metro New York: The chapter sent its Legislative Liaison — Natalka Sawchuk — to National Library Legislative Day in Washington DC in May. The chapter allocates funds from its budget for this purpose every year.

Indiana: Two academic librarians (from 2 different campuses of IU) serve on the ILF Advocacy Committee, which meets monthly to guide legislative and administrative advocacy. During the 2018 legislative session, we effectively secured a bill to merge the IN State L

lowa: Our ACRL Government Relations Representative has actively promoted legislative issues to our chapter, including a virtual legislative day.

Kansas: One of the chapter officers is an ex-officio member of the Governmental Affairs Committee of the Kansas Library Association.

Kentucky: Chapter's chair attended National Library Legislative Day

Maryland: Sara Arnold-Garza, 2017-2018 President attended National Library Legislative day with the Maryland Delegation and also was an invited guest for ACRL's NLLD Advocacy Session.

Michigan, MI-ALA: Our Advocacy Committee continues to provide opportunities for advocacy for our members, including education on ballot initiatives, legislation, and other items of interest. Member Samantha Minnis attend National Library Legislative Day and provided a repo

Michigan, MLA: Relationship with MAME, PLA and Mi-ALA.

Minnesota: ARLD has a liaison to MLA's legislative committee whose purpose is to advocate for academic libraries. The liaison participates in Minnesota Library Legislative Day, LegWork committee meetings, and the annual Legislative Forum. This year, our Legislative

New Jersey: Net Neutrality Day, July 12 2017 was highly publicized from our website and via listservs as a day of action.

North Dakota/Manitoba: Most of the engagement was done through NDLA and the Manitoba Library Association

Ohio: The ALAO Government Relations Liaison traveled to Washington D.C. to participate in the National Library Legislative Day. While in D.C., he attended briefings regarding the current legislative agenda for libraries, and met with staffers to a number of Oh

Oregon: Provided \$1000 to cover expenses to send an ACRL-Oregon board member to National Library Legislative Day May 7-8, 2018. The board member was able to visit with the staff of several Oregon legislators as part of the overall Oregon library contingent which

South Dakota: Our SDLA president-elect participated in National Library Legislative Day and met with South Dakota Members of Congress.

Western Pennsylvania/West Virginia: Legislative liaisons conveyed information for state organizations about legislative concerns.

Wisconsin: WAAL partners with the Wisconsin Library Association to participate in the Library Development and Legislative Committee which participates in Library Legislative Day.

MEMBER ENGAGEMENT

College Libraries Section (CLS): CLS hosted the Friday Night Feast at 2018 Annual Conference in New Orleans. Our Communications and Membership Committees also provide numerous options for membership engagement including our COLLIB-L listserv, the "CLS Member Spotlight" feature on the CLS website, and regular engagement with members through social media. The past-chair of CLS traditionally hosts an orientation for incoming committee chairs, discussion group leaders, and newly elected officers during the Annual meeting. This orientation is meant to supplement the CoPA orientation and to provide information that is specific to the College Libraries Section. The Nominating Committee enables programs and services by engaging the membership in joining and selecting leadership for the Section. Competitive elections provide evidence for an active, engaged, committed membership.

Community and Junior College Libraries Section (CJCLS): Section social media will be consolidated to incorporate content from the blog to the Facebook page.

Distance Learning Section (DLS): • The Membership, Events, & Fundraising Committee sends monthly emails to new, reinstated, and dropped members. The new and reinstated members get "welcome" messages. Dropped members get a "so sorry you've left" message. (Dropped members indicate that they primarily leave the section due to job changes.) • In February, 2018, the section's Membership and Communication committees jointly launched a "Member of the Month" initiative to highlight our diverse members. A submissions form was created that encourages DLS members to either selfnominate or nominate their peers. Since March, four DLS members have been recognized: Carrie Girton, Sarah J. Hammil, Kathleen Pickens and Kelly McCallister. • April 12, 2018: DLS sponsored a reception at the 18th Distance Library Services Conference. •June 24, 2018: At a luncheon sponsored by Routledge Publishing, Marcia Elizabeth Rapchak, head of teaching and learning at Duquesne University, was presented with the 2018 Routledge Distance Learning Librarianship Conference Sponsorship Award. The award honors an individual for working in the field of, or contributing to, the success of distance learning librarianship or related library service in higher education. •June 25, 2018: DLS hosted a breakfast which was open to anyone who is interested in getting to know about the Section, its purpose and its leaders. Approximately 15-20 individuals attended. •In Progress: oThe Mentoring Committee's goal of establishing a formal Mentoring program is ongoing. The committee is designing applications to submit to become either a mentor or a mentee. Applicants will also be encouraged to indicate specific interests within the Section for a self-matching component. Mentoring Application: https://bit.ly/2sJ4RtV oThe Web Committee is working on a test site for proposed updates to the DLS website. oThe issue of a proposed name change for the DLS that would include the word "online" has generated considerable discussion, some of which was in opposition. That discussion is ongoing.

Education and Behavioral Sciences Section (EBSS): EBSS held a 50th Anniversary Celebration at ALA Annual 2018. EBSS promoted events and the work of the section's committees using their Facebook page.

European Studies Section (ESS): In September 2017, the Co-Chairs hosted a webcast to review the ESS Merger Transition Plan implementation and Governance Documents. It was a time to ask questions and raise concerns. After Midwinter, from receiving feedback from the membership, the Co-Chairs sent out a survey for conference scheduling preferences. The results were reported at the ALA Annual Membership and Executive Committee, to inform the new leadership of ESS of existing issues and assist in improvement of future conference attendance planning. In June 2018, ESS Co-Chairs were invited to lead a discussion on professional engagement for librarians at the Midwest Slavic Librarians' Workshop, University of Urbana-Champaign (Kristen participated remotely), resulting in a lively discussion of many challenges for professional librarians. ESS has a Membership Committee, which plans the social events for the section. On the Fridays of Midwinter and Annual, they coordinate the Happy Hour socials and we have a large social during Annual. For the large social, they work closely with the Vendor Relations Committee, who raise funds from sponsors to reduce the ticket prices for the social. This year, ESS had a riverboat cruise during Annual. The Publications Committee also changed the ALA-hosted list serv naming from "WESS" to "ESS" as it now includes all ESS membership to During the Executive Committee meeting, we discussed removing the Brown-hosted list serv of what was WESS and the steps needed to do it. The "Slavlibs" list serv will remain the same as it is not affiliated with ACRL.

Instruction Section (IS): Communication Cmte: With ALA Connect moving to a new platform, links to content in the Instruction Section Archive from the IS website needed to be updated to ensure proper functioning of those links. However, with the delay from September to May of the ALA Connect transition, and with the new content structure of ALA Connect, we have not been able to complete the work and we have identified a number of new problems that need to be addressed by the Executive Committee and/or by ALA Connect before the project can be completed. Because of delays in ALA Connect transition and new issues that result from the way ALA Connect now functions, the committee determined that there are new questions and issues that need to be dealt with in the 2018-2019 year, and the project will be ongoing for the coming year. Communication Cmte (2): A partnership was developed between the IS Communication Committee and the Student Learning and Information Literacy Committee whereby content from contributors to the ACRL Framework Sandbox is solicited and submitted to the IS Newsletter. This reciprocal relationship will help IS members better recognize the Sandbox resource as a tool to improve their practice and share what they're doing, and bring a broader audience and set of contributors to the Sandbox. Communication Cmte (3): A subcommittee investigated the utility of LibGuides as a resource for sharing IS content. It was determined that the IS website serves this purpose sufficiently, and that a LibGuides account would not benefit the section. Communication Cmte (4): Web Admins incorporated tips for committee chairs for working with the IS website into the "Tips for Committee, Publication, & Project Web Pages" page. Membership Cmte: As of summer 2018, there is no longer an in-person ALA event for the Instruction Section. The IS soiree was eliminated because of low attendance and a move to online committee programming. However, the committee is investigating if there is a need and desire for some sort of in-person socialization, even in the new environment. There was an initial attempt at the 2018 LOEX conference that met with mixed Membership Cmte (2): The Membership Committee chair sent out communications with all New, Dropped, and Reinstated members. The Dropped Membership survey was sent to all dropped members. Various membership data, including the dropped membership survey, were looked at by the committee using Google Drive. Future work might include a more formal analysis of this data. Membership Cmte (3): The IS Brochure was eliminated this year by IS Exec since the section is working entirely online. The FAQs are scheduled to be reviewed in Spring 2019. Feedback from the committee

was given to Exec to help in the creation of the latest IS New Leadership Virtual Orientation, slated for fall 2018. Work is also in process to create a visual tool that orients members to the organization, perhaps used in a handout or webpage. IS Chair, Merinda Hensley and Vice-Chair, Meghan Sitar implemented a new process to provide transparency regarding the IS appointment process. With significantly more volunteers that available spots on IS cmtes, the post to ILI-L explained how many committee appointments were open, how many were filled, and the criteria for filling committee appointments. Particular attention was paid to making sure members who have not previously served on an IS committee as Secretary as well as opening up slots for volunteers that did not hold other positions within the ACRL structure in order to spread out appointments as much as possible. IS website: The Communications Cmte added a new page to pull together archived events held by IS committees in order to share content widely, even if members couldn't attend in real time. https://acrl.ala.org/IS/instruction-tools-resources-2/archived-is-webinars/

Literatures in English Section (LES): Membership Committee Co-chair Meg Meiman worked with committee members Priscilla Finley, Hillary Richardson and Heather Simoneau to recruit library graduate students to LES by emailing listservs of library schools. We sent emails out to listservs in spring 2018. The Membership Committee co-chairs also organized the 2018 ALA Annual section social at the Carousel Bar, which was attended by approximately 20 members. The LES Facebook page currently has 185 followers. The highest number of people reached by the posts this past year was 98 on February 8. It was the post seeking volunteers for ACRL Committees. There are currently 295 followers on the LES Twitter Account. Beginning in April, the LES Virtual Participation Committee conducted a weekly discussions via the LES Twitter account using #LESchat which were well received. The discussion about #23fwthings and innovative ways the ACRL Framework was implemented into classroom instruction on May 23 was seen 742 times on Twitter and had 21 interactions.

Politics, Policy and International Relations Section (PPIRS): The section held social events during the ALA Midwinter (Denver) and Annual (New Orleans) Conferences.

Politics, Policy and International Relations Section (PPIRS): PPIRS Membership Committee chair Erin Ackerman, along with Committee member Sara Arnold-Garza, has led a series of engagement efforts: A social event (co-sponsored with ANSS) at the ALA 2018 Annual Conference in New Orleans Marking the LPSS/PPIRS transition by sending "Thank you for your membership" emails to all new and renewing section members Distributing PPIRS fliers at ALA Conference events

Science and Technology Section (STS): In addition to the other events mentioned, STS uses the Twitter hashtag #acrISTS to engage members.

Women and Gender Studies Section (WGSS): The section maintains a listery for members. At ALA Annual, we have an all-committees meeting, executive committee meeting, and a program/discussion group. We also hold our general membership forum followed by a social. This year our social was held at the Newcomb Archives of Tulane University, resulting in a higher than usual level of participation.

Academic Library Services to Graduate Students Interest Group: Used ALA connect and a listserve as a way of communication, call for proposals, for sharing and soliciting ideas, and for recruiting the incoming convener.

Access Services Interest Group: The Access Services Interest Group has grown exponentially in its two years of existence, and if it continues at its current rate in excess of 300 members, will petition for Section creation at the end of the third year in FY19. This vision and strategy of engagement with ACRL members both inside and outside of Access Services Librarianship has been articulated by the convener and incoming convener consistently with ACRL members, leadership, and conference organizers in greater detail over the past year. As the Framework for Access Services Librarianship is discussed and finalized in FY19, it is the expectation of the Interest Group leadership that engagement with the ACRL community is paramount to ensuring the long-term sustainability and transformation of the Interest Group into an ACRL section.

Digital Badges Interest Group: We updated the DBIG LibGuide with interactive features including a discussion space and collaborative Padlet. We also added digital badge vocabulary and an annotated bibliography of relevant literature on digital badges, which was distributed via the listserv in the fall and spring. We welcomed Laureen Cantwell, Reference and Distance Services Librarian at Colorado Mesa University, as the incoming convener who will start in July.

Library Marketing and Outreach Interest Group: LMOIG's membership continues to grow since it began in 2014. Our official ACRL membership grew 11 percent between 2017 and 2018, from 955 in 2017 to 1,062 in 2018. Our unofficial membership through the Facebook group increased from 3,300 in July 2017 to 4,180 in July of 2018. Of those numbers, 2,600 are active members of the community who post and/or comment.

Residency Interest Group: RIG conducts meetings at every ALA Midwinter and Annual Conference, as well as formal and informal virtual gatherings. The ALA conferences serve as an opportunity for interested parties to meet and share information, both at the meetings themselves and through the informal conversations and social events that may follow. RIG Officers are also present at other ALA events such as the ACRL Leadership Council and ACRL 101 and Membership Meetings, not only to further engage with fellow Communities of Practice Assembly leaders and the discussions concerning ACRL as an association, but also to connect with potential new Interest Group members as well. The informal RIG virtual meeting serves as a mechanism for former and current residents to share their experiences and to discuss opportunities, and even obstacles encountered during the residency program. This is the fourth year that RIG has implemented and administered one formal RIG team (Web Team), and two informal working teams (Program & Proposals and New Members & Mentorship). This structure continues to provide opportunities for more RIG members to actively contribute to the group's continued growth and outreach. Through these efforts, RIG members have gained experience doing committee-level work and have built relationships with other early career and diverse library professionals from a variety of institutions across the nation.

Virtual Worlds Interest Group: See event calendar at

https://communityvirtuallibrary.wordpress.com/events/ Trivia Nights On the 1st and 3rd Wednesday of each month, virtual world librarians share a trivia game on a topic or theme. Art Study Group Artists or anyone interested in virtual world art and new media share ideas and attend virtual world field trips. Literary Study Group In collaboration with ISTE, librarians meet alternately at the CVL Literary Campfire and the ISTE Community Building to discuss short stories and literary topics. Book Discussions On the 4th Friday of each month at 6pm, book discussions are held at the campfire on the beach. Often the titles are science fiction which lead to a discuss on digital culture and technology trends in information

science. Symbolic Modeling Poetry-Art-Music Live events Exploring ways to utilize virtual worlds for creativity that cannot be done in the physical world led to the ACRL group participating in symbolic modeling. See a machinima from our meeting on April 15, 2018 https://youtu.be/eZzS3allSmg Speaker: Marly Milena Topic TITLE: CVL and ISTE Creative Improvisation: Art, Music, and Poetry The ACRL Virtual World Interest Group meetings are usually held on the third Sunday of the month at noon Pacific Time. Meetings are held in Second Life at the Community Virtual Library auditorium in Selby Park (Library Land) https://maps.secondlife.com/secondlife/Cookie/100/107/21

Alabama: Chapter members at academic institutions are encouraged to reach out to new librarians. Information about webinars and other professional opportunities/discussions sponsored by the chapter is pushed out on various listservs and social media. Emails are sent out providing members with information about local chapter committees and opportunities for serving in leadership roles.

California: The CARL Board is currently developing a membership survey that will be distributed to the membership in September.

Delaware Valley: The Chapter maintains a member emailing list, Twitter account, website, and blog to promote member engagement. In the spring, the Chapter's Executive Board voted to create a social committee to provide more opportunities for informal networking events.

Eastern New York: We have a website and use Twitter (mostly during our conference). Each school also has a liaison who is our connection and can relay messages to all colleagues at an institution to help encourage program attendance or even membership growth.

Florida: A. On Thursday, October 19, the FACRL fall board meeting was held at the Sheraton Riverwalk Hotel, Tampa, followed by a reception for members, guests, and sponsors. B. In April 2017, elections were held for FACRL Officer and Board positions. C. On Wednesday, May 23, members of the FACRL Board hosted an FACRL recruitment coffee hour at the Florida Library Association Annual Conference. D. On Thursday, May 24, the FACRL spring board meeting was held during the FLA annual conference, followed by a social hour to welcome new board members and guests.

Georgia: GLA New Members Roundtable held three socials throughout the year. Our Atlanta Emerging Librarians held four social/professional development events throughout the year. Coastal Georgia Library Collaborative (CGLC) also held multiple events during the year.

Greater Metro New York: This year the chapter amended its bylaws in an effort to increase member engagement. Traditionally the same group of approximately 30 people from the larger ACRL/NY membership of around 180 has served on the chapter's Symposium Planning Committee and its Executive Board. Several years running the chapter has run unopposed elections for the elective positions on the Executive Board: Vice-President/President-Elect, Treasurer-Elect and Secretary. In an effort to open things up and increase the engagement of the larger membership, the Executive Board decided to address some language in its bylaws that makes it difficult to run elections with fuller slates of candidates. The sentence in question stipulated that elections would be decided by a simple majority of the membership. This could be interpreted to mean that a candidate would need to secure votes from at least 50% of the membership as a whole in order to be elected. With unopposed elections this has not been an issue, as members were notified that abstentions would be counted as votes in favor. With multiple candidates there is no way to interpret abstentions, such that low voter participation

could prevent definitive elections in a given year. This language was changed to require that a candidate secure a simple majority of votes cast. This is envisioned as the first of several measures to increase member engagement and better representation of our diverse membership on our Symposium Planning Committee and Executive Board.

Idaho: ACRL Idaho has a Facebook and Twitter account

Illinois: Social media posts, email listserv

Indiana: After an 18-month engagement with over 750 members and key stakeholders from all types of libraries and positions, Indiana Library Federation adopted its 5-year Strategic Vision and a 3-year Work Plan (https://www.ilfonline.org/page/strategic) in Aug. 2017. ILF has made significant progress on its work plan since, including member-approved streamlined bylaws and organizational structure, missionaligned operational budget and many projects and partnerships, including with IN Dept of Workforce Development.

lowa: • Granted Legacy Awards to recognize long-time members. • Continue to use of Facebook group, with 132 members. • Continuing to develop our ambassadors program. Ambassadors are charged with promoting ILA/ACRL within their institutions. • Began profiling Executive Board members on blog and social media.

Louisiana: The chapter held a membership drive in the Fall of 2017. This was meant not only to update current member information, but to promote the chapter to potential new members.

Maryland: July 2017 ACRL MD Member Forum, ~40 attendees February 2018 ACRL MD Social - duckpin bowling, ~20 attendees June 2018 - National Gallery of Art and NGA Library tour, ~16 attendees Active use of Facebook, Twitter, and a Wordpress blog to share opportunities and news with membership.

Michigan, MI-ALA: Our individual membership has increased to over 350 individual members. We gained two additional institutional members, and are in active conversations with several more to increase institutional memberships. We have an active association listserv, and our website underwent an extensive redesign to enhance the membership side of our website. We have a robust Facebook and Twitter presence, and engage with members via those platforms.

Michigan, MLA: 3 day annual conference 1 day academic libraries workshop Several topical workshops throughout the year. Mentoring program Leadership Academy twitter, website news, etc.

Minnesota: ARLD regularly updates members with information through email blasts, updates in the MLA RoundUp, and postings on the MLA website. We also have a business meeting at the MLA Annual Conference. ARLD posts regularly to our Facebook and Twitter accounts. ARLD also created a new trifold informational brochure this year. Social Events: Book Arts, Then Happy Hour Starts! A tour of the Minnesota Center for Book Arts followed by happy hour. An ARLD Happy Hour was held the evening before the the annual Minnesota Library Association Conference. An ARLD Happy Hour was held in conjunction with the annual Library Technology conference. An ARLD Happy Hour was held following ARLD Day.

Missouri: Chapter members from across the State met for lunch prior to the MACRL Spring program in Columbia MO in order to network and socialize.

Nebraska: Networking event for member at Nebraska Annual Meeting, Oct. 2017

New England: Now that our website has been overhauled, we are finally equipped to leverage new tools in bolster our recruitment and outreach to our constituents. We currently have several social media accounts as well, but admittedly need a stronger protocol/approach to using these tools.

New Jersey: Social Media Directory of Academic Libraries: An International Directory of Academic Library Social Media has been developed through the Marketing & Outreach Committee. This is truly an international directory that has reached as far as Turkey.

North Dakota/Manitoba: In addition to the actual annual symposium, registrants to the Chapter's annual symposium were invited to join their colleagues at a dinner held on May 13, 2017, the day before the symposium. This event was organized to foster relationship-building with colleagues in the region and to facilitate networking and informal sharing of information. It also allowed members of the executive to meet face to face. Members were also given the opportunity to provide feedback on which ACRL e-learning webcast to offer. The Chapter's website, relocated last year to a new host with additional features, was a big success. Members expressed great pleasure in being able to register for the annual symposium electronically, and enjoyed other features. We also have a Facebook page. The Chapter has a Facebook page and a membership listserv which all members can use to distribute chapter news and local announcements. Some bylaw changes were made. The role of legislative liaison, which appeared to be historical in nature and had not been active for some time – and which would be especially complicated by the international nature of this chapter – was eliminated. This had been discussed at the previous year's annual business meeting and there was no objection to elimination of the role, which does not appear to be standard in any case. A bylaw change was also instituted, after being voted on, to make changes to the Member at Large description. 17 of 32 members voted and all were in favor. Two members of the chapter executive (Vickie Albrecht of the University of Manitoba and Zeineb Yousif of the University of North Dakota) attended the ALA Annual Conference in Chicago. A nomination committee consisting of members Marie Speare (University of Manitoba), Phyllis Bratton (University of Jamestown), and Kristen Borysewicz (University of North Dakota) was struck to fill 4 executive officer vacancies (Chair-elect, Secretary, Member at Large, and Treasurer). A full slate was recruited, with several positions being contested. An election was held. The Executive for next year is as follows: Chair: Beth Twomey, NDSU Chair-Elect: Cody Fullerton, U of Manitoba Past-Chair: Stephanie Walker, UND Member-at-large Sarah Clark, U of Manitoba Treasurer: Devon Olson, UND Health Sciences Secretary: Emma Hill Kepron, U of Winnipeg

Ohio: ALAO communicated with its members via Facebook, Twitter, a blog, the ALAO website, a newsletter and through an email listserv. Graduate students who are currently enrolled in Library and Information Science graduate programs are eligible for free ALAO membership.

Oklahoma: OK-ACRL staffs a booth every April at the Oklahoma Library Association conference in which we give away promotional materials and one free attendance to our annual conference. Additionally OK-ACRL maintains a website and Facebook page.

Oregon: A members meeting was held during the ACRL-Washington/Oregon joint conference October 19-20, 2017. ACRL-Oregon hosted a reception the opening night of the Oregon Library Association annual conference on April 18. Emails were sent to new and renewing ACRL-Oregon members thanking

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them for their membership and providing links to relevant information. ACRL-Oregon maintained an active presence on the chapter's Twitter account.

South Carolina: Regular posts on section activities to SCLA blog and FB page. Ed Rock, past C&U chair and past chair of SCLA was elected to the ACRL Chapters Council at ALA. His term runs July 1, 2017 to June 30, 2018 for Vice-Chair; July 1, 2018 to June 30, 2019 for Chair; July 1, 2019 to June 30, 2020 as Past-Chair. Section leadership participated in January 2018 SCLA Leadership Retreat SCLA Section members presented at the SCLA 2017 annual conference October 11-13, 2017

South Dakota: Our ACRL chapter promoted attendance at annual conference and recruited presenters and poster presentations via email, newsletter, and face-to-face.

Virginia: The Virginia Chapter offered two professional development webinars (sponsored by ACRL elearning) to librarians around the state. Five to six academic libraries from around the state hosted viewings of each webinar to librarians in their community: ● Fighting Fake News With the ACRL Framework ● Low Morale Experience of Academic Librarians:ACRL e-Learning

Western Pennsylvania/West Virginia: Completed social media campaigns on twitter. Provided a professional development committee, mentorship program, and resume reviews.

Wisconsin: We have a Facebook account that is specifically focused on the conference. At the conference we hosted several social events including a new members happy hour and "dine around" dinner options.



The following reports can be found on ALA Connect.

ACRL Plan for Excellence Implementation Reports – Sorted by Unit

Sections

Anthropology and Sociology Section (ANSS)

College Libraries Section (CLS)

Community and Junior College Libraries Section (CJCLS)

Digital Scholarship Section (DSS)

Distance Learning Section (DLS)

Education and Behavioral Sciences Section (EBSS)

European Studies Section (ESS)

Instruction Section (IS)

Literatures in English Section (LES)

Politics, Policy and International Relations Section (PPIRS)

Science and Technology Section (STS)

Rare Books and Manuscripts Section (RBMS)

Science and Technology Section (STS)

Women and Gender Studies Section (WGSS)

Interest Groups

Academic Library Services to Graduate Students Interest Group

Access Services Interest Group

Digital Badges Interest Group

Digital Scholarship Centers Interest Group

History Librarians Interest Group

Library Marketing and Outreach Interest Group

Residency Interest Group

Universal Accessibility Interest Group

Virtual Worlds Interest Group

Chapters

Alabama

California

Delaware Valley

Eastern New York

Florida

Georgia

Greater Metro New York

Idaho

Illinois

Indiana

Iowa

Kansas

Kentucky

Louisiana

Maryland

Michigan, MI-ALA

Michigan, MLA

Minnesota

Missouri

Nebraska

New England

New Jersey

New Mexico

North Dakota/Manitoba

Ohio

Oklahoma

Oregon

South Carolina

South Dakota

Virginia

Western Pennsylvania/West Virginia

Wisconsin



Division-level Committee Year-end Report and Work Plan Template

Committee

Visit the ACRL Directory of Leadership to find your charge.

Committee Name: Value of Academic Libraries

Charge/Tasks: To oversee and coordinate ACRL's Value of Academic Libraries Initiative as described in the strategic plan; work with the ACRL Board and other ACRL units in creating a comprehensive effort including coalition building, professional development, publications, research, advocacy, and consultation services and in developing the ACRL Value website; and monitor and assess the effectiveness of the Value Initiative.

Committee leadership

Visit the <u>ACRL Directory of Leadership</u> to find your committee roster. Click the "Next Year" link to view 2017–18 roster information.

- Current Chair (2017–18): Alan Carbery
- Incoming Chair (2018–19): Holly Mercer
- Incoming Vice-chair (2018–19): Jill Becker
- Incoming Board Liaison (2018–19): Emily Daly
- Staff Liaison: Sara Goek, Kara Malenfant

Submission information

Year-end report written by: Alan Carbery

Work plan submitted by: Holly Mercer

2017-18 Year-end Committee Report

This report will be included in the Committee's official record of activities maintained by the ACRL staff.

What were the major projects/activities accomplished by your committee in the 2017–18 membership year?

- Publication of the ACRL/OCLC action-oriented research agenda, and the accompanying data visualization component in September 2017
- Promotion of Academic Library Impact: improving practice and essential areas to research (Research Agenda)
- Awarding of mini-research grants (\$3000 each, to value of \$20,000 total) to carry out research based on the outcomes of the research agenda
- Update of the Visualizing Academic Library Impact: The ACRL/OCLC Literature Analysis to include 2017 publications.
- Travel Scholarships (\$10,000 total) for library workers to share research findings on academic library impact projects at higher education conferences
- In-depth conversation around the potential re-branding of the VAL committee (which was subsequently deferred).

How did you go about getting them done?

- Carried out a specific conference call with new committee members in July 2017, outlining the on-going work of the VAL committee, and encouraging them to engage in existing and upcoming projects
- Operated a "sub-group" approach to the entire committee's work-plan assigning committee members to specific projects
- Routine check-in during our committee calls every six weeks

What were the relevant results for your projects?

- Webinar on the publication of the Academic Library Impact research agenda delivered in Fall 2017
- Research Agenda prompted through the Update on VAL initiative at Midwinter 2017
- Abstract submitted and round-table discussion delivered at the AAC&U conference in January 2018
- Abstract submitted for EDUCAUSE conference in November 2018
- Workshop proposal submitted and invitation received for Library Assessment Conference in Fall 2018
- Webinar delivered on the research grants application process
- Application process for awarding of research grants devised, call placed, and eight grants awarded.
- 51 publication citations from 2017 added to the Visualizing Academic Library Impact Literature Dashboard.
- Application process for awarding of travel scholarships, call placed, and six travel scholarships awarded
- Application for scholarships for 2018 opened

Are any 2017-18 projects ongoing?

- Advocacy Toolkit through LibGuides in development
- Marketing/Promotion around the usage of the research agenda
- Programming showcasing libraries contributions towards equity, access, diversity & inclusion.

What worked well?

- The "sub-group" approach seemed to work well (as long as there was an assigned or natural leader for each sub-group assuming responsibility for progressing the work)
- The committee members appear engaged and enthused in the current work-plan and projects, as well as the overall VAL initiative
- Many of our achievements are as a direct result of the support and leadership of the Mellon/ACLS Public Fellow.

What could have worked better?

The resignation of the vice-chair early in the year, and the subsequent challenge in finding a replacement was difficult. This meant that we haven't achieved all of the intended outcomes from the 2017-2018 work-plan. The Board may wish to consider succession planning as it relates to the goal area committees.

The absence of a vice-chair for most of year meant that I was the touchpoint for all VAL committee subgroups. Naturally, as a result of this, some subgroups lacked the high-touch leadership they needed to move their projects along.

How has the work/activities of your committee demonstrated commitment to equity, diversity, and inclusion, within or beyond ACRL?

- Committee membership expanded to include a more diverse population (including community colleges)
- Awarding of research grants included a diverse pool of recipients (geographic, classification, etc)
- Awarding of travel scholarships allowed members to travel to higher education conferences the application process told us the importance of this funding in an otherwise cost-prohibitive environment.
- The committee is currently developing programming to demonstrate how academic libraries contribute towards the success of their institutions advance issues of equity, access, diversity and inclusion.

What do you wish someone had told you before starting work on this committee? $\ensuremath{\mathsf{N/A}}$

What made this work most rewarding (observations/comments/accolades)?

I found the publication of the research agenda particularly rewarding this year – this is a project that has been years in preparation – since around the time I joined the VAL Committee. I am also extremely grateful to the Board for their approval of the funds to support the research grants and the travel scholarships initiatives. It's incredibly rewarding to lead the VAL committee as they granted numerous scholarships and research grants related to the impact of academic libraries.

Any other comments, recommendations, or suggestions?

I'm extremely grateful to Kara Malenfant, Staff Liaison, and Emily Daly, Board Liaison for their support right throughout the year. Their encouragement and guidance, particularly after the resignation of the vice-chair, helped ensure that the committee continued to function in a productive manner. I am particularly grateful for the stellar efforts of Sara Goek, ACRL Program Manager and Mellon/ACLS Public Fellow. Sara's work this year has been invaluable to the VAL initiative, and she was instrumental in much of the success of our committee this year.

2018-19 Committee Work Plan

Note: Each activity/project should be reported using the below form. Copy and paste the form as many times as needed to detail each activity/project. Plans should be **Specific, Measurable, Attainable, Realistic, and Timely or SMART).**

1. Activity/Project Name

Promote the Research Agenda.

Brief Description

The ACRL/OCLC action-oriented agenda, along with the accompanying data visualization component, was published in 2017. The VAL committee should plan and carry out a targeted promotional campaign to engage librarians with the research agenda.

Goal Area

Select the *single* best connection to the <u>ACRL Plan for Excellence</u> and provide a brief sentence connecting your project to the Plan.

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	☑ 1. Cultivate research opportunities that communicate the impact of academic and research libraries in the higher education
е	environment.
	☐ 2. Promote the impact and value of academic and research libraries to the higher education community.
	☐ 3. Expand professional development opportunities for assessment and advocacy of the contributions towards impact of icademic libraries.
	☐ 4. Support libraries in articulating their role in advancing issues of equity, access, diversity, and inclusion in higher education.
□ Der	nonstrating Commitment to Equity, Diversity, and Inclusion within ACRL and/or the Profession.
□ Ena	bling Programs and Services (education, advocacy, publications, or member engagement)

Brief sentence connecting your project to the Plan

The research agenda addresses VAL's first objective to articulate a research agenda that communicates the value of academic and research libraries, and is integral to VAL's overall goal of libraries demonstrating their alignment with, and impact on institutional outcomes.

Timeline

□ continuous project assigned in charge	
☐ short-term project that will be completed this membership year	
\square multi-year project continuing past this membership year (expected completion date: $_$)

Note: Multi-year, strategic goal-area projects are tracked in a multi-year planning grid. Expect your staff liaison to follow-up with questions to add this project to ACRL's multi-year planning grid which is reviewed by the Board at its fall Strategic Planning Session and referenced for budget preparation.

Outline the steps and intermediate deadlines planned to complete the project.

(add rows as needed)

			Resources Needed (e.g.,
Specific Action	Due Date	Party Responsible	financial*, technology,
			staff support)

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Deliver practicum at Library Assessment Conference in Houston, Dec. 2018	December 2018	Holly Mercer, Lynn Connaway, Jill Becker	Travel, conference attendance and accommodation reimbursement
Promote the research agenda by developing and delivering a "getting started with" or "engaging with" the research agenda through a webinar, ACRL insider, or other ACRL venues as appropriate	Fall 2018	new VAL working group	Access to ACRL's webinar hosting software Logistical support from ACRL Insider
Highlight innovative projects based on the research agenda	June 2019	VAL members	

Assessment: How will success be measured?

Acceptance and delivery of presentations/workshops at conferences. Identification of new research projects based on the agenda. Metrics regarding number of viewers of webinars, assessment of those programs.

2. Activity/Project Name

Library impact grants for practitioner-scholars

Brief Description

Library impact grants for practitioner-scholars to conduct research based on questions identified by the action-oriented research agenda.

Goal Area

Select the *single* best connection to the <u>ACRL Plan for Excellence</u> and provide a brief sentence connecting your project to the Plan.

- ☑ 1. Cultivate research opportunities that communicate the impact of academic and research libraries in the higher education environment.
- ☑ 2. Promote the impact and value of academic and research libraries to the higher education community.
- \square 3. Expand professional development opportunities for assessment and advocacy of the contributions towards impact of academic libraries.
- ☐ 4. Support libraries in articulating their role in advancing issues of equity, access, diversity, and inclusion in higher education.
- ☐ Demonstrating Commitment to Equity, Diversity, and Inclusion within ACRL and/or the Profession.
- ☐ Enabling Programs and Services (education, advocacy, publications, or member engagement)

Brief sentence connecting your project to the Plan

Providing supports to practitioners to carry out research on the main themes identified in the research agenda allows practitioners to explore how they impact institutional outcomes.

Timeline

☐ continuous project assigned in charge	
☑ short-term project that will be completed this membership year	
\square multi-year project continuing past this membership year (expected completion date:)

Note: Multi-year, strategic goal-area projects are tracked in a multi-year planning grid. Expect your staff liaison to follow-up with questions to add this project to ACRL's multi-year planning grid which is reviewed by the Board at its fall Strategic Planning Session and referenced for budget preparation.

Outline the steps and intermediate deadlines planned to complete the project.

(add rows as needed)

Specific Action	Due Date	Party Responsible	Resources Needed (e.g., financial*, technology, staff support)
Plan ACRL 2019 session for grant recipients to share their work	Fall 2018	VAL working group & grant recipients	Logistical support

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Identify and review	Spring 2019	VAL working group (Jill	Logistical support from
applicants for FY2020		Becker, Jill Sodt, Shawn	Mellon/ACLS Fellow, Sara
grants based on criteria		Calhoun, Holt Zaugg)	Goek
and procedures developed			E saltas for activity and a
in 2017-18.			Funding for mini-grants
Target outreach to	Spring 2019	VAL working group	
community college			
librarians to encourage			
their applications			
Develop a special issue of	Summer 2019	VAL Chair and VAL Vice-	Support from C&RL editor,
C&RL with contributions		chair, with members of a	Wendi Kaspar
from FY2019 grant		VAL Research Grants	
recipients		working group	
Highlight innovative	2019-2020	VAL working group	
projects based on the	2013 2020	17.12 11.01.11.11.12 PLOUP	
research agenda			
research agenua			

Assessment: How will success be measured?

Number of applicants seeking funding; increased participation from community college librarians; publication of research outcomes in C&RL

3. Activity/Project Name

Updating the Research Agenda Dashboard/Data Visualization Component

Brief Description

The ACRL/OCLC research agenda includes a data visualization component that practitioners may use to identify and visualize key trends in literature regarding the value of academic libraries.

Goal Area

Select the *single* best connection to the <u>ACRL Plan for Excellence</u> and provide a brief sentence connecting your project to the Plan.

X	Val	lue	οf	Δca	der	nic	Lihr	aries
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academic libraries.	
academic libraries.	dvancing issues of equity, access, diversity, and inclusion in higher education.
	ties for assessment and advocacy of the contributions towards impact of
\square 2. Promote the impact and value of academic a	nd research libraries to the higher education community.
environment.	unicate the impact of academic and research libraries in the higher education

Brief sentence connecting your project to the Plan

Keeping the literature up-to-date in the visualization component will allow practitioners to make use of the research agenda as an important tool for exploring how their libraries affect institutional outcomes.

Timeline

□ continuous project assigned in charge	
\square short-term project that will be completed this membership year	
\square multi-year project continuing past this membership year (expected completion date: $_$)

Note: Multi-year, strategic goal-area projects are tracked in a multi-year planning grid. Expect your staff liaison to follow-up with questions to add this project to ACRL's multi-year planning grid which is reviewed by the Board at its fall Strategic Planning Session and referenced for budget preparation.

Outline the steps and intermediate deadlines planned to complete the project.

Specific Action	Due Date	Party Responsible	Resources Needed (e.g., financial*, technology, staff support)
Update content within the data visualization component through 2018	June 2019	VAL working group	Administrator privileges to the data visualization component
Promote, monitor use and impact of the data visualization component	Spring 2019	VAL working group	

Assessment: How will success be measured?

Addition of citations through 2018; Cost/benefit or development of assessment measures for adding citations to the visualization tool;

4. Activity/Project Name

Empower local academic library advocacy

Brief Description

Develop a spectrum of resources that supports academic librarians in conducting advocacy efforts built on Value concepts and research findings.

Goal Area

Select the *single* best connection to the <u>ACRL Plan for Excellence</u> and provide a brief sentence connecting your project to the Plan.

☑ Value of Academic Libraries	
\square 1. Cultivate research opportunities that comenvironment.	municate the impact of academic and research libraries in the higher education
oxtimes 2. Promote the impact and value of academ	ic and research libraries to the higher education community.
☐ 3. Expand professional development opporte academic libraries.	unities for assessment and advocacy of the contributions towards impact of
\square 4. Support libraries in articulating their role i	in advancing issues of equity, access, diversity, and inclusion in higher education
☐ Demonstrating Commitment to Equity, Diversity	, and Inclusion within ACRL and/or the Profession.
oxtimes Enabling Programs and Services (education, advo	ocacy, publications, or member engagement)

Brief sentence connecting your project to the Plan

The research cultivated by the Value committee's efforts needs to be activated into advocacy for academic libraries, both at the national level and local level. This project develops resources to empower librarians to conduct Value-based advocacy efforts at their institutions.

Timeline

🗵 continuous project assigned in charge	
\square short-term project that will be completed this membership year	
\square multi-year project continuing past this membership year (expected completion date:)

Note: Multi-year, strategic goal-area projects are tracked in a multi-year planning grid. Expect your staff liaison to follow-up with questions to add this project to ACRL's multi-year planning grid which is reviewed by the Board at its fall Strategic Planning Session and referenced for budget preparation.

Outline the steps and intermediate deadlines planned to complete the project. (add rows as needed)

Specific Action	Due Date	Party Responsible	Resources Needed (e.g., financial*, technology, staff support)
Re-evaluate, and sunset if warranted, the Valuography given the data visualization component of the Research Agenda,	December 2018	VAL working group	

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Develop a toolkit of advocacy resources including, but not limited to:	Spring 2019	VAL working	access to
LibGuide page		group	update
			LibGuide,
Refresh of existing website			website
(http://www.ala.org/acrl/issues/value/valueofacademiclibrariestool			
<u>kit</u>)			Funds for
			printing
Poster kits			posters,
Statement of Academic Library Value			graphic
Statement of Academic Library value			design
Create and implement a Value-based advocacy marketing and	Spring 2019	VAL working	
communication plan		group	

Assessment: How will success be measured?

Usage of online resources; reach of advocacy tools

5. Activity/Project Name

Travel grants

Brief Description

Directly engage in advocacy efforts built on Value concepts and research findings at the national level by providing financial support for librarians to present on their work at higher education conferences.

Goal Area

Select the *single* best connection to the <u>ACRL Plan for Excellence</u> and provide a brief sentence connecting your project to the Plan.

☑ Value of Academic Libraries	
\Box 1. Cultivate research opportunities that communicate the impact of academic and research libraries in the hi environment.	gher education
oxtimes 2. Promote the impact and value of academic and research libraries to the higher education community.	
☐ 3. Expand professional development opportunities for assessment and advocacy of the contributions toward academic libraries.	s impact of
☐ 4. Support libraries in articulating their role in advancing issues of equity, access, diversity, and inclusion in h	gher education
☐ Demonstrating Commitment to Equity, Diversity, and Inclusion within ACRL and/or the Profession.	
☐ Enabling Programs and Services (education, advocacy, publications, or member engagement)	
Brief sentence connecting your project to the Plan	
This project enables the VAL committee to empower practitioner-librarians to engage in national advocace	, and to share
their successes with the higher education community.	
Timeline	
⊠ continuous project assigned in charge	
☐ short-term project that will be completed this membership year	
☐ multi-year project continuing past this membership year (expected completion date:	

Note: Multi-year, strategic goal-area projects are tracked in a multi-year planning grid. Expect your staff liaison to follow-up with questions to add this project to ACRL's multi-year planning grid which is reviewed by the Board at its fall Strategic Planning Session and referenced for budget preparation.

Outline the steps and intermediate deadlines planned to complete the project. (add rows as needed)

Specific Action	Due Date	Party Responsible	Resources Needed (e.g., financial*, technology, staff support)
Solicit applications for travel grants to practitioners to share research findings based on key outcomes of the research agenda with	Fall 2018 and Spring 2019	VAL working group	Logistical support

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targeted higher education associations			
Identify and review applicants for travel grants	Fall and Spring 2019	VAL working group	Logistical support
Request travel grant recipients share their experiences via VAL blog or other medium	Spring 2019	VAL chair and vice-chair	
Explore the feasibility of continuing to offer the ACRL/VAL travel scholarships in 2019-20	Spring 2019	VAL Chair and Vice-Chair, with members of working group	Logistical support from staff May need additional funds from the Board to continue

Assessment: How will success be measured?

Number of applicants, number of grants awarded, diversity of presentation venues, quality of research

6. Activity/Project Name

Programming showcasing libraries' contributions to equity, access, diversity, and inclusion in higher education

Brief Description

Develop a suite of programming opportunities including, but not limited to, webinars, blog posts and conference presentations, showcasing initiatives that libraries have undertaken to advance issues of equity, access, diversity, and inclusion.

Goal Area

Select the *single* best connection to the <u>ACRL Plan for Excellence</u> and provide a brief sentence connecting your project to the Plan.

☑ Value of Academic Libraries
\Box 1. Cultivate research opportunities that communicate the impact of academic and research libraries in the higher education environment.
\square 2. Promote the impact and value of academic and research libraries to the higher education community.
\square 3. Expand professional development opportunities for assessment and advocacy of the contributions towards impact of academic libraries.
☑ 4. Support libraries in articulating their role in advancing issues of equity, access, diversity, and inclusion in higher education
☑ Demonstrating Commitment to Equity, Diversity, and Inclusion within ACRL and/or the Profession.
☐ Enabling Programs and Services (education, advocacy, publications, or member engagement)
Brief sentence connecting your project to the Plan
Developing programming will highlight existing initiatives that some libraries are carrying out, while also serving as a case study for libraries wishing to engage in this value-type research. This project directly connects to the fourth objective of the VAL goal area.
Γimeline

Note: Multi-year, strategic goal-area projects are tracked in a multi-year planning grid. Expect your staff liaison to follow-up with questions to add this project to ACRL's multi-year planning grid which is reviewed by the Board at its fall Strategic Planning Session

Outline the steps and intermediate deadlines planned to complete the project.

(add rows as needed)

☑ continuous project assigned in charge

and referenced for budget preparation.

☐ short-term project that will be completed this membership year

☐ multi-year project continuing past this membership year (expected completion date:

ACRL SPOS18 Doc 29.0

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Specific Action	Due Date	Party Responsible	Resources Needed (e.g., financial*, technology, staff support)
Form and charge a VAL committee working group with developing a plan for programming within the 12-month time frame.	August 2018	Holly Mercer	
Plan, solicit, and select presentations that showcase what libraries are doing to promote their institutions' EDI goals	Midwinter 2019	VAL working group	
Organize and deliver a series of e-learning/webinar programs, as identified in the previous specific action	Spring 2019	VAL working group	Logistical/technical support (e.g., promotion, registration, Zoom, etc.)
Brainstorm and ideate a multi-year programming development program	June 2019	VAL working group	May need to request funds for future years

Assessment: How will success be measured?

Number of registrations, feedback on the series; creation of programming



Division-level Committee Year-end Report and Work Plan Template

Committee

Visit the ACRL Directory of Leadership to find your charge.

Committee Name: Student Learning and Information Literacy

Charge/Tasks:

To oversee and implement ACRL's Student Learning Initiative as described in the strategic plan. Work with the ACRL Board and other ACRL units to create a comprehensive approach to student learning and information literacy efforts including a) promote and facilitate professional development, publications, research, and advocacy related to information literacy and student learning; b) support the development of the ACRL student learning/information literacy website; and c) monitor and assess the effectiveness of the ACRL Student Learning Initiative.

Committee leadership

Visit the <u>ACRL Directory of Leadership</u> to find your committee roster. Click the "Next Year" link to view 2017–18 roster information.

- Current Chair (2017–18): Elizabeth Berman
- Incoming Chair (2018–19): Elizabeth Galoozis
- Incoming Vice-chair (2018–19): Nicole Brown
- Incoming Board Liaison (2018–19): Caroline Fuchs
- Staff Liaison: Mary Jane Petrowski

Submission information

Year-end report written by: Elizabeth Berman & Elizabeth Galoozis

Work plan submitted by: Elizabeth Galoozis & Nicole Brown

2017-18 Year-end Committee Report

This report will be included in the Committee's official record of activities maintained by the ACRL staff.

What were the major projects/activities accomplished by your committee in the 2017–18 membership year?

A brief bulleted list is suggested here; reference 2017–18 work plan projects

- Three in-person discussions at ALA conferences:
 - ALA Midwinter Discussion Forum, Not Just Another Frame: Diversity, Equity, and Inclusion in Information Literacy & Instructional Design
 - o ALA Annual Discussion Forum, Where Do We Stand? The Accreditation Process and the Library
 - o ALA Annual Framework Update, ACRL Striking the Match for Inspired Teaching
- Engaging with the ACRL Framework: A Catalyst for Exploring and Expanding Our Teaching Practices, ACRL elearning course in summer 2017; being offered again summer 2018.
- ACRL Webcast: Intersections of Information Literacy and Scholarly Communications for Open Access Week 2017
- ACRL Webinar: A Discussion of Trilateral Collaborations between the Library, Writing Center, and Composition Instructors presented on May 7, 2018.
- Support of two ACRL roadshows: Engaging with the ACRL Framework and Intersections of Information Literacy and Scholarly Communications.
- Six C&RL News Framework columns published:
 - Fisher, Zoe. "Facing the frames: Using the Framework as a guide for a credit-bearing information literacy course" College & Research Libraries News [Online], Volume 78 Number 7 (July/August 2017). https://doi.org/10.5860/crln.78.7.354
 - Berg, Bara. "Enhancing the assignment. Using the Framework for student learning and assessment in a Business Law class" College & Research Libraries News [Online], Volume 78 Number 9 (October 2017). https://doi.org/10.5860/crln.78.9.502
 - Russell, John, and Hensley, Merinda. "Beyond buttonology: Digital humanities, digital pedagogy, and the ACRL Framework" *College & Research Libraries News* [Online], Volume 78 Number 11 (December 2017). https://doi.org/10.5860/crln.78.11.588
 - Baer, Andrea. "It's all relative? Post-truth rhetoric, relativism, and teaching on "Authority as Constructed and Contextual" "College & Research Libraries News [Online], Volume 79 Number 2 (February 2018). https://doi.org/10.5860/crln.79.2.72
 - Baggett, Kevin, Connell, Virginia, and Thome, Allie. "Frame by frame: Using the ACRL Framework for Information Literacy to create a library assessment plan" *College & Research Libraries News* [Online], Volume 79 Number 4 (April 2018). https://doi.org/10.5860/crln.79.4.186
 - Van Hoye, Allan. "Who's left out of the conversation: The problem of marginalizing students in the scholarly conversation" *College & Research Libraries News* [Online], Volume 79 Number 6 (June 2018). https://doi.org/10.5860/crln.79.6.318

- Published interview with Carolyn Radcliff, Director of the Advisory Board for the Threshold
 Achievement Test for Information Literacy, published on the Framework WordPress website on May
 30, 2018: https://acrl.ala.org/framework/?p=412
- Ongoing support for the ACRL Sandbox, the ACRL Framework Toolkit, and the acriframe listserv.
- "Keeping Up With... Universal Design for Learning" and "Keeping Up With... Accreditation" both to be published in *C&RL News* in Fall 2018.
- The Grounded Instruction Librarian: Participating in the Scholarship of Teaching and Learning submitted for publication by ACRL.
- Improved collaborative relationships with several ACRL committees, including ACRL Standards
 Committee, ACRL Information Literacy Frameworks and Standards Committee, Instruction Section
 Publications Committee, and ACRL Immersion Program Committee.

How did you go about getting them done?

A brief bulleted list is suggested (correspond bullets to those above)

The committee was organized into 8 project teams, who were each responsible for achieving committee objectives related to their project areas. These project teams include:

- Diversity and Inclusion in Instructional Design
- Framework Community
- Framework Professional Development
- Information Literacy Self-Studies for Institutional Accreditation
- Intersections of Information Literacy and Scholarly Communication
- Scholarship of Teaching and Learning
- Student Learning and Engagement
- Website Development

What were the relevant results for your projects?

A brief bulleted list is suggested that includes assessment as appropriate (correspond bullets to those above). Be as specific as possible. For example: 300 proposals/applications reviewed, 32 selected; Developed and conducted three podcasts (list podcast titles, speakers, etc.) Reviewed ten standards and guidelines (list titles)

- Over 100 attendees for the three in-person forums at ALA Midwinter and ALA Annual.
- 34 attendees for ACRL eLearning course, Engaging with the ACRL Framework: A Catalyst for Exploring and Expanding Our Teaching Practices.
- 206 registered attendees for webinar A Discussion of Trilateral Collaborations between the Library, Writing Center, and Composition Instructors.
- 13 in-person and 1 online *Engaging with the ACRL Framework* roadshows complete, 4 more currently scheduled; overwhelmingly positive feedback from attendees.
- 7 in-person Intersections of Information Literacy and Scholarly Communications roadshows complete.
- 8,550 article views of the six published Perspectives on the Framework columns.

- 73 additional resources have been added to the ACRL Sandbox, and 92 new contributor accounts have been created. A new resource type, White Paper, has been added.
- ACRL Framework Toolkit is receiving an average of 1,100 visits per month.
- 2,079 subscribers to the acrlframe listserv.
- 51 authors submitted 24 chapters for *The Grounded Instruction Librarian: Participating in the Scholarship of Teaching and Learning.*
- 22,829 views of Student Learning and Information Literacy LibGuides.

Are any 2017-18 projects ongoing?

A brief bulleted list is suggested here

- SLILC website redesign.
- ACRL book proposal on Diversity, Equity & Inclusion in Instructional Design.
- Developing a communication and outreach plan for the ACRL Sandbox.
- C&RL News bi-monthly Framework column.
- Support for two ACRL Roadshows, especially around publicity and marketing: *Engaging with the ACRL Framework* and *Intersections of Information Literacy and Scholarly Communications*.
- Creation of an *Intersections* LibGuide that includes sections for roadshow's major areas of focus as well as sample learning experiences.
- Ongoing conversation about relationship between missions and work of SLILC and the Instruction Section.

What worked well?

A brief bulleted list is suggested here

- Project Team structure with assigned team leads is ideal to disperse the work across the committee and ensure management and accountability for the projects.
- Assigning either the Chair or Vice Chair as the official liaison to each of the project teams allowed for clear lines of communication.
- Having a cross-cutting topic, the website design, unified the committee in terms of working towards a committee goal.
- Successful integration of the Framework Advisory Board into SLILC.

What could have worked better?

A brief bulleted list is suggested here

- More consistent communication and support from ACRL Board Liaison and ACRL Staff Liaison.
- Two of the project teams were understaffed based on the number of projects articulated in the workloads.
- Two of the project teams were unable move the work of their projects forward largely due to competing commitments elsewhere.

ACRL SPOS18 Doc 30.0

How has the work/activities of your committee demonstrated commitment to equity, diversity, and inclusion, within or beyond ACRL?

A brief bulleted list is suggested here

• Diversity and Inclusion in Instructional Design project team held a discussion forum at ALA Midwinter, Not Just Another Frame: Diversity, Equity, and Inclusion in Information Literacy & Instructional Design, and are planning on a book proposal on this topic.

2018–19 Committee Work Plan Student Learning & Information Literacy

Note: Each activity/project should be reported using the below form. Copy and paste the form as many times as needed to detail each activity/project. Plans should be **Specific, Measurable, Attainable, Realistic, and Timely or SMART).**

Activity/Project Name

Framework Resources

Brief Description

Support and sustain established resources (sandbox, discussion list, column, toolkit, news) for engaging with the ACRL *Framework for Information Literacy*. [Components of this project map to previous groups: Framework Community and Framework Professional Development]

Goal Area

Select the *single* best connection to the <u>ACRL Plan for Excellence</u> and provide a brief sentence connecting your project to the Plan.

	tudent Learning . Challenge librarians and libraries to engage learners with information literacy skills in a way that is
	scalable and sustainable.
□ 2	. Increase the impact of information literacy by forming strategic partnerships with relevant higher education organizations.
□ 3	. Build capacity for librarians to collaborate with faculty and other campus partners in instructional and curricular design and delivery that will integrate information literacy into student learning.
□ 4	. Articulate and advocate for the role of librarians in setting, achieving, and measuring institutional student learning outcomes.
	emonstrating Commitment to Equity, Diversity, and Inclusion within ACRL and/or the Profession.
	emonstrating Commitment to Equity, Diversity, and Inclusion within ACRL and/or the Profession. nabling Programs and Services (education, advocacy, publications, or member engagement)
□ E Bri	nabling Programs and Services (education, advocacy, publications, or member engagement) ef sentence connecting your project to the Plan
□ E Brid The	nabling Programs and Services (education, advocacy, publications, or member engagement) ef sentence connecting your project to the Plan resources in the Sandbox, discussion list, and toolkit support engagement and integration o
Brid The	nabling Programs and Services (education, advocacy, publications, or member engagement) ef sentence connecting your project to the Plan resources in the Sandbox, discussion list, and toolkit support engagement and integration o
Brid The the	nabling Programs and Services (education, advocacy, publications, or member engagement) ef sentence connecting your project to the Plan resources in the Sandbox, discussion list, and toolkit support engagement and integration o Framework on all levels — from specific learning activities to information literacy programs;
Brid The the the	resources in the Sandbox, discussion list, and toolkit support engagement and integration of Framework on all levels — from specific learning activities to information literacy programs; news and column showcase inspiring examples of real world solutions.
□ E Brie The the the Tin ontir	resources in the Sandbox, discussion list, and toolkit support engagement and integration of Framework on all levels — from specific learning activities to information literacy programs; news and column showcase inspiring examples of real world solutions.

Outline the steps and intermediate deadlines planned to complete the project.

Specific Action	Due Date	Party Responsible	Resources Needed (e.g., financial*, technology, staff support)
Sandbox Invite specific Sandbox submissions in identified gap areas from sections, communities of interest, etc., including 2019 ACRL conference presentations Analyze use of Sandbox (e.g. number of users, downloads, coverage and gaps, etc) and provide short reports.	Midwinter 2019 Midwinter & Annual 2019	Framework Resources Project Team; Instruction Section; Frameworks and Standards Committee; ACRL sections	Ellysa Cahoy and Donna Witek developed a communication and outreach plan to each out to leaders in ACRL sections.
Discussion List Moderate ACRLFRAME discussion list: http://lists.ala.org/sympa/info/acrlframe Analyze use of ACRLFRAME (e.g. number of subscribers; trends and issues in threads) and provide short reports	Ongoing Midwinter & Annual 2019	Framework Resources Project Team	Information from Ray Pun who did this for 2017-2018.
Toolkit Assess the usage and content of the ACRL Framework for IL Toolkit Make recommendations for improvement based on findings.	Midwinter 2019 Annual 2019	Framework Resources Project Team	Sara Miller developed a Toolkit Sustainability Plan during the 2017-2018 year; Mary Jane Petrowski (for stats, logins, etc.)
Framework Column Solicit calls for submission and select proposals; work with authors as copy editor on bi-monthly C&RL News Framework column.	Ongoing - Bimonthly schedule	Framework Resources Project Team	Consult with David Free (ACRL Editor); Consult with previous editor, Sara Holder, about process

Framework News Website Conduct interviews and publish to Framework News website	Ongoing	Framework Resources Project Team; Consult with Discoverability of Resources Committee	David Free (as highest level admin on the Framework website)
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Assessment: How will success be measured?

Assess the impact of the entire project rather than the specific actions listed above. A sentence or brief paragraph is adequate. (e.g., what indicators will be used, what tools will be used to collect data, and what targets will indicate success)

Usage statistics of Sandbox, Toolkit, Framework News website; ACRLFRAME subscribers and topics; published bi-monthly columns in *C&RL News*.

Activity/Project Name

Conference Program Planning

Brief Description

Work in tandem with other groups to develop SLILC-sponsored programming and events for Annual and Midwinter Conferences and potentially for the biannual ACRL Conference.

Goal Area

Select the *single* best connection to the <u>ACRL Plan for Excellence</u> and provide a brief sentence connecting your project to the Plan.

	enge librarians and libraries to engage learners with information literacy skills in a way that is
scala	<mark>ble and sustainable.</mark>
	ase the impact of information literacy by forming strategic partnerships with relevant higher ration organizations.
	capacity for librarians to collaborate with faculty and other campus partners in instructional curricular design and delivery that will integrate information literacy into student learning.
	ulate and advocate for the role of librarians in setting, achieving, and measuring institutional ent learning outcomes.
	strating Commitment to Equity, Diversity, and Inclusion within ACRL and/or the Profession g Programs and Services (education, advocacy, publications, or member engagement)
☐ Enablin	
☐ Enabling Brief ser Having a	g Programs and Services (education, advocacy, publications, or member engagement)
☐ Enabling Brief ser Having a	ntence connecting your project to the Plan dedicated group to plan conference programming will ensure relevant and timely ming that will promote meaningful engagement with ACRL members.
☐ Enabling Brief ser Having a programm Timelin	ntence connecting your project to the Plan dedicated group to plan conference programming will ensure relevant and timely ming that will promote meaningful engagement with ACRL members.
□ Enablin Brief ser Having a programe Timelin ontinuous	ntence connecting your project to the Plan dedicated group to plan conference programming will ensure relevant and timely ming that will promote meaningful engagement with ACRL members.

Outline the steps and intermediate deadlines planned to complete the project.

Specific Action	Due Date	Party Responsible	Resources Needed (e.g., financial*, technology, staff support)
Develop SLILC Forum and "Framework Professional Development" sessions for ALA Midwinter 2019	Fall 2018	Conference Program Planning Project Team, Chairs	Deadlines from Elois Sharpe

Develop SLILC Forum and "Framework Professional Development" sessions for ALA Annual 2019	Late 2018	Conference Program Planning Project Team, Chairs	Deadlines from Elois Sharpe
Brainstorm SLILC Forum and "Framework Professional Development" sessions for ALA Midwinter 2020	Gather feedback at Annual meeting in 2019	Conference Program Planning Project Team, Chairs	Deadlines from Elois Sharpe
Explore feasibility for SLILC session at ACRL 2019.	Midwinter 2019	Conference Program Planning Project Team, Chairs	
Create "Conference Checklists" to document the process of putting on conference programs for SLILC.	Midwinter 2019, share draft	Conference Program Planning Project Team, Chairs; Coordinate with Discoverability of Committee Resources Team	ACRL staff

Assessment: How will success be measured?

Program attendance and participant feedback.

Discoverability of Committee Resources

Brief Description

Restructure the committee's web presence, create a plan for maintaining its resources, and evaluate existing resources for inclusiveness.

Goal Area

Select the *single* best connection to the <u>ACRL Plan for Excellence</u> and provide a brief sentence connecting your project to the Plan.

	ent Learning allenge librarians and libraries to engage learners with information literacy skills in a way that is
	ilable and sustainable.
	rease the impact of information literacy by forming strategic partnerships with relevant higher ucation organizations.
	ld capacity for librarians to collaborate with faculty and other campus partners in instructional d curricular design and delivery that will integrate information literacy into student learning.
	iculate and advocate for the role of librarians in setting, achieving, and measuring institutional ident learning outcomes.
□ Demo	maturation Commitment to Faville, Diversity, and Individual within ACDI and for the Ducfassion
	onstrating Commitment to Equity, Diversity, and Inclusion within ACRL and/or the Profession.
☐ Enabl	ling Programs and Services (education, advocacy, publications, or member engagement)
□ Enabl	ling Programs and Services (education, advocacy, publications, or member engagement) entence connecting your project to the Plan
Brief so	entence connecting your project to the Plan ying the structure of SLILC's web presence and ensuring it is up to date will enable
Brief so Simplify librarian	entence connecting your project to the Plan ying the structure of SLILC's web presence and ensuring it is up to date will enable ns to more easily find and utilize SLILC's resources, in particular its website,
Brief so Simplify librarian	entence connecting your project to the Plan ying the structure of SLILC's web presence and ensuring it is up to date will enable
Brief so Simplify librarian	entence connecting your project to the Plan ying the structure of SLILC's web presence and ensuring it is up to date will enable ns to more easily find and utilize SLILC's resources, in particular its website, raphies, and events calendar.
Brief so Simplify libraria bibliogr	entence connecting your project to the Plan ying the structure of SLILC's web presence and ensuring it is up to date will enable ns to more easily find and utilize SLILC's resources, in particular its website, raphies, and events calendar.

Outline the steps and intermediate deadlines planned to complete the project.

□ multi-year project continuing past this membership year (expected completion date: _____)

Specific Action	Due Date	Party Responsible	Resources Needed (e.g., financial*, technology, staff support)
Create new website for SLILC according to plan developed by previous project team and Chairs; determine what belongs on public-facing SLILC website, what belongs on ALA Connect, what belongs in Google Drive	Midwinter 2019	Discoverability of Committee Resources Project Team	Support from ACRL/ALA technology staff

Determine communication plan with stakeholders about new website	Midwinter 2019	Discoverability of Committee Resources Project Team, Chairs, full committee (at Midwinter)	ACRL staff and board liaisons
Create and maintain calendar of events if deemed necessary apart from other calendars (e.g., ACRL, Instruction Section)	Midwinter 2019	Discoverability of Committee Resources Project Team	Support from ACRL/ALA technology staff
Create Zotero group for SLILC; save login and password for future committee members; migrate group Zotero bibliographies to SLILC group	Midwinter 2019	Discoverability of Committee Resources Project Team	Consider purchasing storage upgrade (\$120 for unlimited storage)
Migrate content from Spotlight on Scholarship (http://acrl.ala.org/framework/?cat=17); archive any important additional content	Annual 2019	Discoverability of Committee Resources Project Team	Support from ACRL/ALA technology staff
Unpublish http://acrl.ala.org/framework/ ; redirect to new homepage	Annual 2019		Support from ACRL/ALA technology staff

Assessment: How will success be measured?

Successful publication of a new SLILC website that ensures easy discoverability of committee resources.

Activity/Project Name

Professional Development for Student Learning & Information Literacy

Brief Description

Support and sustain professional development for librarians around student learning and information literacy through: ACRL Roadshows (e.g. Intersections of Scholarly Communication & Information Literacy, Engaging with the Framework); connection with existing professional development programs (e.g., Immersion); and creation of web-based learning opportunities (e.g. webinars and e-courses). This team also supports the development of new resources to support and promote professional learning about issues and trends related to the student learning and information literacy. [Components of this project maps to previous groups: Intersections, Framework Professional Development]

Goal Area

Select the *single* best connection to the <u>ACRL Plan for Excellence</u> and provide a brief sentence connecting your project to the Plan.

☐ Student Lea	rning
	librarians and libraries to engage learners with information literacy skills in a way that is
<mark>scalable a</mark>	<mark>nd sustainable.</mark>
	ne impact of information literacy by forming strategic partnerships with relevant higher organizations.
•	city for librarians to collaborate with faculty and other campus partners in instructional ular design and delivery that will integrate information literacy into student learning.
	and advocate for the role of librarians in setting, achieving, and measuring institutional arning outcomes.
☐ Enabling Pro	ing Commitment to Equity, Diversity, and Inclusion within ACRL and/or the Profession. grams and Services (education, advocacy, publications, or member engagement)
	ce connecting your project to the Plan
, -	ill sustain connections among disparate professional development opportunities dent learning and information literacy.
Timeline	
ontinuous proje	ect assigned in charge
hort-term proje	ect that will be completed this membership year
nulti-vear proje	ct continuing past this membership year (expected completion date:

Outline the steps and intermediate deadlines planned to complete the project.

Specific Action	Due Date	Party Responsible	Resources Needed (e.g., financial*, technology, staff support)
Coordinate curriculum and expectations for the <i>Intersections</i> curriculum team with regular communication on road show events; review feedback and assessment post-events and develop strategies for best practices.	Ongoing	Professional Development for Student Learning & IL Project Team	Information from 2017- 2018 Intersections project team & Maryam Fakouri
Coordinate curriculum and expectations for the Engaging with the ACRL Framework curriculum team with regular communication on road show events; review feedback and assessment postevents and develop strategies for best practices.	Ongoing	Professional Development for Student Learning & IL Project Team	Current faculty on Engaging with the ACRL Framework team
Develop plan for vertically integrated curriculum around the SLILC topics (the <i>Framework</i> , instructional and curricular design, etc.) that includes free webinars, DIY workshops, AND for-fee eLearning courses.	Annual 2019	Professional Development for Student Learning & IL Project Team	Support from Elois Sharpe and Margot Conahan
Initiate a conversation with the Immersion faculty about the <i>Framework</i> and ways SLILC can support Immersion.	Midwinter 2019	Strategic Partnerships in Higher Education Project Team	Immersion structure/leadership info from ACRL; Previous work from Elyssa Cahoy and Sheila Stoeckel

Publicize and market professional development programs, roadshows, etc	Ongoing	Professional Development for Student Learning & IL Project Team	Support from ACRL Program Officer Chase Ollis
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Assessment: How will success be measured?

Assess the impact of the entire project rather than the specific actions listed above. A sentence or brief paragraph is adequate. (e.g., what indicators will be used, what tools will be used to collect data, and what targets will indicate success)

Clear curricula for roadshows; high demand for Roadshows and webinars; positive participant feedback.

Activity/Project Name

Strategic Partnerships in Higher Education

Brief Description

Create and/or strengthen relationships with other higher education associations and standards, including institutional accreditation bodies, and provide resources for librarians to benefit from these relationships.

Goal Area

Select the *single* best connection to the <u>ACRL Plan for Excellence</u> and provide a brief sentence connecting your project to the Plan.

☐ Student Learning	
☐ 1. Challenge librarians and libraries to engage learners with information literacy skills in a way that scalable and sustainable.	t is
\square 2. Increase the impact of information literacy by forming strategic partnerships with relevant high	er
education organizations.	
3. Build capacity for librarians to collaborate with faculty and other campus partners in instruction and curricular design and delivery that will integrate information literacy into student learning.	
 4. Articulate and advocate for the role of librarians in setting, achieving, and measuring institution student learning outcomes. 	ıal
☐ Demonstrating Commitment to Equity, Diversity, and Inclusion within ACRL and/or the Professi	on.
☐ Enabling Programs and Services (education, advocacy, publications, or member engagement)	
Brief sentence connecting your project to the Plan	
	ng
Brief sentence connecting your project to the Plan Ensuring SLILC does not work in a vacuum, this project will align our work on student learni with associations and standards that carry weight with individual institutions of higher	ng
Brief sentence connecting your project to the Plan Ensuring SLILC does not work in a vacuum, this project will align our work on student learni with associations and standards that carry weight with individual institutions of higher education. Timeline	ng
Brief sentence connecting your project to the Plan Ensuring SLILC does not work in a vacuum, this project will align our work on student learni with associations and standards that carry weight with individual institutions of higher education.	ng

Outline the steps and intermediate deadlines planned to complete the project.

Specific Action	Due Date	Party Responsibl e	Resources Needed (e.g., financial*, technology, staff support)
Accreditation Provide models or guidelines for IL self-studies for accreditation	Midwinte r 2019	Strategic Partnershi ps in Higher Education Project Team	Work from last year's group, led by Cara Berg.
Internal Connections Engage in dialogue with other ACRL units (e.g. sections, communities of interest) that intersect with student learning and information literacy to understand specific needs of these populations and gaps in support student learning.	Midwinte r 2019	Strategic Partnershi ps in Higher Education Project Team	Last year's Framework Community Work Plan Final Report; Merin da Hensley, IS Chair
Work with ACRL Liaison Assembly to revise Information Literacy talking points (http://acrl.libguides.com/c.php?g=452958&p=3094 030), which are used by ACRL reps to 17 higher ed associations.	Midwinte r 2019	Strategic Partnershi ps in Higher Education Project Team	
External Connections Identify relevant higher education organizations for SLILC to forge relationships with (e.g. EDUCAUSE, NSSE) perhaps via the ACRL Liaison Assembly	Midwinte r 2019	Strategic Partnershi ps in Higher Education	

		Project Team
External Connections Make recommendations for forging relationships with relevant higher education organizations by mapping missions to SLILC Goals.	June 2019	Strategic Partnershi ps in Higher Education Project Team

Assessment: How will success be measured?

Assess the impact of the entire project rather than the specific actions listed above. A sentence or brief paragraph is adequate. (e.g., what indicators will be used, what tools will be used to collect data, and what targets will indicate success)

Accreditation connections to information literacy will be clearly articulated; internal and external relationships will be forged; plans for partnerships will be made.

Activity/Project Name

Curricular Design and Sustainability

Brief Description

Create resources and programming to support connections to and sustainable information literacy integration with curricula and curricular initiatives at individual institutions. (e.g., through curriculum mapping, resources for communication, etc.)

Goal Area

Select the *single* best connection to the <u>ACRL Plan for Excellence</u> and provide a brief sentence connecting your project to the Plan.

☐ Student Learning
☐ 1. Challenge librarians and libraries to engage learners with information literacy skills in a way that is scalable and sustainable.
□ 2. Increase the impact of information literacy by forming strategic partnerships with relevant higher education organizations.
□ 3. Build capacity for librarians to collaborate with faculty and other campus partners in instructional and curricular design and delivery that will integrate information literacy into student learning.
\Box 4. Articulate and advocate for the role of librarians in setting, achieving, and measuring institutional student learning outcomes.
☐ Demonstrating Commitment to Equity, Diversity, and Inclusion within ACRL and/or the Profession. ☐ Enabling Programs and Services (education, advocacy, publications, or member engagement)

Brief sentence connecting your project to the Plan

This project explicitly supports the third objective of SLILC.

□ continuous project assigned in charge	
☐ short-term project that will be completed this membership year	
☐ multi-year project continuing past this membership year (expected completion date:)

Outline the steps and intermediate deadlines planned to complete the project.

Specific Action	Due Date	Party Responsible	Resources Needed (e.g., financial*, technology, staff support)
Gather resources on curriculum mapping and other work on strategic curricular integration of information literacy	Midwinter 2019	Curricular Design and Sustainability Project Team	Draw from and link to Framework Toolkit
Publish bibliography of resources	Spring 2019	Curricular Design and Sustainability Project Team	
Develop guidelines and best practices for strategic curricular integration of information literacy (draft for review)	ALA Midwinter 2020	Curricular Design and Sustainability Project Team; all committee members	Coordination with IL Frameworks & Standards Committee processes and workflows.
Publish guidelines and best practices for strategic curricular integration of information literacy	ALA Annual 2020	Curricular Design and Sustainability Project Team; all committee members	

Assessment: How will success be measured?

Progress toward guidelines and best practices for strategic curricular integration of IL will be made. Positive feedback from librarians using these guidelines and best practices (to be sought in subsequent years).

Activity/Project Name

Assessment of Student Learning

Brief Description

Support libraries in effectively assessing student learning, and in engaging in conversations about the implications of assessment initiatives. [Components of this project map to previous group: Student Learning and Engagement]

Goal Area

Select the *single* best connection to the <u>ACRL Plan for Excellence</u> and provide a brief sentence connecting your project to the Plan.

	☐ Student Learning
	☐ 1. Challenge librarians and libraries to engage learners with information literacy skills in a way that is scalable and sustainable.
	☐ 2. Increase the impact of information literacy by forming strategic partnerships with relevant higher education organizations.
	☐ 3. Build capacity for librarians to collaborate with faculty and other campus partners in instructional and curricular design and delivery that will integrate information literacy into student learning.
	4. Articulate and advocate for the role of librarians in setting, achieving, and measuring institutional
	student learning outcomes.
	☐ Demonstrating Commitment to Equity, Diversity, and Inclusion within ACRL and/or the Profession. ☐ Enabling Programs and Services (education, advocacy, publications, or member engagement) Brief sentence connecting your project to the Plan While the Value of Academic Libraries accomplishes this goal in part, this project will focus
	specifically on supporting assessment initiatives of <i>student learning</i> , and of structuring initiatives in a way that takes issues of critical pedagogy, privacy, and asset-based teaching and learning into account.
•	Timeline
□ со	ntinuous project assigned in charge
□sh	ort-term project that will be completed this membership year
🗆 mı	ulti-year project continuing past this membership year (expected completion date including
	<mark>assessment: 2024)</mark>

Outline the steps and intermediate deadlines planned to complete the project.

Specific Action	Due Date	Party Responsible	Resources Needed (e.g., financial*, technology, staff support)
Gather resources on program- level models of meaningful assessment of student learning*	Midwinter 2019	Assessment of Student Learning project team	
Publish bibliography to SLILC Zotero account.	Annual 2019	Assessment of Student Learning project team	Coordinate with Discoverability of Committee Resources Team
Develop guidelines and best practices for libraries to adopt program-level models of meaningful assessment of student learning (draft for review)	Annual 2020	Assessment of Student Learning project team, Chair	Editing guidance from ACRL
Publish guidelines and best practices for libraries to adopt program-level models of meaningful assessment of student learning	December 2020	Assessment of Student Learning project team, Chair	Editing guidance from ACRL

^{*}For example, ethnographic approaches like that of Donna Lanclos and Andrew Asher, and other models and approaches that go beyond what is "easy to measure," as outlined in Karen Nicholson's address "The Value Agenda': Negotiating a Path Between Compliance and Critical Practice."

Assessment: How will success be measured?

Positive feedback from librarians using these guidelines and best practices (to be sought in subsequent years).





ACRL Multi-Year Planning Grid: Student Learning

Student Learning Goal: Advance innovative practices and environments that transform student learning.

Objective	FY19	FY20	FY21
1. Challenge librarians and libraries to engage learners with information literacy skills in a way that is scalable and sustainable.	FY19 Framework Resources Review, revise and publicize Framework Toolkit; support and promote Framework Sandbox; develop sustainable vision for continuous administration. Professional Development Through conferences, roadshows, and bi-monthly Framework column in C&RL News; Collaborate with Immersion on teaching with the Framework. Discoverability of Committee Resources Restructure the committee's web presence, create a plan for maintenance; evaluate for inclusiveness.	FY20 Framework Resources Support and promote Framework Sandbox; execute plan for continuous administration. Professional Development Develop professional development opportunities around student learning and information literacy through multiple channels, including conferences.	FY21 Framework Resources Assess Sandbox administration plan. Professional Development Conduct and support regular professional development opportunities.

2. Increase the impact of information literacy by forming strategic partnerships with relevant organizations.	Strategic Partnerships in Higher Education Provide models or guidelines for IL self-studies for accreditation. Engage in dialogue with other ACRL units (e.g. sections, communities of interest) that intersect with SLILC goal areas and identify adjacencies; Make recommendations for forging relationships with relevant higher education organizations by mapping missions to SLILC Goals.	Strategic Partnerships in Higher Education Publicize and provide education on guidelines for IL self-studies for accreditation. Continue building and take action on relationships both internally to ACRL and externally to higher education organizations.	Strategic Partnerships in Higher Education Work with internal and external organizations to articulate impact of information literacy instruction on student learning.
3. Build capacity for librarians to collaborate with faculty and other campus partners in instructional and curricular design and delivery that will integrate information literacy into student learning.	Curricular Design & Sustainability Create resources and programming to support connections to and sustainable IL integration with curricula and initiatives at individual institutions.	Curricular Design & Sustainability Develop and publicize guidelines and best practices for strategic curricular integration of information literacy.	Curricular Design & Sustainability Share successes and lessons learned re: guidelines for curricular integration of IL; refine best practices.
4. Articulate and advocate for the role of librarians in setting, achieving, and measuring institutional student learning outcomes.	Assessment of Student Learning Support libraries in effectively assessing student learning, and in engaging in conversations about the implications of assessment initiatives.	Assessment of Student Learning Develop and publish guidelines and best practices for libraries to adopt program-level models of meaningful assessment of student learning.	Assessment of Student Learning Showcase program-level models of meaningful assessment of student learning.



Division-level Committee Year-end Report and Work Plan Template

Committee

Visit the <u>ACRL Directory of Leadership</u> to find your charge.

Committee Name: Research and Scholarly Environment Committee

Charge/Tasks: To oversee and coordinate ACRL's Research and Scholarly Environment Initiative as described in the strategic plan; work with the ACRL Board and other ACRL units in creating a comprehensive effort including coalition building, professional development, publications, research, and advocacy and in developing the ACRL research and scholarly communications website; and monitor and assess the effectiveness of the ACRL Research and Scholarly Environment Initiative.

Committee leadership

Visit the <u>ACRL Directory of Leadership</u> to find your committee roster. Click the "Next Year" link to view 2017–18 roster information.

- Current Chair (2017–18): Patricia Hswe
- Incoming Chair (2018–19): Yasmeen Shorish
- Incoming Vice-chair (2018–19): Nathan Hall
- Incoming Board Liaison (2018–19): Beth McNeil
- Staff Liaison: Kara Malenfant

Submission information

Year-end report written by: Patricia Hswe

Work plan submitted by: Yasmeen Shorish

2017-18 Year-end Committee Report

This report will be included in the Committee's official record of activities maintained by the ACRL staff.

What were the major projects/activities accomplished by your committee in the 2017–18 membership year?

A brief bulleted list is suggested here; reference 2017–18 work plan projects

- Progress in updating the ReSEC research agenda for scholarly communication systems
- Open Research Policy Statement
- "Scholarly Communication" column in C&RL News
- Scholarly communication discussion group
- ACRL/SPARC Forums
- Response Subcommittee
- Relations Subcommittee charge and problem statement
- Data Privacy Cookbook
- OpenCon Scholarship Subcommittee

How did you go about getting them done?

A brief bulleted list is suggested (correspond bullets to those above)

- ReSEC research agenda: staff liaison and subcommittee drafted RFP to engage consultants to lead
 agenda work, with chair and vice-chair reviewing draft before public release; subcommittee, chair,
 vice-chair, staff liaison, and ACRL E.D. interviewed the candidates.
- Open Research Policy Statement: the responsible subcommittee drafted the statement, and it was made available for public comment in summer 2018. Next step is to submit to the Standards Committee.
- "Scholarly Communication" column two co-editors worked together to review column drafts for publication.
- Scholarly Communication Discussion Group the two members responsible for the listserv also planned the Midwinter DG session in collaboration with the STS Scholarly Communication Committee.
- ACRL/SPARC Forums were and always have been a collaboration between ReSEC and SPARC on determining a topic for the Forum and a line-up of guest speakers. Typically, the coordinators for the Scholarly Communication DG have central roles in planning the Forum with SPARC.
- Response Subcommittee drafted two responses to RFIs from the NIH.
- Relations Subcommittee met and communicated virtually on a regular basis to address and compose
 the charge and to start conceptualizing the framework.
- Data Privacy Subcommittee met virtually during the year to develop and finalize the cookbook and consulted with the interim staff liaison on the development of the resulting infographic.
- OpenCon Scholarship Subcommittee convened to review the applications supplied by SPARC, with which ReSEC collaborates on the selection of the scholarship recipients.

What were the relevant results for your projects?

A brief bulleted list is suggested that includes assessment as appropriate (correspond bullets to those above). Be as specific as possible. For example: 300 proposals/applications reviewed, 32 selected; Developed and conducted three podcasts (list podcast titles, speakers, etc.) Reviewed ten standards and guidelines (list titles)

- ReSEC research agenda: 2 sets of application materials reviewed to select research agenda consultants;
 2 consultants selected, who have completed a literature review, 10-15 interviews with experts, 7 focus groups, 3 roundtables, and distributed an online survey.
- 11 "Scholarly Communication" columns
- One joint session at ALA Midwinter 2018 between the STS ScholComm Cmte and the ReSEC ScholComm DG and one session of the SCDG at Annual, which was about the research agenda.
- 2 responses to NIH RFIs about data science (the latest one being <u>here</u>)
- One infographic about data privacy
- Two OpenCon scholarship recipients
- ACRL/SPARC Forums at Midwinter and Annual

Are any 2017-18 projects ongoing?

A brief bulleted list is suggested here

- ReSEC research agenda
- Open Research Policy Statement
- "Scholarly Communication" column in C&RLN
- Scholarly Communication Discussion Group
- Relations Subcommittee
- OpenCon Scholarships
- ACRL/SPARC Forums

What worked well?

A brief bulleted list is suggested here

- The work thus far on the research agenda has gone especially well, since we had top-notch support from Kara and then Erin in their staff liaison roles to ReSEC. They both kept us organized and helped with scheduling calls and discussions about the ongoing work. Erin in particular helped with scheduling and providing the Zoom platform for the webinar and with planning of the roundtable and working sessions at Annual. She did a superb job serving as interim for Kara.
- The chosen consultants for the research agenda are also working out well, as they have kept the committee chair and vice-chair informed of their progress and been able to maintain the schedule of activities.

• The "Scholarly Communication" column is a well-oiled machine. The co-editor roles tend to attract members who flourish in their responsibilities and are good about soliciting new authors for content.

What could have worked better?

A brief bulleted list is suggested here

- Committee communications. We had two calls and two meetings (one at Midwinter and one at Annual). For a busy goal-area committee like ReSEC, it may be worthwhile to have more than two calls during the year so that members can be better in touch regarding progress and updates on projects.
- Responsiveness to marketing concerns expressed by the Research Data Management Roadshow
 coordinator / team. The ReSEC chair and vice-chair brought this matter up with interim staff liaison,
 Erin Nevius, prior to ALA Annual 2018. Kara Malenfant is also aware of it, since it was discussed at ALA
 Midwinter 2018. Marketing this particular brand of roadshow can't be taken lightly and probably needs
 more specific attention and support than some of ACRL's other roadshows.

How has the work/activities of your committee demonstrated commitment to equity, diversity, and inclusion, within or beyond ACRL?

A brief bulleted list is suggested here

- We are increasingly a diverse committee in terms of the composition of members and their institutions.
- The update of the ReSEC research agenda in particular is demonstrating DEI commitment, since the consultants are being intentional about engaging a wide variety of stakeholders and potentially beyond ACRL, since the online survey was open to anyone (i.e., not restricted to ALA/ACRL members).
- The co-editors of the "Scholarly Communication" column have done an excellent job of reaching out to librarians of color and from a range of institutions. Starting this year, the column will make a tradition of inviting the recipients of OpenCon scholarships to collaborate on a column about their experiences at OpenCon.

What do you wish someone had told you before starting work on this committee? Optional

It would have been helpful to talk occasionally with other goal-area leaders to get a sense of their processes with their committees. I almost feel like there should be some "tribal," shared information about committee work and leadership that goes beyond the webinar that ACRL leadership gives once a year to new leaders. Both the vice-chair and I felt this gap. One remedy that the vice-chair came up with was to gather documentation about subcommittee work within ReSEC so that future members would know what subcommittees there are to volunteer for and what their work involves.

What made this work most rewarding (observations/comments/accolades)? Optional

Oh, by far it's the people in the committee. Also, I could not have asked for a more collaborative partner in Yasmeen, who carried out her role as vice-chair thoughtfully, efficiently, and sincerely. I know that, led by Yasmeen and Nathan, ReSEC is bound to have an amazing 2018-2019.

Any other comments, recommendations, or suggestions? *Optional*

Yasmeen and I made this request when we met with the Board at Annual in New Orleans: we feel it would help to know the motivations for new members volunteering for ReSEC – i.e., apart from the members that the chair recommends to the Appointments Committee. If we knew the reasons why new members join, then we may be able to engage them in an informed way about volunteer opportunities. It could help make committee work more efficient, too.

2018-19 Committee Work Plan

Note: Each activity/project should be reported using the below form. Copy and paste the form as many times as needed to detail each activity/project. Plans should be **Specific, Measureable, Attainable, Realistic, and Timely or SMART).**

Activity/Project Name #1

National Research Agenda

Brief Description

Develop and implement a process for a new national research agenda for ACRL's Research and Scholarly Environments Initiative.

Goal Area

Select the *single* best connection to the <u>ACRL Plan for Excellence</u> and provide a brief sentence connecting your project to the Plan.

□ Value of Academic Libraries
☐ 1. Cultivate research opportunities that communicate the impact of academic and research libraries in the higher education environment.
\square 2. Promote the impact and value of academic and research libraries to the higher education community.
\Box 3. Expand professional development opportunities for assessment and advocacy of the contributions towards impact of academic libraries.
☐ 4. Support libraries in articulating their role in advancing issues of equity, access, diversity, and inclusion in higher education
☐ Student Learning
\Box 1. Challenge librarians and libraries to engage learners with information literacy skills in a way that is scalable and sustainable.
☐ 2. Increase the impact of information literacy by forming strategic partnerships with relevant higher education organizations
☐ 3. Build capacity for librarians to collaborate with faculty and other campus partners in instructional and curricular design and delivery that will integrate information literacy into student learning.
\Box 4. Articulate and advocate for the role of librarians in setting, achieving, and measuring institutional student learning outcomes.
☐ Research and Scholarly Environment
\Box 1. Increase the ways ACRL is an advocate and model for open dissemination and evaluation practices.
\Box 2. Enhance members' capacity to address issues related to scholarly communication, including but not limited to data management, library publishing, open access, and digital scholarship.
☑ 3. Increase ACRL's efforts to influence scholarly publishing policies and practices toward a more open and equitable system.
☐ New Roles and Changing Landscapes
\square 1. Deepen ACRL's advocacy and support for a full range of information professionals.
\square 2. Equip library workforce at all levels to effectively lead, manage, and embrace change.
\square 3. Expand ACRL's role as a catalyst for transformational change in higher education.
\square Demonstrating Commitment to Equity, Diversity, and Inclusion within ACRL and/or the Profession.
□ Enabling Programs and Services (education, advocacy, publications, or member engagement)

Brief sentence connecting your project to the Plan

As it has been ten years since the research agenda was last updated, our priorities for research need to be revisited and new ones investigated, with particular attention to the inclusion of voices previously not considered or consulted for such an agenda - which is part of coalition building, a key ReSEC task; this project would complement what we already

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do through the *C&RLN* column, the Scholarly Communication and Research Data Management roadshows, the OpenCon scholarships, and the Toolkit.

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□ continuous project assigned in charge	
X short-term project that will be completed this membership year	
$\ \square$ multi-year project continuing past this membership year (expected completion date: $_$)

Note: Multi-year, strategic goal-area projects are tracked in a multi-year planning grid. Expect your staff liaison to follow-up with questions to add this project to ACRL's multi-year planning grid which is reviewed by the Board at its fall Strategic Planning Session and referenced for budget preparation.

Outline the steps and intermediate deadlines planned to complete the project.

(add rows as needed)

PROJECT NAME: National Research Agenda

2017-18 WG members: Nathan Hall (chair), Paul Bracke, Lori J. Critz, Mary Galvin, Amy Nurnberger.

2018-19 WG members: Charlotte Roh, Paul Bracke,

Specific Action	Due Date	Complete/In Progress and Notes (e.g., who's responsible)
RFP proposals due	01/29/18	Complete
Select consultants	03/12/18	Complete
Draft list of expert interviews	04/20/18	Complete
ACRL Online Open Forum	06/05/18	Complete
Hold virtual focus groups	June, 2018	In Progress, Consultants
Presentation and discussion at ALA Annual Conference (New Orleans, LA: June 21-26)	6/24/18	Consultant, ReSEC, and ACRL staff
Send first draft of report to ReSEC and ACRL staff	August, 2018	Consultant, ReSEC, and ACRL staff
Feedback due to consultant	9/1/18	ReSEC and ACRL staff
Revised draft and advice memo due to working group/ACRL Board	October, 2018	Consultants
Feedback due to consultants	11/1/18	ReSEC and ACRL staff

Final report of publishable quality due to ReSEC and ACRL staff	12/4/18	Consultant
Public release of final report	1/15/19	ReSEC and ACRL staff
ACRL Presents Webcast	Feb, 2019	Consultants & ReSEC Chair Yasmeen Shorish

Assessment: How will success be measured?

A research agenda will be drafted and marketed to the ACRL community. Outreach asking for case studies or examples of implementation will demonstrate adoption by community. Assessment of an agenda of this type will need to occur over years. Precise measures or indicators of success are still TBD, dependent on the final report.

Activity/Project Name #2

Open Research Policy Statement

Brief Description

A revision of the Open Access Statement to include more types of scholarship and offer more relevance to non-tenure-track faculty.

Goal Area

Select the *single* best connection to the <u>ACRL Plan for Excellence</u> and provide a brief sentence connecting your project to the Plan.

□ Va	lue of Academic Libraries
	\Box 1. Cultivate research opportunities that communicate the impact of academic and research libraries in the higher education environment.
	\square 2. Promote the impact and value of academic and research libraries to the higher education community.
	\square 3. Expand professional development opportunities for assessment and advocacy of the contributions towards impact of academic libraries.
	☐ 4. Support libraries in articulating their role in advancing issues of equity, access, diversity, and inclusion in higher education
□ Stı	udent Learning
	□ 1. Challenge librarians and libraries to engage learners with information literacy skills in a way that is scalable and sustainable.
	□ 2. Increase the impact of information literacy by forming strategic partnerships with relevant higher education organization
	□ 3. Build capacity for librarians to collaborate with faculty and other campus partners in instructional and curricular design and delivery that will integrate information literacy into student learning.
	☐ 4. Articulate and advocate for the role of librarians in setting, achieving, and measuring institutional student learning outcomes.
□ Re	search and Scholarly Environment
	oxtimes 1. Increase the ways ACRL is an advocate and model for open dissemination and evaluation practices.
	☐ 2. Enhance members' capacity to address issues related to scholarly communication, including but not limited to data

☐ 3. Increase ACRL's efforts to influence scholarly publishing policies and practices toward a more open and equitable system.

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□ New Roles and Changing Landscapes
\square 1. Deepen ACRL's advocacy and support for a full range of information professionals.
\square 2. Equip library workforce at all levels to effectively lead, manage, and embrace change.
\square 3. Expand ACRL's role as a catalyst for transformational change in higher education.
☐ Demonstrating Commitment to Equity, Diversity, and Inclusion within ACRL and/or the Profession.
\square Enabling Programs and Services (education, advocacy, publications, or member engagement)
Brief sentence connecting your project to the Plan
This effort seeks to expand the OA Policy Statement, which is an advocacy statement, in order to incorporate
feedback gathered since the statement was released in 2016, including explicit mention of different types of
digital scholarship that should be OA and a consideration of how to make the policy statement more relevant
to non-tenure-track librarians.
Timeline
☐ continuous project assigned in charge
X short-term project that will be completed this membership year
☐ multi-year project continuing past this membership year (expected completion date: _Fall 2018)

Note: Multi-year, strategic goal-area projects are tracked in a multi-year planning grid. Expect your staff liaison to follow-up with questions to add this project to ACRL's multi-year planning grid which is reviewed by the Board at its fall Strategic Planning Session and referenced for budget preparation.

Outline the steps and intermediate deadlines planned to complete the project.

(add rows as needed)

PROJECT NAME: Open Research Policy Statement

Team Members: Steven Harris (chair), Abigail Goben, Pamella Lach, Amy Nurnberger, Penny Beile

Specific Action	Due Date	Complete/In Progress and Notes
In revised draft of the policy statement, provide additional details that address the importance and value of open scholarly products and open research.	1/15/18	Have draft completed before Midwinter, so that it may be discussed, as necessary, at Midwinter before being sent to Standards.
Send revised draft to Standards Committee for its review.	3/1/2018	Submit to Standards in the spring so that their evaluation is given to ReSEC before Annual 2018.
Final draft	6/21/18	Intention is to release the revised statement after it clears the ACRL adoption process.

Assessment: How will success be measured?

The revised statement will be approved, as per ACRL regulations.

Activity/Project Name #3

Relations Subcommittee

Brief Description

In light of recent events, such as the purchase of Bepress by Elsevier, and of the increasing practice of vendors to contact, and consult with, university administration, thus potentially usurping the role of academic libraries altogether, ReSEC is forming this subcommittee to help determine what librarians and libraries should be doing to counteract such go-arounds. The subcommittee would work toward defining a framework or set of recommended practices for the purpose of relationship understanding and building, both internally (on campuses) and externally (with various stakeholders).

Goal Area

Select the *single* best connection to the <u>ACRL Plan for Excellence</u> and provide a brief sentence connecting your project to the Plan.

☐ Value of Academic Libraries
\Box 1. Cultivate research opportunities that communicate the impact of academic and research libraries in the higher education environment.
\square 2. Promote the impact and value of academic and research libraries to the higher education community.
\Box 3. Expand professional development opportunities for assessment and advocacy of the contributions towards impact of academic libraries.
☐ 4. Support libraries in articulating their role in advancing issues of equity, access, diversity, and inclusion in higher education
□ Student Learning
\Box 1. Challenge librarians and libraries to engage learners with information literacy skills in a way that is scalable and sustainable.
☐ 2. Increase the impact of information literacy by forming strategic partnerships with relevant higher education organizations
☐ 3. Build capacity for librarians to collaborate with faculty and other campus partners in instructional and curricular design and delivery that will integrate information literacy into student learning.
\Box 4. Articulate and advocate for the role of librarians in setting, achieving, and measuring institutional student learning outcomes.
☐ Research and Scholarly Environment
\square 1. Increase the ways ACRL is an advocate and model for open dissemination and evaluation practices.
☑ 2. Enhance members' capacity to address issues related to scholarly communication, including but not limited to data management, library publishing, open access, and digital scholarship.
☐ 3. Increase ACRL's efforts to influence scholarly publishing policies and practices toward a more open and equitable system.
☐ New Roles and Changing Landscapes
\square 1. Deepen ACRL's advocacy and support for a full range of information professionals.
\square 2. Equip library workforce at all levels to effectively lead, manage, and embrace change.
\square 3. Expand ACRL's role as a catalyst for transformational change in higher education.
☐ Demonstrating Commitment to Equity, Diversity, and Inclusion within ACRL and/or the Profession.
☐ Enabling Programs and Services (education, advocacy, publications, or member engagement)
Brief sentence connecting your project to the Plan
The framework, or set of effective practices, should help guide the ACRL community in developing and
maintaining more productive relationships with their internal and external constituents, done most

Timeline

☐ continuous project assigned in charge

productively with an increased capacity to address issues related to scholarly communication.

X short-term project that will be completed this membership year
☐ multi-year project continuing past this membership year (expected completion date:)

Note: Multi-year, strategic goal-area projects are tracked in a multi-year planning grid. Expect your staff liaison to follow-up with questions to add this project to ACRL's multi-year planning grid which is reviewed by the Board at its fall Strategic Planning Session and referenced for budget preparation.

Outline the steps and intermediate deadlines planned to complete the project.

(add rows as needed)

PROJECT NAME: Relations Subcommittee

Team members: Mel DeSart, Pamella Lach, Amy Nurnberger, Charlotte Roh, Philip Herold, Mary Galvin, Jessica

Clemons

Specific Action	Due Date	Complete/In Progress and Notes
Draft problem statement and charge.	1/15/18	Complete
ReSEC discusses at Midwinter 2018, as necessary	2/11/18	Complete
Subcmte drafts a framework / set of effective practices (this work may involve interviews, survey, literature review - depends on the judgment of subcomte)	2/15 to 6/1	In progress
Subcmte updates ReSEC on progress via a short report	6/1 to 6/15	Complete
ReSEC discusses at Annual 2018, as necessary	6/24/18	Complete
Subcmte lead or subcomte member blogs about progress for ACRL community	Summer 2018	
Subcmte continues carrying out its charge	Summer and fall 2018	Call for relation "stories" to go out during the first half of August.
Subcmte reports on progress to date and how it will wrap up the effort by Midwinter 2019	Fall 2018	
Subcmte submits draft report for ReSEC to review prior to Midwinter 2019	1/10/19	
ReSEC discusses final report as necessary	1/27/19	
Subcmte lead or subcmte member blogs about this work a final time for ACRL community	Spring 2019	

Assessment: How will success be measured?

Since feedback from the ALA/ACRL community on this effort is key, it will be important to be public at certain junctures of the subcommittee's work, such as after they have gathered enough data and information to begin

fleshing out a framework or set of practices / guidelines and once they have a draft of this deliverable to share. Since ReSEC is a co-sponsor of the ACRL/SPARC Forum at the Midwinter and Annual meetings, one of these Forum occasions could be used to present the work of the subcommittee and offer a chance for the community to respond.

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Activity/Project Name #4

Data Privacy Guide

Brief Description

☐ Value of Academic Libraries

As much as those of us working in scholarly communication advocate for open access in research and scholarly publishing, we are also increasingly aware of the need for better guidance and support regarding data privacy. With such a concentration of expertise among its members, ReSEC is in a position to develop a set of recommendations for how academic libraries might work toward devising a strategy for data privacy.

Goal Area

\Box 1. Cultivate research opportunities that communicate the impact of academic and research libraries in the higher education environment.
\square 2. Promote the impact and value of academic and research libraries to the higher education community.
\square 3. Expand professional development opportunities for assessment and advocacy of the contributions towards impact of academic libraries.
☐ 4. Support libraries in articulating their role in advancing issues of equity, access, diversity, and inclusion in higher education.
☐ Student Learning
\Box 1. Challenge librarians and libraries to engage learners with information literacy skills in a way that is scalable and sustainable.
☐ 2. Increase the impact of information literacy by forming strategic partnerships with relevant higher education organizations
☐ 3. Build capacity for librarians to collaborate with faculty and other campus partners in instructional and curricular design and delivery that will integrate information literacy into student learning.
 4. Articulate and advocate for the role of librarians in setting, achieving, and measuring institutional student learning outcomes.
☐ Research and Scholarly Environment
\square 1. Increase the ways ACRL is an advocate and model for open dissemination and evaluation practices.
☑ 2. Enhance members' capacity to address issues related to scholarly communication, including but not limited to data management, library publishing, open access, and digital scholarship.
☐ 3. Increase ACRL's efforts to influence scholarly publishing policies and practices toward a more open and equitable system.
☐ New Roles and Changing Landscapes
\square 1. Deepen ACRL's advocacy and support for a full range of information professionals.
\square 2. Equip library workforce at all levels to effectively lead, manage, and embrace change.
\square 3. Expand ACRL's role as a catalyst for transformational change in higher education.
\square Demonstrating Commitment to Equity, Diversity, and Inclusion within ACRL and/or the Profession.
☐ Fnahling Programs and Services (education, advocacy, publications, or member engagement)

Brief sentence connecting your project to the Plan

Balancing openness with privacy protections is an area of need across academia, but one for which few support resources exist. This guide is an effort to help build capacity in this area.

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□ continuous project assigned in charge	
X short-term project that will be completed this membership year	
\square multi-year project continuing past this membership year (expected completion date: $_$)

Note: Multi-year, strategic goal-area projects are tracked in a multi-year planning grid. Expect your staff liaison to follow-up with questions to add this project to ACRL's multi-year planning grid which is reviewed by the Board at its fall Strategic Planning Session and referenced for budget preparation.

Outline the steps and intermediate deadlines planned to complete the project.

PROJECT NAME: Data Privacy Cookbook

Team Members: Amy Nurnberger, Abigail Gobel, Pamella Lach, Sandy DeGroote

Specific Action	Due Date	Complete/In Progress and Notes
Gain access to original EU design files		Complete
Gather relevant information for introductory document, in US context	June 2017	Complete
Synthesize disparate information into one introductory document	MW18	Complete
Finalize maturity model	MW18	Complete
Create linked reference cards	MW18	Complete
Create the draft document	Annual 2018	Complete
Create final document in ALA Connect	October 2018	In progress
Distribute final document via ACRL Insider	MW19	

Assessment: How will success be measured?

Essentially, assessment of this project would be measured by the number of downloads and how much people reference the guide when consulting or doing instruction. Assessment would rely on informal methods.

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Activity/Project Name #5

OpenCon Scholarships

Brief Description

Select and support the travel of two scholarship recipients to attend OpenCon, an annual conference focused on advancing Open Access, Open Education, and Open Data.

Goal Area

Select the *single* best connection to the <u>ACRL Plan for Excellence</u> and provide a brief sentence connecting your project to the Plan.

☐ Value of Academic Libraries
\square 1. Cultivate research opportunities that communicate the impact of academic and research libraries in the higher education
environment.
\square 2. Promote the impact and value of academic and research libraries to the higher education community.
\square 3. Expand professional development opportunities for assessment and advocacy of the contributions towards impact of academic libraries.
🗆 4. Support libraries in articulating their role in advancing issues of equity, access, diversity, and inclusion in higher education
☐ Student Learning
\square 1. Challenge librarians and libraries to engage learners with information literacy skills in a way that is scalable and sustainable.
☐ 2. Increase the impact of information literacy by forming strategic partnerships with relevant higher education organization.
☐ 3. Build capacity for librarians to collaborate with faculty and other campus partners in instructional and curricular design and delivery that will integrate information literacy into student learning.
 4. Articulate and advocate for the role of librarians in setting, achieving, and measuring institutional student learning outcomes.
☐ Research and Scholarly Environment
\square 1. Increase the ways ACRL is an advocate and model for open dissemination and evaluation practices.
\boxtimes 2. Enhance members' capacity to address issues related to scholarly communication, including but not limited to data management, library publishing, open access, and digital scholarship.
☐ 3. Increase ACRL's efforts to influence scholarly publishing policies and practices toward a more open and equitable system.
☐ New Roles and Changing Landscapes
\square 1. Deepen ACRL's advocacy and support for a full range of information professionals.
\square 2. Equip library workforce at all levels to effectively lead, manage, and embrace change.
\square 3. Expand ACRL's role as a catalyst for transformational change in higher education.
☐ Demonstrating Commitment to Equity, Diversity, and Inclusion within ACRL and/or the Profession.
☐ Enabling Programs and Services (education, advocacy, publications, or member engagement)
Brief sentence connecting your project to the Plan
Attendance at OpenCon allows students and early career professionals to develop the critical skills necessary to catalyze
action toward a more open system for sharing the world's information, and scholarship recipients' service on ReSEC
provides an immediate opportunity for the attendees to build on what they learned to benefit libraries and the broader
scholarly communication landscape.
Timeline
x continuous project assigned in charge

Note: Multi-year, strategic goal-area projects are tracked in a multi-year planning grid. Expect your staff liaison to follow-up with questions to add this project to ACRL's multi-year planning grid which is reviewed by the Board at its fall Strategic Planning Session and referenced for budget preparation.

☐ short-term project that will be completed this membership year

☐ multi-year project continuing past this membership year

Outline the steps and intermediate deadlines planned to complete the project.

(add rows as needed)

PROJECT NAME: OpenCon Scholarships

Team members: Michelle Reed, Cynthia Mari Orozco, Tatiana Bryant

Specific Action	Due Date	Complete/In Progress and Notes
Announce availability of ACRL-sponsored scholarships for OpenCon	June/July	On going
Assign subcommittee to review applications and select scholarship recipients	June/July	On going
Subcommittee reviews applications and makes recommendations to ReSEC Chair for two recipients and two alternates	July/August	On going
ReSEC Chair confirms interest and availability with selected recipients	September	On going
ACRL announces scholarship recipients	September	On going
ACRL funds travel to OpenCon for two members	November	On going
Scholarship recipients submit reflection piece for C&RL News column	December	On going
Subcommittee reviews and makes recommendations for streamlining and communicating the application and selection process with input from OpenCon organizers	Midwinter	On going
ReSEC provides feedback on recommendations and implements suggestions as applicable	March	On going
Repeat action items as defined above	ongoing	On going

Assessment: How will success be measured?

Scholarships were awarded to ACRL members; the project will be evaluated on an ongoing basis based on feedback from scholarship recipients and the subcommittee.

Activity/Project Name #6

Open Access Week Advisory Committee Member

Brief Description

A member of ReSEC serves as an OA Week Advisory Committee member, helping to craft the theme and events related to this internationally celebrated week.

Goal Area

Select the *single* best connection to the <u>ACRL Plan for Excellence</u> and provide a brief sentence connecting your project to the Plan.

□ Value of Academic Libraries	
\Box 1. Cultivate research opportunities that communicate the impact of academic and research libraries in the higher education	1
environment.	
\square 2. Promote the impact and value of academic and research libraries to the higher education community.	
☐ 3. Expand professional development opportunities for assessment and advocacy of the contributions towards impact of	
academic libraries.	
\square 4. Support libraries in articulating their role in advancing issues of equity, access, diversity, and inclusion in higher education	า.
☐ Student Learning	
 1. Challenge librarians and libraries to engage learners with information literacy skills in a way that is scalable and sustainable. 	
\square 2. Increase the impact of information literacy by forming strategic partnerships with relevant higher education organization	ıS.
\square 3. Build capacity for librarians to collaborate with faculty and other campus partners in instructional and curricular design	
and delivery that will integrate information literacy into student learning.	
 4. Articulate and advocate for the role of librarians in setting, achieving, and measuring institutional student learning outcomes. 	
☐ Research and Scholarly Environment	
oxtimes 1. Increase the ways ACRL is an advocate and model for open dissemination and evaluation practices.	
\square 2. Enhance members' capacity to address issues related to scholarly communication, including but not limited to data	
management, library publishing, open access, and digital scholarship.	
\square 3. Increase ACRL's efforts to influence scholarly publishing policies and practices toward a more open and equitable system	
☐ New Roles and Changing Landscapes	
\square 1. Deepen ACRL's advocacy and support for a full range of information professionals.	
\square 2. Equip library workforce at all levels to effectively lead, manage, and embrace change.	
\square 3. Expand ACRL's role as a catalyst for transformational change in higher education.	
☐ Demonstrating Commitment to Equity, Diversity, and Inclusion within ACRL and/or the Profession.	
☐ Enabling Programs and Services (education, advocacy, publications, or member engagement)	
Brief sentence connecting your project to the Plan	
The invitation from SPARC to serve on the OA Week Advisory Committee is a great opportunity to have ACRL'	S
perspective reflected in the event and to learn from great initiatives globally.	
Timeline	
□ continuous project assigned in charge	
X short-term project that will be completed this membership year	
☐ multi-year project continuing past this membership year (expected completion date:)	

Note: Multi-year, strategic goal-area projects are tracked in a multi-year planning grid. Expect your staff liaison to follow-up with questions to add this project to ACRL's multi-year planning grid which is reviewed by the Board at its fall Strategic Planning Session and referenced for budget preparation.

Outline the steps and intermediate deadlines planned to complete the project.

(add rows as needed)

PROJECT NAME: OA Week Advisory Committee

Team Members: Yuan Li

Specific Action	Due Date	Complete/In Progress and Notes
Provide ReSEC perspective to the planning activities. Report back on any interesting initiatives, globally.	10/22/18	In Progress

Assessment: How will success be measured?

Based on feedback from ReSEC representative, we will determine if this was a successful collaboration and if we should advocate for it becoming business as usual.

Activity/Project Name #7

Emerging Leader Project

Brief Description

ReSEC will submit an Emerging Leaders (http://www.ala.org/educationcareers/leadership/emergingleaders)
Project Proposal (October?) tied to the Research Agenda (above). Should the project be selected, ReSEC will host the project and assign a member guide.

Goal Area

Select the *single* best connection to the <u>ACRL Plan for Excellence</u> and provide a brief sentence connecting your project to the Plan

□ v	alue of Academic Libraries
	\square 1. Cultivate research opportunities that communicate the impact of academic and research libraries in the higher education environment.
	\square 2. Promote the impact and value of academic and research libraries to the higher education community.
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	\square 1. Increase the ways ACRL is an advocate and model for open dissemination and evaluation practices.
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	☑ 3. Increase ACRL's efforts to influence scholarly publishing policies and practices toward a more open and equitable system.

☐ New Roles and Changing Landscapes

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 □ 1. Deepen ACRL's advocacy and support for a full range of information professionals. □ 2. Equip library workforce at all levels to effectively lead, manage, and embrace change. □ 3. Expected ACRL's rate are contained for two of a professional shapes in high are diseased. 	
 □ 3. Expand ACRL's role as a catalyst for transformational change in higher education. □ Demonstrating Commitment to Equity, Diversity, and Inclusion within ACRL and/or the Profession. 	
☐ Enabling Programs and Services (education, advocacy, publications, or member engagement)	
Brief sentence connecting your project to the Plan Engage new professionals and future ACRL leaders in actions that move the scholarly communication to a more open and equitable system	
Timeline ☐ continuous project assigned in charge X short-term project that will be completed this membership year ☐ multi-year project continuing past this membership year (expected completion date:)	

Note: Multi-year, strategic goal-area projects are tracked in a multi-year planning grid. Expect your staff liaison to follow-up with questions to add this project to ACRL's multi-year planning grid which is reviewed by the Board at its fall Strategic Planning Session and referenced for budget preparation.

Outline the steps and intermediate deadlines planned to complete the project.

(add rows as needed)

PROJECT NAME: Emerging Leaders Project

Team Members: Jessica Clemmons (member guide). Nathan Hall

Specific Action	Due Date	Complete/In Progress and Notes
Submit Project Proposal	10/1/18	In Progress
Select Emerging Leader to sponsor	TBD	(contingent on project proposal being selected by EL group)
Meet Emerging Leader team at Midwinter	1/2019	(contingent on project proposal being selected by EL group)
Attend Emerging Leader poster session at Annual	6/2019	(contingent on project proposal being selected by EL group)
Meet Emerging Leader team at ReSEC meeting to present their work to committee	6/2019	(contingent on project proposal being selected by EL group)

Assessment: How will success be measured?

Assuming project is selected, ReSEC will devise a rubric against which success will be measured.

Activity/Project Name #8

Scholarly Communication/ReSEC Website Refresh

Brief Description

The ACRL website for Scholarly Communication (http://www.ala.org/acrl/issues/scholcomm) is out of date and does not reflect the activities of ReSEC. A small working group will assess the current page and make recommendations for revisions.

Goal Area

Select the *single* best connection to the <u>ACRL Plan for Excellence</u> and provide a brief sentence connecting your project to the Plan.

☐ Value of Academic Libraries
\Box 1. Cultivate research opportunities that communicate the impact of academic and research libraries in the higher education environment.
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☐ Demonstrating Commitment to Equity, Diversity, and Inclusion within ACRL and/or the Profession.
☐ Enabling Programs and Services (education, advocacy, publications, or member engagement)
Brief sentence connecting your project to the Plan
Having an up to date web presence that highlights the work of this committee, and ACRL, in the area of
scholarly communication would help visitors to the website understand the resources and opportunities
available to them.
Timeline
□ continuous project assigned in charge
X short-term project that will be completed this membership year
☐ multi-year project continuing past this membership year (expected completion date:)

Note: Multi-year, strategic goal-area projects are tracked in a multi-year planning grid. Expect your staff liaison to follow-up with questions to add this project to ACRL's multi-year planning grid which is reviewed by the Board at its fall Strategic Planning Session and referenced for budget preparation.

Outline the steps and intermediate deadlines planned to complete the project.

(add rows as needed)

PROJECT NAME: ReSEC website refresh

Team Members: Mary Galvin, Michelle Reed, Allison Langham-Putrow.

Specific Action	Due Date	Complete/In Progress and Notes
Assess what information should and should not be on the website	MW 2019	In Progress
Recommendations for revisions	Spring 2019	
Launch revised website and post on ACRL Insider about it.	Annual 2019	

Assessment: How will success be measured?

Increase in traffic will be one measure of success.



Division-level Committee Year-end Report and Work Plan Template

Committee

Committee Name: New Roles & Changing Landscapes

Charge/Tasks: To oversee and implement ACRL's New Roles and Changing Landscapes goal, as described in the strategic plan; work with the ACRL Board and other ACRL units in creating a comprehensive effort including coalition building, professional development, publications, research, advocacy, diversity, and consultation services and in developing the ACRL New Roles and Changing Landscapes Initiative; and monitor and assess the effectiveness of this initiative.

Committee leadership

Visit the <u>ACRL Directory of Leadership</u> to find your committee roster. Click the "Next Year" link to view 2017–18 roster information.

- Current Chair (2017-18): Mark Emmons
- Incoming Chair (2018-19): Anne Grant
- Incoming Vice-Chair (2019-20): Jolie Graybill
- Incoming Board Liaison (2017-18): Jeanne Davidson
- Staff Liaison: Erin Nevius

Submission information

Year-end report written by: Mark Emmons

Work plan submitted by: Anne Grant

2017-18 Year-end Committee Report

This report will be included in the Committee's official record of activities maintained by the ACRL staff.

What were the major projects/activities accomplished by your committee in the 2016–17 membership year?

A brief bulleted list is suggested here; reference 2017–18 work plan projects

- OER Constellation
- Change Course
- Collaboration and Partnerships

How did you go about getting them done?

A brief bulleted list is suggested (correspond bullets to those above)

- We held productive whole committee virtual meetings monthly.
- We assigned each member of the committee to one of three teams, representing our three projects.

What were the relevant results for your projects?

A brief bulleted list is suggested that includes assessment as appropriate (correspond bullets to those above). Be as specific as possible. For example: 300 proposals/applications reviewed, 32 selected; Developed and conducted three podcasts (list podcast titles, speakers, etc.) Reviewed ten standards and guidelines (list titles)

- The OER Constellation team collaborated with SPARC to develop an ACRL Roadshow adapted from the SPARC OER curriculum and began conversations with the Open Textbook Network to modify the curriculum. The team submitted a proposal for an ACRL preconference.
- The Change Course team developed a curriculum for the course teams at academic libraries can use to foster change at their own institutions. The team will complete the curriculum by the end of July 2018, at which point it will be made available to ACRL so that we can hire an instructional designer.
- The Collaboration and Partnership team is working with ACRL staff to draft a LibGuide and prepare an ACRL Presents webinar that will serve as a marketing tool to launch the collaborative branded document that will be crowdsourced by ACRL members and that will be "published" periodically.

Are any 2017-18 projects ongoing?

A brief bulleted list is suggested here

- The OER Constellation team will complete the curriculum and submit it to ACRL.
- The Change Course team members have all renewed their membership in the committee so that they
 might serve as subject matter experts for the instructional designer.
- The Collaboration and Partnership team will finalize the plan and lead the crowdsourcing effort.

What worked well?

A brief bulleted list is suggested here

- The committee works well as a whole.
- Every member was an active contributor.

What could have worked better?

A brief bulleted list is suggested here

• I could have held the teams more accountable for timeliness.

What do you wish someone had told you before starting work on this committee? *Optional*

- I had prior experience on goal level committees before.
- Our structure of serving as a vice chair before serving as a chair served me well.

What made this work most rewarding (observations/comments/accolades)? Optional

The committee is doing work that will make a difference in the lives of librarians, even though the gratification is delayed since we are still a very new committee just completing our second year in existence.

Any other comments, recommendations, or suggestions? *Optional*

The committee is in good hands with Anne Grant and Jolie Graybill lined up as our next two leaders.

2018–19 Committee Work Plan

Note: Each activity/project should be reported using the below form. Copy and paste the form as many times as needed to detail each activity/project. Plans should be **Specific, Measurable, Attainable, Realistic, and Timely or SMART).**

Please note that the work plan was developed individually by 2017/2018 chair Mark Emmons based on conversations and documents. The two work teams will be formed in July and will likely make changes and tune ups to the specifics of each work plan.

Activity/Project Name #1 OER Constellation

Brief Description

NRCL will finalize the development of a constellation of support mechanisms for librarians responsible for Open Education Resources, consisting of: (1) communities of practice, (2) list of proficiencies, (3) professional development opportunities and (4) toolkit of skills and approaches for successful programs and partnerships. NRCL has (1) worked with other organizations that are involved with OER such as SPARC and OTN and (2) has developed a list of basic proficiencies. This year NRCL will (1) identify potential communities of practice, (2) develop a webinar and identify librarians who can provide the webinar training and (3) identify elements of the toolkit and work with the community of practice to assure its use and usefulness. NRCL will work with ACRL staff to market and publicize the OER constellation. In addition, NRCL will prioritize the next role for which to create constellations and identify communities of practice so that new committee members with appropriate experience may be named. Work will be completed on the OER constellation by June 30, 2019.

Goal Area

Select the *single* best connection to the <u>ACRL Plan for Excellence</u> and provide a brief sentence connecting your project to the Plan.

□ Val	ue of Academic Libraries
	☐ 1. Cultivate research opportunities that communicate the impact of academic and research libraries in the higher education environment.
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	☐ 4. Support libraries in articulating their role in advancing issues of equity, access, diversity, and inclusion in higher education.
□ Stu	dent Learning
	☐ 1. Challenge librarians and libraries to engage learners with information literacy skills in a way that is scalable and sustainable.
	☐ 2. Increase the impact of information literacy by forming strategic partnerships with relevant higher education organizations
	☐ 3. Build capacity for librarians to collaborate with faculty and other campus partners in instructional and curricular design and delivery that will integrate information literacy into student learning.
	☐ 4. Articulate and advocate for the role of librarians in setting, achieving, and measuring institutional student learning outcomes.
□ Res	earch and Scholarly Environment
	☐ 1. Increase the ways ACRL is an advocate and model for open dissemination and evaluation practices.

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\square 2. Enhance members' capacity to address issues related to scholarly communication, including but not limited to data management, library publishing, open access, and digital scholarship.
☐ 3. Increase ACRL's efforts to influence scholarly publishing policies and practices toward a more open and equitable system.
☐ S. Increase Acids a chorts to influence scholarly publishing policies and practices toward a more open and equitable system. ☐ New Roles and Changing Landscapes
☐ 2. Equip library workforce at all levels to effectively lead, manage, and embrace change.
☐ 3. Expand ACRL's role as a catalyst for transformational change in higher education.
☐ Demonstrating Commitment to Equity, Diversity, and Inclusion within ACRL and/or the Profession.
☐ Enabling Programs and Services (education, advocacy, publications, or member engagement)
Brief sentence connecting your project to the Plan
The OER Constellation will deepen ACRL's advocacy and support for librarians with OER librarians and will
identify one new area to develop a constellation of support. These will be the first steps in a larger
constellation project that will deepen ACRL's advocacy and support for a full range of information
professionals in a variety of new roles.
professionals in a variety of new roles.
Timeline
☐ multi-year project continuing past this membership year (expected completion date:)
indict year project continuing past this membership year (expected completion date.

Note: Multi-year, strategic goal-area projects are tracked in a multi-year planning grid. Expect your staff liaison to follow-up with questions to add this project to ACRL's multi-year planning grid which is reviewed by the Board at its fall Strategic Planning Session and referenced for budget preparation.

Outline the steps and intermediate deadlines planned to complete the project.

Specific Action	Due Date	Party Responsible	Resources Needed (e.g., financial*, technology, staff support)
Identify communities of practice	September 1, 2018	NRCL OER team	
Develop webinar content based on syllabus drafted for Roadshow and identify librarians to provide webinar training	November 1, 2018	NRCL OER team	Staff support to set up webinar.
Schedule, publicize and deliver webinar	Spring 2019	NCRL OER Team	

Specific Action	Due Date	Party Responsible	Resources Needed (e.g., financial*, technology, staff support)
Develop toolkit with community of practice	June 30, 2019	NRCL OER team	Staff support to publicize proficiencies.
NRCL will prioritize the next role for which to create constellations and identify communities of practice so that new committee members with appropriate experience may be named	June 30, 2019	NRCL Committee	
Survey for measuring regard for components of OER.	January, 31 2019	NRCL OER Team	Electronic means to distribute surveys and collect results

Assessment: How will success be measured?

The OER Constellations will be successful if (1) they are completed, (2) they are used, and (3) they are well regarded. Completion will be assessed by making sure all four parts are finished by June 30, 2019. Use will be measured by web metrics – the first year will set a baseline with a goal of increasing use each year. How well they are regarded will be measured by a survey of each component administered during the first year of availability.

Activity/Project Name #2 Change & Innovation Course

Brief Description

NRCL has developed the curriculum for a self-directed, self-paced, online course on facilitating and leading library innovation that would be taken by teams of library employees. NRCL has identified an instructional designer to design and implement the course. NRCL will work with ACRL staff to ensure that the course offered a facilitated version of the course, using either ACRL Consulting Services or a library leader from another institution. Work will be completed by Spring 2019.

Goal Area

Select the *single* best connection to the <u>ACRL Plan for Excellence</u> and provide a brief sentence connecting your project to the Plan.

☐ Value of Academic Libraries
\Box 1. Cultivate research opportunities that communicate the impact of academic and research libraries in the higher education environment.
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☑ New Roles and Changing Landscapes
 □ 1. Deepen ACRL's advocacy and support for a full range of information professionals. ☑ 2. Equip library workforce at all levels to effectively lead, manage, and embrace change.
\square 3. Expand ACRL's role as a catalyst for transformational change in higher education.
☐ Demonstrating Commitment to Equity, Diversity, and Inclusion within ACRL and/or the Profession.
☐ Enabling Programs and Services (education, advocacy, publications, or member engagement)
Brief sentence connecting your project to the Plan
The Change & Innovation Course will equip library workforce at all levels to effectively lead, manage, and
embrace change on their campuses by providing the education and tools they need.

Timeline

□ continuous project assigned in charge
☐ short-term project that will be completed this membership year
☑ multi-year project continuing past this membership year (expected completion date: Fall 2018)

Note: Multi-year, strategic goal-area projects are tracked in a multi-year planning grid. Expect your staff liaison to follow-up with questions to add this project to ACRL's multi-year planning grid which is reviewed by the Board at its fall Strategic Planning Session and referenced for budget preparation.

Outline the steps and intermediate deadlines planned to complete the project.

Specific Action	Due Date	Party Responsible	Resources Needed (e.g., financial*, technology, staff support)
Identify an instructional	August 31, 2018.	NRCL Change Course team	Financial support to hire
designer to implement		as SME to instructional	course designer. Staff
the course.		designer	support to publicize course.
Assessment will be	September 29, 2018	NRCL Change Course Team	Means to electronically
designed to determine if			administer and collect
the course prompted			results.
change and/or innovation.			
Testing and assessment of	December 2018	NRCL Change Course Team	
the designed course.			
Course to be offered.	Spring 2019	NRCL Change Course Team	

Assessment: How will success be measured?

The Change & Innovation Course will be successful if (1) the course is completed by the instructional designer, (2) institutional change teams take the course, and (3) the course promotes change and innovation at individual institutions. Completion and design will be successful if finished by October 31, 2018. Use will be measured by numbers of institutions that take the course – the first year will set a baseline with a goal of increasing use each year. The instructional designer will embed assessment measures on both the course itself with a built in follow up evaluating if the course promoted change and innovation.

Activity/Project Name #3 Collaborations & Partnerships Publication

Brief Description

The Collaborations & Partnerships Publication team will work to develop an ACRL LibGuide that addresses and summarized New Roles and Changing Landscapes for the library community. This guide would be a place to link the Change Course and the Constellation projects so that they might be easily accessed by the ACRL community. This team also anticipates working on an ACRL webinar that will discuss how campus partnerships can enhance library services. This webinar will be an opportunity for a facilitated conversation about how academic libraries across the country are successfully (or not so successfully) partnering with other campus constituents. Both of these projects will hopefully lead to the opportunity to create an article that will share these ideas with the larger ACRL community.

Goal Area

Select the *single* best connection to the <u>ACRL Plan for Excellence</u> and provide a brief sentence connecting your project to the Plan.

☐ Value of Academic Libraries
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☐ Enabling Programs and Services (education, advocacy, publications, or member engagement)

Brief sentence connecting your project to the Plan

The Collaborations & Partnerships Publication team is creating a LibGuide to be an entry point for ACRL members and academic librarians to access all the work of the New Roles and Changing Landscapes Committee, where they can find tools they need to establish partnerships across campus and lead and manage change.

Timeline

☑ continuous project assigned in charge
\square short-term project that will be completed this membership year
oxtimes multi-year project continuing past this membership year (expected completion date: Fall 2018)

Note: Multi-year, strategic goal-area projects are tracked in a multi-year planning grid. Expect your staff liaison to follow-up with questions to add this project to ACRL's multi-year planning grid which is reviewed by the Board at its fall Strategic Planning Session and referenced for budget preparation.

Outline the steps and intermediate deadlines planned to complete the project.

Specific Action	Due Date	Party Responsible	Resources Needed (e.g., financial*, technology, staff support)
Develop ACRL LibGuide	January 31, 2019	Collaboration Team	LibGuide support from ACRL staff
Plan and launch webinar about partnerships	Spring 2019	Collaboration Team	Support for webinar launch from ACRL staff
Develop a survey to assess the impact of the webinar on familiarity with partnership practices in the academic library	Spring 2019	Collaboration Team	Support for launch and reporting of data from the survey
Plan for collaborative publication	Plan to be completed by June 30, 2019	Collaboration Team	

Assessment: How will success be measured?

Impact of the ACRL LibGuide created by the team will be evaluated by web traffic statistics from SpringShare. The webinar will be evaluated for impact on participant familiarity with partnership practices by a survey that will be distributed after the event. The plan for the collaborative article will be evaluated by the NRCL committee as a whole to determine next steps.

Activity/Project Name #4

Diversity Pipe Line

Brief Description

We have begun exploring changing demographics and social justice as part of the changing landscape with attention to how these relate to equity, diversity, and inclusion. Our next steps are to look at practical concreate approaches to the ideas that have emerged. One idea for such an approach might be a pipe line that encourages undergraduates and even graduate students and library staff to explore opportunities in librarianship. We recommend that we, along with the other goal committees, have a representative on the EDI team to enable communication.

Goal Area

Select the *single* best connection to the <u>ACRL Plan for Excellence</u> and provide a brief sentence connecting your project to the Plan.

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☐ Demonstrating Commitment to Equity, Diversity, and Inclusion within ACRL and/or the Profession.
☐ Enabling Programs and Services (education, advocacy, publications, or member engagement)
Brief sentence connecting your project to the Plan
In the committee's exploration of ways to use new roles and changing landscapes in libraries to encourage participation
from a broader range of individuals, we will relate not only to our own committee goal areas, but also the VAL diversity
goal.
godi.
Timeline
☑ continuous project assigned in charge
☐ short-term project that will be completed this membership year
☐ multi-year project continuing past this membership year (expected completion date:)
Note: Multi-year, strategic goal-area projects are tracked in a multi-year planning grid. Expect your staff liaison to follow-up with
questions to add this project to ACRL's multi-year planning grid which is reviewed by the Board at its fall Strategic Planning Session

Outline the steps and intermediate deadlines planned to complete the project.

and referenced for budget preparation.

Specific Action	Due Date	Party Responsible	Resources Needed (e.g., financial*, technology, staff support)
Explore the idea of the pipe line and develop concrete	September 28, 2018	Diversity team (newly formed)	

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Specific Action	Due Date	Party Responsible	Resources Needed (e.g., financial*, technology, staff support)		
ways to implement such a project					

Assessment: How will success be measured?

Committee chair and vice chair will bring ideas about the diversity pipe line to the SPOS meeting in October for discussion by the board.

ACRL Research Planning and Review Committee

2018 top trends in academic libraries

A review of the trends and issues affecting academic libraries in higher education

Livery other year, the ACRL Research Planning and Review Committee produces a document on top trends in higher education as they relate to academic librarianship. Topics in this edition of ACRL Top Trends will be familiar to some readers who will hopefully learn of new materials to expand their knowledge. Other readers will be made aware of trends that are outside of their experience. This is the nature of trends in our current technological and educational environments: change is continual, but it affects different libraries at different rates. The 2018 top trends share several overarching themes, including the impact of market forces, technology, and the political environment on libraries.

Publisher and vendor landscape

Publishers and database providers continue to move beyond their traditional functions of research dissemination and distribution into areas of enriched discovery, analytics, productivity, and research workflow.

In August 2017, Elsevier purchased institutional repository and publishing platform bepress. This purchase followed Elsevier's purchases of SSRN and Plum and exemplifies a trend of major publishers purchasing and developing services that radically extend their capabilities beyond publishing. More recently, Digital Science has announced a new tool,

Dimensions, which is intended to "reimagine" article discovery and access through, among other things, a citation databases and research analytics suite.² Clarivate Analytics, perhaps best known for providing access to indexing and citation resources, such as Web of Science, Journal Citation Reports, and Endnote, has continued to expand its commercial reach into the scholarly infrastructure realm and ecosystem with the acquisition of Publons (a peer-review platform) and Kopernio (which

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aims to provide more seamless access to licensed and open access content).³

As these large publishers and vendors turn more attention to the publishing infrastructure and elements of scholarly communication, they are becoming full-service providers supporting every aspect of scholars' publication workflow from discovery to dissemination. These changes could have major impacts on smaller publishers, independent service providers, and academic libraries in the coming years.

The attraction of this model lies in streamlining disparate elements of academic research and publishing with a single provider that can coordinate funding, data collection and analysis, collaboration across institutional and international boundaries, writing, publication, and promotion of published materials. How researchers find information impacts the marketplace.

Kyle Siler argues that academics are more likely to acquire information through online search than through reading, and if this is the case, large publishers have the infrastructural advantage in making scholarship more visible. This might seem like a familiar conundrum for libraries to contemplate: Is this the new version of the "Big Deal," where we are caught between demonstrating our value to researchers and determining sustainable commitments to licensed content and platforms?

An article in the *Chronicle of Higher Education* is one of the recent calls to members of the academic community to be more informed about the choices they make and be more active to change the climate.⁷ The efforts of European institutions, particularly in Germany and the Netherlands, to forward alternative approaches to open access and negotiations with major publishers, are other notable examples of actions toward sustainability of the scholarly information ecosystem.⁸

Attempts to change the payment model for scholarly publishing have also gained traction in the OA2020 movement. This is a trend for librarians to monitor, as it could have significant implications for collec-

tions budgets, subscriptions, and campus priorities.

In an effort to streamline access to licensed content and reduce or eliminate the need for users to resort to tools like SciHub and ResearchGate (threatened with a lawsuit), publishers, librarians, and other stakeholders have been collaborating on RA21.9 Highwire Press, meanwhile, has partnered with Google Scholar to develop CASA (Campus-Activated Subscriber Access). 10 These tools propose a federated identity system that would eliminate the need for IP authentication and proxy servers, allowing users to login once and be recognized across all participating platforms.

There are numbers of issues at play in the establishment and diffusion of federated identity systems, ¹¹ including 1) privacy concerns associated with the aggregation of this much user data, 2) potential challenges for smaller publishers unable to participate in the federated process, and 3) an increase in barriers faced by on-campus users. Access and discovery will continue to be both a priority and a challenge for libraries, as outside companies and individuals develop alternative mechanisms that are perceived as easier to use. ¹²

Fake news and information literacy

Though far from being a new phenomenon, fake news has proved to be highly influential as a descriptive term and rhetorical device. Fake news played a significant role in the 2016 presidential election, 13 and is a phrase frequently used by the current President of the United States to undermine mainstream news media. Libraries have responded to the issue of fake news, defined as deliberate misinformation that relies on attention-grabbing or inflammatory content to spread widely and influence others, by promoting information literacy as a means of verifying the accuracy and credibility of information. Initiatives, such as IFLA's "How To Spot Fake News" infographic, have gone viral and appeared in international news.¹⁴

Fake news and other forms of specious information presented as fact have drawn

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new attention to the old problems of resource evaluation and information credibility. Librarians have been quick to respond, and information trust and fake news are topics of forthcoming research studies from Project Information Literacy, a book from ALA Editions, and the spring 2018 issue of *Reference and User Services Quarterly*. ¹⁵ Academic librarians have developed numerous workshops and research guides devoted to fighting fake news and to promoting information literacy.

Going forward, it will be important to consider the complexity of fake news and the limits of information literacy in fighting it. A recent study found that fake news may not be as profoundly influential as previously reported, primarily affects hyperpartisan readers, and generally is used by individuals to reinforce what they want to believe.16 The problem of fake news is not restricted to facts as information alone is unlikely to change one's beliefs.17 The impact of the fractured and contested media landscape is well worth further consideration and action from the profession, and opens possibilities for partnerships with other people on our campuses who face the same concerns.

Project management approaches in libraries

Project management principles focus on an incremental, team-based approach when tackling large, digital projects, enabling libraries to effectively and efficiently prioritize staffing models, collections, and budgets. Project management has become part of the everyday work of many academic librarians, and most of them have participated in three-to-eight projects in the last five years." This is especially true as academic libraries collaborate on scholarly digital projects or involve institutional partners beyond the library or campus.

Michael J. Dulock and Holley Long report on how their library incorporated project management methodology adapted from techniques used in agile software development to deliver digital objects and collections with recommendation for other libraries.²⁰

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tive process has evolved from group editing bulleted, narrative texts and Gantt charts to more robust, collaborative software and applications that can be shared across many users and several institutional partners.

With an increased need for the knowledge and skills associated with formal project management principles, many professionals traditionally trained in library and information science find themselves lacking or needing additional coursework to become familiar with, or certified, in project management.

James H. Walther, a library and information management professor, examined the specific skill of project management by tailoring graduate coursework to incorporate personal course plans. From this approach he recommends using this teaching method more broadly in library and information science education.21 Brett D. Currier, Rafia Mirza, and Jeff Downing propose that project management planning skills have always existed within libraries and librarians, but an increased involvement in digital humanities initiatives requires an adjustment to a more "holistic mindset," where librarians "position themselves as collaborative partners on projects instead of service providers to projects."22

Textbook affordability and OER

Open Educational Resources (OER) continue to demonstrate importance in a number of ways: sustainable collections in libraries, affordable textbooks for students, new options for curriculum development, and avenues for digital scholarship. Challenges to faculty adoption include difficulty finding resources, lack of resources in a subject area, quality, and the content updates.²³ These perceived barriers can turn into opportunities for librarians to cultivate partnerships with faculty in the discovery, advocacy, and preservation of OER.

To build a sustainable OER collection in any medium, librarians must first identify user needs in supporting curriculum and research through a variety of collection management practices. By incorporating

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OER into the curriculum, librarians have the unique opportunity to develop collaborations with faculty, subject librarians, and academic technologists to assist in determining what OER are available, assessing their quality, and adding these materials into the course management system (CMS).²⁴

Librarians have also advocated for the adoption of OER through grant award programs and assistance in developing and publishing OER.²⁵ OER production can be a goal for library-based publishing efforts by leveraging advocacy efforts through the library and publishing experience through university presses to reduce costs for students, while showcasing research and teaching strengths at a university.²⁶

Libraries are not the only group advocating for OERs and textbook affordability. There are numerous campus partners, including students. To help students with controlling the cost of their education and to encourage faculty to choose affordable options, some schools include designators in their course registration systems to indicated courses with low-cost and zero-cost required texts.²⁷

A number of libraries are also leveraging their e-book content to support textbook affordability initiatives. These initiatives focus on providing e-access to course texts, as well as offering faculty the ability to consider and select available e-book titles for course use. 28 Limitations in the marketplace, such as DRM restrictions and required logins and software that users may not have already installed, are impediments to implementation.

Products from publishers and CMS platforms may create opportunities for libraries to work with faculty. The CMS Canvas allows for a feed from the bookstore into individual courses highlighting required texts.²⁹ EBSCO Course Builder integrates with the Blackboard CMS to enable faculty to search EBSCO³⁰ and quickly create their own links to readings from within the CMS.

These approaches are an evolution of the traditional print and e-reserves roles of the library, and leverage content that the

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for awareness of the library's value for the library to support faculty course development in new ways.

Learning analytics, data collection, and ethical concerns

The use of learning analytics, which involves the mining and analysis of student data to make improvements or predictions based on past student behavior, has intensified across higher education. Academic libraries are part of this trend, tying the use of library materials and services to student performance measures, such as GPA and retention rates. The use of learning analytics is viewed by some librarians and administrators as a promising tool for achieving positive outcomes for students and institutions. as well as for illustrating ways that academic libraries contribute to institutional productivity and academic achievement. The ACRL Academic Library Impact report advocates working with stakeholders to "statistically analyze and predict student learning and success based on shared analytics."31

Learning analytics, however, may pose significant conflicts with ALA's Code of Ethics and "professional commitments to promote intellectual freedom; protect patron privacy and confidentiality; and balance intellectual property interests between library users, their institution, and content creators and vendors "32"

Across higher education, concerns are being raised about reducing student learning and experiences to a set of variables and using data to identify "at-risk" students. The ethical dimensions of involvement in this area will be of increasing importance as college and research library participation in analytics programs progresses.

Librarians and other information professionals have raised concerns regarding how patron data is captured by library discovery tools and, in particular, how and with whom it is shared. Libraries seek to provide more refined and efficient services (marketing, discovery interfaces, collection use), but these

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improvements may be generated or informed through the analysis of user activity, creating a conundrum between user service and user privacy.³³ For example, proxy servers might involve collecting user IDs (and associated demographic information) and relating them to use of resources originating from that user. Issues of privacy and data aggregation and retention must be considered and balanced against library service enhancement, and often necessitate sustained communications between campus IT and the library.³⁴

Research datasets acquisition, text mining, and data science

With the growth of data science and quantitative research needs, collection managers have engaged in the establishment of more defined guidelines and best practices for the acquisition of standalone spatial and quantitative datasets. Data sources now go beyond text and numeric data, extending to multimedia data, social media data, and hypertext and hypermedia data.³⁵

Relevant mining techniques and methods range from information extraction, information retrieval, natural language processing, classification, and clustering to different ways of text summarization.³⁶

Datasets possess their own sets of acquisition and management challenges, including licensing restrictions, access and ownership, support, maintenance, discovery, and cost. Some libraries are beginning to offer more secure and dedicated funding lines for research datasets.³⁷ Most libraries are determining the best means of managing, funding, and developing these small data set collections.³⁸

There are challenges to the librarian and researcher since data sources are usually in silos and use different standards, rendering data integration difficult.³⁹ When dealing with datasets containing sensitive information, such as social media data, enterprise data, and health data, privacy-preserving techniques need to be applied carefully throughout the data integration, sharing, and processing stages.⁴⁰

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cant challenge. Many datasets are copyright-protected, and fair use rights could be limited by licenses. ⁴¹ There are still a variety of approaches among vendors for access to their respective corpus of data/text, which may or may not be in line with library best practices or library technical capabilities (e.g., dedicated servers for storage or development of content requirement of local developer resources to support).

Librarians can assist researchers by clarifying legal aspects and negotiating licensing permissions with publishers.⁴² By creating guides on text and data mining tools and methods and providing information on library databases and data sources, librarians support training and awareness of the data resources and tools that they purchase. Librarians and library technicians also provide support in areas such as digitization, data extraction, data preparation, and even devising models for data analysis. 43 At the end of text and data-mining projects, libraries may help preserve the datasets for reuse, assist researchers to contribute to open access datasets, and record metadata for discovery.44

The establishment of data science programs at numerous institutions has led to the need for librarians to adapt and integrate growing management, accessibility, and technical subject expertise to support data scientists. ⁴⁵ Professional associations and information science programs should continue to expand and enhance training in data management and data analytics to prepare librarians in using and addressing big data questions with colleagues and patrons. ⁴⁶

Collection management Acquisition model developments

Demand-driven acquisition (DDA) patterns continue to evolve as the majority of publishers have altered, restricted or eliminated their short-term loan (STL) options (particularly for front-list titles). These market changes and publisher responses to revenue losses have challenged the sustainability and attractiveness of broad-based e-book DDA.⁴⁷

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A more viable option for numerous libraries has been to engage with established library vendors for new DDA plans that do away with the STL model and provide non-DRM (digital rights management) access to university press titles. Although the corpus of titles, particularly frontlist titles, remains limited, aggregators are working to provide more DRM-free options, as well, for purchase through book jobbers.

Outside of "traditional" e-book DDA plans, newer streaming video plans have become increasingly popular to meet demand for streaming content.⁴⁸

The evidence-based acquisitions model (EBM) is a newer development, in which libraries make an upfront financial commitment to a publisher list of titles, and subsequently choose an agreed amount of titles for perpetual ownership. While this model is attractive to libraries and publishers alike, principal concerns of the EBA model are 1) the potential need for long-term annual commitment, due to potential variations in e-book use by discipline, and 2) the need for robust usage statistics for decision-making.

Open access collection development policies and funding schemes

A continuing challenge for collection budgets and policies surrounds the funding of open access initiatives, including the support of article-processing charges. David W. Lewis has called on libraries to consider devoting 2.5% of their budgets to supporting the open access infrastructure.⁴⁹ Depending on how the open access investment is defined⁵⁰ and an individual library's budget, 2.5% could have a substantial impact on the collections budget.

Cumulatively, if many libraries devote 2.5%, this could also have a substantial impact on open access initiatives. Therefore, it is incumbent upon libraries, particularly collection managers, to establish clear policies that outline parameters for the support and funding of specific open access initiatives and programs. ⁵¹ In addition, there is increasing discussion about how to incorporate

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decision-making, in particular, in relation to ever-increasing serial budgets (an open access-adjusted cost per download measure as proposed by Kristin Antelman).⁵² There has been some movement both in the United States and Europe for vendor licenses that allow for suspension of author-processing charges in the publisher's journal.⁵³

Legacy print collections

Several new large-scale print retention initiatives are in various stages of development, including the HathiTrust Print Retention Program, which has amassed retention commitments of more than 4.8 million volumes from member institutions.54 At the same time as libraries are digitizing collections and purchasing more in electronic format, there is discussion in the profession about how to manage, promote, and engage users with the library print collection. The Arizona State University report on open stacks, funded by the Andrew W. Mellon Foundation, begins to explore potential approaches to better tailor, diversify, and market the local print collection, and includes materials and tools to help guide individual libraries.55 Interestingly, some traditional measures, such as in-house usage, are being used to better understand patron engagement with onsite collections 56

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Environmental Scan 2017

By the ACRL Research Planning and Review Committee

March 2017

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ACRL 2017 Environmental Scan

Introduction

Every other year the ACRL Research Planning and Review Committee publishes a scan of the higher education environment with a focus on implications for academic libraries. The 2017 Environmental Scan builds on last year's Top Trends in Academic Libraries ¹ and the 2015 Environmental Scan, ² which discussed other notable topics of interest to the academic librarian community, including student success measurements and open educational resources. Therefore, we have chosen not to repeat those topics in this year's data. The topics discussed and reviewed in this year's Environmental Scan include higher education funding and costs, enrollment trends within higher education, evidence-based decision making in academic libraries, information literacy issues, competency-based education, digital preservation, open science, open data, curating research data, scholarly communication issues, open access and collection management trends, collection assessment and evaluation trends, research evaluation and metrics, planning and designing library spaces, and social justice issues related to libraries and higher education.

Higher Education Funding

The data collected for the Grapevine report on state fiscal support for higher education "show an overall 4.1% increase in state fiscal support for higher education from Fiscal Year 2015 (FY15) to Fiscal Year 2016 (FY16)." However, that modest increase comes after many years of cuts following the 2008 recession. According to The Pew Charitable Trusts' data, while federal spending on higher education has increased in recent years, state spending on public higher education has decreased since the Great Recession. The changing balance affects the operation of institutions of higher education, since the "federal government mostly provides financial assistance to individual students and funds specific research projects, while states typically fund the general operations of public institutions." Analysis compiled for the Young Invincibles' 2016 State Report Cards "shows that states have cut per student spending by 21 percent between fiscal years 2008

¹ ACRL Research Planning and Review Committee, "2016 Top Trends in Academic Libraries: A Review of the Trends and Issues Affecting Academic Libraries in Higher Education," *College & Research Libraries News* 77, no. 6 (June 1, 2016): 274–81, http://crln.acrl.org/content/77/6/274.

² ACRL Research Planning and Review Committee, "Environmental Scan 2015" (Chicago, IL: Association of College & Research Libraries, March 2015),

http://www.ala.org/acrl/sites/ala.org.acrl/files/content/publications/whitepapers/EnvironmentalScan15.pdf.

³ "Annual Grapevine Compilation of State Fiscal Support for Higher Education Partial Results for Fiscal Year 2015-2016" (Center for the Study of Education Policy at Illinois State University and the State Higher Education Executive Officers (SHEEO), 2016),

https://education.illinoisstate.edu/grapevine/Grapevine FY16 Press Release.pdf.

⁴ "Federal and State Funding of Higher Education: A Changing Landscape" (Washington, DC: Pew Charitable Trusts, June 2015), 1.

⁵ Ibid., 3.

through 2014. While many states have begun to reinvest in the past few years, only two states spend as much as they did before the recession (Alaska and North Dakota)."⁶ Alongside this development, "tuition and fees at both 4-year and 2-year institutions rose 28 percent since the last recession."⁷

A recent study from the Center on Budget and Policy Priorities (CPBB) describes a similar educational environment, where "states have slashed higher education funding" and "the price of attending public colleges has risen significantly faster than the growth in median income. Budgets for higher education institutions are still below pre-recession levels, tuition continues to rise, and enrollment continues to rise. However, "because tuition increases have not fully compensated for the loss of state funding, and because most public schools do not have significant endowments or other sources of funding, many public colleges and universities have simultaneously reduced course offerings, student services, and other campus amenities," as well as increasing the student-tofaculty ratio on average nationwide." ¹⁰ Increasingly, costs are shifted to the students, harming especially low-income students. Federal grants have increased, but since they do not cover the full cost of college, including room and board, students still borrow, increasing both the number of students in debt and the size of the average debt. 11 Pew and the CPBB both have recommendations to improve the situation, but all involve spending more money on higher education, even though "nearly every state has shifted costs to students over the last 25 years."12

Implications

Increasing enrollments and stagnant budgets will undoubtedly affect budgeting and staffing decisions in many public colleges and universities.
Further cuts to library budgets could affect everything from collections budgets or
lead to academic libraries hiring more part-time workers, as many colleges have
done via adjunct faculty.
Libraries could experience downward pressure on starting salaries and the
replacement of retiring and resigning staff with entry-level librarians and
paraprofessional staff.
Increasing student-to-faculty ratios could provide opportunities for libraries to
market instructional and research services to faculty who might welcome the
assistance in light of increasing workloads.

⁸ Michael Mitchell, Michael Leachman, and Kathleen Masterson, "Funding Down, Tuition Up State Cuts to Higher Education Threaten Quality and Affordability at Public Colleges" (Washingtion, DC: Center on Budget and Policy Priorities, August 15, 2016), 1, http://www.cbpp.org/sites/default/files/atoms/files/5-19-16sfp.pdf.

⁶ "2016 State Report Cards" (Washington, DC: Young Invincibles Student Impact Project, January 2016), 6, http://younginvincibles.org/wp-content/uploads/2016/01/YI-State-Report-Cards-2016.pdf.

⁷ Ibid., 7.

⁹ Ibid., 14.

¹⁰ Ibid., 15.

¹¹ Ibid., 16–17.

¹² Ibid., 16.

Higher Education Cost

Trends in Tuition and Fee Rates

The 2016 presidential election brought the cost of higher education to the forefront of many Americans' minds as the merit and plausibility free college tuition and rising student debt become platform issues. According to The College Board's *Trends in College Pricing 2016*, "the rate of growth of published tuition and fees is not accelerating over time." Rather, published tuition rates increased slightly less in 2016-17 than the year before, and they have shown a slower rate of increase between 2006-07 and 2016-17 than was seen for two decades prior. The recession period between 2008-09 and 2012-13 saw a 28% increase in average tuition and fees, but "as the economy has recovered, state and local per-student appropriations have risen and tuition increases have slowed considerably." However, the rate of increase remains higher than inflation and outpaces growth in incomes, which may contribute to greater affordability concerns for enrolling students and their families. ¹⁵

The latest Integrated Postsecondary Education Data System (IPEDS) provisional data, published in November 2016, shows that tuition and fees for "full-time, first-time degree/certificate-seeking undergraduates" has shown a general trend of increase between the 2013-14 and 2015-16 academic years. ¹⁶

Although for-profit institutions saw a very slight decrease (less than 1%), a price increase of about 4% was the norm among public and private nonprofit institutions, for both instate and out-of-state students. ¹⁷ Prices for *in-district* students—that is, "a student who lives in the locality surrounding the institution, such as county" ¹⁸—were slightly lower than in-state prices at 4-year institutions, but rose by the same percentage as in-state prices. At 2-year institutions, however, the difference was more noticeable: prices for indistrict students only rose by 4.9%, versus a 5.4% increase in prices for in-state students.

More recent data on published tuition and fees charges for 2016-17 are available from The College Board's Annual Survey of Colleges. For full-time, in-state undergraduates, The College Board's data show an average price of \$9,650 at public 4-year institutions and \$3,520 at public 2-year institutions. Compared to the same data reported for 2015-16,

¹³ The College Board, *Trends in College Pricing 2016*, (2016), 7, accessed January 2, 2016, at http://trends.collegeboard.org.

¹⁴ The College Board, 24.

¹⁵ The College Board, 3.

¹⁶ Scott A. Ginder, Janice E. Kelly-Reid, and Farrah B. Mann, *Postsecondary Institutions and Cost of Attendance in 2015-16; Degrees and Other Awards Conferred, 2014-15; and 12-Month Enrollment, 2014-15: First Look (Provisional Data)* (NCES 2016-112rev), U.S. Department of Education, (Washington, DC: National Center for Education Statistics, 2016), 3, accessed January 2, 2016, at https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2016112rev.

¹⁷ More specifically, the average full-time, in-state price at 4-year public institutions rose by 4.1% from \$7,819 (2013-14) to \$8,141 (2015-16), while the average full-time, in-state price at 2-year public institutions rose a bit more, by 5.4%, from \$3,738 (2013-14) to \$3,941 (2015-16).

¹⁸ Ginder, Kelly-Reid, and Mann (2016), 5.

this equates to price increases of 2.4% and 2.3% respectively, which does indeed suggest a slowing rate of increase. Regardless of the specifics of data collection, there is agreement that the rate of increase is in tuition is slowing but still outpaces tuition.

Average prices aside, the variation in actual tuition and fees between institutions is significant: although "37% of full-time public four-year undergraduates, including both in-state and out-of-state students, were enrolled at institutions with published tuition and fee levels between \$6,000 and \$8,999" in 2016-17, another 3% of these students faced lower prices and 17% faced published prices of \$15,000 or more. 19

Note that one cannot directly compare The College Board's pricing data for 2016-17 to the 2015-16 IPEDS data. This is due to a difference in reporting: IPEDS provides "institutional averages as reported by the institution, not average amounts paid by students (i.e., charges are not weighted by enrollment)."²⁰ The College Board data, on the other hand, provides enrollment-weighted data.²¹

Implications

- As the public awareness of college costs and student debt grows, so does pressure to contain costs. Libraries are cost-centers—they rarely bring in significant revenue—so libraries may be looked at as a place to cut.
- To preserve budgets, libraries will need to prove their value throughout the student lifecycle from recruitment to retention, from student learning to graduation rates.

Other Factors Affecting Price

In addition to tuition and fees, the total cost of higher education is affected by other factors such as room and board costs, textbook costs, and financial aid (not to mention other general expenses such as laundry, transportation, etc.). The College Board reports that room and board cost, on average, \$8,060 for in-district students at public 2-year institutions and \$10,440 for in-state students at public 4-year institutions. This equates to increases of 1.6% and 2.9% respectively, compared to The College Board's data for 2015-16.²² The College Board report points out that many expenses such as housing and food "are expenses people face whether or not they are in school," and the real cost to many students is the forgone earnings of a full-time job. But "because students tend to think of living expenses as part of the cost of going to college, and because they must come up with the funds to cover these outlays, it is useful to use these expenses as a proxy for forgone earnings."²³

¹⁹ The College Board, 13.

²⁰ Ginder, Kelly-Reid, and Mann (2016), 5.

²¹ The College Board, 9.

²² Ibid.

²³ The College Board, 8.

Textbook prices have also continued to increase, rising to \$82 for the average new textbook and \$59 for the average used textbook in 2014-15, compared to \$79 and \$59 in 2013-14 and \$72 and \$54 in 2012-13, according to the National Association of College Stores (NACS). In the 2015-16 Student Watch report, which is based on student-reported spending habits, the average student's annual spending on textbooks and other course materials has decreased, perhaps due in part to the leveraging of textbook rental options. More worrying, however, is the possibility that students are avoiding the costs and trying to complete courses without the required materials: in a 2014 report, 65% of students surveyed indicated that they had skipped buying a course textbook because of the cost, and as textbook prices continue to rise, this trend may persist or even increase, putting a student's academic success at risk.

Financial aid grants can decrease the actual price paid by students or their families (net price) as compared to the published tuition and fee price. In 2016-17, the average full-time, in-state student at a public 4-year college received enough grant aid and federal tax benefits to cover about 61% of the average published tuition and fee price. However, when increases in published tuition and fees are compared to increases in grant aid between 2011-12 and 2016-17, the increase in grant aid only accounts for about 19% of the increase in published tuition and fees, suggesting that rising grant aid still may not be able to keep pace with rising prices. ²⁷

Implications

- Rising textbook costs present an opportunity for academic librarians to advocate
 for open-access (OA) textbooks and other open educational resources (OER)
 across campus, as one way to help decrease the overall cost of obtaining a college
 degree.
- Course reserves, a long-time library services, could see renewed interest as faculty, students, and campus administrators look to contain textbook costs.
- Campuses with a "library fee" should not expect students to vote in increases.

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²⁴ National Association of College Stores, "Higher Education Retail Market Facts & Figures," (2016), accessed January 4, 2016, at https://www.nacs.org/research/HigherEdRetailMarketFactsFigures.aspx.

²⁵ Ethan Senack, *Fixing the Broken Textbook Market: How Students Respond to High Textbook Costs and Demand Alternatives*, U.S. PIRG [Public Interest Research Group] and the Student PIRGs, (Washington, DC: Center for Public Interest Research, 2014), 4, accessed January 5, 2016, at http://www.uspirg.org/reports/usp/fixing-broken-textbook-market.

²⁶ The College Board, 20.

²⁷ The College Board, 8.

Enrollment Trends

Changes in Enrollment Figures

According to IPEDS, overall enrollment at Title IV institutions²⁸ has shown a slight decrease of about -1.6% from fall 2014 to fall 2015 (the latest enrollment data currently available from IPEDS),²⁹ and the State Higher Education Executive Officers Association (SHEEO) reports a "slight decline in each of the last four years" nationwide.³⁰ However, the picture is more varied after the IPEDS data is separated according to public/nonprofit or for-profit sectors. Enrollment at 4-year institutions in both the public and nonprofit sectors *increased* by a little over 1% during this period, while 4-year for-profit institutions saw an enrollment decrease of about -9%. Enrollment changes among 2-year institutions are more prounounced, although 2-year public institutions saw an approximate -3% decrease, 2-year private nonprofits saw instead an increase of almost 51%, and 2-year for-profit enrollment dropped by -17%.

Some analysts think that economic recovery from the recent recessions could contribute to enrollment declines—as more people are able to find jobs, fewer non-traditional students arrive at colleges in search of additional education and training.³¹ Nevertheless, the persistent positive impact of a college degree on family income should continue to fuel enrollment demand: in 2015, "the median family income for families headed by a four-year college graduate was more than twice the median for families headed by a high school graduate."³²

Implications

Campuses fund	ded heavily	from tuitio	n money	will be	the most	affected	by
declining enro	llments.						

²⁸ Title IV of the Higher Education Act of 1965 (HEA) covers the administration of the United States federal student financial aid programs. American colleges and universities are generally classified with regard to their inclusion under Title IV. See https://studentaid.ed.gov/sa/glossary-Federal_Student_Aid_Programs

²⁹ Ginder, Kelly-Reid, and Mann (2016), 8. Calculations performed by author to compare 2016 data to: Scott A. Ginder, Janice E. Kelly-Reid, and Farrah B. Mann, *Postsecondary Institutions and Cost of Attendance in 2014-15; Degrees and Other Awards Conferred, 2013-14; and 12-Month Enrollment, 2013-14: First Look (Provisional Data)* (NCES 2015-097rev), U.S. Department of Education, (Washington, DC: National Center for Education Statistics, 2016), accessed January 2, 2016, at https://nces.ed.gov/pubs2015/2015097rev.pdf.

³⁰ State Higher Education Executive Officers Association, *State Higher Education Finance: FY 2015*, (2016), 21, accessed January 2, 2016, at http://sheeo.org/sites/default/files/project-files/SHEEO FY15 Report 051816.pdf.

³¹ Ellen Wexler, "State Support Recovering, but Not Recovered," *Inside Higher Ed*, April 27, 2016, https://www.insidehighered.com/news/2016/04/27/public-colleges-relied-less-tuition-2015. ³² The College Board, 29.

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Ш	Declining enrollments could affect per-FTE database licenses, so libraries experiencing dramatic enrollment changes should pay attention to potential cost-savings.
	The impact of fluctuating cost and enrollment will depend in large part on how a given library is funded. For example, overall increases in tuition and required fees may not include an increase in the library use fee; thus, funding by per-credit-hour student fees, coupled with declining enrollment, may result in a decreased library budget.

Regional Variations in High School Graduation rates

The Bureau of Labor Statistics reports that in "October 2015, 69.2 percent of 2015 high school graduates were enrolled in colleges or universities," or "about 2.1 million" students. That percentage has remained steady for many years, although the total number of high school graduates has recently begun to decline. He Western Interstate Commission for Higher Education (WICHE) predicts that "in many states education agencies and postsecondary institutions, used to planning for ever-larger demand, will face a new reality" as the supply of high school graduates declines or grows slowly in coming years. The declining number of high school graduates is not uniform across the United States however. By 2027, WICHE predicts that total numbers will have declined in the Northeast by 11%, the Midwest by 12.4%, and the West by 6% from peak numbers in previous years, while the South is predicted to increase by 5.5% over a previous peak in 2011.

The geographic distribution of high school graduates is of particular importance. According to a report from the American Council on Education, "the majority (57.4%) of incoming freshmen attending public four-year colleges enroll within 50 miles from their permanent home." Whether because of "distance elasticity," "spillover effects," or "community ties," geography plays a large role in where undergraduate students attend college, which is why regional variations in the number of high school graduates affects institutions of higher education. A recent *Chronicle of Higher Education* report anticipates that "this supply-demand problem will be particularly acute in the Northeast

³⁶ Ibid., 10.

³³ "College Enrollment and Work Activity of High School Graduates" (Washington, DC: Bureau of Labor Statistics, 2016), http://www.bls.gov/news.release/hsgec.toc.htm.

³⁴ "Digest of Education Statistics, 2015" (Washingtion, DC: National Center for Education Statistics, 2015), https://nces.ed.gov/programs/digest/d15/tables/dt15_302.10.asp.

³⁵ "Knocking at the College Door: Projections of High School Graduates 8th Edition" (Boulder, CO: Western Interstate Commission for Higher Education, December 2012), 5, http://www.wiche.edu/pub/knocking-8th.

³⁷ Nicholas Hillman and Taylor Weichman, "Education Deserts: The Continued Significance of 'Place' in the Twenty-First Century" (Washingtion, DC: American Council on Education, 2016), 2, https://www.acenet.edu/news-room/Documents/Education-Deserts-The-Continued-Significance-of-Place-in-the-Twenty-First-Century.pdf.

and Midwest, which are home to a greater concentration of institutions and are projected to produce fewer high school graduates over the next decade."³⁸

Implications

Public four-year colleges outside the South and West will likely face significant
declines in enrollment.
Potential downsizing could affect academic libraries in those institutions,
including the increasing necessity to justify budgets and staffing in the libraries of
affected institutions.
Declines in undergraduate enrollment in the East and Midwest could change the
proportion of undergraduate to graduate and traditional to non-traditional students
and affect library services and collections.

Information Literacy Issues

Transition to Framework for Information Literacy for Higher Education

With the ACRL's rescinding of the *Information Literacy Competency Standards for Higher Education*³⁹ in 2016, academic librarians are now considering how to incorporate ACRL's new *Framework for Information Literacy for Higher Education*⁴⁰ into their practice. Use of the Framework requires strategies for making the transition from the performance-based goals of the previous *Standards* to a less prescriptive set of learning goals that emphasize conceptual understanding in the form of threshold concepts. ⁴¹ The fundamentally different approach of the *Framework* compared to the previous *Standards* has been the topic of vigorous debate throughout the profession. ⁴² A number of writers have examined the Framework and the process of standards revisions from a perspective grounded in critical theory. ⁴³ Discussions of specific related issues are beginning to

³⁸ Jeffrey J Selingo, 2026, *The Decade Ahead: The Seismic Shifts Transforming the Future of Higher Education* (Washingtion, DC: The Chronicle of Higher Education, 2016), 9.

Association of College and Research Libraries, "Information Literacy Competency Standards for Higher Education," 2000, http://www.ala.org/acrl/sites/ala.org.acrl/files/content/standards/standards.pdf.
 Association of College and Research Libraries, "Framework for Information Literacy for Higher

Education," 2015, http://www.ala.org/acrl/standards/ilframework.

⁴¹ Nicole Pagowsky, "A Pedagogy of Inquiry," *Communications in Information Literacy* 9, no. 2 (2015): 136–44; Trudi E. Jacobson and Craig Gibson, "First Thoughts on Implementing the Framework for Information Literacy," *Communications in Information Literacy* 9, no. 2 (2015): 102–10.

⁴² ME Dempsey et al., "Continuing the Conversation: Questions about the Framework," *Communications in Information Literacy* 9, no. 2 (2015): 164–75.

⁴³ Emily Drabinski, "Toward a Kairos of Library Instruction," *The Journal of Academic Librarianship* 40, no. 5 (September 2014): 480–85, doi:10.1016/j.acalib.2014.06.002; Yasmin Sokkar Harker et al., "Seeking Social Justice in the ACRL Framework," *Communications in Information Literacy* 9, no. 2 (2015): 111–25; Kevin P. Seeber, "THIS IS REALLY HAPPENING: Criticality and Discussions of Context in ACRL's Framework for Information Literacy. . 2015;9(2):157.," *Communications in Information Literacy* 9, no. 2 (n.d.): 157–63.

appear in the literature, such as how to assess learners' conceptual understandings⁴⁴ and application of the *Framework* to discipline-specific information literacy needs. ⁴⁵ Knowing how to speak to administrators and teaching faculty about the Framework is particularly important, especially given the fact that Middle States Commission on Higher Education—a regional higher education accreditation agency that had previously included information literacy as one of its important learning outcomes for students—released a draft revision of their accreditation standards that did not include information literacy in its set of learning outcomes, nor mentioned the teaching functions of librarians. ⁴⁶ Though the standards were revised to include information literacy as a learning outcome, neither *libraries* nor *librarians* appear in the final version. ⁴⁷ In contrast, the federal K-12 *Every Student Succeeds Act* ⁴⁸ of 2015 includes language describing requirements for provision of effective school library programs. While this law does not apply to libraries in higher education, it is worthwhile to consider what the divergence between the two documents portends.

Implications

- Lack of support from accrediting bodies could downgrade the status of librarians as teaching partners.
- Work still needs to be done to make the Framework more easily implemented.
 Librarians must be confident in their understanding to communicate the elements of the Framework to faculty when they advocate for time to teach information literacy.

Libraries and Fake News

A particularly contentious presidential election cycle brought information literacy to the fore in the concern over the existence of "fake news" and the extent of its influence over the election results. A third of young Americans ages 18-29 get news from social

⁴⁴ Megan Oakleaf, "A Roadmap for Assessing Student Learning Using the New Framework for Information Literacy for Higher Education," *The Journal of Academic Librarianship* 40, no. 5 (September 2014): 510–14, doi:10 .1016/j.acalib.2014.08.001.

⁴⁵ Larissa Garcia and Jessica Labatte, "Threshold Concepts as Metaphors for the Creative Process: Adapting the Framework for Information Literacy to Studio Art Classes," *Art Documentation: Journal of the Art Libraries Society of North America* 34, no. 2 (September 2015): 235–48, doi:10.1086/683383; Maureen Knapp and Stewart Brower, "The ACRL Framework for Information Literacy in Higher Education: Implications for Health Sciences Librarianship," *Medical Reference Services Quarterly* 33, no. 4 (October 2, 2014): 460–68, doi:10.1080/02763869.2014.957098; Rebecca Z. Kuglitsch, "Teaching for Transfer: Reconciling the Framework with Disciplinary Information Literacy," *Portal: Libraries and the Academy* 15, no. 3 (2015): 457–70, doi:10.1353/pla.2015.0040.

⁴⁶ Stephen Bell, "Why'd Middle States Go and Do That?," *ACRL Insider*, February 11, 2014, http://www.acrl.ala.org/acrlinsider/archives/8299.

⁴⁷ Middle States Commission on Higher Education, *Standards for Accreditation and Requirements for Affiliation* (Philadelphia, PA: The Commission, 2015), http://www.msche.org/publications/RevisedStandardsFINAL.pdf.

⁴⁸ "Every Student Succeeds Act," Pub. L. No. S. 1177 (2015).

media. ⁴⁹ A Stanford University study showed that students in college, middle, and high school possess a troubling lack of skills in analyzing the validity of arguments in social media conversations and in differentiating advertisements from news stories, for example. ⁵⁰ In a related vein, following the election the news source Buzzfeed found that the top twenty "fake news" stories appearing in social media in the final three months of the campaign—including the most-shared falsehood that Pope Francis endorsed Donald Trump for the presidency—generated more user engagement than the top news stories appearing on websites of 19 major news organizations. ⁵¹ In the wake of the election, Facebook, a major channel for media content for many Americans, announced plans to curtail the propagation of fake news by implementing user reporting mechanisms and partnering with fact-checking organizations. ⁵² Librarians were part of the conversation about fake news and its influence on civic society with commentary by and about librarians' roles in media education appearing in several major media outlets. ⁵³

The widespread availability and consumption of "fake news" is partly due to lack of knowledge and expertise in evaluating information sources, but it cannot be separated from the human tendency toward cognitive biases such as confirmation bias—accepting information as true which already meets our pre-existing beliefs and values, and anchoring bias—fixation on initial information one hears about a topic. ⁵⁴ Social media combined with an explosion of information sources targeted for every conceivable demographic allow individuals to easily separate into information siloes, resulting in "filter bubbles" and "echo chambers." We must help learners expose the filter bubbles and help them to question the societal conditions that create the filter bubbles in the first place.

⁴⁹ Pew Research Center, "The Modern News Consumer," July 2016, http://www.journalism.org/2016/07/07/the-modern-news-consumer/.

⁵⁰ Stanford History Education Group, "Evaluating Information: The Cornerstone of Civic Online Reasoning," November 22, 2016, https://sheg.stanford.edu/upload/V3LessonPlans/Executive%.

⁵¹ Craig Silverman, "This Analysis Shows How Fake Election News Stories Outperformed Real News on Facebook," *Buzzfeed News*, November 16, 2016, https://www.buzzfeed.com/craigsilverman/viral-fake-election-news-outperformed-real-news-on-facebook.

⁵² Mike Isaac, "Facebook Mounts Effort to Limit Tide of Fake News," *The New York Times*, December 15, 2016, https://www.nytimes.com/2016/12/15/technology/facebook-fake-news.html.

⁵³ Donald A. Barclay, "Column: Can Librarians Help Solve the Fake News Problem?," *PBS NewsHour*, January 6, 2017, http://www.pbs.org/newshour/updates/column-can-librarians-help-solve-the-fake-news-problem/; Kaitlyn Tiffany, "In the War on Fake News, School Librarians Have a Huge Role to Play," *The Verge [Time Magazine]*, November 16, 2016, http://www.theverge.com/2016/11/16/13637294/school-libraries-information-literacy-fake-news-election-2016; Shannon Najmabadi, "How Can Students Be Taught to Detect Fake News and Dubious Claims?," *Chronicle of Higher Education*, December 12, 2016, http://www.chronicle.com/article/How-Can-Students-Be-Taught-to/238652.

⁵⁴ Jennifer L Hochschild and Katherine Levine Einstein, *Do Facts Matter?: Information and Misinformation in American Politics*, 2015; Samantha Lee and Shana Leibowitz, "20 Cognitive Biases That Screw up Your Decisions," *Business Insider*, August 26, 2015, http://www.businessinsider.com/cognitive-biases-that-affect-decisions-2015-8.

Implications

- Higher education's concerns over fake news may increase opportunities for collaboration involving the evaluation of information sources and critical thinking.
- Efforts to teach learners how to evaluate information source quality should incorporate discussion of the effect of cognitive biases, personal beliefs, and values on one's approach to information evaluation.

New Forms of Education: Competency-Based Education

Competency-based education (CBE) disrupts the traditional concept of higher education instruction and competence in a discipline, from being conceptualized as accumulation of credit hours—or time on task in an educational program—to being conceptualized as the direct assessment of the learner's mastery of defined skills and knowledge. ⁵⁵ Rather than prioritizing the education that happens within the bounds of an educational institution, learners are rewarded for on-the-job and experiential learning that is then bolstered by specific learning interventions to address deficiencies in knowledge and skills as they progress towards a degree. For example, a learner may require only a limited amount of coaching in a specific skill in order to reach a defined competency, or may need to enroll in an entire course in an area in which she lacks previous learning or experience.

This illustrates an important divergence from traditional programs: in the CBE model, a learner's progress to a degree is individualized and self-paced, making possible expedited progress through programs at a cost savings to the learner. In 2015, six hundred colleges and universities reported that they had already implemented or were currently developing competency-based programs⁵⁶ and a 2016 report by Ellucian found that institutions implementing CBE targeted the adult learner and represented enhancement of existing programs rather than creation of new programs.⁵⁷ One barrier to the widespread implementation of CBE programs is the federal financial aid requirement which bases aid awards on credit hours.⁵⁸ HR 3136, "Advancing CBE Demonstration Project Act," which would allow a small number of institutions to offer experimental CBE programs

⁵⁵ EDUCAUSE Learning Initiative, "7 Things You Should Know About... Competency-Based Education," 2015, https://library.educause.edu/~/media/files/library/2014/2/eli7105-pdf.pdf.

⁵⁶ C Giesinger et al., "Scaling Solutions to Higher Education's Biggest Challenges: An NMC Horizon Project Strategic Brief," October 2016, http://cdn.nmc.org/media/2016-nmc-horizon-strategic-brief-scaling-solutions.pdf.

⁵⁷ R Garrett and H Lurie, "Deconstructing CBE: An Assessment of Institutional Activity, Goals, and Challenges in Higher Education," 2016, http://www.ellucian.com/Software/CBE-Maturity.

⁵⁸ Giesinger et al., "Scaling Solutions to Higher Education's Biggest Challenges: An NMC Horizon Project Strategic Brief."

⁵⁹ "Advancing Competency-Based Education Demonstration Project Act of 2014," Pub. L. No. HR 3136 (2014).

that would be eligible for federal financial aid, has been passed by the House of Representatives but has not yet been taken up by the Senate as of this writing.

While CBE proponents argue for the model's potential to decrease costs while increasing the accessibility of a college degree for adult learners, there are many critiques of the model. Some argue that it requires oversimplification of complex knowledge and skills in order to provide direct assessment of competency and that learners within the model experience a lack of social support and engagement due to the absence of a cohort. 60 Detractors also claim that that the model is being driven by a focus on job skills and vocational training spurred by economic expediency to the detriment of a liberal education, which could further compartmentalize lower- and middle-class Americans into lower levels of the economic order.⁶¹

For library services and collection development, CBE calls for an approach that is competency- and program-based rather than course-based. Librarians should know what competencies are important to each program and design collections of information resources targeting these competencies. Furthermore, since each learner proceeds through their educational program in an individualized sequence, our services will need to be promoted on an individual basis, highly embedded and integrated within the academic and easily accessible at the point of need. 62 For library instruction, it is crucial to understand the heightened importance of performance- and portfolio-based assessments that probe learners' ability to perform workplace-relevant tasks. The success of CBE hinges on educators' ability to define competencies and assess learners' mastery of them. Implementation of CBE will require librarians to work closely with disciplinary faculty in order to formulate information literacy-related competencies: what do successful professionals in various fields do and produce with information in the workplace? Then, librarians will need to collaborate with teaching faculty in order to design assessments that document the competency of learners to perform those tasks successfully. For example, work products and accompanying assessment rubrics will most likely look different from the traditional academic papers and citation analyses that librarians have often used in the past.⁶³

⁶⁰ Daniel Hickey, "A Framework for Interactivity in Competency-Based Courses.," EDUCAUSE Review, August 3, 2015, http://er.educause.edu/articles/2015/8/a-framework-for-interactivity-in-competency-basedcourses.

⁶¹ S Ward, "Competency-Based Education Threatens to Further Stratify Higher Education," *Inside Higher* Ed, February 1, 2016, https://www.insidehighered.com/views/2016/02/01/competency-based-educationthreatens-further-stratify-higher-education-essay.

⁶² Kristin M. Woodward, "Students at the Center in Emerging Academic Models: Embedded Information Literacy and Distance Services in the University of Wisconsin System Flex Degree," Library Hi Tech News 32, no. 7 (September 7, 2015): 12-15, doi:10.1108/LHTN-04-2015-0023.

⁶³ L Homol and R Miller, "Keeping Up With...Competency-Based Education," 2015, http://www.ala.org/acrl/publications/keeping_up_with/cbe.

Implications

Academic librarians should continue to expand beyond one-shot instruction to
more sustained instruction, whether that is through multiple modules,
embeddedness, engaged design/tutorials, or through a focus on new forms of
literacy, such as digital literacy.
Librarians may need to rethink information literacy competencies to align with
program-level competencies rather than course-based or introductory skills and
devise ways for students to demonstrate their information competence in ways
that align with the CBE methodology.
Academic librarians need to continue to work closely with administrators, as well
as departmental leadership, to demonstrate their added value to the curriculum
and student learning. CBE might be one avenue for doing so.

SDigital Preservation

National digital stewardship agenda

In 2015, the National Digital Stewardship Alliance (NDSA) updated its National Agenda for Digital Stewardship, ⁶⁴ identifying actionable recommendations to advance the community capacity for digital preservation. The agenda recognizes that "much of the investment and effort in the field of digital preservation has been focused on developing technical infrastructure, networks of partnerships, education and training, and establishing standards and practices. Little has been invested in understanding how the stewardship community will coordinate the acquisition and management of born-digital materials in a systematic and public way."65 It thus calls for a robust empirical evidence base being built for generalizable guidance, basic research being paired with infrastructure development, and organizations and policies being focused on supporting long-term digital stewardship. The agenda highlighted LOCKSS (https://www.lockss.org/), DuraCloud (http://duracloud.org/), and the Digital Preservation Network (DPN) (http://dpn.org/) as the community-based platforms that continue to develop substantial functionality in support of long-term stewardship for digital scholarship. Recently EU funded projects are mentioned as progress in basic research: SCAPE (http://scape-project.eu/) designed an architecture for proactive and continuous preservation planning and monitoring which is context aware and can be integrated with operational systems; 66 4C (http://www.4cproject.eu/) conducted an analysis of state of the art in digital curation cost modeling, developed an online Curation Costs Exchange tool and a roadmap of recommendations for affordable digital curation solutions and services.

⁶⁴ NDSA Coordinating Committee and NDSA Working Group co-chairs, "2015 National Agenda for Digital Stewardship," 2014, http://hdl.loc.gov/loc.gdc/lcpub.2013655119.1.

⁶⁵ "2015 National Agenda for Digital Stewardship" (Washingtion, DC: National Digital Stewardship Alliance, September 2014), 4.

⁶⁶ Christop Becker, Luis Faria, and Kresimir Duretec, "Scalable Decision Support for the Digital Preservation," *OCLC Systems & Services: International Digital Library Perspectives* 30, no. 4 (2014): 249–84, doi:http://dx.doi.org/10.1108/OCLC-06-2014-0025.

University libraries leaders have witnessed the history of previous unsuccessful national print and digital preservation initiatives and they are now experiencing the recent limited attempts of some regional and some overlapped but still separated efforts on academic content preservations, for example, CLOCKSS (https://www.clockss.org/), Portico (http://www.portico.org/), the HarthiTrust (http://www.hathitrust.org/), the APTrust (http://aptrust.org/), and the DPN projects. They now call for a nation wide coordinated agenda to preserve the intellectual and cultural records and a system that is both robust and affordable. This must be a community effort and go beyond the walls of academic libraries, but it could also be an opportunity for the libraries to be the leader in this historical "time of change and uncertainty." 67

University libraries' digital preservation practices

University libraries are no doubt the loyal members in the digital stewardship community, from earlier projects of digitizing and providing digital access to these digital collections to recently building institutional repositories for digital scholarship produced all through the research life cycle. As their digital collections continue to expand, university libraries started to re-evaluate their current preservation policies and practices and update digital asset management system (DAMS) to prepare for future preservation challenges. Earlier in 2011, The College of Charleston transferred to use open source DAMS when its original system hit a license limit and encountered multiple issues.⁶⁸ Start from 2014, Yale University began to invest in a unified Hydra/Fedora infrastructure. ⁶⁹ More recently, the university of Houston Digital Library conducted a comprehensive assessment of existing DAMS and carefully planned the new system implementation based on its local context and needs⁷⁰; the University of North Texas Libraries' self-audit used the Trusted Repositories Audit and Certification (TRAC) checklist to identify current issues;⁷¹ the Atlanta University Center Robert W. Woodruff Library applied the Open Archival Information System (OAIS) Reference Model when considering their new system choices.⁷²

Within our professional organization, ACRL, the Digital Curation Interest Group (established in 2011), together with the Digital Humanities Interest Group (established in

⁶⁷ Deanna Marcum, "Due Diligence and Stewardship in a Time of Change and Uncertainty," *Ithaka Issue Brief*, no. April (2016): 1–10; Mary M Case, "Preservation and Scholarly Communication: The Grand Challenges of Our Time," *Technicalities* 36, no. 5 (2016): 1, 3–6.

⁶⁸ Heather Gilbert and Tyler Mobley, "Breaking Up With CONTENTdm: Why and How One Institution Took the Leap to Open Source," *Code4Lib Journal*, no. 20 (2013): 1–9.

⁶⁹ Yale University Library IT, "Hydra/Fedora Presentation," 2014, http://web.library.yale.edu/sites/default/files/files/HydraFedoraMSSA_presentation-v2.pdf.

⁷⁰ A Wu, S Thompson, and R Vacek, "Hitting the Road Towards a Greater Digital Destination: Evaluating and Testing DAMS at University of Houston Libraries," *Information Technology and Libraries*, no. June (2016): 5–19, doi:10.6017/ital.v35i2.9152.

⁷¹ Ana Krahmer and Mark Edward Phillips, "Communicating Organizational Commitment to Long-Term Sustainability through a Trusted Digital Repository Self-Audit," in *IFLA World Library and Information Congress, August 13-19, 2016.*, 2016.

⁷² Christine Wiseman and Al Matthews, "Time, Money, and Effort: A Practical Approach to Digital Content Management," *AUC Robert W. Woodruff Library Staff Publications*, no. Paper 8 (2016): 38–63.

2014) and the Numeric and Geospatial Data Services in Academic Libraries Interest Group (established in 2010), proposed to form a Digital Scholarship Section at the end of 2016, visioning to combine and coordinate various professional expertise and efforts all related to organization, preservation, presentation, and communication of digital scholarly assets. This could be a new starting point for the academic librarianship to formally address the digital preservation challenge for digital scholarship, and we could expect more active and collaborative involvement and contribution in this field from our profession.

Implications

University libraries' digital preservation efforts must continue with building an
infrastructure that could effectively and efficiently support the changing scholarly
communication life cycle as networked systems in light of the diversity of digital
objects and media ⁷³ and the increasing openness and collaborative nature of the
research process. ⁷⁴
Besides developing automation tools to gather good enough bibliographic
metadata, taxonomy for complex scholarly objects, and a sustainable system
accommodating new workflows, university libraries will have to not only
collaborate internally, but also engage more with the content producers,
publishers, research administrators, funder and many other stakeholders to secure
funding, policy, and support for a robust and constantly evolving research and
education system. ⁷⁵

Open Science and Open Data

Open Science

Discussion about the individual benefits of openness in research, in particular open data, has spread to a broad range of disciplines. Indeed, a growth of inter-disciplinary conversations about open research and data sharing are reflected in a spate of publications over the past several years across the life sciences, ^{76,77} physical sciences, ⁷⁸

⁷³ Amy Kirchhoff, Sheila Morrissey, and Kate Wittenberg, "Networked Information's Risky Future: The Promises and Challenges of Digital Preservation," *Educause Review*, no. May/June (2015): 50–51.

⁷⁴ Rebecca Kennison and Lisa Norberg, "A Network Approach to Scholarly Communication Infrastructure," *Educause Review*, no. May/June (2015): 58–59.

⁷⁵ Kirchhoff, Morrissey, and Wittenberg, "Networked Information's Risky Future: The Promises and Challenges of Digital Preservation"; Kennison and Norberg, "A Network Approach to Scholarly Communication Infrastructure."

⁷⁶Spires-Jones, T.L., Poirazi, P. and Grubb, M.S., 2016. Opening Up: open access publishing, data sharing, and how they can influence your neuroscience career. *European Journal of Neuroscience*, *43*(11), pp.1413-1419

⁷⁷ New England Journal of Medicine - Perspectives on Data Sharing: http://www.nejm.org/page/data-sharing

⁷⁸ Schmidt, B., Gemeinholzer, B. and Treloar, A. (2016). Open Data in Global Environmental Research: The Belmont Forum's Open Data Survey. *PloS one*, *11*(1), p.e0146695.

and social sciences.^{79,80,81} These frequently practical articles on the current state of open research within disciplines are important because they reflect discussion of professional norms by researchers within the discipline, rather than a discussion driven by libraries or administrators.

Open Science Policies and mandates remain on the rise, whether institutionally based or by funder. In the United States, the National Institutes of Health lead the charge by implementing a public access policy in 2008. 82 The response to the 2013 White House Office of Science and Technology (OSTP) memo on public access has resulted in over fifteen additional U.S. government agencies announcing plans for article and data sharing requirements. 83

Outside of the United States, the Research Councils UK expanded the RCUK Policy on Open Access in 2013 for an anticipated five-year transition to open access.⁸⁴ Additionally, the Australian Research Council instituted an open access policy that same year, and the Netherlands Organization for Scientific Research implemented an open access policy in 2016.⁸⁵ And in 2015, the Higher Education Funding Council for England added an open-access mandate to the Research Excellence Framework.⁸⁶ The impact of these mandates are beginning to be seen, as illustrated in the *Ithaka S+R Jisc RLUK Survey of UK Academics*, where more respondents in 2015 acknowledge the importance of characteristics of open access than in the 2012 survey.⁸⁷

⁷⁹ Nosek, B.A., Alter, G., Banks, G.C., Borsboom, D., Bowman, S.D., Breckler, S.J., Buck, S., Chambers, C.D., Chin, G., Christensen, G. and Contestabile, M. (2015). Promoting an open research culture. *Science*, 348(6242), pp.1422-1425.

⁸⁰ Borgman, C.L., Darch, P.T., Sands, A.E., Pasquetto, I.V., Golshan, M.S., Wallis, J.C. and Traweek, S. (2015). Knowledge infrastructures in science: data, diversity, and digital libraries. *International Journal on Digital Libraries*, 16(3-4), pp.207-227.

⁸¹ Herndon, J. & O'Reilly, R. (2016). Data sharing policies in social sciences academic journals: Evolving expectations of data sharing as a form of scholarly communication. In *Databrarianship: the academic data librarian in theory and practice* (Ed. Kellam, L.M. & Thompson, K.). Available at http://hdl.handle.net/10161/12792.

⁸² "NOT-OD-08-033: Revised Policy on Enhancing Public Access to Archived Publications Resulting from NIH-Funded Research," accessed November 18, 2016, http://grants.nih.gov/grants/guide/notice-files/NOT-OD-08-033.html.

⁸³ John Holdren, "Increasing Access to the Results of Federally Funded Scientific Research," Letter, (February 22, 2013),

https://www.whitehouse.gov/sites/default/files/microsites/ostp/ostp_public_access_memo_2013.pdf; Amanda Whitmire et al., "A Table Summarizing the Federal Public Access Policies Resulting from the US Office of Science and Technology Policy Memorandum of February 2013," April 18, 2016, doi:10.6084/m9.figshare.1372041.v5.

 ⁸⁴ Research Councils UK, "RCUK Policy on Open Access and Supporting Guidance," April 8, 2013.
 ⁸⁵ Australian Research Council, "ARC Open Access Policy," Text, *ARC Open Access Policy*, (June 17, 2014), http://www.arc.gov.au/arc-open-access-policy; NWO, "Open Science," 2016, http://www.nwo.nl/en/policies/open+science.

Higher Education Funding Council for England, "Policy - Open Access Research," *Higher Education Funding Council for England*, accessed November 18, 2016, http://www.hefce.ac.uk/rsrch/oa/Policy/.
 Christine Wolff, Alisa Rod, and Roger Schonfeld, "UK Survey of Academics 2015" (Ithaka S+R | Jisc | RLUK, June 15, 2016), http://www.sr.ithaka.org/publications/uk-survey-of-academics-2015/.

Funder mandates are not limited to just government agencies and public access to tax funded research. Open access policies have been instituted by the Wellcome Trust, Bill & Melinda Gates Foundation, and UNESCO.⁸⁸

Open science and open access policies aren't restricted to only funders, as more and more universities and other research institutions have introduced their own open access policies. The Harvard Faculty of Arts and Sciences and the Harvard Law School adopted policies in 2008, followed by Massachusetts Institute of Technology and University of Kansas in 2009. Since then, these institutional policies have expanded to over 40 universities and research institutions in the United States, and over 300 around the world that require open access to research.⁸⁹

Implications

Librarians can support open research by providing expertise, coordination, and
space for developing communities of practice at their own institutions.
Librarians can support the local and disciplinary discussions of open research by
supporting and facilitating conversations with stakeholders at their local
institutions.
Librarians who manage digital repositories should maintain awareness of
emerging tools and platforms in open science to enable discovery and
interoperability of data and associated metadata that are distributed across
multiple systems.

Open Science tools

As Open Science becomes more widespread, more and more tools become available to support such endeavors. These tools may range from databases like Sherpa/Juliet and ROARMAP, where one can find funder mandate information, to Jmol, an open source viewer for 3D molecules. Preprint servers like arXiv and Biorxiv can be used to disseminate research papers before submission, establishing precedence for research and garnering feedback in addition to formal peer-review. Figshare can be used to publish research outputs in a variety of formats, from datasets to conference slides to videos. And Open Science Framework, a research management platform that serves to provide version control, facilitate collaboration, and network project outputs, pulls it all together. This is only a short review of the tools available to support the open science and the scholarly conversation.

^{88 &}quot;Open Access Policy | Wellcome," accessed November 19, 2016, https://wellcome.ac.uk/funding/managing-grant/open-access-policy; "Open Access Policy," *Bill & Melinda Gates Foundation, accessed November 19, 2016, http://www.gatesfoundation.org/How-We-Work/General-Information/Open-Access-Policy; UNESCO, "Open Access Policy Concerning UNESCO Publications," 2013, http://unesdoc.unesco.org/images/0022/002208/220872E.pdf.

^{89 &}quot;ROARMAP," *Welcome to ROARMAP - ROARMAP*, accessed November 18, 2016, http://roarmap.eprints.org/.

⁹⁰ Krzysztof J. Gorgolewski and Russell A. Poldrack, "A Practical Guide for Improving Transparency and Reproducibility in Neuroimaging Research," *PLOS Biology* 14, no. 7 (July 7, 2016): e1002506, doi:10.1371/journal.pbio.1002506.

Implications

In order to support open science, academic librarians need to develop workflows,
consultation services and educational initiatives around open access, open data,
and open science tools.
In order to support open science and promote the reproducibility of research,
academic libraries need to develop workflows and services to support open access
to and transparency of research products.
As more funders and institutions continue to require open access to science and
research, academic librarians should develop workflows and services to support
these mandates.
As open science tools become more available, academic librarians should take the
lead and promoting and supporting such tools.

Open Data

Open data is not free data. Openness demands infrastructure, expertise, and people to lead culture change. Rather than our infrastructure dictating our approaches, it should align with our values and support researchers in adopting systems and approaches that are most effective for open research. Such resources carry costs for both the producers and consumers of data. However, the distribution of these costs across institutions, research centers, consortia, funders, publishers, and other stakeholders moving forward remains unclear. It has also become clear that open data is only one aspect of the emerging modern research environment. Page 192

Funder data policies and publisher data availability requirements continue to drive the conversation about open data in many disciplines. In conjunction with a lack of institutional research data policy and guidance, these top-down drivers pose significant practical challenges for researchers in meeting the disparate and sometimes conflicting guidelines. ⁹³ It is unclear yet how the federal funding agency policies, rife with ambiguity, will affect practice. In an effort to alleviate this uncertainty and to offer concrete guidance, many practical articles, reports, and guides have been written to help

⁹¹ Wilbanks, J. (2016). Keynote at the NIH Open Science Symposium. Available at http://www.slideshare.net/wilbanks/vannevar-bush-in-the-21st-century

⁹² Treadway, Jon; Hahnel, Mark; Leonelli, Sabina; Penny, Dan; Groenewegen, David; Miyairi, Nobuko; Hayashi, Kazuhiro; O'Donnell, Daniel; Science, Digital; Hook, Daniel (2016): The State of Open Data Report. figshare. doi:10.6084/m9.figshare.4036398.v1

⁹³ Briney, K., Goben, A. and Zilinski, L., 2015. Do you have an institutional data policy? A review of the current landscape of library data services and institutional data policies. *Journal of Librarianship and Scholarly Communication*, *3*(2).

researchers adopt open research practices. 94,95,96 Common recommendations include being informed about funder and publisher policies, creating an operational data management plan, posting or registering study design, and thoroughly documenting the research process and resulting data. While our understanding of the benefits and costs associated with open data is still incomplete and the process of sharing data is nascent, effective practices and standards such as the FAIR Data Principles are beginning to emerge. 97 An emerging theme over the past couple of years is that the value of data lies in their use. The stories of individual projects and scholars continue to be powerful in advocating for greater openness. To that end, several organizations including DataONE, SPARC, and others are gathering them for use in training and advocacy. 98,99,100,101 Research efforts by Sage Bionetworks is developing open research practices while expanding the role of participants based on the belief that open research practices and tools are needed to solve our most difficult health problems. 102,103 As many researchers have discovered, the utility of open data is limited by the quality of the associated documentation and description. Metadata are critical to the discovery, evaluation, and reuse of open data. 104

Many grassroots initiatives have arisen to help researchers and librarians develop the skills necessary to participate in and benefit from the emerging research environment. Similarly, both informal certificate programs and formal programs in data science have expanded greatly. As a greater percentage of the research workforce develops the skills to work with larger and more complex data and infrastructure, open research practices will become more feasible and prevalent.

⁹⁴ Michener WK (2015) Ten Simple Rules for Creating a Good Data Management Plan. *PLOS Computational Biology* 11(10): e1004525. doi: 10.1371/journal.pcbi.1004525

⁹⁵ Strasser, C., 2015. Research Data Management. National Information Standards Organization.

⁹⁶ Goodman A, Pepe A, Blocker AW, Borgman CL, Cranmer K, Crosas M, et al. (2014) Ten Simple Rules for the Care and Feeding of Scientific Data. *PLOS Computational Biology* 10(4): e1003542. doi:10.1371/journal.pcbi.1003542

⁹⁷ FORCE11. (2016). *Guiding Principles for Findable, Accessible, Interoperable and Re-usable Data Publishing version b1.0.* [online] Available at https://www.force11.org/fairprinciples.

^{98 &}quot;Data Stories | DataONE," accessed December 10, 2016, https://www.dataone.org/data-stories.

⁹⁹ "Impact Stories," SPARC, accessed December 10, 2016, http://sparcopen.org/impact-stories/.

¹⁰⁰ "DIKW: Data, Information, Knowledge, Wisdom: Data Stories," accessed December 10, 2016, http://inkouper.blogspot.com/search/label/data%20stories/.

¹⁰¹ "YourDataStories – EU Research Project on Opendata, Dataviz and DDJ," accessed December 10, 2016, http://yourdatastories.eu/.

¹⁰² John Wilbanks, "Citizens as Partners in the Use of Clinical Data - O'Reilly Radar," accessed December 10, 2016, http://radar.oreilly.com/2014/05/citizens-as-partners-in-the-use-of-clinical-data.html.

¹⁰³Wilbanks, J. and Friend, S.H., 2016. First, design for data sharing. *Nature biotechnology*. Available at http://www.nature.com/nbt/journal/v34/n4/full/nbt.3516.html

¹⁰⁴ Allard, S., Lee, C., McGovern, N.Y. and Bishop, A. (2016). The Open Data Imperative: How the Cultural Heritage Community Can Address the Federal Mandate. CLIR Publication No. 171. *Council on Library and Information Resources*.

¹⁰⁵ Software Carpentry. https://software-carpentry.org/

¹⁰⁶ Mozilla Science Lab: https://wiki.mozilla.org/ScienceLab

¹⁰⁷ Data Carpentry. http://www.datacarpentry.org/

¹⁰⁸ Coursera Data Science Specializations: https://www.coursera.org/browse/data-science?languages=en

¹⁰⁹ Data science programs in higher education. http://datascience.community/colleges

One key characteristic of scientific research is reproducibility, the ability to repeat studies while retaining consistent results. However, there is little incentive to investigate reproducibility and strong incentive to introduce new ideas. ¹¹⁰ There is concern in the sciences, and at large, that a not insignificant amount of published research includes false findings. ¹¹¹ In light of these concerns, open reproducible research has been gaining increasing traction in the sciences. In the Reproducibility Project: Psychology, perhaps one of the most significant reproducibility studies, 270 contributing authors, the Open Science Collaboration, worked together to complete 100 replications. ¹¹² By making the results freely and publicly available through the Open Science Framework, these collaborators are demonstrating guidelines put forth to support reproducibility. ¹¹³ Files associated with the project, from datasets to papers, are available for others to find, use, and build upon. This increases the transparency of the project, making this reproducibility study itself reproducible. Tools like the Open Science Framework, repositories, and platforms for openly sharing and disseminating research are integral to reproducibility.

Implications

- Libraries need to make open data discoverable and usable. Librarians will need to stay current on open datasets as another type of gray literature in their subject areas.
- Increasing use of data across the academy could escalate demand for computers
 with processing and visualization power. Libraries should consider if this
 capacity is service that they can provide to their campuses.

Curating Research Data

Established in 2013, the Research Data Alliance (RDA) (https://www.rd-alliance.org/) has now grown to include 4,500 volunteer members representing 115 countries and through working groups and interest groups and collectively working toward building the social and technical bridges that enable global open data sharing. RDA has so far endorsed many recommendations and outputs (https://www.rd-alliance.org/outputs-and-recommendations/all-outputs-recommendations) to help tackle infrastructure and data sharing challenges related to data reproducibility, preservation, legal interoperability, citation, data type registry, metadata and so on. Among these includes the 23 Things:

¹¹⁰ Brian A. Nosek, Jeffrey R. Spies, and Matt Motyl, "Scientific Utopia II. Restructuring Incentives and Practices to Promote Truth Over Publishability," *Perspectives on Psychological Science* 7, no. 6 (November 1, 2012): 615–31, doi:10.1177/1745691612459058.

¹¹¹ John P. A. Ioannidis, "Why Most Published Research Findings Are False," *PLOS Medicine* 2, no. 8 (August 30, 2005): e124, doi:10.1371/journal.pmed.0020124.

¹¹² Open Science Collaboration, "Estimating the Reproducibility of Psychological Science," *Science* 349, no. 6251 (August 28, 2015): aac4716, doi:10.1126/science.aac4716.

¹¹³ Gorgolewski and Poldrack, "A Practical Guide for Improving Transparency and Reproducibility in Neuroimaging Research"; Nosek, Spies, and Motyl, "Scientific Utopia II. Restructuring Incentives and Practices to Promote Truth Over Publishability."

libraries for Research Data in 11 languages (https://www.rd-alliance.org/group/libraries-research-data-supporting-output), an overview of practical, free, online resources and tools for librarians to incorporate research data management into their practice. Organizations, for example, the ICSU World data System (WDS) and the Data Seal of Approval (DSA) also partnered within RDA and developed their unified requirements for Core Trustworthy Data Repository certification. (https://www.icsu-wds.org/news/news-archive/wds-dsa-unified-requirements-for-core-certification-of-trustworthy-data-repositories). NISO has recently submitted a case statement to the RDA seeking broad international participation in its initiative on developing a consensus framework for managing privacy risks related to the collection, preservation, sharing, use and re-use of research data.

With all above diligent global and collaborative efforts and the availability of tools, technology, and best practices, research data curation is still a big challenge to the digital preservation professionals. According to Research Data Canada (RDC)'s recent survey of 32 Canadian and international online data platforms, there are "a heterogeneity of features and services across platforms, non-standardized use of terms, uneven compliance with relevant standards, and a paucity of certified data repositories."115 However, the launch of the Portage Network (https://portagenetwork.ca/) in 2014 by the Canadian Association of Research Libraries seem to be a very promising innovation that led by the library community with the ambition to develop a national research data culture, foster a community of practice for research data, and build Canada's national research data services and infrastructure. Besides a library based network of expertise on research data management, it's also going to be a national platforms for planning, preserving and discovering research data. The latter will allow multiple data centers and archives to ingest data, that could be preserved at a core network of dedicated trustworthy digital repositories, and accessible through various dissemination venues for use and reuse by researchers. 116 Curating and preserving government data in particular is potentially of even greater importance in light of the current administration, as some scientists believe. 117

Implications

☐ Curating research data sets challenge academic librarians' existing knowledge and skill limits as well as the libraries' infrastructure and limited resources. Libraries should consider the multiple ways to incorporate these new services including

^{114 &}quot;Case Statement: Joint NISO-RDA Working Group on Privacy Implications of Research Data Sets,"
2016, <a href="https://rd-alliance.org/sites/default/files/case_statement/15-1223 RDA Case Statement WG on Data%26 Privacy.doc - overlay-context=group/rdaniso-privacy-implications-research-data-sets-wg/case-statement/rdaniso-privacy-implications.</p>

T15 Claire Austin et al., "Research Data Repositories: Review of Current Features, Gap Analysis, and Recommendations for Minimum Requirements," *IASSIST Quarterly*, no. Preprint (2015): 1–17.

The Chuck Humphrey, "Shared Stewardship of Research Data," 2016.

¹¹⁷ Amina Khan, "Fearing Climate Change Databases May Be Threatened in Trump Era, UCLA Scientists Work to Protect Them," *Los Angeles Times*, January 21, 2017, http://www.latimes.com/science/sciencenow/la-sci-sn-climate-change-data-20170121-story.html.

expanding existing institutional repositories, ¹¹⁸ forming regional consortium ¹¹⁹ and even international organizations, ¹²⁰ or collaborating directly with the research communities ¹²¹ and other stakeholders. ¹²²
Academic libraries' continuous involvement with and contribution to this national and international agenda of preserving all relevant scholarly products as evidenced in research data curation will provide opportunities to engage with the
research community, the government, and the public, through meaningful conversation and high level collaboration.

Scholarly Communication

Institutional Versus Subject Repositories

Low rates of deposit to Institutional Repositories (IRs) persist in the United States; while IR early adopter and leader MIT in 2016 celebrated their IR reaching 44% of the faculty articles published since implementation of their OA policy¹²³ and a few other universities such as Oregon State University and Nebraska State University have also surpassed 40%, U.S. universities as a rule remain below a 50% deposit rate. The University of California system has been holding at just 25%,¹²⁴ and the average voluntary deposit rate at U.S. universities without a deposit policy is much lower. While open archival mandates have been successful in Europe—resulting for instance in archival rates of 90% at the University of Liege in Belgium,¹²⁵ where the passive compliance mechanism in the mandate states that publications can only be considered for tenure and promotion if the final accepted manuscript has been deposited in the IR—the weaker institutional policies in the U.S. have not by themselves been sufficient to motivate high rates of deposit. However, a recent study by Oregon State, which saw deposit rates climb from 11% to

¹¹⁸ Laura Palumbo et al., "Preparing to Accept Research Data: Creating Guidelines for Librarians," *Journal of eScience Librarianship* 4, no. 2 (November 2015): e1080–e1080, doi: 10.7191/jeslib.2015.1080.

¹¹⁹ "Texas Digital Library Dataverse Implementation Working Group Final Report," 2016, https://tdl.org/wp-content/uploads/downloads/2016/09/TDL-DIWG-Final-Report.pdf.

¹²⁰ Andrea Goethals et al., "Facing the Challenge of Web Archives Preservation Collaboratively: The Role and Work of the IIPC Preservation Working Group," *D-Lib Magazine* 21, no. 5/6 (May 2015), doi: 10.1045/may2015-goethals.

¹²¹ Amy Barton, Paul J Bracke, and Ann Marie Clark, "Digitization, Data Curation, and Human Rights Documents: Case Study of a Library-Researcher-Practitioner Collaboration," *IASSIST Quarterly*, no. Spring (2016): 27–34.

¹²² Kevin R. Dyke et al., "Placing Data in the Land of 10,000 Lakes: Navigating the History and Future of Geospatial Data Production, Stewardship, and Archiving in Minnesota," *Journal of Map & Geography Libraries* 12, no. 1 (2016): 52–72, doi:10.1080/15420353.2015.1073655.

¹²³ Katharine Dunn, "New milestone for MIT faculty open access policy," *MIT Libraries: News & Events*, August 19, 2016, https://libraries.mit.edu/news/milestone-faculty-access-3/22639/.

¹²⁴ Paul Basken, "The U. of California's open-access promise hits a snag: The faculty," *The Chronicle of Higher Education*, July 7, 2016, http://www.chronicle.com/article/The-U-of-California-s/237044.

¹²⁵ Ian Chant, "Increasing participation in your institutional repository," *Library Journal*, February 1, 2016, http://li.libraryjournal.com/2016/02/oa/increasing-participation-in-your-institutional-repository/.

45%, demonstrated that "outreach activities and mediated deposit services" may have more impact on deposit rate than a policy alone. 126

One of the suggested contributors to low IR participation is that researchers tend to be more aligned with and more loyal to a discipline than an institution—at least in part because the average researcher will change universities at least once during their career ¹²⁷—and thus more likely to deposit to a subject repository versus an institutional repository. Indeed, compared to lagging IR deposit rates, the landscape of subject repositories grew significantly in 2016, with launches or announcements of SocArXiv: Open Archive of the Social Sciences, engrXiv, ChemRxiv, and PsyArXiv¹²⁸ joining the likes of bioRxiv and the original arXiv, which celebrated its 25th anniversary in 2016.

However, concerns loom about the risk of monetization of subject repositories—or the data they represent, in particular ¹²⁹—and open access initiatives in general. In May 2016, not long before the launch of SocArXiv, Elsevier acquired SSRN, a previous venue for open archives for the social sciences. ¹³⁰ Elsevier has also begun building partnerships with universities to increase ties between its ScienceDirect platform and university IRs; ¹³¹ reactions to this partnership differ, due at least in part to a fundamental difference in philosophy concerning the goals and purpose of the IR, ¹³² and this very disagreement

¹²⁶ Hui Zhang, Michael Boock, and Andrea Wirth, "It takes more than a mandate: Factors that contribute to increased rates of article deposit to an institutional repository," *Journal of Librarianship & Scholarly Communication* 3, no. 1 (January 2015): 14.

¹²⁷ Aaron Tay, "Are institutional repositories a dead end?," *Musings About Librarianship* (blog), August 11, 2016, http://musingsaboutlibrarianship.blogspot.com/2016/08/are-institutional-repositories-failing.html#.WDnJ9dQrKt9.

¹²⁸ Philip N. Cohen, "Announcing the development of SocArXiv, an open social science archive," SocOpen: The SocArXiv Blog, July 9, 2016, https://socopen.org/2016/07/09/announcing-the-development-of-socarxiv-an-open-social-science-archive/; "Announcing engrXiv, the eprint server for engineering," engrXiv Blog, July 27, 2016, https://blog.engrxiv.org/2016/07/announcement; American Chemical Society, "American Chemical Society announces intention to establish 'ChemRxiv' preprint server to promote early research sharing," press release, August 10, 2016,

https://www.acs.org/content/acs/en/pressroom/newsreleases/2016/august/acs-announces-intention-to-establish-chemrxiv-preprint-server-to-promote-early-research-sharing.html; Sean Rife, "Introducing PsyArXiv: A preprint service for psychological science," *PsyArXiv Blog*, September 19, 2016, http://blog.psyarxiv.com/psyarxiv/2016/09/19/introducing-psyarxiv/.

¹²⁹ ckelty, "It's the data, stupid: What Elsevier's purchase of SSRN also means," *Savage Minds* (blog), May 18, 2016, http://savageminds.org/2016/05/18/its-the-data-stupid-what-elseviers-purchase-of-ssrn-also-means/.

¹³⁰ Roger Schonfeld, "Elsevier acquires SSRN," *The Scholarly Kitchen* (blog), May 17, 2016, https://scholarlykitchen.sspnet.org/2016/05/17/elsevier-acquires-ssrn/.

¹³¹ Carl Straumsheim, "Opening up the repository," *Inside Higher Ed*, May 25, 2016, https://www.insidehighered.com/news/2016/05/25/university-florida-elsevier-explore-interoperability-publishing-space; Sacha Boucherie, "Publisher/University collaboration expands access to research articles," Elsevier, May 19, 2016, https://www.elsevier.com/connect/publisher-university-collaboration-expands-access-to-research-articles; Judith C. Russell et al., "Academic library and publisher collaboration: Utilizing an institutional repository to maximize the visibility and impact of articles by university authors," *Collaborative Librarianship* 8, no. 2 (2016), :

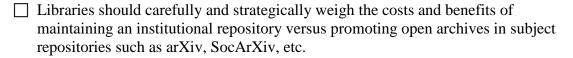
http://digitalcommons.du.edu/collaborativelibrarianship/vol8/iss2/4.

Ellen Finnie and Greg Eow, "Beware the Trojan horse: Elsevier's repository pilot and our vision for IRs & open access," *IO: In the Open* (blog), May 31, 2016, http://intheopen.net/2016/05/beware-the-trojan-

of what the IR does or should do seems to be at the heart of recent professional debates regarding the success or failure of IRs. 133

These recent actions build upon Elsevier's past "research intelligence" acquisitions, such as Mendeley and Pure (formerly Atira), but the company is not alone in what Richard Poynder describes as "colonizing and building out the open access infrastructure;" ¹³⁴ in 2016, scholarly publishing also witnessed the acquisition by John Wiley & Sons of the scholarly content hosting platform Atypon. ¹³⁵ For-fee databases such as Inspec have begun integrating content from open repositories, and the FIZ AutoDoc document delivery service is now charging customers to be linked to freely available open-access content; Poynder asserts that it is "safe to assume" Elsevier will eventually begin charging for access to open content as well. ¹³⁶ Some publishers such as Taylor and Francis and Springer Nature are also moving to provide libraries with automatic services for uploading both faculty pre-print and open access content into their respective IRs.

Implications



horse-elseviers-repository-pilot-and-our-vision-for-irs-open-access/; Coalition of Open Access Policy Institutions, "COAPI Steering Committee statement on UF-Elsevier pilot," June 2, 2016, https://docs.google.com/document/d/1zSqYYRERO-0Bdqsh14Gje9WBOrD4srdhuO624a0dT24/edit; Barbara Fister, "When is the library open?," *Library Babel Fish* (blog), *Inside Higher Ed*, June 2, 2016; https://www.insidehighered.com/blogs/library-babel-fish/when-library-open; Roger Schonfeld, "Building a repository in partnership with Elsevier: The University of Florida's perspective," *The Scholarly Kitchen* (blog), June 29, 2016, https://scholarlykitchen.sspnet.org/2016/06/29/elsevier-uf-partnership/;Russell et al., "Academic library and publisher collaboration."

¹³³ Eric Van de Velde, "Let IR RIP," *SciTechSociety* (blog), July 24, 2016, http://scitechsociety.blogspot.co.uk/2016/07/let-ir-rip.html; Richard Poynder, "Q&A with CNI's Clifford Lynch: Time to re-think the institutional repository?," *Open and Shut?* (blog), September 22, 2016, http://poynder.blogspot.co.uk/2016/09/q-with-cnis-clifford-lynch-time-to-re_22.html; Kathleen Shearer, "More on the future of repositories: Response to Richard Poynder," *COAR: Confederation of Open Access Repositories*, September 28, 2016, https://www.coar-repositories.org/news-media/more-on-the-future-of-repositories-response-to-richard-poynder/; Richard Poynder, "Institutional repositories: Response to comments," *Open and Shut?* (blog), October 5, 2016, http://poynder.blogspot.com/2016/10/institutional-repositories-response-to.html; Aaron Tay, "Making scholarly communication great again: Do institutional repositories still have a role?" (presentation for UKSG, online, October 26, 2016), http://www.uksg.org/webinars/institutionalrepositoriesandopenaccess.

¹³⁴ Poynder, "Q&A," 6.

¹³⁵ Wiley-Blackwell, "Wiley signs definitive agreement to acquire Atypon," press release, August 18, 2016, http://www.wiley.com/WileyCDA/PressRelease/pressReleaseId-127702.html.

Libraries committed to growing their institutional repositories would be well-
served to aggressively pursue open archival mandates, including, when possible,
passive compliance mechanisms tied to tenure and promotion.
Libraries should consider carefully commercial vendor strategies in the IR
environment.

Open Peer Review

As libraries take a larger role in the publishing scholarly monographs and journals, one area to watch is that of open peer review in the scholarly communication process. Open peer review can be utilized in several different ways – through signed reviews, publishing signed reviews and author responses alongside an article, or even through crowd-sourcing peer review via comments to pre-print services such as ArXiv.org – ultimately open peer review is characterized by transparency.¹³⁷

As a result, this transparency is attributed with relieving a number of potential issues related to the blind peer review process. Where it has been suggested blind peer review leads to reviewer abuse, open peer review provides accountability for reviewers to provide courteous, high quality, professional reviews. At the same time, open peer review can provide added value for reviewers by publicly crediting them for their time and intellectual contributions to the final manuscript. Additionally, it has been suggested that open peer review can contribute to the reproducibility of research and easier identification of misconduct. Furthermore, it has been suggested that open peer review can strengthen scholarly communities through dialogue, achieve social justice by challenging elitism in the scholarly communication process, and help that process take place faster than through blind peer review. As a number of potential issues review.

¹³⁷ Elizabeth Walsh et al., "Open Peer Review: A Randomised Controlled Trial," *The British Journal of Psychiatry* 176, no. 1 (January 1, 2000): 47–51, doi: 10.1192/bjp.176.1.47; Elizabeth C. Moylan et al., "Open, Single-Blind, Double-Blind: Which Peer Review Process Do You Prefer?," *BMC Pharmacology and Toxicology* 15 (2014): 55, doi: 10.1186/2050-6511-15-55; Kathleen Fitzpatrick, "Peer-to-peer Review and the Future of Scholarly Authority," *Social Epistemology* 24, no. 3 (July 1, 2010): 161–79, doi: 10.1080/02691728.2010.498929; David Shotton, "The Five Stars of Online Journal Articles - a Framework for Article Evaluation," *D-Lib Magazine* 18, no. 1/2 (January 2012), doi: 10.1045/january2012-shotton.

¹³⁸ Walsh et al., "Open Peer Review"; Axel Boldt, "Extending ArXiv.org to Achieve Open Peer Review and Publishing," *Journal of Scholarly Publishing* 42, no. 2 (January 1, 2011): 238–42, doi:10.3138/jsp.42.2.238; Fitzpatrick, "Peer-to-peer Review and the Future of Scholarly Authority." ¹³⁹ Ulrich Pöschl, "Interactive Journal Concept for Improved Scientific Publishing and Quality Assurance," *Learned Publishing* 17, no. 2 (April 1, 2004): 105–13, doi:10.1087/095315104322958481. ¹⁴⁰ Boldt, "Extending ArXiv.org to Achieve Open Peer Review and Publishing"; Pöschl, "Interactive Journal Concept for Improved Scientific Publishing and Quality Assurance." ¹⁴¹ Boldt, "Extending ArXiv.org to Achieve Open Peer Review and Publishing"; Pöschl, "Interactive Journal Concept for Improved Scientific Publishing and Quality Assurance"; Thomas H.P. Gould, "Scholar as E-Publisher," *Journal of Scholarly Publishing* 41, no. 4 (June 1, 2010): 428–48, doi:10.3138/jsp.41.4.428; Kathleen Fitzpatrick and Avi Santo, "Open Review: A Study of Contexts and Practices," December 1, 2012, https://mellon.org/resources/news/articles/open-review-study-contexts-and-practices/.

There are deterrents to utilizing open peer review, as it will impact scholarly communication, from authors and reviewers, to editor, publishers, and journals. ¹⁴² There may be hesitancy to move from a well-known system to signing reviews or knowing who article authors are. ¹⁴³

Implications

Libraries acting as publishers need to investigate the support and integration of
open peer review in their publication process.
As interest grows, academic librarians should develop consultation services and
educational initiatives to support authors interested in taking advantage of open
peer review.

Open Access and Collection Management Trends

The JISC study from May 2016 offers some significant analysis of trends in Article Processing Fees, particularly paying attention to offsetting costs and publisher responses and to the need for the accurate recording of Article Processing Charge (APC) cost data. The recent ARL SpecKit (SpecKit 353) also focuses on trends across ARL libraries in the funding, management, and policies of open access funds that support APCs. An increasing number of symposia, including the recent symposium at University of Kansas, are critically reassessing the development and trends of APCs in the scholarly communication ecosystem. Interesting findings from these studies and discussions include (1) the slowing down of APC support overall due to budget constraints within library budgets, (2) the need for greater transparency in terms of measuring APCs, including grant/voucher schemes and other offsetting costs, (3) the convergence of APCs across publishers, and (4) "double dipping" in the context of hybrid journals.

Building upon the OA2020 White Paper from the Max Planck society, ¹⁴⁵ which proposed a flipped model (article processing fees in lieu of subscription costs) for the funding of academic journals, the 2016 Pay-it-Forward Study ¹⁴⁶ from the University of California (Davis) concludes that such a funding model is indeed feasible, albeit in the most broadest of senses, and would not only depend on library collection budgets, but also on external partners such as grant funding agencies. One of the fundamental assumptions in these studies is that there is value in uncovering the costs of publishing, and thereby possibly allowing authors and researchers to place pressure on publishers. The report's

¹⁴² Emily Ford, "Defining and Characterizing Open Peer Review: A Review of the Literature," *Journal of Scholarly Publishing* 44, no. 4 (January 1, 2013): 311–26, doi:10.3138/jsp.44-4-001.

¹⁴³ Kathleen Fitzpatrick and Katherine Rowe, "Keywords for Open Peer Review," *Logos* 21, no. 3 (December 1, 2010): 133–41, doi: 10.1163/095796511X560024.

¹⁴⁴ "Article Processing Charges and Subscriptions: Monitoring Open Access Costs." JiSC publication. https://www.jisc.ac.uk/reports/apcs-and-subscriptions. Accessed December 7, 2016. Also of interest may be the Open Access Symposium on "Beyond APCs/BPCs" held at University of Kansas in November 2016 (https://www.jisc.ac.uk/reports/apcs-and-subscriptions).

¹⁴⁵ The White Paper led to the unveiling of a website which outlines a roadmap for large scale transformation of scholarly dissemination to be open access. See more here: http://oa2020.org/. ¹⁴⁶ For the Pay-it-Forward study's background and the final report, see http://icis.ucdavis.edu/?page_id=713. Accessed November 21, 2016

publication has led to renewed interest in the political economy of academic publishing ecosystems and new sustainable business models (recognizing the differences between the scholarly monograph and journal environments). The Pay it Forward rather rigorous and unique in that incorporates numerous assessments of pricing patterns, likely user behaviors, library expenditure trends, and extramural (external) research funding sources, as well as a very extensive bibliography on open access models, trends and cost analyses.

There have been a number of critiques (possibly better to frame as concerns) of the APC model proposed by the Pay-it-Forward study. The most prominent of these concerns come from Virginia Steel, the University Librarian at UCLA. Her concerns can be summarized in a few key points:

APCs vary significantly, and there is no "true" cost for APCs, therefore making
predictions based on the flipped model unreliable.
There may be encouragement, or at least some incentive, on the part of journal
publishers to consolidate and thereby increasing APC costs to universities and
colleges
The role of prestige and reward structures in the academy may complicate the
equity and cost of the model
Significant time and effort in the execution and implementation of the flipped
model will be necessary.
It is unlikely to change the "current balance of power" in the journal publishing
in terms of controlling intellectual content. 147

Another key concern would center upon the issue of digital preservation, which does not seem to be addressed much in these flipped models. In addition, the collection management paradigm under such a model would be radically altered. Local collections, for example, are certainly not solely based upon faculty publishing choices.

It is evident, in light of the creation of open access platforms by major publishers (and hybrid journals) that this gold open access is no longer viewed as an existential threat to revenue. However, with that said, there is the definite concern of whether publishers can still receive the funding they require for their editorial, curatorial and dissemination functions to break-even. However, there is growing concern, voiced by a number of heads of collection development, that publishers (particularly those with hybrid journals) may be "double-dipping" in terms of revenue streams. Although many publishers eschew double-dipping policy, several studies demonstrate that total subscription costs (TPCs) must now incorporate APCs in addition to tradition subscriptions to large commercial publishers. ¹⁴⁸

 ¹⁴⁷ Virginia Steel "Open Letter to the Academic Community." October 19, 2016.
 https://www.library.ucla.edu/sites/default/files/Ginny-Steel open-letter OA2020-PIF October-2016.pdf
 ¹⁴⁸ Stephen Pinfield, Jennifer Salter and Peter A. Bath (2015) "The Total Cost of Publication in a Hybrid Open-Access Environment: Institutional Approaches to Funding Journal Article-Processing Charges in Combination with Journal Subscriptions." *Journal for the Association of Information Science and*

Some agreements have taken place out of APCs, e.g., the Association of Dutch Universities has made an agreement with Wiley allowing its scholars to publish in Wiley journals without any APCs.

Publishers have countered with the issue of whether current APCs are actually enough to truly cover publishing costs and associated activities of high-end journals and in particularly costs incurred by smaller or new publishers. There are industry experts who estimate that per-article fees are way too low to protect even small margins. Some have argued that there should be more emphasis on author submission fees, which may actually de-incentivize some researchers, thereby leading to lower numbers of submissions overall. The argument goes that the lower number of submissions will substantially reduce the editorial board/office workload as well as help defray the costs of rejection or revise and resubmits (R+Rs). However, a downside is no doubt that submission fees may actually place journals at a competitive disadvantage. Such a downside may help explain why the submission fee model (either in addition to, or in lieu of the APC) has not been widely adopted as of yet (although in some disciplines, such as Finance, there is a wider option). In addition, the argument might be made that the low APCs will actually lead to more consolidation of OA titles for reasons of economies of scale, and therefore reduce competition in the marketplace.

In the area of scholarly monographs, several new studies, including those from Ithaka S+R¹⁵⁰ and the American Association of University Publishers AAUP, have attempted to quantify the actual costs of producing an academic monograph. A wide variation in cost estimates have resulted from these studies, but are usually within the range of \$25-\$30K. These cost assessments are some of the first to rigorously ask what essential services publishers provide to the academic community. For the Humanities and Social Sciences, recent Mellon studies have called for the possible university subvention of monographs (through joint funding from the Provost and academic libraries). Such subventions may be more sustainable in larger more research-intensive institutions. More research is being performed to determine how these subventions would be managed

Technology 67: 1751-1766. Also see the ARL Spec Kit 353: Funding Article Processing Fees for payment methods and strategies in ARL libraries.

¹⁴⁹ See David Crotty "Can Highly Selective Journals Survive on APCs?" *The Scholarly Kitchen*. http://scholarlykitchen.sspnet.org/2016/10/10/can-highly-selective-high-end-journals-survive-on-apcs. Accessed November 30, 2016.

¹⁵⁰ Nancy Maron, Christine Mulhern, Daniel Rossman and Kimberly Schmelzinger (2016) "The Costs of Publishing Monographs: Towards a Transparent Methodology." Ithaka S+R Report. https://doi.org/10.18665/sr.276785

¹⁵¹ Note there have been more informal attempts on the part of publishers to list their substantive functions and how these functions have increased and/or become more complex. For example, see Kent Anderson's "96 Things Publishers Publishers Do (2016 Edition)": https://scholarlykitchen.sspnet.org/2016/02/01/guest-post-kent-anderson-updated-96-things-publishers-do-2016-edition/. Accessed November 21, 2016.

152 Michael Elliot et al. "The Future of the Monograph in the Digital Era: A Report to the Andrew W. Mellon Foundation by Emory University." July 1, 2015. https://pid.emory.edu/ark:/25593/q4fd0.

153 Carolyn Walters et al. "A Study of Direct Author Subvention for Publishing Humanities Books at Two Universities: A Report to the Andrew W. Mellon Foiundation by Indiana University and the University of Michigan." September 15, 2015. https://hdl.handle.net/2027.42/113671.

and how open access monographs would be licensed and strategies for long-term preservation.

Open Access collection policies are becoming more common as a means to mange and guide libraries in participating in open access initiatives, as well as in selecting and vetting content to incorporate into their respective catalogs. ¹⁵⁴ In providing financial support to collaborative open access schemes, libraries must weigh the benefits of advocacy with sustainability (i.e., support for more sustainable business models and economies/efficiencies of scale). These collaborative models are of course prone to free rider problems (all benefit without contribution). Some initiatives are moving more towards an investment model rather than a project-by-project model—which has been the norm. Others such as Norberg and Kennison (2014) have made the case for "partnerships among scholarly societies and academic libraries funded by an institutional fee structure based on a student-and-faculty per-capita sliding scale." This model is important to note, as it focuses more on the Humanities and Social Sciences, which have not been as involved in the emergence of APCs in the open access environment as have the STEM disciplines. Grant funding still seems to be particularly important as a means to provide seed money or feasibility funds, e.g., the Mellon/NEH Humanities Open Book Program. It is still rather early to consider significant acquisition budgets to be permanently designated for open access rather than for traditional vendor/publisher purchases, but this balance of funding and priorities might change as local collections matter less, and a more "facilitated" or "collective" collection becomes the norm. 156

Implications

Librarians must continue to balance the hybrid scholarly publishing world of
subscription and open access publications
The demand and cost of/for APCs is outpacing library budgets. Therefore,
librarians may need to consider more budget flexibility, cost sharing, or consortial
models, in accommodating APCs.
University presses and libraries should continue to forge closer relationships and
partnerships as monograph publishing strategies and funding change
Libraries must consider the financial implications for APC support and be wary of
potentially negative externalities of pure APC approaches
Open access collection building as well as funding of open access initiatives
should be monitored and policies developed to steer decision-making

¹⁵⁴ For some notable examples, see Emory's Open Access Collection Development Policy (http://guides.main.library.emory.edu/ld.php?content_id=16498194) and the University of North Texas' Open Access and Born Digital Collection Policy (http://www.library.unt.edu/policies/collection-development-policy).

¹⁵⁵ Lisa Norberg and Rebecca Kennison (2014) "Toward a Scalable and Sustainable Approach to Open Access Publishing and Archiving for Humanities and Social Sciences: A Proposal." *Learned Publishing* 27: 223-235.

¹⁵⁶ Bob Kleft (2016) "Curating Collective Collections—Open Sesame: Collection Development at the Network Level." *Against the Grain* 28(4): 87-88.

Collection Assessment, Evaluation, and Analytics

As the recent ARL Spec Kit on Collection Assessment (#352) makes clear, collection assessment and evaluation has been significantly integrated into most academic libraries functions, and has taken on more of a "normality" than a project focus. ¹⁵⁷ Such assessment is much in line as libraries consider closer integration with local, national and international communities, both in terms of services and in the collections they provide or facilitate access to. The survey uncovers the varied goals, rationales, and methodologies for collection assessment, including (but certainly not limited to):

 ☐ Cost-per-use for electronic resource purchase and cancellation decisions ☐ Overlaps with other libraries for weeding and print retention commitments (Sustainable Collection Services, Gold Rush, etc); these sorts of large scale comparisons are becoming more remarkable as the idea of the "collective" and/ "facilitated" collection gain more traction in the community ☐ Digitization initiatives ☐ Selector/subject liaison effectiveness ☐ Adapting collections to new discipline areas 	/or
In terms of technology and staffing, there are a number of trends that appear:	
 Collection analyst/strategist/assessment positions are becoming the norm (either full time, or significant percentages of a staff person's time) Greater emphasis on visualization tool—which often require significant training to effectively utilize—such as Cognos and Tableau There is greater emphasis and pressure placed on ILS providers/vendors to better incorporate and integrate usage statistics and assessment tools within their respective products 	g
Despite the greater emphasis and normalization of such assessment efforts, numerous challenges have been identified in collection assessment, including:	
 □ Data integration (with local systems, for example—particularly in light of some institutions' ILS changes/migrations) □ Consistency/quality of data as well as comprehensiveness □ Comparability, validity and reliability of data □ Volume of data (and its management and preservation) □ Staffing and expertise 	2

As noted in the *College and Research Libraries* Top Ten Trends from 2016, collection assessment practitioners have been expanding their data sources to incorporate new data sources, such as EZProxy logs and in-depth analysis of ebook logs/statistics to gain a

¹⁵⁷ Karen R. Harker and Jeannette Klein (2016) *ARL Spec Kit 352: Collection Assessment*. ARL Publications.

better understanding of which patrons are using e-resources and once in those resources, how they are interacting with them. Yet, traditional circulation studies and bibliometric analyses of theses and dissertations are still quite prevalent in the literature.

Implications

Libraries need to continue to work with vendors to develop and leverage more
robust usage data tools for resources
Libraries need to consider devoting more staff and technological resources, both
locally and collectively, to gathering, analyzing, and implementing collection
assessment tools
Continued research should be conducted in understanding user behavior within
and interactions with e-resources, particularly behavior associated with ebooks
and ebook platforms.

Research Evaluation and Metrics

Research Evaluation

As internet based technologies have revolutionized the production and dissemination of scholarly knowledge, so too must the evidence and strategies used to evaluation scholarly activities adapt. Amidst political turmoil and stiff competition for funding, the conversation about evaluating research activities and outputs continues to develop rapidly. Though the U.S. does not have a national evaluation program like those in the UK 158 and Germany, 159,160 prevailing practices for evaluating the output of faculty for hiring, funding, and promotion and tenure generally rely heavily on journal articles and citations as proxies for research quality and impact. This practice of relying on a narrow subset of scholarly products and bibliometrics to evaluate the quality of a scholar's work has led to oversimplification of scholarly output and impact. In turn, this has led to adverse effects such as salami publishing, honorary authorship, citation cartels, and other unethical behavior. 161 While scholarly impact as a concept is dynamic and contextual, 162 the Journal Impact Factor remains entrenched in research evaluation practices at the institutional level because it makes the work manageable (according to Borchardt¹⁶³).

http://www.dfg.de/en/research_funding/programmes/excellence_initiative/

¹⁵⁸ U.K. Research Excellence Framework - http://www.ref.ac.uk/

¹⁵⁹ Germany's Excellence Initiative -

¹⁶⁰ https://www.research-in-germany.org/en/research-landscape/research-ranking.html

¹⁶¹ Haustein, Stefanie, and Vincent Larivière. "The use of bibliometrics for assessing research: possibilities, limitations and adverse effects." In *Incentives and performance*, pp. 121-139. Springer International Publishing, 2015.

¹⁶² NISO. Outputs of the NISO Alternative Assessment Project (RP-25-2016), 2016. Available at http://www.niso.org/apps/group public/document.php?document id=17090

¹⁶³ Williams, C., & Padula, D. The Evolution of Impact Indicators: from bibliometrics to altmetrics. 2016.

Requirements to make the publications resulting from federally funded research accessible to the public in conjunction with a trend to view research data as valuable outputs of research and the resulting federal focus on data management practices has accelerated the pace of change in research evaluation. Many scholars are now expected to report outputs beyond publications of their research along with evidence of the resulting impact. The NISO Alternative Assessment Metrics (Altmetrics) Initiative released a draft table listing a wide range of scholarly outputs (see Google document at https://sites.google.com/a/niso.org/scholarlyoutputs/) as a first attempt at a comprehensive list of research outputs. Related to research impact is the expanding use of persistent identifiers for the actors, inputs, and outputs of research. The NISO report includes a link to an initial attempt to identify and characterize these efforts at https://sites.google.com/site/nisopersistentids/.

Our current policy environment presents an important opportunity to expand the view of research impact to include a more comprehensive picture of outputs, evidence, and types of impact. An example of a model that takes a broad view is the Becker Model for Assessing the Impact of Research, which offers a detailed list of research outputs along with five categories of impact – advancement of knowledge, clinical implementation, community benefit, economic benefit, policy and legislation (Bernard Becker Medical Library, Washington University School of Medicine https://becker.wustl.edu/impact-assessment).

Metrics

Metrics are often discussed and used as direct measures for research quality, productivity, impact, and influence. However, existing evidence only supports their use as *indicators* of impact or influence. Research quality is best evaluated by experts, usually through peer review.

Currently, we lack theoretical concepts on which to base our interpretations of citation metrics, webometrics, and altmetrics. Citation metrics are assumed to measure influence or scholarly impact, while altmetrics include an array of heterogeneous data that describe recorded online events without adequate understanding of the underlying acts being measured. Despite this gap in theory, citation metrics have been used for decades in order to evaluate research. Perhaps the greatest limitation of citation metrics is that they do not provide insights into the community, economic, or policy and legislative impacts of scholarship. More specifically, the most commonly used citation metric—Journal Impact Factor—is neither a predictor nor a good representative of actual citations. In order to address some of the concerns expressed about the JIF, several normalized citation metrics have been developed over the past decade. The most recent of which is the Relative Citation Ratio (RCR) developed by the National Institutes of Health for

¹⁶⁴ Haustein, Stefanie. "Grand challenges in altmetrics: heterogeneity, data quality and dependencies." *Scientometrics* (2016): 1-11.

¹⁶⁵ Haustein & Larivière, 2015

¹⁶⁶ Haustein & Larivière, 2015

NIH-funded publications.¹⁶⁷ However, normalized citation indicators also have limitations, most notably that the relative impact of an article varies with different definitions of research fields.¹⁶⁸ Scientometrics researchers believe that multiple metrics should be used to evaluate research, mirroring the complexity of scholarly communication. In fact, Haustein & Larivière¹⁶⁹ emphasize that peer review and bibliometrics are best used in combination.

Altmetrics is a term encompassing a broad range of digital indicators for scholarly output. These indicators are derived from online activity and engagement among a diverse group of stakeholders, both academic and public. ¹⁷⁰ A growing number of scholars are experimenting with altmetrics to tell a more complete story about their scholarship and its impact. ¹⁷¹ This pattern is similar to the adoption of citation metrics. Though we do not yet have a theoretical framework for understanding the types of acts and intentions for which altmetrics are indicators, practice is outpacing theory. Williams and Padula ¹⁷² suggest that altmetrics enable researchers to tell a richer, more detailed story of their scholarship by supporting three activities: 1) monitoring and tracking attention to the output; 2) showcasing engagement; and, 3) enabling greater discovery. Altmetrics also allow stakeholders to view the context of engagement and discussion, not just a tally of interactions. They also describe benefits to publishers, which include enabling them to showcase activity around their product, to demonstrate their value, and to gauge the effectiveness of promotional activities.

With this view of metrics as indicators rather than direct measures of impact or influence, the discussion of the relative strengths and weakness is advancing, offering greater nuance to guide practical understanding and use. However, it is important to remember that data integrity (e.g., data that are both valid and reliable) is an issue inherent in all information systems. ¹⁷³ Challenges particular to altmetrics include heterogeneity, data quality, and dependencies. ¹⁷⁴ The greatest challenge at this point is the lack of knowledge about the acts producing altmetrics and the extent to which they represent engagement with scholarship.

The NISO report also offers recommendations for metrics relating research data: 1) data citations should be implemented following the Force11 Joint Declaration of Data Citation Principles; and, 2) standards for research-data-use statistics need to be developed. More generally, metrics for research data should be consistent with bibliometric approaches for other research outputs. 175

¹⁶⁷ https://icite.od.nih.gov/

¹⁶⁸ Haustein & Larivière, 2015

¹⁶⁹ 2015

¹⁷⁰ NISO, 2016

¹⁷¹ Williams & Padula, 2016

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¹⁷³ Gordon, Gregg, Jennifer Lin, Richard Cave, and Ralph Dandrea. "The question of data integrity in article-level metrics." *PLoS Biol* 13, no. 8 (2015): e1002161.

¹⁷⁴ Haustein, 2016

¹⁷⁵ NISO, 2016

While our understanding of the rapidly shifting scholarly communication ecosystem is incomplete, scientometrics scholars generally agree on two key points: no single metric is an appropriate measure for research quality or impact; and citation metrics, webometrics, and altmetrics are imperfect indicators of research impact. ¹⁷⁶

Implications

Librarians should expect and hold altmetric data providers and aggregators
accountable to the NISO Data Quality Code of Conduct.
Librarians should continue to educate researchers and administrators about the
responsible use of citation and altmetrics for research evaluation purposes.
Librarians should collaborate with institutional leaders to develop internal
expertise to support the use of citation and altmetrics in ways that promote
institutional values, rather than relying on commercial products that are
expensive, provide metrics that create perverse incentives, and provide an
incomplete picture of an institutions outputs and resulting impact.

Planning and Designing Academic Library Spaces

Of particular interest is the *Project Information Literacy Report on Academic Learning Spaces*. Researchers interviewed 49 librarians, architects, and consultants regarding 22 currently ongoing academic library space projects asking "what types of academic learning activities are new spaces intended to support, and how are these designs for learning achieved," how "the professional values of librarianship and architecture combine to inform space designs, and what challenges exist when planning and such designs," and "what best — and worst — practices have librarians and architects learned from the projects." ¹⁷⁷

Major findings include the prioritization of "flexible" spaces supporting student needs for collaborative and individual study. They tended to focus on students as library users with less concern for faculty or librarians, although most of them employed no formal process to accumulate user information regarding the students. They also gathered useful anecdotal information during tours of other libraries and benefited from communication with all constituents. When projects were completed, "formal evaluation metrics were rarely used" because of barriers including "logistics, time, energy, or available expertise." Some challenges included librarians' "lack of control over high-level decision-making," occasional clashes between architects' aesthetic preferences and librarians' functionality concerns, and project delays and cost overruns. ¹⁷⁸

¹⁷⁶ NISO, 2016

¹⁷⁷ Allison J. Head, "Planning and Designing Academic Library Learning Spaces: Expert Perspectives of Architects, Librarians, and Library Consultants," A Project Information Literacy Report, December 6, 2016, 1, http://www.projectinfolit.org/uploads/2/7/5/4/27541717/pil libspace report 12 6 16.pdf. ¹⁷⁸ Ibid., 2–3.

Implications

Librarians and architects can work together successfully to create useful student
learning spaces.
The relative lack of consideration for non-undergraduate student users should be
addressed as libraries try to balance multiple patron needs and requirements,
which may intersect and/or
There are challenges in that alterations to traditional library space will most likely
displace traditional physical collections and therefore, impact particular
traditional users. Libraries must focus, therefore, on more ensuring access and
providing enhanced services for these patrons and their research and teaching
needs

Libraries and Social Justice

To say that racial and social justice issues have been prominent in national life in the past few years would be an understatement. During the administration of the first African-American U.S. president, the Black Lives Matter movement arose from a number of complex societal factors crystallizing around the witnessing of deaths of African-Americans at the hands of police. Social media quickly spread reactions and dialog in the wake of each new tragic event. Separate from these horrifying events, sports personalities took a knee against systemic racism and justice issues entered popular culture through a runaway Broadway musical and a Superbowl halftime show. A noteworthy reaction to these tragic events and concerns, whether they involved racism, sexism, homophobia, or other oppressive forces, was intellectuals' work of providing historical context on these events in the form of syllabi for the public. ¹⁷⁹ These syllabi collected extensive amounts of educational resources such as books, journal and newspaper articles, multimedia, fiction, poetry, primary source documents, and music using social media crowdsourcing and were often compiled with assistance from librarians. 180 Marcia Chatelain, assistant professor of history at Georgetown College, was perhaps the first to compile this type of syllabus following the death of Michael Brown, a young African-American, at the hands of police in Ferguson, Missouri. 181 Other well-known instances of this phenomenon included #CharlestonSyllabus, 182 created in the wake of the murders of nine African-American churchgoers by a white supremacist terrorist and since published as a book, ¹⁸³ and the #LemonadeSyllabus¹⁸⁴ which provided context surrounding Beyonce Knowles'

¹⁷⁹ Ellen C. Caldwell, "Teaching Trump: The Rise of the Crowd Sourced Syllabus," *JSTOR Daily*, December 1, 2016, http://daily.jstor.org/teaching-trump-rise-crowd-sourced-syllabus/.

¹⁸⁰ Chad Louis Williams, Kidada E. Williams, and Keisha N. Blain, eds., *Charleston Syllabus: Readings on Race, Racism, and Racial Violence* (Athens: The University of Georgia Press, 2016).

¹⁸¹ Sociologists for Justice, "#FergusonSyllabus," *Sociologists for Justice*, 2014,

https://sociologistsforjustice.org/ferguson-syllabus/.

¹⁸² Chad Williams, Kidada Williams, and Keisha N. Blain, "#CharlestonSyllabus," *African American Intellectual Historical Society*, 2015, http://www.aaihs.org/resources/charlestonsyllabus/.

¹⁸³ Williams, Williams, and Blain, Charleston Syllabus.

¹⁸⁴ Candice Benbow, "#LemonadeSyllabus," May 6, 2016, http://www.candicebenbow.com/lemonadesyllabus.

Lemonade project, a statement about Black womens' experience. Public dialogue surrounding the syllabi was enabled by the use of Twitter hashtags such as #ColinKaepernickSyllabus, #OrlandoSyllabus, and #SyllabusforHAM (the Hamilton Syllabus). 185

Within the library and information science profession, several voices called attention to a number of justice-related issues such as a continuing lack of diversity in library hiring ¹⁸⁶ and microaggressions experienced by librarians of color. ¹⁸⁷ Stories about built-in racial bias evidenced in seemingly-neutral technology were featured in the popular media as well. For example, racially biased search algorithms in Google such as the sexualization of Black girls and women and the criminalization of Blacks in search results ¹⁸⁸ was the subject of many news stories which often quoted UCLA faculty member Safiya Noble, an expert in this area. ¹⁸⁹ The reproduction and reinforcement of prejudice via Google's autocomplete search feature—which predicts what a search statement will be based on previous searches typed by millions of other users—was in the news, ¹⁹⁰ as well as the "technological redlining" of the popular game Pokemon Go in which minority neighborhoods host few prize locations in this geographically-based game. ¹⁹¹ Other writers troubled the notion of neutrality in library collections and services and explored

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¹⁸⁵ Eng Beng Lim, "#OrlandoSyllabus," *Bully Bloggers*, June 24, 2016, https://bullybloggers.wordpress.com/2016/06/24/the-orlando-syllabus/; Rebecca Martinez et al., "#ColinKaepernickSyllabus," *New Black Man (in Exile): The Digital Home for Mark Anthony Neal*,

September 6, 2016, http://www.newblackmaninexile.net/2016/09/colinkaepernicksyllabus.html?m=1; Trevor Boffone, "#SyllabusforHAM: The Hamilton Syllabus," *Trevor Boffone, Ph.D.*, 2016, https://trevorboffone.com/2016/06/02/syllabus4ham-the-hamilton-syllabus/.

¹⁸⁶ Angela Galvan, "Soliciting Performance, Hiding Bias: Whiteness and Librarianship," *In the Library with a Lead Pipe*, June 3, 2015, http://www.inthelibrarywiththeleadpipe.org/2015/soliciting-performance-hiding-bias-whiteness-and-librarianship/; April Hathcock, "White Librarianship in Blackface: Diversity Initiatives in LIS," *In the Library with a Lead Pipe*, October 7, 2015,

http://www.inthelibrarywiththeleadpipe.org/2015/lis-diversity/; Jennifer Vinopal, "The Quest for Diversity in Library Staffing: From Awareness to Action," *In the Library with a Lead Pipe*, January 13, 2016, http://www.inthelibrarywiththeleadpipe.org/2016/quest-for-diversity/.

¹⁸⁷ Jaena Alabi, "Racial Microaggressions in Academic Libraries: Results of a Survey of Minority and Non-Minority Librarians," *The Journal of Academic Librarianship* 41, no. 1 (January 2015): 47–53, doi:10.1016/j.acalib.2014.10.008.

¹⁸⁸ Latanya Sweeney, "Discrimination in Online Ad Delivery" (Data Privacy Lab: Harvard University, January 28, 2013), http://dataprivacylab.org/projects/onlineads/1071-1.pdf; Jessica Guynn, "'Three Black Teenagers' Google Search Sparks Outrage," *USA Today*, June 9, 2016, <a href="http://www.usatoday.com/story/tech/news/2016/06/09/google-image-search-three-black-teenagers-three-black-tee

http://www.usatoday.com/story/tech/news/2016/06/09/google-image-search-three-black-teenagers-three-white-teenagers/85648838/.

¹⁸⁹ Safiya Umoja Noble, "Google Search: Hyper-Visibility as a Means of Rendering Black Women and Girls Invisible," *InVisible Culture: An Electronic Journal for Visual Culture*, no. 19 (October 2013), http://ivc.lib.rochester.edu/google-search-hyper-visibility-as-a-means-of-rendering-black-women-and-girls-invisible/.

¹⁹⁰ Claire Cain Miller, "When Algorithms Discriminate," *The New York Times*, July 9, 2015, https://www.nytimes.com/2015/07/10/upshot/when-algorithms-discriminate.html.

¹⁹¹ Allana Akhtar, "Is Pokemon Go Racist? How the App May Be Redlining Communities of Color," *USA Today*, August 9, 2016, http://www.usatoday.com/story/tech/news/2016/08/09/pokemon-go-racist-app-redlining-communities-color-racist-pokestops-gyms/87732734/; Jeffrey Vagle, "Technological Redlining," *The Center for Internet and Society (Stanford Law School)*, July 19, 2016, http://cyberlaw.stanford.edu/blog/2016/07/technological-redlining.

libraries' situatedness in white supremacy and the colonizing impulse. ¹⁹² These voices called on academic librarians to critically examine how injustice is embedded and continued in every aspect of our individual and collective work.

Implications

- Achieving increased representation and de-marginalization of scholars of color in academia will require journal editors to examine their publishing practices and individual librarians' examination of whom they cite in their own scholarly work.
- New strategies will be required in order to hire and retain academic librarians in proportions that reflect the diversity of the student population and the American population at large.

Action-Oriented Research Agenda on Library Contributions to Student Learning and Success

Recognizing the need to demonstrate the value of academic libraries, ACRL formed a team to "develop an action oriented research agenda on library contributions to student learning and success," and to answer the following two research questions: "What are the ways that libraries align with and have impact on institutional effectiveness?" and, "How can libraries communicate their alignment with and impact on institutional effectiveness in a way that resonates with higher education stakeholders?" After reviewing and coding "357 relevant readings" on library assessment, the team found that "librarians experience difficulty articulating their value to higher education administrators and other stakeholders, and do not appear to be included in discussions related to higher education outcomes, such as accreditation." Some frequently discussed topics, such as assessment and communication, are often "not empirically measured," and those that are use a small variety of methods, which may not "match the methods relevant to senior leadership." The initial report suggests that academic librarians have trouble relaying their value to their institutions because they do not focus on topics important to "higher education administrators and decision makers."

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¹⁹² Chris Bourg, "Never Neutral: Libraries, Technology, and Inclusion," *Feral Librarian*, January 28, 2015; nina de jesus, "Locating the Library within Institutional Oppression," *In the Library with a Lead Pipe*, September 24, 2014, http://www.inthelibrarywiththeleadpipe.org/2014/locating-the-library-in-institutional-oppression/; Freeda Brook, Dave Ellenwood, and Althea Eannace Lazzaro, "In Pursuit of Antiracist Social Justice: Denaturalizing Whiteness in the Academic Library.," *Library Trends* 64, no. 2 (2015): 246–84, http://esacch.ebscohost.com/login.aspx?direct=true&db=lxh&AN=113186747&site=ehost-live&scope=site.

¹⁹³ Lynn Silipigni Connaway et al., "Action-Oriented Research Agenda on Library to Student Learning and Success: Initial Report" (Chicago, IL: Association of College & Research Libraries, November 2016), 1. ¹⁹⁴ Ibid., 14.

¹⁹⁵ Ibid., 15.

Implications

The demand for evidence-based decision-making necessitates that libraries have
someone on staff who can not only work with data but plan what assessments and
data are appropriate for telling the story of library value.
The library profession should respond to the need for librarians with these skills
through Master's level course-work and continuing professional development.
Librarians and library administrators must continue to develop best practices and
effective documentation to demonstrate value and be willing to share these
practices and documentation cross-institutionally.

Conclusion

Academic libraries exist within the context of their specific institutions and the broader political, social, and regulatory environments. This year's Environmental Scan highlighted trends in funding and enrollment demographics that could affect the fiscal bottom line of colleges and research university libraries as well as change the populations that we serve. Other changes such as the Framework for Information Literacy in Higher Education, an increase in competency-based education, and social justice issues affect how libraries might connect with the values of academic departments to deliver instruction. The on-going evolution of scholarly communications and open access are expanding to include open science and open data movements; this cluster of trends has implications for libraries' involvement in curating research data, supporting open access, and providing services to their scholars in understanding the information publishing environment. All of the trends combine to affect library planning for collections and services and how libraries assess their success. Metrics and research evaluation continue to be a demand from funding agencies to campuses and from campus administration to libraries. Libraries and librarians must be prepared to communicate the Library's value in the higher education landscape by staying aware of the changes and priorities beyond their walls. The 2017 ACRL Environmental Scan and footnotes offer a start to understanding the challenges external trends and implications for action.

Appendix A: ACRL Research Planning and Review Committee 2016-2017

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Erin Dorris Cassidy Access Services Coordinator & Scholarly Communications Librarian Sam Houston State University

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Plan for Excellence Quarterly Activity Report (PEAR) Report Period: March 17, 2018–June 1, 2018

This is the second report of a cumulative report for FY2018. Data format:

- New entries are in regular font.
- Starting with the second quarter report, previously reported entries are in italic.

Strategic Goal Areas

Value of Academic Libraries (VAL)

Goal: Academic libraries demonstrate alignment with and impact on institutional outcomes.

Objective 1: Cultivate research opportunities that communicate the impact of academic and research libraries in the higher education environment.

- Eight recipients have been selected for the first round of the Academic Library Impact research grants. The press release with details will be issued on June 12.
- On March 8, ACRL staff member Sara Goek and VAL committee chair Alan Carbery offered a free webinar Q&A on the Academic Library Impact research grants. The application deadline is extended to April 5.
- A subcommittee of VAL is devising a plan to bring together and highlight growing number of VAL resources and toolkits for members, including a comprehensive review communication channels. They are working on a LibGuide for this purpose.
- On January 9, 2018, launched the new Academic Library Impact Research Grants. ACRL has allocated \$20,000 in fiscal year 2018 to offer research grants of up to \$3,000 each to carry out new research, particularly in areas suggested by ACRL's 2017 report "Academic Library Impact: Improving Practice and Essential Areas to Research" (prepared by OCLC Research and released September 26, 2017). Applications are due April 1.

Objective 2: Promote the impact and value of academic and research libraries to the higher education community.

The Project Outcome for Academic Libraries Task Force has determined seven survey areas including:
 Undergraduate Instruction, Events/Programs, Research Support, Teaching Support, Digital Collections,
 Library Spaces, and Library Technology. Consensus on the outcome measures (survey questions) is
 expected by next virtual meeting on June 11, 2018. Survey field-testing protocol has been introduced.

ACRL SPOS18 Doc 35.0

- Staff (Sara Goek & Emily Plagman) presented at the Association for the Assessment of Learning in Higher Education conference in June 2018 on the Task Force's work so far and gathered feedback from an assessment perspective.
- On March 26, the Project Outcome for Academic Libraries Task force held a face-to-face meeting in Chicago to choose survey topic areas, outcome measures, and data benchmarks for the ACRL version of Project Outcome.
- On January 20, ACRL announced the first 6 recipients of VAL Travel Scholarships. These scholarships of up to \$2,000 each support librarians presenting on their work demonstrating the impact of academic libraries at higher education conferences. These travel scholarships take up a recommendation from the new ACRL report Academic Library Impact: Improving Practice and Essential Areas to Research (prepared by OCLC Research and released in September 2017) that academic librarians effectively communicate their contributions both up to institutional stakeholders and out to other departments. Future rounds of scholarships are expected to be announced in summer 2018.
- In late January, member leader Alan Carbery and OCLC research lead author Lynn Silipigni Connaway presented a roundtable discussion on the Academic Library Impact report at the Association of American Colleges & Universities Annual Conference in Washington, D.C.
- A subcommittee of VAL is establishing a process for adding literature to the data visualization dashboard, created by OCLC Research, which accompanies the Academic Library Impact report.
- The Task Force will review Board MW feedback, and work with PAO on defining campaign goals to help develop new "Because" statements. The Task Force has completed a needs assessment survey and will use the data to develop a marketing toolkit with Gale.
- On November 16, 2017, ACRL co-released an occasional paper "Creating Sustainable Assessment through Collaboration: A National Program Reveals Effective Practices" with the National Institute for Learning Outcomes Assessment (NILOA). Authored by Kara Malenfant and Karen Brown, the report synthesizes the results of ACRL's Assessment in Action: Academic Libraries and Student Success (AiA) program, examines the collaborative practices advanced by the AiA program, and explains how these practices promote assessment aligned with institutional priorities, encourage common understanding among stakeholder groups about attributes of academic success, produce meaningful measures of student learning, create a unified campus message about student learning and success, and focus on transformative and sustainable change.
- On October 31, 2017, launched new Value of Academic Libraries Travel Scholarships. ACRL has allocated \$10,000 in fiscal year 2018 to offer travel scholarships of up to \$2,000 each for librarians presenting on their work demonstrating the impact of academic libraries in the broader landscape of higher education. Practicing librarians and information professionals applied by Dec 8 for funding to present their work at higher education conferences or disciplinary conferences where they will reach audiences outside the library field. Six scholarships were awarded in January 2018.
- On October 26, 2017, at its virtual meeting, the ACRL Board of Directors approve a request for a survey
 management tool for academic libraries based on the PLA Project Outcome tool, a free, online toolkit in
 which libraries access standardized outcome measures, administer surveys in an online platform, and
 see results in an interactive data dashboard and report creation tool. The Board also approved the

- establishment of the Project Outcome for Academic Libraries Task Force. As of January 2018, appointments were in process.
- Work continued on the forthcoming print volume, Shaping the Campus Conversation on Student
 Learning and Experience: Activating the Results of Assessment in Action, which will describe the entire
 AiA program in greater detail. The volume, to be published by ACRL in Spring 2018, will provide context,
 offer reflections from team leaders, and serve as a culminating capstone for the three-year IMLSfunded program.
- Executive Director Davis continued serving on an advisory panel for an IMLS grant on Learning
 Analytics, Megan Oakleaf, PI, with the aim of increasing academic library involvement in higher
 education learning analytics and preparation of academic librarians to engage in this emerging and
 important use of data to support student learning and success. Davis attended two advisory committee
 meetings, one at EDUCAUSE and one after the fall CNI meeting.
- The ACRL Libraries Transform Implementation Task Force is working with the ALA Public Awareness
 Office (PAO) on draft Because statements for Board discussion at Midwinter. The task force is also
 working with Cengage to update the ACRL marketing toolkit.

Objective 3 Expand professional development opportunities for assessment and advocacy of the contributions towards impact of academic libraries.

- On May 24, 2018, Andrea Falcone presented a free ACRL Presents webcast, "Get to Know the Revised Standards for Libraries in Higher Education: A Guide for Supporting Planning and Assessment." The thirty-minute session followed by a Q&A and discussion helped attendees learn how others have used SLHE to demonstrate library impact and value to various stakeholders.
- On November 9, 2017, offered the free ACRL Presents webcast, "The New Academic Library Impact
 Report," so that the community had a chance to learn about this valuable resource. Developed for ACRL
 by OCLC Research and released September 26, 2017, the report investigates how libraries can increase
 student learning and success and effectively communicate their value to higher education stakeholders.
 The webcast provided context for this action-oriented research agenda and detailed plans for future
 directions including new programs for travel scholarships and research grants.

Objective 4: Support libraries in articulating their role in advancing issues of equity, access, diversity, and inclusion in higher education.

- ACRL partnered with the ALA Office for Diversity, Literacy, and Outreach Services (ODLOS) to offer the ACRL Presents webcast, "Addressing cultural humility and implicit bias in information literacy sessions," in February 2018. More than 700 people registered for the session.
- Executive Director Davis met with the ODLOS Director to update her on ACRL's EDI signature initiative and to get input on idea for a possible Diversity Alliance resident for ACRL.
- ACRL offered the e-Learning webcast, "Choosing to Lead: The Motivational Factors of Underrepresented Minority Academic Librarians in Higher Education," in November 2017.

Student Learning

Goal: Librarians transform student learning, pedagogy, and instructional practices through creative and innovative collaborations.

Objective 1: Challenge librarians and libraries to engage learners with information literacy skills in a way that is scalable and sustainable.

- Alison Head provided an interim report on her ACRL-funded project, The News Consumption Study, including preliminary findings from the online survey and the computational analysis of social media.
- ACRL published Framing Information Literacy: Teaching Grounded in Theory, Pedagogy, and Practice,
 6-Volume Set (Publications in Librarianship #73), edited by Janna L. Mattson and Mary K. Oberlies.
- As of June 1, 2018, there were 2,079 subscribers to the ACRLFRAME discussion list (dedicated to the discussion of the ACRL Framework for Information Literacy), which is actively used.
- As of June 5, 2018, As of June 6, 2018, **73** additional resources have been added to or updated by their contributor to the ACRL Information Literacy Framework Sandbox to date in FY18; **92** new contributor accounts have been added since September 1, 2017.
- 24 additional resources have been added to or updated by their contributor to the ACRL Information Literacy Framework Sandbox to date in FY18. Fifty-four new contributor accounts have been added since September 1, 2017.
- C&RL published 8 articles in FY18 including "Outcomes Assessment in Undergraduate Information Literacy Instruction: A Systematic Review" (Allison Erlinger); "Exploring the Research Mindset and Information-Seeking Behaviors of Undergraduate Music Students" (Joe C. Clark and Jennifer Johnstone); "Three Perspectives on Information Literacy in Academia: Talking to Librarians, Faculty, and Students" (Anna Yevelson-Shorsher and Jenny Bronstein); "Survey of Information Literacy Instructional Practices in U.S. Academic Libraries" (Heidi Julien, Melissa Gross, Don Latham); "Shame: The Emotional Basis of Library Anxiety" (Erin L. McAfee); "Information Literacy in the Sciences: Faculty Perception of Undergraduate Student Skill" (Heather Brodie Perry); "The Practice and Promise of Critical Information Literacy: Academic Librarians' Involvement in Critical Library Instruction" (Eamon C. Tewell); "A Collaborative, Trilateral Approach to Bridging the Information Literacy Gap in Student Writing" (Trenia Napier, Jill Parrott, Erin Presley, Leslie Valley).
- C&RL News published 6 articles (some as part of the Perspectives on the Framework column) including ""Frame by frame: Using the ACRL Framework for Information Literacy to create a library assessment plan" (Kevin Baggett, Virginia Connell, and Allie Thome); "Enhancing the assignment: Using the Framework for student learning and assessment in a Business Law class (Cara Berg); "Says who? Librarians tackle fake news" (Shellie Jeffries, John Kroondyk, Francine Paolini, Christina Radisauskas); "CREATE: Adapting the Framework to Studio Art disciplines" (Amanda Meeks, Larissa Garcia, Ashley Peterson, Alyssa Vincent); "Beyond buttonology: Digital humanities, digital pedagogy, and the ACRL Framework" (John E. Russell, Merinda Kaye Hensley); "Be critical, but be flexible: Using the Framework to facilitate student learning outcome development" (Andrea Falcone, Lyda McCartin).
- 17 new resources have been added to or updated by their contributor to the ACRL Information Literacy
 Framework Sandbox to date in FY18. Thirty-seven new contributor accounts have been added since
 September 1, 2017. The top eight resources include: "Empower Market Analysis with Research" (697
 downloads); "Where Do I Find Business Information?" (523 downloads); "CRAAPP Detector" (508
 downloads); "Evaluating Online Information" (477 downloads); "ACRL Framework Rubric" (471

- downloads); "Searching Strategy" (446 downloads); "News and Social Media" (444 downloads); "Information Literacy Framework Exercise" (432 downloads).
- ACRL published two books including Disciplinary Applications of Information Literacy Threshold Concepts, edited by Samantha Godbey, Susan Beth Wainscott, and Xan Goodman and The Fun of Motivation: Crossing the Threshold Concepts (Publications in Librarianship #71), by Mary Francis.
- ACRL is partnering with the ALA Office of Literacy, Diversity, and Outreach Services (OLDOS) to offer the free webcast, "Addressing cultural humility and implicit bias in information literacy sessions," in late January. As of January 10, nearly 500 individuals have registered for the event.

Objective 2: Increase the impact of information literacy by forming strategic partnerships with relevant higher education organizations.

 The Board approved "Guidelines for Primary Source Literacy" developed by the Rare Books and Manuscripts Section and the Society of American Archivists Council in February 2018. Approval by SAA is pending.

Objective3: Build capacity for librarians to collaborate with faculty and other campus partners in instructional and curricular design and delivery that will integrate information literacy into student learning.

- SLILC sponsored "A Discussion of Trilateral Collaborations between the Library, Writing Center, and Composition Instructors" on May 7, 2018.
- "Engaging with the ACRL Framework" roadshow has been offered 6 times and is scheduled to be presented 6 more times in FY18. Adjustments in the curriculum were made after the first five workshops based on attendee feedback and presenter review.
- "Intersections of Scholarly Communication and Information Literacy" roadshow has been presented
 twice in FY18, with 2 additional workshops scheduled for the spring. The presenter team is creating an
 Intersections LibGuide that will include sections for the major areas they focus on during the workshop,
 in addition to sample learning experiences, which are the most-requested aspect of their presentation.
- SLILC committee members plan to submit an ACRL 2019 pre-conference proposal building on librarians and faculty SoTL partnerships to enhance student learning.
- Worked with the Open Textbook Network on their plans for an Open Educational Resources (OER) Librarian Bootcamp, the pilot of which, will be held at the ACRL 2019 Conference.

Objective 4: Articulate and advocate for the role of librarians in setting, achieving, and measuring institutional student learning outcomes.

Research and Scholarly Environment

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Goal: The academic and research library workforce accelerates the transition to more open and equitable systems of scholarship.

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Objective 1: Increase the ways ACRL is an advocate and model for open dissemination and evaluation practices.

- The draft revision to the 2016 ACRL Policy Statement on Open Access to Scholarship by Academic Librarians, encouraging academic librarians to make their research data open, was posted for public commentary online in May 2018 and in the June edition of C&RL News.
- In May, ReSEC submitted a letter to the Environmental Protection Agency on behalf of ACRL, requesting that they extend the comment period for Strengthening Transparency in Regulatory Science to a minimum of ninety days. ("Strengthening Transparency in Regulatory Science; Docket ID No. EPA-HQ-OA-2018-0259)
- A working group of ACRL Research and Scholarly Environment Committee continued conversations about potential revisions to the ACRL Policy Statement on Open Access to Scholarship by Academic Librarians (June 2016) which would encourage academic librarians to also make their research data open.
- On October 31, 2017, ACRL provided comments to the National Library of Medicine (NLM) in response
 to their call for information on next-generation data science challenges in health and biomedicine.
 NLM, the programmatic and administrative home for data science at the National Institutes of Health
 (NIH), sought community input in order to help it complement NIH's efforts to catalyze open science,
 data science and research reproducibility.
- In October the ACRL Board established the Impactful Scholarship and Metrics Task Force to create a new ACRL framework that tackles the question of what constitutes impactful scholarship within librarianship, including appropriate metrics that can or could be used to measure said impact.

Objective 2: Enhance members' capacity to address issues related to scholarly communication, including but not limited to data management, library publishing, open access, and digital scholarship.

- A member working group from ReSEC continues to investigate possible recommended practices for libraries to develop and maintain productive ongoing relationships with a range of stakeholders, including vendors and publishers.
- A member working group from ReSEC continues to discuss the issues surrounding data privacy and the support that librarians could provide through a resource like a "data privacy cookbook."
- A member working group from ReSEC continues to explore the intersections between scholarly communication and collection development.
- A member working group from ReSEC continues to evaluate the need for a library publishing roadshow.
- On February 28, 2018, offered the free ACRL Presents webcast, "Can't You Just Say Yes: Answering Copyright Questions About Fair Use for Faculty Colleagues" as a part of Fair Use/Fair Dealing week.
- On February 10, held the ACRL/SPARC Forum at ALA Midwinter Meeting about how the library community can reassert its influence to shape the open access publishing landscape.
- On February 2, issued a guest blog post on ACRL Insider by ReSEC Chair and Vice Chair titled, "Get to Know the ACRL Research and Scholarly Environment Committee."

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- A member working group from ReSEC continues to evaluate the need for a library publishing roadshow.
- On January 4, ACRL announced five sites to host the workshop "Scholarly Communication: From
 Understanding to Engagement" at a subsidized rate in 2018; they are: Bowdoin College (Brunswick,
 ME), New York University, Abu Dhabi (Abu Dhabi, United Arab Emirates), University of Illinois at
 Urbana-Champaign (Urbana, IL), University of North Carolina, Greensboro (Greensboro, NC), and West
 Virginia University (Morgantown, WV). The application period was announced on October 17, 2017,
 and applications were due Friday, November 17, 2017.
- In December 2017, agreed to a request to fund \$2,000 to support travel by early-career and underrepresented librarians participating in an IMLS funded workshop (organized by North Carolina State University Libraries, University of Kansas Libraries, and University of Illinois Urbana-Champaign School of Information Sciences) to explore the need for, and ideal components of, an open educational resource (OER) for teaching library students and professionals about scholarly communication
- On October 12, 2017, ACRL announced 2 recipients of sponsored scholarships to attend OpenCon 2017 in Berlin, Germany, November 11-13. Cynthia Orozco is Librarian for Equitable Services at East Los Angeles College, Calif., and Tatiana Bryant is Digital Projects and Engagement Librarian at the University of Oregon.
- On October 25, 2017, offered a free ACRL Presents webcast to kick-off Open Access Week. Entitled "What We Talk About When We Talk About Open Access," the webcast speaker was Maryam Fakouri, Scholarly Publishing Outreach Librarian at the University of Washington Seattle and co-designer of the curriculum for the ACRL traveling workshop "Two Paths Converge: Designing Educational Opportunities on the Intersections of Scholarly Communication and Information Literacy."
- In October, the ACRL Board approved a Research Assessment and Metrics Division-level Interest Group as a forum for discussing trends in the number of indicators and metrics for measuring the impact of scholarship.

Objective 3: Increase ACRL's efforts to influence scholarly publishing policies and practices toward a more open and equitable system.

• Rebecca R. Kennison of K | N Consultants Ltd. and Nancy L. Maron of BlueSky to BluePrint, LLC were contracted at the end of March to design, develop, and deliver a new report on effective and promising practices within the research environment and scholarly communication system, and identify areas where further research is needed. The final report is due in December 2018.

- Before submission of the final report, Kennison and Maron will be holding a working session at the
 Joint Council of Librarians of Color (JCLC) conference in September 2018, where participants will be
 able to review and submit feedback on a first draft of the report.
- On June 5, Rebecca R. Kennison and Nancy L. Maron, along with ReSEC Chair and Vice-Chair Patricia Hswe and Yasmeen Shorish, hosted a free ACRL Presents webcast to discuss the new research agenda, progress to date, and events and milestones to come.
- Two sessions will be held in support of the new research agenda at 2018 ALA Annual:
 - Scholarly Communication Discussion Group
 Sunday, June 24, 2018 2:30pm 3:30pm
 Come learn more about the new research agenda that's been commissioned to examine the research environment and scholarly communication system and provide an overview of trends, identify effective and promising practices, and delineate important questions where deeper inquiry is needed to accelerate the transition to more open, inclusive, and equitable systems of scholarship.
 - Research Agenda on the Research Environment and Scholarly Communication System Working Session

Sunday, June 24, 2018 – 4:00pm – 5:30pm

After an open and competitive request for proposals, a team of researchers has been selected to design, develop, and deliver a new report on effective and promising practices within the research environment and scholarly communication system, and identify areas where further research is needed. The researchers will be particularly looking to include the perspectives of historically underrepresented communities to expand the profession's understanding of these environments and systems. This meeting is a broad, inclusive work session that will engage participants in the prioritization of important scholarly communication topics through a mix of discussion and dynamic activities.

- The ACRL/SPARC Forum at the 2018 ALA Annual is titled "Diversity, Equity, and Inclusion in Scholarly Communications," and features Siko Bouterse, Co-Founder and Coordinator, Whose Knowledge?; Bergis Jules, University & Political Papers Archivist, University of California, Riverside; and Michelle Baildon, Collections Strategist for Arts & Humanities, MIT Libraries; hosted by ReSEC Vice Chair Yasmeen Shorish.
- Through February and early March, a working group of senior staff and ReSEC leaders met regularly to evaluate proposals, interview finalists, conduct reference checks, and negotiate a contract for the design, development, and delivery of a new ACRL research agenda on the research environment and scholarly communication system.
- ACRL and SPARC sponsored a session at ALA MW on Saturday, February 10, 8:00 9:30 am, Colorado Convention Center, Rm 201 about a concept proposed by David Lewis, University Librarian at IUPUI, that academic libraries pooling their resources - 2.5% of their budgets - to support an open scholarly commons.
- Staff continued discussions with colleagues at ARL about the future of the LIS editors group and colleagues at both SPARC and ARL about the future of the Create Change website.

- On December 19, 2017, issued a request for proposals for the design, development, and delivery of a new ACRL research agenda on the research environment and scholarly communication system. The final research agenda will provide an overview of trends, identify effective and promising practices, and delineate important questions where deeper inquiry is needed to accelerate the transition to more open, inclusive, and equitable systems of scholarship. This research agenda will be informed by scholarly literature, as well as by advances in practice and the voices of historically underrepresented communities. Proposals are due January 29.
- On November 8, 2017, sought broad community input on the scope of forthcoming request for proposals for the design, development, and delivery of a new ACRL Scholarly Communication Research Agenda. The working group provided an excerpt and sought input on the proposed scope of the research agenda.
- In November 2017, the vice chair of ReSEC Yasmeen Shorish held a preliminary conversation with senior staff at the National Academies of Sciences Board on Research Data and Information to represent the views of academic librarians as they work on their report Towards an Open Science Enterprise, sponsored by the Arnold Foundation.
- Staff and a ReSEC member leader joined conversations with ARL, SPARC and the Confederation of Open Access Repositories about a possible project to convene groups of experts and key stakeholders to develop requirements and specifications for building (or leveraging an existing) platform and services that would help librarians become aware of worthy projects and of where, possibly, to commit funds not only to support open access content but to do so openly. This way, OA content creators would depend on revenue from pledges, and the community could see where investments are (and are not) being made.
- A member working group from ReSEC is planning to offer expertise on open access and library-based publishing to other publishing units within ALA to see if any other publications are consider flipping open and if we can support them.
- A member working group from ReSEC is assessing the need to continue convening the Scholarly Communications Discussion Group.

New Roles and Changing Landscapes

Goal: Academic and research library workforce effectively navigates change in higher education environments.

Objective 1: Deepen ACRL's advocacy and support for a full range of information professionals.

- OpenCon is a unique conference series and community that aims to empower the next generation to advance Open Access, Open Education, and Open Data, organized by the Right to Research Coalition, SPARC, and an Organizing Committee of students and early career researchers from around the world.
 New Roles worked with OpenCon representatives to propose a workshop at ACRL 2019.
- Constellation subcommittee continuing to work on OER librarians.

Objective 2: Equip library workforce at all levels to effectively lead, manage, and embrace change.

• Subcommittee chaired by Erin Smith is continuing work on a self-directed online workbook; the goal is to have content identified by September 2018.

 Subcommittee chaired by Erin Smith continuing to work on self-directed online workbook. Goal is to have content identified by September 2018.

Objective 3: Expand ACRL's role as a catalyst for transformational change in higher education.

- New Roles member Jolie Graybill served on the planning committee for the Symposium for Strategic Leadership in Diversity, Equity, and Inclusion held May 2018 in Minneapolis, MN, offered by ARL and ACRL. The sold-out symposium focused on increasing understanding and capacity among academic and research library professionals for creating healthy organizations with diverse, equitable, and inclusive climates.
- In 2017 we had 36 members of the Diversity Alliance (DA). Renewals were sent this fall and to date 72% of the members have renewed. Nine new members joined the Diversity Alliance in 2018 giving us a total of 35 members to date.
- The Diversity Alliance Midwinter meet-up for Deans, Directors, and Resident Coordinators was held on Sunday, Feb. 11 from 9-10 AM.
- ACRL 2019 Diversity Alliance Preconference Institute is in the planning stages led by Leo Agnew,
 University of Iowa. ACRL Professional Development Manager Margot Conahan is now working with this group.
- University of North Carolina-Greensboro is preparing an IMLS grant to develop and offer two additional Resident Institutes for Diversity Alliance Residents for the Fall of 2018 and 2019.
- The DA Task Force continues to connect with other initiatives to diversity the profession outside of ALA and ACRL; within ACRL the TF is working to clarify the roles of the Diversity Alliance, the Residency Interest Group, and the (Dr. E. J.) Josey Spectrum Scholar Mentor Committee.

Enabling programs and services activities

The regularly recurring operations relevant to the ability of ACRL to lead academic and research librarians and libraries in advancing learning and scholarship are reported below.

Advocacy

Strengthening partnerships with other organizations

- ARL partnered with the Association of Research Libraries (ARL) to offer the two-day Symposium for Strategic Leadership in Diversity, Equity, and Inclusion in Minneapolis, May 10-11, 2018. The sold-out symposium focused on increasing understanding and capacity among academic and research library professionals for creating healthy organizations with diverse, equitable, and inclusive climates. Program sessions provided actionable information and tools for library and archive leaders to take back to their organizations and help develop authentically inclusive environments, where people from underrepresented and marginalized groups can thrive and succeed. Executive Director Davis participated in a well attended panel session about the ACRL Diversity Alliance.
- The ACRL Executive Director identified a keynote speaker for the Community College Baccalaureate Association's annual conference so that the presidents could learn more about libraries. (March 2018)

- The ACRL Executive Director participated in an IMLS-funded forum on text-data mining that brought together researchers, content providers, societies, and legal experts to consider issues around limited access data. ACRL will disseminate the white paper for this project. (April 2018)
- The ACRL Executive Director was invited to participate in the International Federation of Libraries (IFLA) North American Global Visioning Conference and attended the two day meeting in Ottawa. (April 2018).
- The ACRL team offered a Webinar (https://npsig.wordpress.com/2018/05/17/the-first-webinar-2018-is-now-available-online/) through the IFLA Continuing Professional Development and Workplace Learning (CPDWL) and New Professionals Interest Group. The topic, "Can the library do everything? The changing role of librarians and the library as a space of social inclusion," featured speakers from Oregon and Taiwan and attracted 49 attendees.
- The Executive Director attended the annual meeting of the American Council of Learned Societies in April, the spring meeting of the Association of Research Libraries, and the spring meeting of the Council of Higher Education Management Associations.
- The Executive Director and STS Liaison Aimee Sgourakis worked with the March for Science Executive Director to arrange Aimee's participation on a panel on student advocacy and the librarian's role during the March For Science Summit in Chicago in July.
- The ACRL Executive Director and President attended the Coalition for Networked Information (CNI) meeting in December.
- The ACRL Executive Director and Past President Herold met with the executive director of the March for Science, while in NYC, to explore mutual interests and possible further collaborations.

Communication on major issues and trends in libraries and higher education

- On May 24, 2018, ACRL worked with its Research and Scholarly Environment Committee to submit
 comments requesting that the EPA extend the comment from 30 to 90 days, and to hold public
 hearings in order to solicit comments from concerned stakeholders. The EPA granted this request, and
 has extended its deadline to August 16, 2018 and will hold a public hearing on July 17, 2018.
- On April 13, 2018, ACRL signed SPARC's letter to express concerns regarding language in the Geospatial Data Act of 2017. The letter states that, "there is no basis in law that calls for the government to rely on and use of the private sector in the provision of geospatial data to the maximum extent practical." Additionally, the proposed amendment that, "Any data acquired through commercial contracts will be made available to the public," is seriously concerning, and the letter states that, "By entering into a contract with an external party, federal agencies are potentially allowing these parties the ability to assert ownership of such data."
- On April 4, 2018, ACRL joined SPARC's Open Access Working Group with eight other national and regional library, publishing, research and advocacy organizations to express support of the amendments contained in AB 2192 of the "California Taxpayer Access to Publicly Funded Research Act." The amended language in AB 2192 would require all articles reporting on California state funded research be made publicly available to all in a timely, barrier-free manner.

- On April 2, 2018, ACRL responded to a request for information issued March 5, 2018, on first National Institutes of Health (NIH) Strategic Plan for Data Science.
- On March 20, ACRL signed on to SPARC's appropriations letter to request \$10 million in federal funding to be appropriated for open textbooks for college students.
- On March 14, ACRL promoted the ALA action alert to support federal library funding for FY 2019 as the
 White House budget proposal for FY 2019 eliminated funding for the Institute of Museum and Library
 Services and the majority of federal library funding. This places over \$210 million in federal library
 funding at risk, just through the elimination of programs like the Library Services and Technology Act
 (LSTA) and Innovative Approaches to Literacy (IAL) program.
- As part of the Library Copyright Alliance, ACRL, ALA and ARL joined in taking the following actions:
 - On March 15, issued a statement welcoming the introduction of the Marrakesh Treaty Implementation Act in the U.S. Senate. The Marrakesh Treaty, adopted by the member states of the World Intellectual Property Organization in 2013, requires countries to enact copyright exceptions that allow the making and distribution of accessible format copies such as braille or audiobooks, including by importation and exportation. The Treaty is largely based on the existing exception in the U.S. Copyright Act, 17 U.S.C. § 121. The Marrakesh Treaty Implementation Act amends the Copyright Act to ensure compliance with the Marrakesh Treaty.
 - On March 15, joined a statement by a broad spectrum of stakeholder organizations applauding introduction of the Marrakesh Treaty Implementation Act in the U.S. Senate. Other organizations who joined: the American Council of the Blind, American Foundation for the Blind, Association of American Publishers, Authors Guild, Benetech, National Federation of the Blind, National Music Publishers Association, and Perkins School for the Blind.
 - On March 14 submitted reply comments (together with the Association of Transcribers and Speech-to-text Providers and the Association on Higher Education and Disability) in response to comments in favor of and objections to the proposed Class 2 exemption for disability services professionals to make video programming accessible from the anti-circumvention provisions of Section 1201 of the Digital Millennium Copyright Act (DMCA).
- At the 2018 ALA Midwinter Meeting in Denver, the ACRL Board of Directors signed on to an American Historical Association (AHA) statement condemning Polish law criminalizing public discussion of Polish complicity in Nazi war crimes.
- On February 8, 2018, ACRL announced five ACRL members selected to receive travel scholarships to attend National Library Legislative Day (NLLD) in Washington, D.C., May 7-8, 2018, for the first time. ACRL Will host a lunch for the scholarship winners and officers during NLLD.
- On November 15, 2017, ACRL announced travel scholarships to National Library Legislative day. ACRL allocated \$7,500 to reimburse travel expenses for individuals at up to \$750 each to attend NLLD through a competitive process, with applications due December 19, 2017 and notifications in mid-January.
- Alerted the community to Net Neutrality developments, via ACRL Insider blog posts (from ALA Washington Office) on November 29, December 5, and December 12, 2017.

- On October 5, 2017, ACRL promoted the opportunity to apply to participate in the inaugural ALA Policy Corps initiative. ACRL member leader Jonathan Miller and staff member Kara Malenfant are active on the working group that is designing the program. The Corps will launch with an initial cohort with diverse representation from across library types and geographies. Participants will cultivate their passion and deep expertise for a public policy issue; create or enhance the skill set needed to impact legislation and policy; mentor others on a given policy issue of interest; participate in a cohort to share challenges and successes; and ultimately impact national, state and local policymaking. The application deadline was Friday, November 3, 2017. Three academic librarians were selected for the initial 12-memner cohort, announced January 4, 2018.
- In late November 2017, ACRL signed on to two letters opposing a proposed tax on graduate student tuition waivers included in the tax reform bill recently passed by the U.S. House of Representatives. Subjecting tuition waivers to income tax would dramatically increase the tax burden of hundreds of thousands of students and potential impede future innovation in research and teaching. The letters, from the March for Science and the American Council of Learned Societies, call on Members of Congress to reject the proposed change and stand up for the future of American higher education.
- On November 6, 2017, encouraged ACRL members (via ACRL Insider post) to submit public comments to the U.S. Department of Education (ED) on its "Proposed Supplemental Priorities of Discretionary Grant Programs," that is the areas where the ED plans to focus competitive grant programs, due Monday, November 13. We asked members to tell the ED to make eligible for federal funding that can provide more resources and opportunities to the communities we serve.
- On October 18, 2017, ACRL commended ALA on its support of immigrants and social media by the organization's signing of a statement issued by the NYU Brennan Center for Justice concerning the State Department's proposed policies, published for comment in Public Notice 10065.
- On October 4, 2017, ACRL issued a statement in support of "Dreamers" the Deferred Action to Childhood Arrivals (DACA) program, which safeguards nearly 800,000 undocumented youth from deportation as they pursue the American dream. DACA-qualified students are members of our academic communities, attend our institutions, work in our libraries, and contribute their unique perspectives to the intellectual discourse, which is vital for the success of our research and educational missions.
- As part of the Library Copyright Alliance, ACRL, ALA and ARL joined in taking the following actions:
 - On December 18, 2017, supported the Electronic Frontier Foundation (EFF), New Media Rights (NMR), and the Organization for Transformative Works (OTW) in filing a long comment regarding a proposed exemption under DMCA 17 U.S.C. 1201, proposing a simplified Class 1 for Audiovisual Works.
 - On December 18, 2017, joined the Software Preservation Network in filing a long comment regarding a proposed exemption under DMCA 17 U.S.C. 1201, which would allow cultural heritage institutions to circumvent technological protection measures in order to preserve computer programs and computer-program dependent materials.
 - On December 18, 2017, filed a long comment regarding a proposed DMCA exemption under 17
 U.S.C. 1201, which would allow educational institution's disability offices to circumvent

- technological protection measures for motion pictures in order to make them accessible to people with disabilities.
- On October 18, 2017, sent a letter to Congressman Jeffries and Marino opposing the small claims system established by the CASE Act.

Education

Leadership Institutes

- ACRL worked with the Harvard Graduate School of Education to secure reception space at the ALA Midwinter Meeting for alumni and those interested in the Leadership for Academic Librarians program. (ACRL has long been a partner with GSE on these institutes.)
- ACRL partnered with other higher education associations to offer the Women's Leadership Institute in Newport Beach, California, December 2-5, 2017. The program is focused on women seeking to become leaders in higher education administration.

Immersion Institutes

• Immersion '18 will be held at the University of St. Thomas in St. Paul, Minnesota, July 29-August 3, 2018. The Immersion Faculty have been working on a comprehensive curriculum redesign for the past year. Capacity has been increased by 35% in order to engage more participants in the program. The program is sold out with 122 registrants. In addition, 23 individuals applied for Immersion Program scholarships. Six scholarships were awarded to individuals from under-represented groups.

Licensed Workshops

As of June 1, 2018, 33 licensed workshops have been delivered since September 2017. 9 additional
workshops have been scheduled for FY2018, including the five annual subsidized Scholarly
Communication workshop offerings, for a current total of 42. The full breakdown of completed and
forthcoming workshop deliveries for FY18 is in the table below:

	Assessment	Framework	Intersections	RDM	Scholarly Communication	Standards
Completed (FY18)	6	12	4	4	5 (4 subsidized)	2
Confirmed forthcoming (FY18)	2	4	0	0	1 subsidized	2

As of March 16, 2018, 19 licensed workshops have been delivered since September 2017. 16 additional
workshops have been scheduled for FY2018, including the five annual subsidized Scholarly
Communication workshop offerings, for a current total of 35. The full breakdown of workshop
completed and forthcoming deliveries for FY18 is in the table below:

	Assessment	Framework	Intersections	RDM	Scholarly Communication	Standards
Completed (FY18)	4	9	2	2	1	0
Confirmed forthcoming (FY18)	3	4	2	2	5 subsidized	2

- ACRL has begun offering its RoadShows as preconferences at ALA conferences. The Framework
 RoadShow was delivered in Denver before the 2018 Midwinter Meeting, and the Assessment in Action
 RoadShow will be delivered in New Orleans before the 2018 Annual Conference.
- The international reach of the RoadShow program continues to expand. In addition to those previously mentioned in the last report, the Assessment RoadShow will be delivered in Singapore in May, and the Framework RoadShow will be delivered as a preconference at the 2018 Sharjah Library Conference in the United Arab Emirates.
- As of January 12, 2018, 15 licensed workshops have been delivered since September 2017. 17 additional
 workshops have been scheduled for FY2018, including the five annual subsidized Scholarly
 Communication workshop offerings. The full breakdown of workshop deliveries, requests, and inquiries
 for FY18 is in the table below:

	Assessment	Framework	Intersections	RDM	Scholarly Communication	Standards
Completed (FY18)	4	6	2	2	1	0
Confirmed forthcoming (FY18)	2	6	2	2	5 subsidized	1

• The RoadShows are beginning to reach a larger international audience, with 4 different RoadShows being delivered in other countries in in FY18. The Assessment in Action workshop was delivered as a preconference at the 2017 Sharjah Library Conference in the United Arab Emirates; The Framework workshop will be delivered in Montreal in May 2018; the RDM workshop was delivered to the University of the West Indies in Trinidad and Tobago in November 2017; and the Scholarly Communication workshop was delivered to the University of Guelph in Ontario in December 2017, and will be delivered to NYU Abu Dhabi in the United Arab Emirates as part of the subsidized RoadShow program in spring 2018.

ACRL Conference

May 4 was the submission deadline for contributed paper, panel session, preconference, and workshop proposals. ACRL received 795 submissions across the four formats:

	Contributed Papers	Panel Sessions	Preconferences	Workshops
Percentage change from 2017 to 2019				
Down 3% in total number of submissions from 2017 to 2019	+8%	-12%	+66%	-18%
ACRL 2019 Proposal Submissions				
ACRL 2019 total submissions	378	298	20	99
ACRL 2019 number accepted for presentation	96	79	5	19
ACRL 2019 acceptance rate	25%	27%	25%	19%

ACRL 2019 committees are currently reviewing submissions, with decisions finalized in late July and notifications issued in early August.

Keynote speakers have been confirmed: Viet Nguyen, Alison Bechdel, and Michele Norris.

Conference registration and housing launched in late May, with online and print registration materials updated in order to be GDPR-compliant. Scholarship applications are also available; ACRL will award over 150 scholarships in five categories worth over \$100,000.

Conference fundraising is off to a strong start, despite economic pressures and consolidation in the marketplace. As of May 21, there are \$218,600 in donation pledges, 87% of budget.

Conferences, Pre-conferences and workshops

ACRL is offering two preconferences in conjunction with the ALA Annual Conference in New Orleans:

- Assessment in Action: Demonstrating and Communicating Library Contributions to Student Learning and Success (36 registrants as of May 21, 2018)
- Deconstructing Digital Scholarship Consultations in the Library (25 registrants as of May 21, 2018)

ACRL offered two workshops in conjunction with the ALA Midwinter Meeting. 30 individuals participated in the full-day workshop, "Engaging with the ACRL Framework: A Catalyst for Exploring and Expanding Our Teaching Practices" and 24 individuals (the attendance maximum) participated in the RBMS sponsored workshop "Applying Descriptive Cataloging of Rare Materials (Manuscripts)."

The RBMS Conference, Convergence will take place right before the ALA Annual Meeting in New Orleans, June 19 – 22, 2018. The Website (http://conference.rbms.info/2018/) launched in early November and the schedule is being finalized. Registration (which opened in February) is currently over 370 participants and we anticipate exceeding the sponsorship goal of \$64,000. Thirty-three scholarship winners have also been selected and notified.

• This was the largest RBMS Conference to date with about 550 registrants and over 80 booksellers, it also holds the record for largest amount of sponsorship, with \$91,650 total in sponsorship funds.

Annual Conference Programs

- The deadline for 2019 program proposals is August 19, 2018. Program proposals will be submitted via a centralized submission site for all ALA Divisions, RoundTables, Committees, and Offices.
- Planning is ongoing for ACRL's 19 programs at the 2018 ALA Annual Conference.

ACRL's Professional Development Committee has some concerns about the loss of the blind peer review process and is communicating these and other concerns to the ALA Committee. ACRL received 124 Annual Conference program submissions, an increase of 175% from previous years. This dramatic increase is attributed to the centralized submission form implemented by ALA this year. The ACRL Professional Development Committee reviewed proposals and selected 19 programs (# of program slots was designated by ALA Conference Services). Based on the large number of submissions, the acceptance rate for 2018 Annual Programs was only 16%.

Online learning (see additional webinars in the CHOICE section of this report)

ACRL offered the following e-Learning events:

Title	Туре	Date	Individual Reg	Group Reg	Quality	Learning Outcomes	Recommended (9 to 10 ratings)	# of eval respondents
Applying Information Literacy to Digital Humanities Projects	Webcast	3/20/2018	14	12	45%	78%	29%	21
Data Driven Library Budgeting	Webcast	4/5/2018	20	1	93%	90%	77%	13
Disciplinary Applications of Information Literacy Threshold Concepts	Webcast	4/20/2018	30	7	43%	50%	28%	14
Critical Thinking About Sources: Lessons and Activities for First- Years	Webcast	5/2/2018	51	8	77%	83%	36%	34
Framing Information Literacy Webcast Series, Part One	Webcast	06/13/2018	TBD			TBD		
Framing Information Literacy Webcast Series, Part Two	Webcast	06/20/2018	TBD			TBD		

Member Engagement

Membership units/Governance

ACRL Leader virtual orientation was offered in May following the flipped classroom method. Three
presentations—one tailored to committees, one to sections, and one to interest and discussion
groups—were prerecorded and shared with ACRL leaders. Subsequently three synchronous Zoom
sessions were offered to answer questions. Overall feedback collected through an online survey was
positive based on responses received from 13 attendees. Eleven respondents found "The (pre-

recorded) content was useful in my understanding of my role in ACRL." For the live FAQ, twelve survey respondents reported that, "The live FAQ was valuable, and helped supplement the pre-recorded content."

- The 2018 ACRL Membership Survey was conducted March 13-April 4, 2018 and received an overall response rate of 33% (3,029 participants). The survey's margin of error of +/-1.6% at the 95% confidence level and the results are considered representative of ACRL's membership.
- On April 3, 2018, the ACRL Board of Directors approved the disbandment of the Readers' Advisory Interest Group.
- On April 3, 2018, the ACRL Board of Directors approved the renewal of the Virtual Worlds Interest Group for an additional three-year period, July 2018-June 2021.
- On April 3, 2018, the ACRL Board of Directors approved the dissolution of the Digital Scholarship Centers Interest Group as this interest group will become a discussion group within the Digital Scholarship Section (DSS), as of September 1, 2018.
- On February 10, 2018, the ACRL Board of Directors approved the establishment of the Systematic Reviews and Related Methods Interest Group. The interest group will become an official dues product on September 1, 2018.
- On September 1, 2017, the Asian, African, and Middle Eastern Studies Section (AAMES) officially transitioned to the Asian, African, and Middle Eastern Studies Interest Group (AAMESIG).
- On September 1, 2017, the Slavic & Eastern European Studies Section (SEES) and the Western European Studies Section (WESS) officially transitioned to the European Studies Section (ESS).
- On September 1, 2017, the Digital Curation Interest Group, the Digital Humanities Interest Group, and the Numeric and Geospatial Data Services in Academic Libraries Interest Group officially transitioned to the Digital Scholarship Section (DSS).
- On October 26, 2017, the ACRL Board of Directors approved the establishment of the Research Assessment and Metrics Interest Group.
- ACRL officers gave presentations at the following chapters:
 - South Dakota: Cheryl A. Middleton (September 28, 2017)
 - Maryland: Lauren Pressley (November 6, 2017)
- The ACRL Community College Engagement Task Force submitted a list of recommendations to the ACRL Board for recruiting and engaging community college librarians.
- The ACRL Vice President Lauren Pressley and Executive Director Davis attended the ASAE CEO Symposium for Chief Elected/Chief Staff Officers.
- ACRL has contracted with a research firm to develop "personas" of ACRL members that can be used to inform communications and better tailor information about ACRL resources to their interests.

Awards

- David W. Lewis was named the 2018 ACRL Academic/Research Librarian of the Year. He will be presented with his award at the ACRL President's Program during the 2018 ALA Annual Conference.
- The winners of the 2018 Excellence in Academic Libraries Awards were selected in the following categories, and have selected dates to host an award ceremony on their respective campuses:

- Community College: Naugatuck Valley Community College (April 9, 2018, Irene M. H. Herold attending)
- o University: Virginia Commonwealth University (April 27, 2018, Cheryl A. Middleton attending)
- College: SUNY, Geneseo (date and officer attending TBD)
- Applications were received for 19 ACRL awards (STS awards not offered in 2018 award season).
- The Awards working group is reviewing the Awards Task Force recommendations submitted at the 2017 ALA Annual Conference. The group will reconvene after Midwinter.
- The ACRL Past President Irene Herold and Executive Director Davis attended the presentation of the "I Love My Librarian" Award at the Carnegie Foundation in New York City. This year's event included a luncheon with the winners and the type of library division officers serving on the selection committee and the Executive Directors.

Special events at ALA Conferences

- EBSS is celebrating its 50th anniversary in 2018! EBSS is proud to mark this milestone with a "Good As Gold Celebration" during the ALA Annual Conference in New Orleans. The event will include presentation of awards, a display of EBSS memorabilia, and good food and conversation!
- Plans are being made for 12 section and interest group special events during ALA Annual Conference in New Orleans.
- ACRL sections and interest groups will host five social events during the ALA Midwinter Meeting in Denver.

Consulting services

- Conducted site visit for external review at Southern Illinois University Edwardsville (March 2018, Brown, Malenfant).
- Submitted two proposals to the American University in Paris for a planning retreat (May 2018).
- ACRL is fulfilling three consulting contracts this spring and summer. We are reviewing staffing for this service and are in negotiations to contract with one of ACRL's "adjunct" consultants to manage/coordinate the service while Kara Malenfant is on sabbatical (March 126-July 25). Mary Jane Petrowski will be the staff backup person to this adjunct.
- 5 proposals sent since September 2017 around library reviews (3), strategic planning (1), and team development (1). A sixth proposal on strategic staffing is in process.
- Work completed for a state college peer and aspirant comparisons.
- Additional marketing is on hiatus while the future of the program is considered. A robust marketing and communication plan for Consulting Services has been developed which includes targeted email marketing blasts, webinars, blog posts, meetups and displays at conferences, and consulting conversations.
- Senior Leadership and Change Strategist Howard Prager visited North Park University and Elmhurst College libraries to gain further understanding of the needs of small, private college libraries.
 Publications

Non-periodical Publications

- Published since the last report:
 - Framing Information Literacy: Teaching Grounded in Theory, Pedagogy, and Practice, 6-Volume
 Set (Publications in Librarianship #73), edited by Janna L. Mattson and Mary K. Oberlies
 - Volume 1: Research as Inquiry
 - Volume 2: Information has Value
 - Volume 3: Searching as Strategic Exploration
 - Volume 4: Information Creation as a Process
 - Volume 5: Scholarship as Conversation
 - Volume 6: Authority is Constructed and Contextual
 - Shaping the Campus Conversation on Student Learning and Experience: Activating the Results
 of Assessment in Action, edited by Karen Brown, Debra Gilchrist, Sara Goek, Lisa Janicke
 Hinchliffe, Kara Malenfant, Chase Ollis, and Allison Payne
- Soon to publish:
 - The Changing Academic Library, Third Edition: Operations, Culture, Environments (ACRL Publications in Librarianship No. 74), by John M. Budd
- Published since the last report:
 - Applying Library Values to Emerging Technology: Decision-Making in the Age of Open Access, Maker Spaces, and the Ever-Changing Library (Publications in Librarianship #72), edited by Peter D. Fernandez and Kelly Tilton
- Soon to publish:
 - Framing Information Literacy: Teaching Grounded in Theory, Pedagogy, and Practice, 6-Volume
 Set (Publications in Librarianship #73), edited by Janna L. Mattson and Mary K. Oberlies
 - Volume 1: Research as Inquiry
 - Volume 2: Information has Value
 - Volume 3: Searching as Strategic Exploration
 - Volume 4: Information Creation as a Process
 - Volume 5: Scholarship as Conversation
 - Volume 6: Authority is Constructed and Contextual
- The Publications in Librarianship (PIL) Editorial Board is finishing work on their open peer review plan and will present it to the Publications Coordinating Committee at ALA Annual 2018 for adoption. They are finalizing an open peer review agreement for the editors/authors of the books (voluntarily) going through the open review process, as well as a code of conduct for reviewers. PIL hopes to conduct its first open peer review in FY19.
- Published since the last report:
 - The Library Assessment Cookbook, edited by Aaron W. Dobbs
 - Now You're a Manager: Quick and Practical Strategies for New Mid-Level Managers in Academic Libraries, by M. Leslie Madden, Laura Carscaddon, Denita Hampton, and Brenna Helmstutler

- Academic Library Impact: Improving Practice and Essential Areas to Research, by Lynn Silipigni Connaway, William Harvey, Vanessa Kitzie, and Stephanie Mikitish
- Undergraduate Research and the Academic Librarian: Case Studies and Best Practices, edited by Merinda Kaye Hensley and Stephanie Davis-Kahl
- Disciplinary Applications of Information Literacy Threshold Concepts, edited by Samantha Godbey, Susan Beth Wainscott, and Xan Goodman
- The Fun of Motivation: Crossing the Threshold Concepts (Publications in Librarianship #71), by Mary Francis
- Financial Management in Academic Libraries: Data-Driven Planning and Budgeting, by Robert E.
 Dugan and Peter Hernon

Soon to publish:

 Applying Library Values to Emerging Technology: Decision-Making in the Age of Open Access, Maker Spaces, and the Ever-Changing Library (Publications in Librarianship #72), edited by Peter D. Fernandez and Kelly Tilton

Library Statistics

The 2017 ACRL Academic Library Trends & Statistics Survey opened on September 1, 2017 and closed on March 30, 2018 with a response rate of 51.5% (1,719 locked surveys). This is the 3rd highest response rate in the history of the survey—and the best response rate in the past 16 years. The 2017 survey recorded the highest ever number of participating institutions (1,719). Almost 13% (194) more institutions participated this year compared to last. Also worthy of note: community college participation increased from 34.9% to 38.2%—more than 3%. The 2017 print edition is on schedule to publish before the end of June.

• As of March 21, 2018, there are 1,394 locked surveys and 863 libraries have selected to use the IPEDS download. As of January 9, 2018, there are 157 locked surveys and 256 libraries that have selected to use the IPEDS download.

Standards and Guidelines

- The Board reaffirmed the association's Statement on the Certification & Licensing of Academic Librarians, Joint Statement on Faculty Status of College and University Librarians, and Statement on the Terminal Professional Degree for Academic Librarians at its spring meeting.
- New Guidelines for Primary Source Literacy and a revision of Standards for Libraries in Higher Education were approved by the Board of Directors at the 2018 ALA Midwinter Meeting.
- RBMS/ SAA Standardized Statistical Measures and Metrics for Public Services in Archival Repositories and Special Collections Libraries were approved by the ACRL Board in October 2017. SAA added their approval in January so that the document is officially a joint document.

Framework for Information Literacy for Higher Education Stats

	Q1 (SeptNov.)	Q2 (Dec. – Feb.)	Q3 (March – May)	Q4 (June – August)	Total
Online visits	26,684	22,277	24,835		73,796

	Q1 (SeptNov.)	Q2 (Dec. – Feb.)	Q3 (March – May)	Q4 (June – August)	Total
Print distribution	350	300	500		1,150

Standards for Libraries in Higher Education Stats

	Q1 (SeptNov.)	Q2 (Dec. – Feb.)	Q3 (March – May)	Q4 (June – August)	Total
Online visits	3,611	2,907	8,400		14,918
Print distribution	20	0	280		300

All Standards/ Guidelines/ Frameworks Online Visits

Q1	Q2	Q3	Q4	Total
(SeptNov.)	(Dec. – Feb.)	(March – May)	(June – August)	Total
60,526	50,557	68,830		179,913

Social Media

	Q1 YTD	Q2 YTD	Q3 YTD	Q4 YTD
	(SeptNov.)	(Dec. – Feb.)	(March – May)	(June – August)
Facebook Likes	7,195	7,278	7,268	
Twitter Followers	18,050	18,427	18,699	
Pinterest Followers	428	436	435	
Instagram Followers	351	369	402	

ACRL Insider Stats

	Q1 (SeptNov.)	Q2 (Dec. – Feb.)	Q3 (March – May)	Q4 (June – August)	Total
Posts	56	49	62	(**************************************	167
Page Views	15,155	16,477	14,019		45,711
			(estimate due		
			to Google		
			Analytics error)		

ACRLog Stats

	Q1 (SeptNov.)	Q2 (Dec. – Feb.)	Q3 (March – May)	Q4 (June – August)	Total
Posts	15	16	14		45
Page Views	32,956	27,741	31,705		92,402

ACRL TechConnect Stats

	Q1 (SeptNov.)	Q2 (Dec. – Feb.)	Q3 (March – May)	Q4 (June – August)	Total
Posts	6	3	5		14
Page Views	13,649	9,710	11,937		35,296

VAL Blog Stats

	Q1	Q2	Q3	Q4	Total
	(SeptNov.)	(Dec. – Feb.)	(March – May)	(June – August)	
Posts	2	3	0		5
Page Views	5,552	3,960	4,302		13,814

College & Research Libraries

- Issues published on regular schedule.
- A special issue featuring articles focused on management and leadership issues was published in April 2017.
- The editorial/ submission management system used by the journal moved from Aries, a commercial product, to Open Journal Systems in late May. The move integrates the submission system with the online publishing system and results in cost savings for the journal.
- Portico digital preservation was added to all journals this spring.

Online Access Stats (total access across content formats):

Q1	Q2	Q3	Q4	Total
(SeptNov.)*	(Dec. – Feb.)	(March – May)	(June – August)	Total
335,053	376,142	744,493		1,455,688

^{*} We figured out a way to more accurately determine OJS usage stats, Sept.-Nov. stats have been revised for consistency with Dec-Feb.

C&RL News

- Issues published on regular schedule.
- Portico digital preservation was added to all journals this spring.

Online Access Stats (total access across content formats):

Q1 (SeptNov.)*	Q2 (Dec. – Feb.)	Q3 (March – May)	Q4 (June – August)	Total
262,643	245,835	477,336		987,814

^{*} We figured out a way to more accurately determine OJS usage stats, Sept.-Nov. stats have been revised for consistency with Dec-Feb.

RBM

- Issues published on regular schedule.
- Portico digital preservation was added to all journals this spring.

Online Access Stats (total access across content formats):

Q1	Q2	Q3	Q4	Total
(SeptNov.)*	(Dec. – Feb.)	(March – May)	(June – August)	TOLAI
36,232	35,204	100,474		171,910

^{*} We figured out a way to more accurately determine OJS usage stats, Sept.-Nov. stats have been revised for consistency with Dec-Feb.

CHOICE

Open Choice

Creating a tool for the adoption of open educational resources relies in part on a fine-grained understanding of the process by which instructors discover and select materials, both commercial and open, for their classes. In order to develop this understanding, in late March we began work on a massive survey, "Course Material Adoption: Faculty Survey," designed to inform the architecture and functionality of our OER adoption service, *Open Choice*. The survey was distributed to 88,000 teaching faculty at two- and four-year institutions across the United States selected from a subject-targeted list of faculty purchased from MDR. By the close of the survey period, 1,357 people had participated—a truly outstanding response. While the survey yielded much valuable information on course-material adoption, it was equally valuable as a "lead generation" vehicle, or rather, a means of populating our database with specific information about undergraduate courses and the materials used in them. In all, 272 of the respondents indicated their willingness to share lists of the open educational resources that they use for their courses. To these individuals we sent a Google form asking for further information, which form yielded a list of 248 unique resources supporting 251 unique courses. Fortified with the information provided by the survey, we have begun planning a Choice white paper analyzing the survey responses in detail and outlining their implications for the adoption of open educational resources.

In April, Mark Cummings and project manager Melissa Karp visited the offices of our product developers, productOps, to discuss further business-model ideas, product architecture, and the projected roadmap for *Open Choice*. This meeting was an important step toward gaining a better understanding of the direction we want the product to take. Following the meeting, we inaugurated our editorial operations by sending an *Open Choice* reviewer invitation letter to Choice teaching faculty reviewers, OER reviewers identified from our research, and survey respondents who gave us permission to contact them. The invitation yielded 1,043 responses from those who expressed interest in serving as *Open Choice* reviewers.

Because of the diversity of OER content and formats, reviews of these materials must follow a standardized format in order to support meaningful analysis and comparisons. Accordingly, in May we drafted a review template and scoring matrix, covering author credentials, target audience, license terms, formats, accessibility, adaptability, content, pedagogy, user interface, and competing works. Currently we are running a pilot program to test the templates with four Choice reviewers. Their reviews and comments are due on or before June 4th. Additionally, we have built a public forum (http://forums.choicereviews.org) where interested readers can view the templates in .pdf format and register their comments and suggestions for its

improvement. When the template and scoring matrix have been finalized, invitations will be issued for reviews of some 250 target resources identified as Stage 1 of the project.

January saw the completion of the architecture of the in-house database for Open Choice—containing the contact information of potential reviewers, course information, and URLs to open educational resources—by Jason Simon, our in-house web developer. Since then, information on 1,888 potential reviewers, 401 OER, and 70 undergraduate courses has been uploaded into this database.

In January, Mark Cummings and Melissa Karp visited an OER bootcamp at Ohio Dominican University in Columbus, Ohio. The bootcamp showcased the OER efforts underway in Ohio, with groups of professors from community colleges and private and public universities convening to create "open" courses that will be implemented at fifteen institutions of higher education in that state. In February, Mark and Melissa visited Gateway Community College, in New Haven, Connecticut, to meet with faculty about the use of both commercial and open educational resources. This enlightening meeting offered insights into the discovery and adoption processes for commercial and open resources at community colleges.

Simultaneously, we have been conducting weekly calls with the productOps team (Jason Cozy, Sam Baron, and Robert Hirsch) to discuss the discovery phase of Open Choice, and Jason and Melissa have daily conversations to keep each other informed of research and progress that is being made at both productOps and Choice.

This month, we deployed a survey to 75,000 faculty members about their adoption methodologies and use of both open and commercial resources. Additionally, planning efforts are underway to recruit reviewers for Open Choice.

Work on Open Choice, the open educational resources (OER) project, began in earnest at the end of September 2017 with a threefold focus. First of all, we moved to create the editorial infrastructure for reviews of OER. Simultaneous with this, we began discussions with our technology partners regarding project design and user experience. And finally, we entered into conversations with several groups in an effort to more clearly define the adoption processes for course materials. This information is essential to helping us gain a deeper understanding of how Open Choice will function, the OER formats it will review, and the people the platform is intended to serve.

At the end of October 2017, Mark Cummings, Melissa Karp (project manager), Lisa Gross (director of information services), and Jason Simon (senior web developer) visited productOps, our development partners, for two days of discussions about the goals and structure of Open Choice and how those goals might be implemented on a digital platform. Out of this has emerged a statement of work for the first phase of development. Throughout the fall, we created a curated list of open educational resources (from well-known OER repositories, such as the Open Textbook Network and OpenStax) along with a taxonomy of subjects and course levels. Additionally, we gathered the contact information of faculty who have used or are currently using OER in their courses, with the goal of utilizing this contact information to recruit potential Open Choice reviewers. As of this writing, we have contact information for over 1,000 faculty OER users. To store this information, our in-house software engineer created a relational database to further organize reviewer,

author, resource, and publisher information. During December, Melissa Karp drafted the review templates and scoring rubrics that will be used in the product. These will guide reviewers through a standardized analysis of the resource under review and a comparison of it with commercial options, thereby establishing both qualitative and quantitative benchmarks related to the quality of specific OERs.

In the coming weeks Mark and Melissa have scheduled visits with OhioLink, Gateway Community College, the University of Connecticut, and City College of New York to engage with faculty around the courseware adoption process.

Choice Reviews

During the period, Choice editors and reviewers added 1,003 reviews to *Choice Reviews*. Usage for the 2017-18 academic year-to-date is shown below.

TABLE 1: CHOICE REVIEWS USAGE STATISTICS

Number of reviews as of 30 May 2018: 206,025

					Unique
	Sessions	Page Views	Searches	Readings	Reviews Read
Sep	16,469	103,651	45,794	65,559	13,291
Oct	22,650	133,077	59,973	69,211	13,968
Nov	22,960	136,826	63,937	64,532	14,980
Dec	14,480	98,503	46,027	51,214	11,898
Jan	15,797	126,735	59,831	69,186	12,985
Feb	19,237	136,642	61,979	67,484	14,072
Mar	21,446	145,602	67,338	76,029	16,152
Apr	20,209	129,470	61,381	63,373	14,771
May	13,174	93,630	47,321	46,196	12,569
Jun					
Jul					
Aug					
TOTAL YTD	166,422	1,104,136	513,581	572,784	124,686

How to read this table:

- Sessions: Number of log-ins by registered users
- <u>Page views</u>: Total number of pages viewed. Each page contains from 1 to 75 reviews, depending on context and user-controlled settings
- Review Readings: N readings of a single review count as N
- <u>Unique Reviews Read</u>: N readings of a single review count as one (1)

In an effort to spur sales of subscriptions, in April we began a telemarketing campaign with Arrowhead Promotions and Fulfillment targeting customers who are up for renewal or whose free trial had lapsed. In two months they have called 166 customers and garnered 33 subscriptions (conversions). This summer we are looking forward to working closely with our new marketing manager to create a campaign that brings our various marketing efforts into concert and integrates user engagement strategies.

Editorial

Changes in the editorial group continue to occupy the attention of editorial director Bill Mickey, as Lisa Mitten, our longtime social sciences editor, announced her retirement, effective 1 June, after some eighteen years of service here at Choice. Recruitment of a new editor will begin in April. Meanwhile, we have filled the mathematics and science editor position vacated last fall by Melissa Karp (now the project manager for Open Choice). The new editor, Katherine Wessbecher, started on January 22nd. Katherine was most recently associate editor at the Putnam Books imprint at Penguin Random House.

Choice's expansion into greater LIS coverage continues with the official introduction of LIS title reviews. Publishers have been notified of the new review category, and books are already coming in and being assigned. We've created a category designation in both the magazine and the database, with promotions currently underway to inform subscribers.

Finally, in March Bill Mickey and ad sales manager Pam Marino attended the 2018 ER&L (Electronic Resources and Libraries) Conference in Austin, Texas, to assess the scope and reach of this emerging conference and to meet with Choice sponsors.

Customer Service

As of the beginning of February, all subscription and customer service staff were using FreskDesk, a cloud-based customer service support application, to communicate with customers. Now that all staff are using this system, there is more transparency in how customer tickets are dealt with. Also, this move has improved communication between the subscription assistant and customer service representative.

In early March we contracted with a telemarketing group who will begin calling lapsed subscribers for Choice Reviews, and free trial participants for Choice Reviews and ccAdvisor. Back in April, May, and June a year ago our customer service representative called free trial and lapsed subscribers and found that, on average, 73% of calls garnered a subscription (or about \$42,000 to be earned over 12 months). We hope for comparable results from this telemarketing effort.

Product Development

With this writing, the book-tracking feature for Choice Connect editors has been completed. This feature gives Choice editors the ability to put book/item requests directly into Choice Connect, where it can be tracked through the ordering process and eventually to receipt. The feature will allow for easier communication of title requests, simpler ordering for the publisher liaison, and accurate delivery to the requesting editor.

Katherine Wessbecher was hired as Science and Technology Subject Editor for CHOICE Reviews.

Following a brief drought, the Choice Internship program got back on track with the addition of Ana Peguero in mid-October. Arnaav Bhavanani, an international student at Wesleyan, will be joining us toward the end of January for the spring term. Their duties include managing our "Ask an Archivist" article, assembling content for the Academic Publishing Weekly newsletter, and posting articles to "The Open Stacks," the Choice blog on Choice360.org, among others.

ccAdvisor

Following lengthy negotiations, Choice just this month concluded an agreement to provide the Statewide California Electronic Library Consortium (SCELC) membership of 112 institutions with a yearlong paid-trial subscription to *ccAdvisor*. This is the third consortium that has subscribed to this product. CRL is renewing their subscription for FY19, and negotiations with other large library systems are ongoing. In support of this and related sales and marketing initiatives, Deb Villavicencio-Eschinger, the new Choice marketing manager, has taken the lead in creating campaigns designed to introduce consortial members to the product and to alert subscribers to *The Charleston Advisor* of a special offer enabling them to bundle their subscription with that of *ccAdvisor*.

Meanwhile Choice software developer Jason Simon completed work on a *ccAdvisor* publisher portal, the purpose of which is to provide publishers with a platform on which they can notify us of new or revised digital products they wish to have reviewed. Following its launch on 1 May, nearly two hundred publishers were notified of the portal's availability, and suggestions for database reviews have already been received.

Sales

Proposals are out for three large consortial opportunities, including the Statewide California Electronic Library Consortia (SCELC), Academic Libraries of Indiana (ALI), and the Pennsylvania Academic Library Consortium (PALCI). Mark met with representatives of SCELC at the ALA Midwinter conference in Denver to discuss a pilot program offering CCA access to all 112 member libraries. Also at Midwinter, Mark and the principals at The Charleston Company agreed to move forward with bundled sales of CCA and The Charleston Advisor in an effort to drive subscription revenue.

ccAdvisor's advertising sales thru March have generated \$17,990 in revenue and include another new contract, from United Nations Publications. The current sales goal of \$25,000 has now been exceeded by 2%, upping the predicted total sales for the year to \$29,000.

Resources for College Libraries

During this period, 770 titles were added to the RCL + RCL Career Resources database. Annual revision materials—including current title lists, out-of-print title lists, new edition reports, and annual revision checklists—were distributed to all RCL + RCL Career Resources subject editors. Peer review recruiting for the summer peer review of 22 RCL history and interdisciplinary studies subjects and 11 RCL Career Resources disciplines commenced, with broad promotion across ACRL, ALA, and Choice email, discussion lists, and social media channels. Ongoing data cleaning continued, with 179 records showing "publication cancelled" data from BIP reviewed and updated appropriately.

On the product development side at ProQuest, work on incorporating Syndetics Unbound features in the RCL database and RCL content in both the Syndetics Unbound catalog/discovery layer and Ebook Central platform progressed apace, with plans to officially launch by ALA Annual.

670 titles were added to the RCL + RCL Career Resources database during this period (from 2 January - 8 March 2018). Database clean-up resulted in 78 duplicates titles deleted and 53 publication status corrections

submitted to BIP. The web metadata project was completed, with resource type and access type metadata terms added to all 1,440 online resources in RCL (with over 1,100 indexed as "open access"). Four new RCL + CR subject editors were recruited and underwent database training. A Choice/ACRL webinar entitled "Using Core Titles in New Contexts" was held February 22 and drew 488 registrants and 196 live participants.

Five hundred and ninety-four titles were added to the RCL + RCL Career Resources database during this period. Regular post-revision data cleaning occurred, with 135 duplicate titles deleted, 143 forthcoming publication status corrections, and 151 excluded titles identified for follow-up editorial action. The web metadata enrichment project progressed, with 80% of subjects reviewed and initially indexed by subject editors and 50% of subjects reviewed and classified for intersubject consistency by the project editor. A revamped marketing site appeared live on the ProQuest.com domain, highlighting select subject editors and new RCL use cases. The beta RCL element in ProQuest's Syndetics Unbound launched, with sales and availability starting in January 2018.

Product Development

The reviewer portal for ccAdvisor has been opened to reviewers for the submission of manuscripts as well as the completion of their reviewer profiles. Assignments will soon be done through the system as well, following the logging of all outstanding assignments made outside of the system prior to its rollout. As of April 1, ccAdvisor Connect will be in use for all ccAdvisor reviews, and the system now includes the ability to delete reviews in their entirety and to assign reviews for re-review, essential for a database that will be subject of frequent updates.

With the product launched—and with the addition of 34 new reviews during the fall—we turned our attention to sales and marketing. Our marketing launch played out over the fall, with the execution of an extensive, multilayered campaign spanning advertising, social media, public relations, app promotions, direct mail, and tradeshows—specifically the Charleston Conference, where ccAdvisor was our focus. In addition, a telesales initiative was launched in October, with calls to 751 institutions.

In October, the Center for Research Libraries (CRL) entered into a subscription agreement on behalf of its member libraries (235 sites) and following our participation in the vendor showcase at the Charleston Conference, proposals were requested from the Statewide California Electronic Library Consortium (112 sites) and the Community College League of California (114 sites), both of which proposals are still outstanding.

ccAdvisor's first quarter also generated \$12,700 in advertising revenue. There are presently (3) advertisers with full-year contracts, including Accessible Archives, Adam Matthew, and Taylor & Francis.

Choice-ACRL Webinars

The addition of (3) webinar programs in April has brought YTD revenue to \$90,500. Accessible Archives joined us for the first time with a program on "Quantitative Reporting on Digital Collections," which was a huge success with over 1,000 registrations.

Table 2: Year-to-Date Choice-ACRL Sponsored Webinars

Date	Sponsor	Title	Registrant s	Attendees
	Adam	Rediscovering Propaganda Film: From Historical Vault to Digital		
9/7/2017	Matthew	Research Collection	296	117
9/21/2017	Rowman & Littlefield	Documents that Changed the Way We Live	473	176
-, , -	Springer	Keeping Classical Reference Current: The New Palgrave		-
9/26/2017	Nature	Dictionary of Economics	214	74
9/27/2017	ProQuest	A Generation Apart: The Changing Expectations of Modern Researchers	1,164	467
9/28/2017	Alexander Street	Closing the Gap Between Open Access and Subscription Content	892	345
10/3/2017	Gale	Supporting Gender and Sexuality Studies at Academic Libraries	365	164
11/2/2017	EBSCO	Making eBooks Work in Your Workflows	698	255
11/16/2017	СНОІСЕ	The Right Resources Change Everything: Introducing ccAdvisor, an Online Review Guide to Digital Resources	390	143
11/29/2017	Springer Nature	Interdisciplinarity and the Liaison Librarian	1,166	474
12/5/2017	Elsevier	Trends and Technology Accelerating Scholarly Research	762	281
2/22/2018	RCL	Using Core Titles in New Contexts	488	196
3/6/2018	Overdrive	eBooks can do that? Customize your academic library with digital.	555	217
3/29/18	Gale/Cengage	The Evolution of the Study of Literature	366	130
4/18/18	Accessible Archives	Quantitative Reporting on Digital Collections	1093	470
4/24/18	Adam Matthew	Primary Sources in Teaching: Collaborations Between Libraries and Faculty	1047	434
4/26/18	Springer Nature	Reading and Engaging with Existing Digital Humanities Projects	836	320

From January to March Choice hosted two additional sponsored webinars, bringing the total number for fiscal year 2018 to 12. Registrations for sponsored webinars in FY18 total 7,463, with attendances at 2,616 for a 39% attendance rate. The average number of registrants stands at 622, with attendances averaging 262.

The most popular webinar of the period from January to March was "eBooks can do that? Customize your academic library with digital," on March 6, presented by Jeff Huffman and Rob Rando and sponsored by Overdrive, a new sponsor for the webinar program. The webinar garnered 555 registrants and 217 attendees, and response was quite positive, with a range of positive comments coming through the post-webinar survey, including, "Interesting subject. Presenters were very thorough and they kept things moving. Answered all of my questions." And "I am grateful that ACRL offers these presentation, they can be very helpful."

From October to January Choice hosted five additional sponsored webinars, bringing the total number for fiscal year 2018 to 10. Registrations for sponsored webinars in FY18 total 6,420, with attendances at 2,496, for a 39% attendance rate. The average number of registrants stands at 642, with attendances at 250.

The most popular webinar of the period from October to January was "Interdisciplinarity and the Liaison Librarian," on November 29, presented by Jeff Knapp and sponsored by Springer Nature. It garnered 1,166 registrants and 474 attendees. The webinar spurred response on Twitter, with Kait Neese tweeting the following, "#Interdisciplinarity growth strategy at your institution or library? Try 'Academic Book Clubs' - #ACRLChoiceWebinars @Choice_Reviews @SpringerNature" and Elizabeth Baker tweeting simply, "Watching the 'Interdisciplinary and the Liaison Librarian' Webinar. #ACRLChoiceWebinars #librarylife #LearningAndDevelopment #professionaldevelopment."

Choice Research

Following on the success of our first white paper, on institutional repositories, in April we began work on a second in the series, slated for publication in late summer. Again sponsored by Taylor & Francis, this white paper will focus on academic library marketing and outreach practices and, as before, is based on a survey. Deployed on 14 May to over 25,000 people, the survey had garnered 868 responses as of the end of May, with one week left before the survey closes.

Choice white paper #1, "The Evolving Institutional Repository Landscape," was released in early February, to coincide with the Midwinter conference. This detailed analysis offers a look into the current state of and future prospects for institutional repositories, a particularly timely topic in light of the recent upheaval in the landscape. Researched and written by Judy Luther, president of Informed Strategies, the white paper provides an overview of IRs based on in-depth interviews with industry leaders such as Clifford Lynch (CNI), Raym Crow (Chain Bridge Group), and Lorcan Dempsey (OCLC), supplemented by an open survey that gathered data from over a hundred and fifty North American universities. The work explores current usage patterns and practices, where IRs fit in an evolving scholarly and academic ecosystem, and realistic paths for future development.

Underwritten by Taylor & Francis, the survey has been downloaded by 648 people as of this writing. Plans for a second white paper this year are being developed now.

The Choice program of sponsored research papers got underway in October, with work beginning on our first topic, the current state of institutional repositories. Judy Luther and her Informed Strategies team were retained to conduct the survey and hold conversations with industry leaders, and the results of their work will be compiled by them in a white paper, which is expected at Choice in mid-January. Publication is scheduled to coincide with the ALA Midwinter conference in early February, at which time the paper will be made freely available for download on Choice360.

Podcasts

The Authority File podcast continues its upward trajectory. Each podcast consists of an hour-long discussion segmented into four fifteen-minute episodes. The forty-eight episodes recorded thus far have been downloaded 1,662 times and streamed 2,893 times. During the period of this report, we published podcasts on open-access monographs, sponsored by Project Muse; the new COUNTER standards, sponsored by Accessible Archives; and a discussion based on the institutional repositories white paper (see above) hosted by its author, Judy Luther, and including extensive remarks by Illinois Wesleyan's Stephanie Davis-Kahl and Utah State University's Dylan Burns.

Going into its eighth month, The Authority File continues to draw listeners to Choice's website, Choice360.org, with 2,198 streams from the site in the January to mid-March period and 1,579 downloads.

In January the episodes highlighted three of the best episodes from the previous six months, and in February Bill spoke with Robert Dugan, Dean of Libraries at University of West Florida (Pensacola), about the recent ACRL title, Financial Management in Academic Libraries: Data Driven Planning and Budgeting. February was the most listened-to month to date for the Podcast, with 793 downloads and 1,246 streams.

Quarter 2 revenue for Podcasts resulted in \$4,250, a mere \$1,250 better than first quarter, but overall, still falling behind on the targeted sales goal of \$18,000 for the year. It's possible that the lack of lead generation for this product might be playing a role in the shortfall in sales. Still, there remains a solid four months to generate the \$6,500 needed to meet this year's sales goal.

Going into its sixth month, The Authority File continues to draw listeners to Choice's marketing site, Choice360.org, with 1,876 streams from the site in the October-December period and 1,754 downloads. Also worth mentioning, an adjustment to Choice360.org at the end of September now allows tracking of actual streams and downloads, a level of granularity previously unachievable using only Google Analytics. Total impressions on the podcast feed for October, November, and December were respectively, 25,734, 20,294, and 17,521. Impressions on the podcast feed include downloads (though not streams), and discovery services such as iTunes and Stitcher reporting information from the feed such as episode descriptions and lengths.

December's conversation with Denita Hampton, Leslie Madden, and Laura Carscaddon focused on their new ACRL book Now You're a Manager: Quick and Practical Strategies for New Mid-Level Managers in Academic Libraries. November's conversation focused on the book Asian American Librarianship and Library Services published by Rowman & Littlefield, and October brought a conversation with Joe Janes about his Rowman & Littlefield title, Documents that Changed the Way We Live. Upcoming sponsors in 2018 include Sage, Project Muse, and Accessible Archives. All told, these podcasts generated a modest \$3,000 in ad revenue.

Operations

This fall we continued to work to integrate the customer service and fulfillment team into the operations group. This included meeting frequently with the new team members to get a sense of their work and communication styles. We also worked together to develop goals for the group, one of which is to redesign the subscription revenue report that will go to the publisher of Choice and the executive director of ACRL. This new report will not only be easier to read but will include IPEDS demographic data for Choice Reviews so that we can better understand our customer. We are also taking a hard look at the Choice Reviews subscription and free trial numbers for FY17 in order to develop strategies to increase subscriptions in FY18.

Operations

Operational activities relevant to the quality of ACRL's strategic and enabling programs and services are reported below.

Staff

- Mary Jane Petrowski, Associate Director, was awarded the 2018 University of North Carolina at Chapel Hill School of Information and Library Science Distinguished Alumni Award at the SILS commencement on May 13, 2018.
- Gena Parsons-Diamond was hired as ACRL Program Coordinator for Member Services and started on May 15, 2018. Gena will provide support for fundraising, professional development, book publishing, ACRL Diversity Alliance, as well as member promotion, recruitment and retention programs.
- We have contracted for six months with Karen Brown to manage/coordinate ACRL Consulting Services as of May 21, 2018. Staff will evaluate how this worked and how ACRL can best address the need for program review and consulting help.
- ACRL held an Office Green Week during the second week of May to promote eco-friendly initiatives in the office.
- Kara Malenfant, Senior Strategist for Special Initiatives, is on a four-month sabbatical March 26 July 25. She will be working on a joint project with the AMICAL consortium of 27 American international liberal arts institutions working together on common goals for libraries, technology, and learning. In her absence, her duties will be covered as follows: Government relations by Allison Payne, Research and Scholarly Environment by Erin Nevius, and Value of Academic Libraries by Sara Goek
- Senior Leadership Strategist Howard Prager is no longer with ACRL as of March 8. As we consider how to best fill this position the staff liaison responsibilities he held have been distributed as follows on an interim basis:
 - Erin Nevius: New Roles, Changing Landscapes.
 - ACRL Consulting: Mary Jane Petrowski is primary staff contact for consulting while Kara is on sabbatical and negotiations are underway with an adjunct consultant to serve as consulting coordinator while the position is reconsidered.
 - o Allison Payne and Mary Ellen Davis: Diversity Alliance.

ACRL Staff & ALA

- Executive Director Mary Ellen Davis and Program Officer Allison Payne attended ALA National Library Legislative Day on May 7–8, 2018 in Washington, DC.
- Davis continues to serve on ALA Senior Management. Work this spring focused on the ALA budget, options for ALA's real estate, and GDPR. Executive Director Davis is serving on the ALA Senior Management team this year. This entails many meetings, multi-day budget meetings, and helping the organization strategically think about its focus and future. Senior Management is also reviewing proposals from commercial real estate groups to identify a partner to explore leveraging the assets of the ALA office buildings.
- ACRL Executive Director is working to implement ALA's response to the EU's GDPR (General Data Protection Regulation.

- Executive Director Davis and Conference Supervisor Tory Ondrla participated in a workplace facilities focus group as part of ALA's study of the best use of its buildings.
- Associate Director Mary Jane Petrowski gave a well received overview of membership trends to interested ALA Staff during one of the regular ALA 411 sessions.
- Davis and Petrowski met with ALA Director of Staff Development and consultant to review the initial steps to launch the prospect research approved the by the Board.
- Davis is helping the Public Library Association identify academic space in Washington, DC for PLA's kick off meeting for its <u>Inclusive Internship Initiative</u>. PLA has IMLS funding for 50 libraries to each host a high school junior, senior, or rising college freshman as a paid intern this summer. PLA brings them all together at the start of the summer and is interested in exposing the students to academic libraries as part of their seminar.
- Mary Jane Petrowski is co-chairing the ALA Division Membership Working Group. The group has been working to develop wireframes for the new ALA Connect system as well as messaging. The new ALA Connect will launch on April 24, 2018.
- ACRL Senior Strategist for Special Initiatives Kara Malenfant participates in the ALA working group that is designing President Jim Neal's Policy Advocates program.
- ACRL Content Strategist Erin Nevius is working on a co-marketing program with ALA Editions over FY18, consisting of five joint emails, at least one direct mail postcard piece, and promoting more than twenty ACRL titles from new books through backlist titles.

Fundraising

- As of May 31, 2018, ACRL has received \$44,306 from 234 donors this year. Of this amount, \$13,090 was given during the challenge grant period making ACRL eligible for an additional \$10,000 in matching funds from an anonymous donor. The 2019 ACRL Conference Scholarship Fund balance is \$33,134.
- The University of Iowa has identified a donor to fund ACRL memberships for 90 library school students in FY19.
- Susan Hammersmith is making good progress on the co-funded ACRL/ALA development and prospect research consulting project.

Technology

- The new ALA Connect was launched on May 10, 2018. ACRL staff are working to develop missing structure and documentation that will help ACRL members use the new Connect space to manage their committee and community of practice work.
- Staff are working to "clean up" and improve the look of ACRL's web pages to make them more engaging to users.
- Starting May 1, 2018, ACRL will offer Zoom (supports up to 1,000 attendees) to all its membership groups and will no longer be offering WebEx. Adobe Connect will continue as a virtual meeting option for members.

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Enabling Programs and Services Key Performance Indicators (KPIs)

Report Period: March 17, 2018 – June 1, 2018

Enabling programs and services key performance indicators (KPI)

ACRL is committed to assessing progress in advancing the Plan for Excellence, but acknowledges that the entire plan does not need to be measured at one time. The following goals have been identified as the measurement focus for FY17 and the progress toward each to date is reported below.

Member Engagement

Goal: ACRL will retain 95% of its FY17 membership for a total of 9,970 members and that 48.4% (which is the average new member retention rate in the last ACRL non-conference year) of new members who joined ACRL between May 2016 – March 2017 will renew membership in FY18.

KPIs	Data									
Benchmark	ACRL has decreased membership 1.5% (158) since August 2017 when membership was 10,495.									
analysis of ACRL			May	/		May	May	May	May	
total membership			FY18	8		FY17	FY16	FY15	FY14	
number		Total								
		membership	10,33	37	1	.0,766	10,837	11,463	11,249	
		Change year	•							
		over year	-3.98	%	-1	0.66%	-5.46%	1.90%	-7.07%	
Continue to	First	-year membe	r renewal	rate:						
benchmark and	Yea	ar 1st	2 nd	3 rd		4 th	Year to	1		
analyze impact of	100	Quarter	Quarter	Qua	rter	Quarter	Date			
new member	FY1		52.2%	54.		Quarter	52.5%	-		
outreach program	FY1		50.8%	48.9			48.7%			
	FY1		50.8%	53.			49.1%			
	FY1		52.3%	54.4			51.0%			
	FY1		52.9%	53.			52.4%			
	FY1		56.1%	54.			53.6%			
	FY1	12 56.8%	57.9%	53			56.0%			
	FY1	11 62.5%	60.1%	54.0	0%		59.0%			
	FY1	10 56.7%	63.3%	58.	8%		60.0%			
	FYC	9 59.0%	61.9%	62.	7%		61.1%			
	FYC	08 60.0%	64.0%	63.	7%		62.7%			
	Note	e: FY05 and FY	′06 are pre	-reces	sion	control gro	oup with reten	tion rates of 6	62% and 66%,	
	resp	ectively. No re	eminders w	ere se	ent. N	Non-confer	ence years are	shaded for c	omparison.	
	**Aı	n analysis of 4	57 first-ye	ar me	mbe	rs who did	not renew as	of April 2018	shows that 58	%
	(264) were regula	r members	, and	27%	(123) were	e students. 81	% of first-yea	r members wh	10

KPIs	Data
	dropped their ACRL membership also dropped their ALA membership (and 59% of those were
	regular members); 10% kept their ALA membership but dropped ACRL in favor of other
	division/roundtable affiliations (and 39% of those were student members); 9% dropped all
	division and roundtable membership but retained their ALA membership (and 35% were
	students).
Benchmark by	ACRL personal membership distribution for FY18 to date is shown below. The average ACRL
continuous voors	mambarship tanura is 4.00 years (and the modian length of ACRI membarship is 4 years)

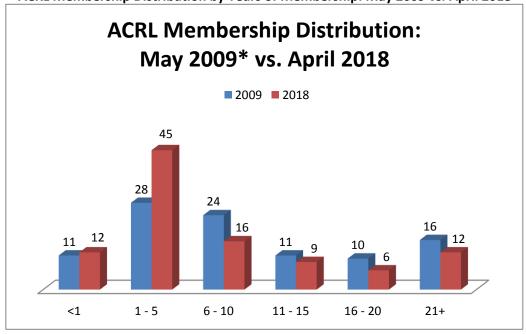
continuous years of membership

membership tenure is 4.08 years (and the median length of ACRL membership is 4 years).

teriare is 4.00 years (and the median length of Menz membership is 4)						
FY18 Q3	%	Number	FY17 Q3	%	Number	
<1 year	12	1,226	<1 year	14	1,184	
1-5 yrs	45	4,451	1-5 yrs	44	4,462	
6-10 yrs	16	1,587	6-10 yrs	15	1,532	
11-15 yrs	9	847	11-15 yrs	9	885	
16-20 yrs	6	602	16-20 yrs	6	622	
21+ yrs	12	1,222	21+ yrs	13	1,281	
Total	100	9,936*	Total	100	10,157*	

^{*}These numbers include only personal members. Reports were run on June 3, 2018, and June 12, 2017 and reflect total personal members as of those dates.

ACRL Membership Distribution by Years of Membership: May 2009 vs. April 2018



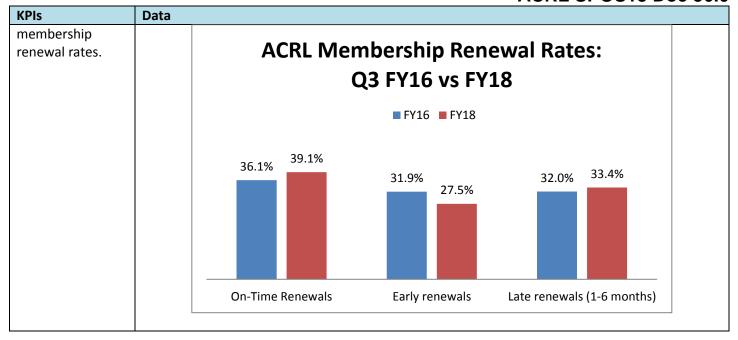
Y axis: % of total membership

X axis: # of years of ACRL membership

*Based on survey data. 23.3% of ACRL members responded to the May 2009 membership survey (with a margin for error of +/-1.74% at the 95% confidence level). Survey data is both statistically valid and representative of ACRL membership as a whole. Years of membership is not a proxy for work place experience. While 57% of our members have been with us 5 years or less, only 41% are new (or relatively new) to the profession according to the 2018 membership survey.

Assess the impact of the renewal reminder program on ACRL

Renewals for FY16 and FY18 year-to-date are illustrated below. As of April 2018, the renewal rate for ACRL members was 75.5%. Of that number, almost two-thirds (66%) renewed on or before their membership anniversary, and the number of late renewals remains on par with FY16.



Education

Goal: **85%** or more of respondents rate the quality of ACRL professional development offerings as excellent or above average. **70%** or more of respondents indicate at least a 20% higher confidence level in their knowledge of the topic.

KPIs	Data					
Quality						
assessment		1 st	2 nd	3 rd	4 th	FY17
and learning		Quarter	Quarte	r Quarte	r Quarte	r Overall
outcomes	Average overall quality assessment	82%	94%	65%		
	* Event specific details can be found in Docu Activities Report.					ellence
Participant	Self-reported learning outcomes data from p	rofessional	offerings of	detailed ab	ove:	
learning		1 st	2 nd	3 rd	4 th	FY17
		Quarter	Quarter	Quarte	Quarte	er Overall
	Average number of respondents who indicated at least a 20% higher confidence level in their knowledge of the topic	85%	90%	75%	1. 1. 101 (5
	Note: Event specific details can be found in L Activities Report.					r Excellence
Likely to	40% Participants enthusiastically recommendation					
Recommend		1 st	2 nd	3 rd	4 th	FY17
		Quarter	Quarter	Quarter	Quarter	Overall
	Average number of participants who indicated a 9 or 10 rating for recommending this professional development, on a 10-point scale	49%	65%	43%		
	This includes every evaluation return	ned, even in	a course h	ad only 1 r	esponse.	



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NOTE: Unanimous Consent is not appropriate when voting on main motions, since they do not qualify as "routine and non-controversial decisions". Members must be given the full opportunity to express their sentiment by a formal show of hands.

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5. The Chair puts the motion to a vote.	"There being no further debate, we will proceed to the vote. The motion is that Those in favor of the motion raise one hand. Thank you. Those opposed raise one hand. Thank you."	Ensure clarity by repeating the motion before taking the vote. There is no need to call for abstentions, since they are not counted (unless the statute or the Bylaws provide otherwise). If the result is clear, it is not necessary to count the votes.
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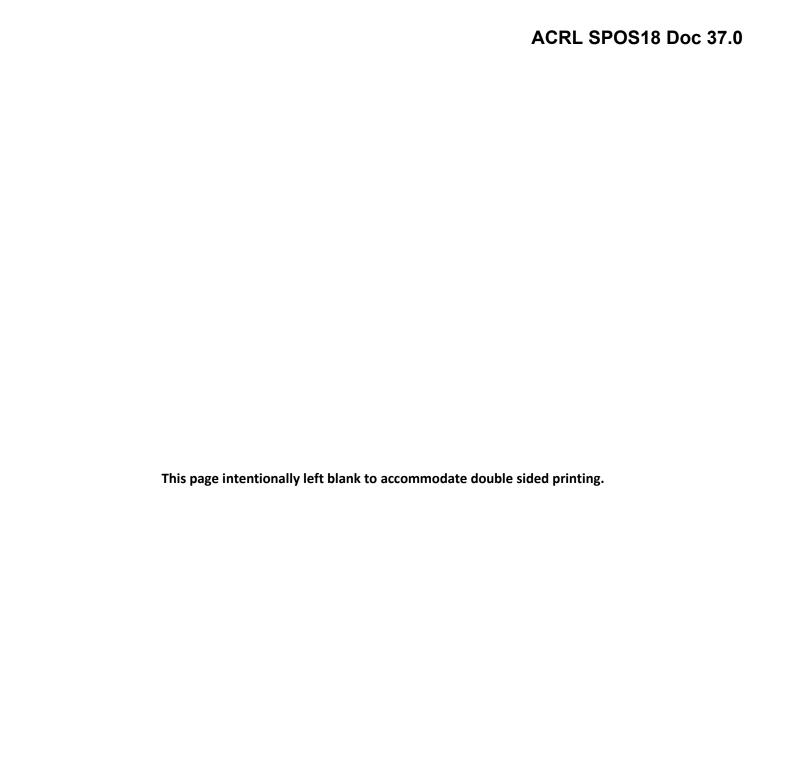
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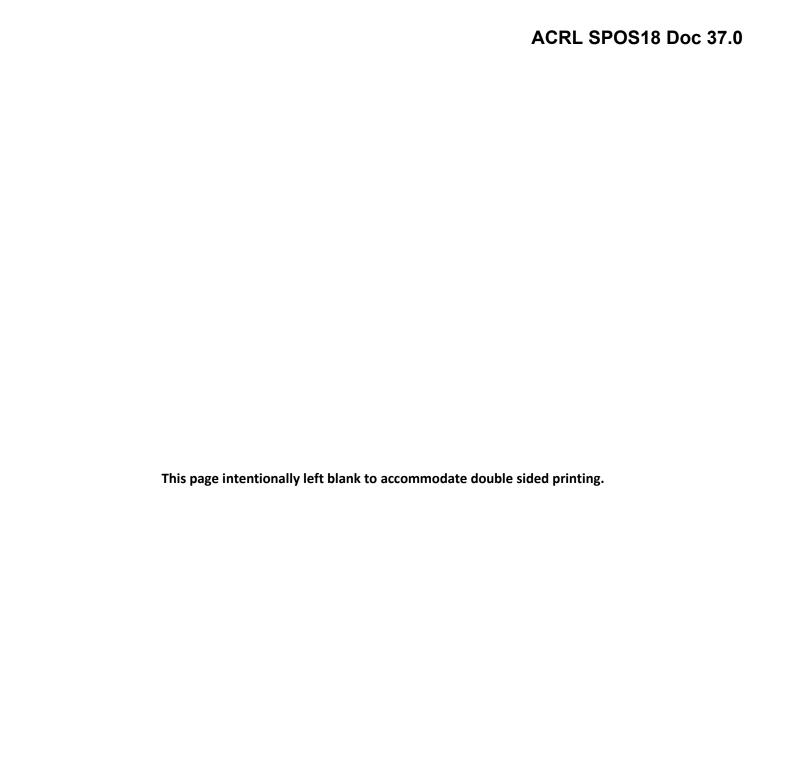
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✓ Board Liaison Checklist Completed Between Annual Conference and SPOS

	Send message to chair/vice chairs of their liaison assignments. (Copy staff liaison) Have a phone call with the ACRL staff liaison to understand the past action plan for their assignments and thoughts about future needs/directions to coach the group toward (could be after receipt of the draft plan, but maybe helpful to confer, and if they are not familiar with their staff liaison to talk to them, prior to receipt) Direct the chair of the section/committee to set up a conference call at a mutually convenient time
Commit	Etees Only Walk through the work plan and coach the committee chair on desired revisions or litems for consideration, such as is it measurable, potential for success, is the time allowed reasonable, and end with a date by which the revised plan should be received Review and approve the work plan (communicate back to committee/section chair and ACRL staff liaison) Prepare to speak on behalf of the work plan at SPOS
	 Set December and May reminders to notify section chairs if you will attend their Midwinter and Annual Conference executive committee meetings. Ask section chairs to ensure you are added to section executive committee email lists.



July 1, 2018

Dear [insert which committee] Chair [insert their name],

I want to take this opportunity to introduce myself to you, as I have been appointed your ACRL Board liaison. I am also serving as a Board liaison to [list other committees, sections] during the coming year. I, along with your ACRL Staff liaison[insert name], are here to answer your questions, review plans, provide information, and support you and your section. We appreciate your service and are here to help.

*Just a few words about me by way of introduction [insert years as a member, where you work, ACRL work you have done before, etc. No more than 3 sentences. This is not a CV, but a brief getting-to-know you letter. For example, when I was assigned to LES I mentioned my undergraduate degree in English and how this liaison assignment took me back to my first passion for literature. When assigned to WGSS I talked about my work on a national Women and Equity committee.]

The ACRL Board liaison is not a member of your committee. I have access to your ALA Connect community and look forward to becoming conversant and aware of the issues and topics that are important to your committee. Even if I cannot attend one of your committee meetings, I can still read the minutes and messages and stay current with your committee's work.

If you hold virtual meetings throughout the year, please let me know if my attendance would be helpful and I will make every effort to attend, respond to questions, hear any concerns, and connect you to the right source for responses if I don't know. If you hold face-to-face meetings at ALA Midwinter and ALA Annual Conference meetings, I usually can drop by to provide an update on ACRL Board activities and actions relevant to your board, answer questions or take concerns back to ACRL for responses. Unfortunately my conference schedule often means I cannot attend your entire meeting, and if I have conflicts (such as if your committee meeting is at the same time as ACRL Board), then I might not make it by. That should not prevent us from connecting at the ACRL Leadership Council meetings on Friday afternoon at the ALA Midwinter and Annual Conference meetings.

The Friday of conference there is always a leadership networking event prior to Leadership Council from 1:30-2:00 pm. I will be in attendance, and this is a good way early in the conference to let me know what is on your mind. That way when I drop by your committee meeting I can sometimes bring a response in person, but I will definitely follow up via e-mail if I cannot make it in person. Usually I will be seated at your table at Leadership Council, which provides another opportunity for us to interact. I encourage you and your vice chair to attend the Friday events as they will provide an overview and update of ACRL activities and focus.

Moving on to another important topic, as a new chair you will need to almost immediately prepare and submit your draft work plan for the coming year, which also includes the Strategic Plan Implementation Report on the past year's activities. Please be aware of the deadlines. You need to send your draft to me and your ACRL Staff liaison as soon as possible (not at the deadline date), because we will review it

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and then ask you to schedule a conference call so that we can confer with you and your vice chair your draft. Please know that whatever changes or questions we may have about your draft are based in our desire for your committee to be successful and supported by ACRL. We may have ideas that you could not know about based in a deeper knowledge of the workings of ACRL, or suggestions to make your work more manageable. Your plan and report is approved by me, your ACRL Board liaison. I will also bring it forward to the fall ACRL Strategic Planning and Orientation Session and represent your work to the full Board – so the better I understand it and can speak to it, the better off we all are!

Again, let me reiterate how delighted I am to be working with you and your committee. I look forward to a productive year. Please do not hesitate to reach out to me and/or your ACRL Staff liaison. We appreciate your service!

Sincerely,

[name]
ACRL Board Member-At-Large
[contact e-mail]
[contact phone number]

July 1, 2018

Dear [insert which section] Section Chair [insert their name],

I want to take this opportunity to introduce myself to you, as I have been appointed to serve as your ACRL Board liaison for [insert fiscal year]. I am also serving as the Board Liaison to [list other sections and ACRL Committees so that Section Chair understands the scope of your liaison responsibilities]. I, along with Megan Griffin who is your ACRL staff liaison, are here to answer your questions, review plans, provide information, and support you and your section. We appreciate your service and are here to help.

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The ACRL Board liaison is not a member of your section. Board members are not assigned to to sections where they are members, so I look forward to learning more about your section's work. It would be helpful to me to be placed on your discussion list and Executive Committee's distribution list so I can become conversant with and aware of the issues and topics that are important to your members. I would also appreciate receiving a copy of your section newsletter. This way, even if I cannot attend one of your Executive Committee meetings, I can still read the minutes and messages and be informed regarding your section's work.

If you hold a virtual Executive Committee meeting in lieu of an ALA Midwinter meeting, please let me know if my attendance would be helpful and I will make every effort to attend. I can respond to questions, hear any concerns, and provide advice, if necessary. If you hold face-to-face Executive Committee meetings at ALA Midwinter and ALA Annual meetings, I usually can drop by to provide an update on ACRL Board activities and actions relevant to your board, answer questions or take concerns back to ACRL for responses. Unfortunately my conference schedule often means I cannot attend the entire meeting, and if I have conflicts (such as if your Executive Committee meeting is at the same time as ACRL Board), then I might not make it by. That should not prevent us from connecting at the ACRL Leadership Council meetings on Friday afternoon at the ALA Midwinter and Annual Conference meetings

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ACRL Board Orientation

A brief review of ACRL's Board Meeting practices



"Suffering is optional"

- On the ACRL Board anyway!
- If there is a problem mutual responsibility to intervene
 - Example: Members, time is running short, shall we move on?
 - Example: I think we've gotten off track, can we return to the issue at hand?



Model's for Board Engagement

Passive Spectators

Vs.

Active, Engaged Contributors

"Riding the Train"

- Silent
- Complain
- "Blame Game"

"Paddling the Canoe"

- All members engaged
- Mutual responsibility for quality of the meeting



Judge Meeting on

Output & Decisions

Having everyone happy at the end is not criteria for judging the quality of meeting.



Knowledge Based Decisions

- All members contribute knowledge
- All members gain knowledge
- Safe learning environment
- Dysfunction = anything that interferes with exchange of knowledge (Ex: silence)
- Need to go after knowledge if silent members have it
- Members have a duty to distribute knowledge





2 Hats: Framework for ACRL representatives to ALA units

Gain input



Share input



• Listen, learn



Vote



•Report/Inform





Informal Consideration

 Use to define/clarify motion or informally discuss motion in Board document before formally considering motion





"Call the Question"

- Decision to close discussion made by group
 - •Informal ready to close discussion/any objection to proceeding?
 - •Formal move to close debate; second; vote requires 2/3 vote
- ACRL Board does not routinely use





Ctte Recommendation Format:

- 1) Charge
- 2) Action Taken
- 3) Learned info
- 4) Recommendation



Amendment

- Proposal = well structured don't need housekeeping
 - Housekeeping can be delegated to E.D. to clean up without changing intent.
- Without objections informed amendment
- •"I move to amend the motion by..."
- OK to withdraw motion or amend by substitution.
- Good to preface "with all due respect I speak in favor / against amendment, because..."

Primary Amendment

Main Motion

- 1. Vote on amendment
- 2. Then vote on motion



After Board Takes an Action

- After a formal vote, even if all Board members are in favor
- Best practice to repeat the motion/decision or to recap closure of the discussion if delegating next steps
- If delegating next steps:
 - Communicate what's happened and what added value is needed.



Best practices for Virtual Meetings/Conference Calls

- Ask for names/ establish order/ state name before speaking.
- Define how are email/chat discussions "chaired"
- Need to establish ground rules affirm still engaged in knowledge based decision making.
- Need repetition not as concerned avoiding repetition for time management in this environment.





ACRL SPOS18 Doc 40.0



Interested in these topics? Learn more about them and other Horizon Project insights by "liking" the NMC on Facebook at facebook.com/newmediaconsortium and on Twitter at twitter.com/nmcorg.

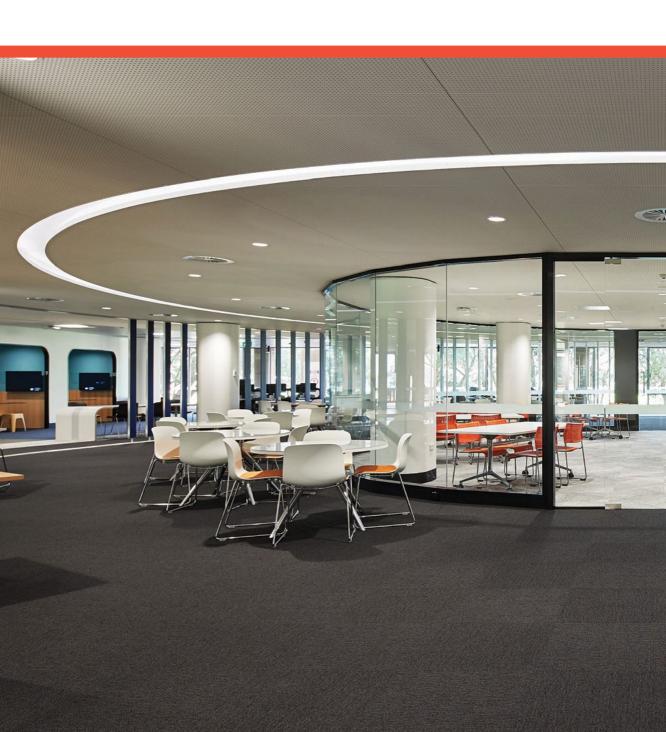


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The NMC Horizon Report: 2017 Library Edition

is a collaboration between The NEW MEDIA CONSORTIUM, UNIVERSITY OF APPLIED SCIENCES (HTW) CHUR, TECHNISCHE INFORMATIONSBIBLIOTHEK (TIB), and ETH LIBRARY.

The research behind the *NMC Horizon Report: 2017 Library Edition* is a collaboration between The New Media Consortium (NMC), University of Applied Sciences (HTW) Chur, Technische Informationsbibliothek (TIB), and ETH Library. Their critical participation in the production of this report and their strong support for the NMC Horizon Project is gratefully acknowledged.

The NMC also recognizes the Association of College & Research Libraries (ACRL) as the official dissemination partner of the report, and is grateful for their involvement and generosity. Learn more about ACRL at www.ala.org/acrl.

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ISBN 978-0-9986242-8-0

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Citation

Adams Becker, S., Cummins, M., Davis, A., Freeman, A., Giesinger Hall, C., Ananthanarayanan, V., Langley, K., and Wolfson, N. (2017). *NMC Horizon Report: 2017 Library Edition*. Austin, Texas: The New Media Consortium.

Acknowledgments

The NMC gratefully acknowledges Bryan Alexander, Steven Bell, and Lisa Janicke Hinchliffe for their insights and contributions to the "Economic and Political Pressures" topic in this report. Additionally, the NMC recognizes Lindley Shedd for contributing research and expertise to a number of topics throughout the report.

Front Cover Photograph

Students check out anatomical models at Lied Library, University of Nevada Las Vegas. UNLV Photo Services/Aaron Mayes.

Inside Cover Photograph

The innovative learning spaces at Reid Library, The University of Western Australia. Photo: Peter Bennetts

Back Cover Photograph

Innovation Space at the Health Sciences and Human Services Library (HS/HSL) of University of Maryland, Baltimore. Photo: HS/HSL

Executive Summary

hat is on the five-year horizon for academic and research libraries? Which trends and technology developments will drive transformation? What are the critical challenges and how can we strategize solutions? These questions regarding technology adoption and educational change steered the discussions of 77 experts to produce the NMC Horizon Report: 2017 Library Edition, in partnership with the University of Applied Sciences (HTW) Chur, Technische Informationsbibliothek (TIB), ETH Library, and the Association of College & Research Libraries (ACRL). This *NMC Horizon Report* series charts the five-year impact of innovative practices and technologies for academic and research libraries across the globe. With more than 15 years of research and publications, the NMC Horizon Project can be regarded as education's longest-running exploration of emerging technology trends and uptake.

Six key trends, six significant challenges, and six developments in technology profiled in this report are poised to impact library strategies, operations, and services with regards to learning, creative inquiry, research, and information management. The three sections of this report constitute a reference and technology planning guide for librarians, library leaders, library staff, policymakers, and technologists. These top 10 highlights capture the big picture themes of organizational change that underpin the 18 topics:

- **Libraries remain the gatekeepers to rich tapestries of information and knowledge.** As the volume of web resources increases, libraries are charged with finding new ways to organize and disseminate research to make it easier to discover, digest, and track.
- **2**Incorporating new media and technologies in strategic planning is essential. Libraries must keep pace with evolving formats for storing and publishing data, scholarly records, and publications in order to match larger societal consumption trends favoring video, visualizations, virtual reality, and more.
- In the face of financial constraints, open access is a potential solution. Open resources and publishing models can combat the rising costs of paid journal subscriptions and expand research accessibility. Although this idea is not new, current approaches and implementations have not yet achieved peak efficacy.
- Libraries must balance their roles as places for both independent study and collaboration. Flexibility of physical spaces is becoming paramount for libraries to

serve as campus hubs that nurture cross-disciplinary work and maker activities — without eschewing their reputations as refuges for quiet reflection.

Catering to patrons effectively requires usercentric design and a focus on accessibility. Adopting universal design principles and establishing programs that continuously collect data on patron needs will make libraries the ultimate destination for learning support and productivity.

Spreading digital fluency is a core responsibility. Libraries are well-positioned to lead efforts that develop patrons' digital citizenship, ensuring mastery of responsible and creative technology use, including online identity, communication etiquette, and rights and responsibilities.

Libraries must actively defend their fundamental values. In times of economic and political unrest, libraries will be challenged to uphold information privacy and intellectual freedom while advocating against policies that undermine public interests and net neutrality.

- Advancing innovative services and operations requires a reimagining of organizational structures. Rigid hierarchies are no longer effective. To meet patrons' needs, libraries must draw from different functional areas and expertise, adopting agile, matrix-like paradigms.
- **genabled** by digital scholarship technologies, the research landscape is evolving. GIS data, data visualization, and big data are expanding how information is collected and shared. These tools are helping libraries preserve and mine their collections while illuminating collaborative opportunities.
- 1 Artificial intelligence and the Internet of Things are poised to amplify the utility and reach of library services. These emerging technologies can personalize the library experience for patrons, connecting them more efficiently to resources that best align with their goals.

It is our hope that this analysis will help to inform the choices that academic and research libraries are making to improve, support, or extend learning and research. Education leaders worldwide look to NMC Horizon Project publications as strategic technology planning references, and it is for that purpose that the NMC Horizon Report: 2017 Library Edition is presented.

NMC Horizon Report > 2017 Library Edition at a Glance

Trends Accelerating Technology Adoption in Academic and Research Libraries

2018 2019 2020 2021 Short-Term Driving technology adoption in academic and research libraries over the next one to two years Research Data Management Valuing the User Experience Driving technology adoption in academic and research libraries over the next three to five years Mid-Term Patrons as Creators Rethinking Library Spaces **Long-Term** Driving technology adoption in academic and research libraries for five or more years Cross-Institution Collaboration **Evolving Nature of the Scholarly Record**

Challenges Impeding Technology Adoption in Academic and Research Libraries



Solvable Those that we understand and know how to solve

Accessibility of Library Services and Resources Improving Digital Literacy



Difficult Those that we understand but for which solutions are elusive

Adapting Organizational Designs to the Future of Work Maintaining Ongoing Integration, Interoperability, and Collaborative Projects



or Less

Wicked Those that are complex to even define, much less address

Economic and Political Pressures Embracing the Need for Radical Change

2017

Important Developments in Technology for Academic and Research Libraries

Time-to-Adoption Time-to-Adoption Time-to-Adoptior Horizon: One Year

2018

Big Data Digital Scholarship Technologies Horizon: Two to Three Years



2019

Library Services Platforms Online Identity

Horizon: Four to Five Years

2021

2020



Artificial Intelligence The Internet of Things

Introduction

he NMC Horizon Report: 2017 Library Edition was produced by the NMC in collaboration with the University of Applied Sciences (HTW) Chur, Technische Informationsbibliothek (TIB), ETH Library, and the Association of College & Research Libraries (ACRL). The internationally recognized NMC Horizon Report series and regional NMC Technology Outlook series are part of the NMC Horizon Project, a comprehensive effort established in 2002 that identifies and describes important developments in technology poised to have a large impact on technology planning and decision-making in education around the world. Each of the four global editions of the NMC Horizon Report — higher education, primary and secondary education (K-12), museum, and academic and research library — highlights six trends, six challenges, and six developments in technology or practices that are likely to enter mainstream use within their focus sectors over the next five years (2017-2021).

In the pages that follow, 18 topics selected by the 2017 Library Expert Panel related to applications of technology for learning, research, and information management are examined. The topics are placed directly in the context of their likely impact on the core missions of academic and research libraries, and detailed in succinct, non-technical, and unbiased presentations. Each has been tied to essential questions of relevance or policy, leadership, and practice.

To plan for the future, it is important to look back. In reflecting on the three library-focused editions of the *NMC Horizon Report*, larger themes have emerged. Certain topics such as research data management and embracing the need for radical change reappear, regularly voted into the report by a now vast body of education leaders and technologists. The tables below show the findings from the past two library editions as well as the 2017 edition. (In some cases, for consistency, the topic names have been slightly modified from the report where they originally appeared.)

In observing the numerous overlaps from edition to edition, it is important to note that while topics may repeatedly appear, they only represent the broad strokes of library transformation; each trend, challenge, and technology development evolves over time, with fresh perspectives and new dimensions revealed every year. For example, scholarly records today are not what they were yesterday. Progress in open access and new research formats have expanded the spectrum of possibilities for how information is stored, accessed, and communicated.

Also noteworthy are topics that were almost included in the report. Because the expert panel votes on which topics they believe are poised for the deepest impact, some received many votes, but not enough to be featured among the 18 here.

Three Library Editions of the NMC Horizon Report

Key Trends	2014	2015	2017
Continual Progress in Technology, Standards, and Infrastructure			
Cross-Institution Collaboration			
Evolving Nature of the Scholarly Record			
Increasing Accessibility of Research Content			
Patrons as Creators			
Prioritization of Mobile Content and Delivery			
Research Data Management			
Rethinking Library Spaces			
Rise of New Forms of Multidisciplinary Research			
Valuing the User Experience			

Significant Challenges	2014	2015	2017
Accessibility of Library Services and Resources			
Adapting Organizational Designs to the Future of Work			
Capturing and Archiving the Digital Outputs of Research as Collection Material		l	
Competition from Alternative Avenues of Discovery			1
Economic and Political Pressures			
Embedding Academic and Research Libraries in the Curriculum			
Embracing the Need for Radical Change			
Improving Digital Literacy			
Maintaining Ongoing Integration, Interoperability, and Collaborative Projects		l	
Managing Knowledge Obsolescence			ı
Rethinking the Roles and Skills of Librarians			
Important Developments in Technology	2014	2015	2017
Artificial Intelligence	2014	2015	2017
Bibliometrics and Citation Technologies			
Big Data			
Digital Scholarship Technologies			
Electronic Publishing		l	
Information Visualization			
Library Services Platforms			
Location Intelligence			
Machine Learning			
Makerspaces			
Mobile Apps			1
Online Identity			
Online Learning			
Open Content			
open content			
Semantic Web and Linked Data			

The next page contains a synopsis of topics not profiled here that are still deemed worthy of following in the coming years. Definitions and panel discussions of these topics can be viewed at library.wiki.nmc.org. Wherever relevant, important aspects of them have been integrated into the 18 topics represented in this report.

The final topics are published here as two-page spreads to make them useful as standalone essays and guides, but generating a more holistic vision of how they all coalesce is becoming increasingly important. In some instances, the challenges represent the obstacles hindering positive trends from scaling and the technologies are accelerators, revealing a convergence between all three sections.

Taken together, the topics featured in the library report from year to year tell a larger story about the overarching themes driving progress in — or impeding — learning, research, and information management. Each topic can be placed into one or more of six meta-categories that reflect movements in academic and research libraries, especially in the context of higher education as a whole.

Key Trends	Significant Challenges	Important Developments in Technology
Advancing Cultures of Innovation	Addressing Societal Challenges	Adaptive Learning Technologies
Collaborative Learning Approaches	Competition from Alternative Avenues of Discovery	Information Visualization
Increasing Accessibility of Research Content	Embedding Academic and Research Libraries in the Curriculum	Makerspaces
Prioritization of Mobile Content and Delivery	Managing Knowledge Obsolescence	Mixed Reality
Proliferation of Open Educational Resources	Marketing/Promoting Library Services	Virtual Assistants
Shift Away from Books	Rethinking the Roles and Skills	Wearable Technology

of Librarians

NMC Horizon Report > 2017 Library Edition Semi-Finalists

Six Meta-categories for NMC Horizon Report Topics



Expanding Access and Convenience

People expect to be able to learn and work anywhere, with constant access to learning materials, as well as each other. Academic and research libraries have made great strides in generating

more methods and platforms for students, faculty, and researchers to collaborate and be productive wherever they are. The advent of always-connected devices has provided more flexibility in how, when, and where people learn and conduct research, and many libraries have updated their IT infrastructures accordingly. Further, libraries must continuously update their policies and services to accommodate all patrons, regardless of disabilities.



Spurring Innovation

To spread progressive practices and develop 21st century services, libraries must be structured in ways that allow for flexibility while spurring creativity and entrepreneurial thinking. Libraries

are positioned at the threshold of new frontiers in digital scholarship, though the culture often stems from academic leadership. In order to continuously stimulate fresh ideas and incubate improved services and operations, there is a need for libraries to adopt more agile organizational structures.



Fostering Authentic Learning and Discovery

Pedagogical trends in higher education are decidedly more student-centered in service of creating richer and more hands-on, real-world experiences.

As vital hubs for campus activities, libraries have a responsibility to promote these active approaches by revamping their physical spaces and rethinking the kinds of events and training they offer. Similarly, research is increasingly becoming a collaborative activity that involves cross-disciplinary teams who work with and record data in technology-enabled formats. Libraries are well-positioned to cater to these activities by providing access to new digital tools and establishing the processes to store and disseminate an ever-expanding range of data and research outputs.



Balancing Societal Shifts

Though they are often viewed as steady, historic beacons that are vital to local and global communities, libraries are not immune to the pressures brought about by changes in national economies,

governments, consumer behaviors and expectations, and education paradigms. Responding to every challenge or shift in a timely manner is nearly impossible, so libraries are devising long-term strategies that prioritize agility and cost-effective practices while anticipating and planning for emerging technologies to come.



Tracking Research and Patron Data

As scholarly records proliferate online in different formats, libraries play a major role in understanding their impact in the greater research community. This has been

traditionally evaluated by where and how prominently a work is published. However, more libraries are measuring the impact through altmetrics — examining the influence of research in various mediums outside of formal publications and citations. Just as research can be tracked and measured, libraries are becoming more adept at integrating analytics and feedback

loops into their services and operations to gain a better understanding of patron behaviors and needs — and make subsequent adjustments accordingly.



Spreading Digital Fluency

Technology and digital tools have become ubiquitous, but they can be ineffective when they are not integrated into learning and research processes in meaningful ways. The

contemporary workforce and academia increasingly call for digitally-savvy individuals who can seamlessly work with different media and new technologies as they emerge. A major element of fostering this fluency is recognizing that simply understanding how to use a device or certain software is not enough; people must be able to make connections between the tools and the intended outcomes, leveraging technology in creative ways that allow them to more intuitively adapt from one context to another. As hubs of information literacy and discovery, libraries are integral in advancing this mission, working with campus leaders, faculty, and staff to embed digital fluency more deeply in teaching and learning.

In the report that follows, each topic will have icons that appear next to it, indicating the above metacategories where it belongs, in order to more clearly illuminate the connections between topics. The report's first two sections focus on an analysis of the trends driving technology decision-making and planning, and the challenges likely to impede the adoption of new technologies, respectively. Each includes an explicit discussion of the trend or challenge's implications for policy, leadership, and practice in academic and research libraries and library organizations. The inclusion of these three elements acknowledges that it takes a combination of governance, vision, and action to advance positive trends and surmount pressing challenges. Relevant examples and readings for further elaboration conclude each topic.

The report's third section focuses on important developments in technology — consumer technologies, digital strategies, enabling technologies, internet technologies, learning technologies, social media technologies, and visualization technologies — all positioned to impact libraries over the next five years. Each development contains a discussion of its relevance to academic and research libraries, and concludes with a set of project examples and further readings.

Taken together, the three sections constitute a straightforward guide for strategic planning and decision-making for academic and research library leaders across the world.

Trends Accelerating Technology Adoption in Academic and Research Libraries

he six trends described in the following pages were selected by the project's expert panel in a series of Delphi-based voting cycles, each accompanied by rounds of desktop research, discussions, and further refinements of the topics. These trends, which the members of the expert panel agreed are very likely to drive technology planning and decision-making over the next five years, are sorted into three movement-related categories — long-term trends that typically have already been impacting decision-making, and will continue to be important for more than five years; mid-term trends that will likely continue to be a factor in decision-making for the next three to five years; and short-term trends that are driving technology adoption now, but will likely remain important for only one to two years, becoming commonplace or fading away in that time.

While long-term trends have already been the topic of many academic and research library leaders' discussions and extensive research, short-term trends often do not have an abundance of concrete evidence pointing to their effectiveness and future directions. All of the trends listed here were explored for their implications for libraries in a series of online discussions that can be viewed at horizon.wiki.nmc.org/Trends.

The NMC Horizon Project model derived three metadimensions that were used to focus the discussions of each trend and challenge: policy, leadership, and practice. Policy, in this context, refers to the formal laws, regulations, rules, and guidelines that govern libraries; leadership is the product of experts' visions of the future of libraries, based on research and deep consideration; and practice is where new ideas and services take action, in libraries and related settings. Below are summaries of the six key trends that will be explored more in-depth in this section, with citations and resources included.

Long-Term Trends: Driving technology adoption in academic and research libraries for five or more years

Cross-Institution Collaboration. Collective action among institutions is growing in importance for the future of academic and research libraries. Today's global environment is allowing them to unite across international borders and work toward common goals concerning technology, research, and shared values.

Within the current climate of shrinking budgets and increased focus on digital collections, collaborations enable libraries to improve access to scholarly materials and engage in mission-driven cooperative projects. More and more, libraries are joining consortia to combine resources or to align themselves strategically with innovation in higher education. Support behind technology-enabled learning has reinforced the trend toward open communities and consortia as library leaders, educators, and technologists come together to develop platforms and software that help institutions aggregate and store data, ensuring sustainable access and preservation.

Evolving Nature of the Scholarly Record. Once limited to print-based journals and monographic series, scholarly communications now reside in networked environments and can be accessed through an expansive array of publishing platforms. The internet is disrupting the traditional system of scholarship, which was founded on physical printing and distribution processes. Now scholarly records can be published as soon as peer review has taken place, allowing communication to happen more frequently and publicly. No longer limited to text-based products, scholarly work can include research datasets, interactive programs, complex visualizations, and other non-final outputs, as well as web-based exchanges via social media. There are profound implications for libraries, especially those that are seeking alternative routes to standard expensive publishing venues. As different kinds of scholarly communication are becoming more prevalent on the web, librarians are expected to discern the legitimacy of these innovative approaches and their impact in the greater research community through emerging altmetrics tools.

Mid-Term Trends: Driving technology adoption in academic and research libraries over the next three to five years

Patrons as Creators. A shift is taking place in the focus of pedagogical practice on university campuses worldwide as students, faculty, and researchers across disciplines are learning by making and creating rather than by simply consuming content. Creativity, as illustrated by the growth of user-generated videos, maker communities, and crowdfunded projects in the

past few years, is increasingly the means for active, hands-on learning. People now look to libraries to assist them and provide tools for skill-building and making. Libraries are ideal environments to serve as creation hubs on campus. This function is a natural extension of their traditional role as facilitators of knowledge creation and as spaces where scholars can connect. To catalyze creativity, many library makerspaces are adopting emerging technologies such as 3D printers, flexible displays, media production tools, and natural user interfaces to enable the act of making. As this trend accelerates, libraries are increasingly responsible for managing the volume and variety of the creations that materialize.

Rethinking Library Spaces. At a time when discovery can happen anywhere, students are relying less on libraries as the sole source for accessing information and more for finding a place to be productive. According to an EBSCO survey on how college students conduct research, 68% start their research process by using Google and Wikipedia. As a result, institutional leaders are starting to reflect on how the design of library spaces can better facilitate the face-to-face interactions that most commonly take place there. In this manner, staff are examining patron behavior to inform decisions for strategic plans and budgetary considerations. Many libraries are making room for active learning classrooms, media production studios, makerspaces, and other areas conducive to collaborative and handson work. These changes reflect a deeper pedagogical shift in higher education to foster learning experiences that lead to the development of real-world skills and concrete applications for students.

Short-Term Trends: Driving technology adoption in academic and research libraries over the next one to two years

Research Data Management. The growing availability of research reports through online library databases is making it easier than ever for students, faculty, and researchers to access and build upon existing ideas and work. Archiving the observations that lead to new ideas has become a critical part of disseminating reports. Enhanced formats and workflows within the realm of electronic publishing have enabled experiments, tests, and simulation data to be represented by audio, video, and other media and visualizations. Emergence of these formats has led libraries to rethink processes for managing data throughout the research lifecycle, from collection to analysis, visualization, and preservation. Advancements in digital data management are leading to more accurate subject search results and citations, while enabling libraries to more effectively curate and display relevant resources for patrons. As libraries continue to update repositories with new data formats, they must look to future developments within higher education to prepare for emerging methods of data curation to incorporate cutting-edge technologies.

Valuing the User Experience. User experience (UX) refers to the quality of a person's interactions with services and products. The term is commonly applied to assess exchanges with websites, mobile devices, and operating systems, but libraries are also applying the same usability principles to physical spaces. In the digital realm, easy navigation, digestible content, and practical features are encompassed in effective website and database designs. Further, companies such as Amazon and Google are identifying patterns in users' online behaviors to better tailor search results at the individual level. Direct feedback from users in the form of ratings on websites including NetFlix and TripAdvisor help companies customize content and adjust user interface design. The result is a more efficient and personal experience for users. Librarians are now favoring more user-centric approaches, leveraging data on patron touchpoints to identify needs and develop high-quality engaging experiences. Library publishing services can also benefit from understanding how user interface and design decisions impact both authors and readers.

Cross-Institution Collaboration

Long-Term Trend: Driving technology adoption in academic and research libraries for five or more years



ollective action among institutions is growing in importance for the future of academic and research libraries. Today's global environment is allowing them to unite across international borders and work toward common goals concerning technology, research, and shared values. Within the current climate of shrinking budgets and increased focus on digital collections, collaborations enable libraries to improve access to scholarly materials and engage in mission-driven cooperative projects.1 More and more, libraries are joining consortia to combine resources or to align themselves strategically with innovation in higher education.² Support behind technology-enabled learning has reinforced the trend toward open communities and consortia as library leaders, educators, and technologists come together to develop platforms and software that help institutions aggregate and store data, ensuring sustainable access and preservation.

Overview

Collaboration in the form of reciprocal borrowing agreements has been commonplace for some time. IFLA's "Guidelines for Best Practice in Interlibrary Loan and Document Delivery" draws its recommendations from studies performed in the late 1990s and early 2000s.3 One longstanding service is BorrowDirect, which has grown from its 1999 launch to include all Ivy League institutions as well as MIT, Duke University, Johns Hopkins University, and the University of Chicago.4 Library organizations are also facilitating the sharing of e-resources. For example, members of the Lebanese Academic Library Consortium benefit from economies of scale through cooperative purchasing of subscriptions to major databases.⁵ Collaborations of this nature have potential to impact participating libraries' acquisitions. Leaders may opt not to purchase resources held in other members' collections to allow additional flexibility around purchasing digital technologies, particularly as endowment funds are not always structured to accommodate innovation initiatives.6

As library professionals collaborate with other institutions, they may encounter challenges such as conflicting priorities or issues around funding responsibilities; however, joint initiatives are becoming more essential in the library field due to budgetary constraints. By working together, libraries can leverage subject matter expertise not present within their own

staff, more efficiently bring promising programs to scale, and tackle issues too large for single institutions to address.⁷ In its "Strategic Thinking and Design Initiative" report, the Association of Research Libraries interviewed leadership from large-scale library collaborations such as HathiTrust, Europeana, and DPLA. Key lessons learned included fostering a culture of non-competitiveness within the project space; developing a shared vision to drive the work; and focusing on existing problems within higher education that are present on participating campuses. Leaders also noted that as technology evolves and matures, a more collaborative model of scholarship is emerging; library projects serving multiple institutions are part of this environmental shift.⁸

Libraries are also working together to develop new technologies to build collaborative collections and improve delivery of library services. MIT Libraries, New York University Libraries, Princeton University Library, and Stanford University Library have developed GeoBlacklight, an open access geospatial search application.9 This software is leveraged in initiatives including the Big Ten Academic Alliance Geospatial Data Project, in which librarians and geospatial specialists from ten institutions have aggregated a discoverable collection of GIS datasets and digitized historical maps.¹⁰ Further, the Open Library Foundation aims to advance innovation by providing infrastructure to enable collaborations and communities of practice.11 The organization supports the FOLIO initiative, a nextgeneration platform where librarians, technologists, and service providers can discuss and co-develop open source software to meet library needs.12

Implications for Policy, Leadership, or Practice

The Council of the European Union recently met to discuss the future directions of Europeana, ¹³ a digital search platform and virtual exhibition space for cultural heritage content institutions across the EU. Changes were recommended to the funding structure of this project, moving from primary reliance on member state contributions to a model in which EU funds cover the majority of operational costs. ¹⁴ At the institutional level, library directors must consider formulating policies around managing funding and sharing resources when working with other libraries. Decision-makers may opt to organize collaborative efforts within legal entities

separate from their institutions. For example, Emory University Library and Georgia Tech Library have joined forces to open the Library Service Center, a cold-storage facility located on Emory's campus that allows faculty, staff, and students from both institutions to access the shared collection.¹⁵ The institutions contributed equal support for facility construction and operating costs through EmTech, a 501(c)(3) organization.¹⁶

Organizations and initiatives are supporting academic and research libraries in cross-institutional efforts. EIFL (Electronic Information for Libraries), a nonprofit network of libraries and consortia across Africa, Asia, and Europe, offers professional development opportunities and resources to increase knowledge sharing and collaboration. Librarians can access toolkits, webinars, and white papers on topics including consortium development and open educational resources.¹⁷ As part of the Laura Bush 21st Century Librarian Program, the Biodiversity Heritage Library (BHL), a global consortium of over 30 research, natural history, and botanical libraries, has received IMLS funding to host National Digital Stewardship Residency positions at five of its partner institutions. The residents aim to improve digital tools and processes that BHL will use in creating the next-generation version of its online open access collection of biodiversity literature. Best practices for digital libraries developed by the resident cohort will inform other large-scale initiatives including the Digital Public Library of America and Europeana.¹⁸

Eight Hong Kong universities have partnered to improve students' information literacy with support from the Hong Kong University Grant Council. Each institution will create one module for an interactive courseware program on a shared platform. Librarians from participating institutions will co-develop strategies for working with faculty to integrate the modules into curricula.19 Libraries are also collaborating to foster comprehensive digital preservation. The California Digital Library, Harvard Library, and UCLA Library have received an IMLS grant to develop Cobweb, an open-source platform for capturing and archiving web content metadata that provides participants a window into the work of other libraries and archives.²⁰ The platform will help curators avoid duplicative action and prevent gaps in coverage. Cobweb aims to promote collaboration and enable libraries to efficiently allocate their resources toward these efforts.²¹

For Further Reading

The following resources are recommended for those who wish to learn more about cross-institution collaboration:

Challenges Facing the Formation of Library Cooperation and Resource Sharing

go.nmc.org/tanzlib

(Jaffar Msafiri Ponera, International Journal of Research,

January 2017.) The author examined collaborations between two Tanzanian university libraries. Recommendations include the development of formal cooperative policies at each institution and the signing of memoranda of agreement detailing the sharing of information resources.

Development of a Cross Institutional Digital Repository (PDF)

go.nmc.org/crossdep

(Maggie Farrell, IFLA World Library and Information Congress 2015, August 2015.) By engaging multiple institutions in the development of digital repositories, diverse skill sets can be leveraged to accomplish the work of building appropriate technology and contributing resources. Best practices for managing joint efforts are identified.

Digital Resources Management in Libraries: Step towards Digital Bangladesh

go.nmc.org/bangla

(A.I.M. Rahman et al., Proceedings of the National Seminar on Cross-talk of Digital Resources Management, 2015.) To meet future goals of developing a national federated interface for digital resources, this article recommends that academic and research libraries experiment with smaller-scale cross-institutional collaborations to create standards and guidelines based on lessons learned.

The Myanmar Academic Library Consortium is Born qo.nmc.org/myanlib

(Electronic Information for Libraries, 13 December 2016.) Leadership gatherings held by EIFL set the stage for nine institutions to form the Myanmar Academic Library Consortium. The organization aims to coordinate professional development for library staff and provide financial benefits to members through consortium-wide sharing of e-resources.

New UK-wide Service Will Transform Library Collaboration

go.nmc.org/jiscserv

(Jisc, 3 February 2017.) Jisc has partnered with global library cooperative OCLC to build a system supporting the creation of a national bibliographic knowledge base for the UK. The project will leverage technology used by OCLC's WorldCat database to aggregate digital resources and metadata to ensure sustainable access for scholars.

Open Pathways to Student Success

go.nmc.org/acadoer

(Joseph A. Salem Jr., *The Journal of Academic Librarianship*, January 2017.) Libraries can lead their institutions in developing open educational resource repositories to improve student academic performance. This article describes efforts in progress by multi-institution partnerships such as the Open Textbook Network.

Evolving Nature of the Scholarly Record

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Long-Term Trend: Driving technology adoption in academic and research libraries for five or more years

nce limited to print-based journals and monographic series, scholarly communications now reside in networked environments and can be accessed through an expansive array of publishing platforms.²² The internet is disrupting the traditional system of scholarship, which was founded on physical printing and distribution processes. Now scholarly records can be published as soon as peer review has taken place, allowing communication to happen more frequently and publicly. No longer limited to text-based products, scholarly work can include research datasets, interactive programs, complex visualizations, and other non-final outputs, as well as web-based exchanges via social media. There are profound implications for libraries, especially those that are seeking alternative routes to standard expensive publishing venues.23 As different kinds of scholarly communication are becoming more prevalent on the web, librarians are expected to discern the legitimacy of these innovative approaches and their impact in the greater research community through emerging altmetrics tools.

Overview

This trend reflects a growing convergence of several vital priorities for the field: digital scholarship, altmetrics, and open access resources.24 Libraries are increasingly the gatekeepers of their academic communities' research outputs and scholarly works. Historically, this role has been undertaken by subscription-based academic journals and university presses. Scholarship is still steeped in these traditional approaches because of the inherent prestige; quality and impact are often evaluated by how prominently and where a work is published. However, technology is gradually but significantly transforming the way information is collected, validated, and disseminated, prompting a host of alternative publication models. The digitization of scholarly records and the transition from text-based materials to more dynamic, rich formats are key steps of this evolution.²⁵ In this new realm, scholars need librarians' support in demonstrating the impact of their various outputs at tenure and promotion reviews.²⁶

As a result of this long-term shift, libraries are growing more adept at managing repositories, curating research data, and promoting the sharing of open data.²⁷ The Canadian Association of Research Libraries (CARL) and the Canadian Research Knowledge Network

(CRKN) have been seminal in initiating advocacy and support activities that inform institutional leaders on the evolution of scholarly communication with a focus on open access.²⁸ Last year, CRKN launched the Institutional Mobilization Toolkit to aid libraries in their discussions around the cost and availability of research resources.²⁹ Another major focus area for libraries is altmetrics — digital indicators that demonstrate the activity and engagement deriving from an output, both quantitatively and qualitatively. This evaluation process can, for example, include mentions on social media.³⁰ While traditional citation tools expose the frequency in which other researchers reference a work, altmetrics can reveal how scholarly records influence policies and real-world practices.³¹

The transformation of scholarly publishing has also sparked important discussions about the future of peer review. Open peer review — the act of exposing authors' and referees' identities to each other — is on the rise as a means of alleviating chronic issues like efficiency and reviewer accountability.32 PeerJ is one journal that aims to accelerate the peer review process while minimizing cost; authors can sign up for a lifetime membership to enable unlimited free publishing, and all works are released under a Creative Commons license.33 In F1000Research's open research platform, all articles receive transparent peer review and benefit from the inclusion of all source data. Articles, slides, and posters are published on a rapid timeline without editorial bias.34 Certification can also be performed online through platforms such as PubPeer,35 an open peer review site where scientists comment on articles published using a digital object identifier. While this model has not been consistently scaled across research fields, proponents suggest that open review accurately reflects that all research is a work in progress.36

Implications for Policy, Leadership, or Practice

As the variety of alternative scholarly records grows, more libraries are measuring the impact through altmetrics. To date, however, there has been no standardization for guidelines. The National Information Standards Organization (NISO) launched the Alternative Assessment Metrics Project with the goal of identifying best practices that inform policy. A report on the findings of the project pinpoint several recommendations, including stating that metrics

about the use of research data should be made widely accessible; altmetric citations must encompass persistent identifiers that are machine actionable across all systems; and formulations need to reflect the growing trend of non-human downloads.³⁷ Further, altmetrics have significant implications for tying research outputs to specific policies. London's Altmetric LLP published "Understanding the Impact of Research on Policy Using Altmetric Data" to showcase how their Altmetric Policy Miner tool is helping World Bank Group and Cochrane UK to better understand how the knowledge they have generated through reports, papers, and articles is being leveraged by policymakers worldwide.

The movement toward open access publishing at scale requires leadership from championing organizations and consortia. Fifty partners from European Union countries are collaborating on OpenAire2020, an effort to promote open scholarship by improving the discoverability and reusability of research data. Research libraries, national e-infrastructure and data experts, and legal researchers are leveraging the online OpenAire platform to create open scholarship workflows and guidelines for the broad adoption of an all-purpose repository.³⁸ Another trailblazer in this arena is National Science Communication Institute, who has forged a long-term partnership with UNESCO in establishing the Open Scholarship Initiative. Scholarly publishing decision-makers are routinely convened to share their perspectives and identify actionable solutions to challenges. They are working to address barriers to open access, the affordability of journals, and ways in which institutional repositories can work together to encompass the full breadth of the world's knowledge.³⁹

Across the field, traditional processes are being revamped in favor of future-focused publishing models. The University of Cape Town Libraries is the first higher education institution in Africa to publish an open monograph using the Open Monograph Press platform, raising the national profile of the movement towards libraries as open-source publishers.⁴⁰ At the University of Illinois, the Publishing Without Walls project aims to develop a library-based service model for scholarly publishing to provide university libraries with the support and resources they need to integrate openly accessible, scalable, and sustainable publishing services that better cater to scholars' needs. 41 Additionally, more libraries are leveraging information visualization technologies to showcase scholarly work and pinpoint connections between research. At the Coalition for Networked Information's (CNI) Fall 2016 meeting, Cornell University Library presented a data and visualization service called Scholars@Cornell. The goal of this new initiative is to bolster the visibility of the institution's research while illuminating explicit and latent patterns of scholarly collaboration.⁴²

For Further Reading

The following resources are recommended for those who wish to learn more about the evolving nature of the scholarly record:

ACRL Scholarly Communication Toolkit

go.nmc.org/acrlsct

(Association of College & Research Libraries, accessed 9 February 2017.) This seminal toolkit was created to help librarians integrate scholarly communication perspectives into library operations and programs as well as to prepare presentations on the surrounding issues.

Altmetrics in the Library (PDF)

go.nmc.org/altmet

(Anne E. Rauh, *Syracuse University SURFACE*, 21 August 2016.) A science and engineering librarian provides context and visuals championing the importance of academic libraries' role in integrating altmetrics.

The Cost of Open Access to Journals: Pay It Forward Project Findings

go.nmc.org/costof

(MacKenzie Smith, CNI, 30 November 2016.) The Pay It Forward project explored the viability of open access models by factoring in institutional costs, faculty and student opinions, and ways to financially support article processing charges.

Five Librarians Discuss the Future of the Academic Book (PDF)

go.nmc.org/fivelib

(Christina Kamposiori, *British Academy Review*, January 2017.) The program officer of Research Libraries UK conducted interviews with academic librarians of varying backgrounds to frame a vision for the future of scholarly works. Among the perspectives surfaced was libraries' active position in designing evolved resources and content.

Scholarly Communication/Publication: Scholarly Communication & OA

go.nmc.org/witsza

(University of the Witwatersrand Johannesburg, accessed 9 February 2017.) This library guide from a South African institution was created to help researchers and students navigate multiple modes of publishing and includes checklists, open access resources, and more.

What are the Challenges of Open Peer Review? go.nmc.org/oprchall

(Stephanie Boughton, *BioMed Central*, 15 June 2016.) The author discusses skepticism towards open peer review. There is a lack of research both into this emergent model and into peer review in general. She believes the first step is to establish a clearer definition of open peer review.

Patrons as Creators

Mid-Term Trend: Driving technology adoption in academic and research libraries over the next three to five years



shift is taking place in the focus of pedagogical practice on university campuses worldwide as students, faculty, and researchers across disciplines are learning by making and creating rather than by simply consuming content.43 Creativity, as illustrated by the growth of user-generated videos, maker communities, and crowdfunded projects in the past few years, is increasingly the means for active, hands-on learning. People now look to libraries to assist them and provide tools for skill-building and making. Libraries are ideal environments to serve as creation hubs on campus. This function is a natural extension of their traditional role as facilitators of knowledge creation and as spaces where scholars can connect. To catalyze creativity, many library makerspaces are adopting emerging technologies such as 3D printers, flexible displays, media production tools, and natural user interfaces to enable the act of making. As this trend accelerates, libraries are increasingly responsible for managing the volume and variety of the creations that materialize.

Overview

The traditional view of libraries as places to quietly conduct research and engage in independent study has given way to environments that emphasize collaboration and experimentation. Larger societal trends towards participatory cultures are prompting libraries to adopt a new vision of their patrons as innovators, and to cultivate spaces and resources that support the act of creating.⁴⁴ Libraries have been well-positioned to house campus makerspaces that encompass 3D printers and scanners, computer assisted design (CAD) software, and more. The goal is to empower patrons to engage in hands-on, interdisciplinary learning that can lead to the discovery of new knowledge and interests, the initiation of new research, or entrepreneurial activities.⁴⁵ The library makerspace at Kent State University Tuscarawas, for example, helps patrons turn ideas into business ventures and marketable products. By also serving as the home for the Ohio Small Business Development Center, the site is bolstering digital and entrepreneurial literacy.⁴⁶

A recent survey by the Association of Research Libraries (ARL) revealed that 64% of responding libraries in North America are engaged in providing, planning, or piloting makerspace services. Another 17% plan

to investigate the services.⁴⁷ Many are including a combination of central services such as reference, training, hardware, scanning, and a repository for models — with an emphasis on 3D design, printing, and scanning. However, fostering effective opportunities for technology-enabled creation will require human support. Almost all of the surveyed libraries make available or plan to offer in-person technology training and skill-building sessions. Additionally, 75% provide digital resources to guide patrons with design, models, and software. In response to the survey, ARL developed the Rapid Fabrication/Makerspace Services SPEC Kit for libraries. As this trend gathers steam, libraries are also revising their budgets, shifting from traditional collection development to patron-driven acquisitions.⁴⁸

A growing host of academic and research libraries exemplify this trend. New York University modeled its data services on the format of an art studio; the open lab space is supported by data librarians and technologists, and provides access to software, data sources, and training, empowering people to easily discover resources to create.49 Meanwhile, the German National Library of Science and Technology in Hannover held a workshop to help campus scientists and engineers create brief video abstracts using mobiles and free web applications, as well as guiding them on choosing appropriate licenses and online publishing sites.⁵⁰ Canada's Ryerson University recently opened its first library makerspace, the Isaac Olowolafe Digital Media Experience (DME) Lab.51 Designed with a peerto-peer learning service model, the DME Lab provides students with access to Oculus virtual reality headsets and other technologies. A variety of workshops are available there, as well as individual instruction in the use of advanced media creation tools.

Implications for Policy, Leadership, or Practice

Many libraries have adopted policies regarding the use of 3D printing and other creative tools, generally restricting students to uses of the equipment that are not prohibited by law, dangerous, or impinging on others' intellectual property rights. In many instances, patrons submit their designs and obtain approval before library employees operate the 3D technology.⁵² Some institutions have procedures regarding the

prioritization of printing projects, often based on academic priority, class due dates, or time of approval of the submission. At the University of Toronto's Gerstein Science Information Centre, students may operate the technology independently after completing a safety and training session, and reserving access time.⁵³

Libraries are initiating programs and partnering with university faculty and other organizations to promote active learning and innovation. Through a grant from the Andrew W. Mellon Foundation, the University of Virginia Library's Scholars' Lab developed the Praxis Program, which awards graduate students with fellowships that allow them to apprentice with library employees to design and construct a digital project centered on the humanities or a specific software tool. Participating students developed Prism, a software tool that expands the capabilities of text by allowing for collaborative interpretation.54 In an effort to give skilled, creative students a greater role in the library's innovation efforts, UCLA Library launched Simul8. Through this program, student employees at the UCLA Library are designing apps to increase the ease of sharing library collections.⁵⁵

The most important practical implication of this trend in libraries is an increase in patron creation and innovation. Students at NUI Galway used the 3D design software and printers in the library makerspace to generate a variety of sculptures and to design and print models of molecules. 56 In Australia, patrons of the Curtin University's TL Robertson Library makerspace have experimented with using batteries, LEDs, and conductive thread to connect a circuit and attach it to a garment or soft item.⁵⁷ Integrating electronics, mechanics, and game design, a group of Carnegie Mellon University (CMU) students collaborated to build a virtual reality tank game in the IDeATe Experimental Fabrication Lab, one of several makerspaces hosted in CMU's Hunt Library. The invention featured a physical chair system that required players to engage with the game using their hands and feet, simulated turns, and allowed multi-player participation. In recognition of their achievement, the students received the Outstanding Project Award in Build18, an annual CMU freestyle tinkering festival that gives CMU student engineers free rein to showcase their creativity.58

For Further Reading

The following resources are recommended for those who wish to learn more about patrons as creators:

Ascending Bloom's Pyramid: Fostering Student Creativity and Innovation in Academic Library Spaces go.nmc.org/ascend

(Mark Bieraugel and Stern Neill, *College & Research Libraries*, February 2016.) The authors explore the way

in which the design of spaces either fosters or impedes creative processes and behaviors.

The KnowledgeLab

go.nmc.org/knowlab

(Neilson Library Knowledge{Lab}, accessed 2 March 2017.) The KnowledgeLab at Smith College Libraries is a participatory space for undergraduate students to engage with emerging practices around the making and sharing of knowledge. The space serves as a platform for showcasing creative student scholarship and experiments generated and implemented by students through a mini-grants program.

MLab

go.nmc.org/mlabuv

(Maker Lab in the Humanities, University of Victoria, accessed 7 February 2017.) Some library makerspaces have narrowed their focus to provide deeper dives into particular disciplines and research areas. The MLab at University of Victoria Libraries concentrates on the intersection of culture criticism, experimental prototyping, and electronics.

NCSU Libraries Code + Art Student Visualization Contest

go.nmc.org/codeart

(North Carolina State University, accessed 7 February 2017.) During the NCSU Libraries Code + Art Student Visualization Contest, students create a wide range of data visualizations, procedurally generated environments like game environments, and virtual and augmented reality experiences.

SLUB Makerspace

go.nmc.org/slubde

(Dresden Technology Portal, accessed 7 February 2017.) Germany's Saxon State and University Library Dresden (SLUB), a three-branch library that serves Dresden University of Technology, provides patrons with a makerspace in which to experiment, realize their creative vision, and cultivate a community with a common interest in making.

The State of Library Makerspaces

go.nmc.org/thestate

(Fangmin Wang et al., *International Journal of Librarianship*, 2016). This article provides a comprehensive overview of the maker culture in academic libraries. The authors profile several makerspaces at North American universities, including North Carolina State University, Ryerson University, and the University of Nevada in Reno.

Rethinking Library Spaces

Mid-Term Trend: Driving technology adoption in academic and research libraries over the next three to five years





t a time when discovery can happen anywhere, students are relying less on libraries as the sole source for accessing information and more for finding a place to be productive. According to an EBSCO survey on how college students conduct research, 68% start their research process by using Google and Wikipedia.59 As a result, institutional leaders are starting to reflect on how the design of library spaces can better facilitate the faceto-face interactions that most commonly take place there. In this manner, staff are examining patron behavior to inform decisions for strategic plans and budgetary considerations. Many libraries are making room for active learning classrooms, media production studios, makerspaces, and other areas conducive to collaborative and hands-on work.60 These changes reflect a deeper pedagogical shift in higher education to foster learning experiences that lead to the development of real-world skills and concrete applications for students.61

Overview

The transformation of physical spaces is an ongoing trend within higher education. Listed as a long-term trend in the NMC Horizon Report > 2015 Library Edition, the 2017 expert panelists believe that the reconceptualization of library spaces is maturing. Recent studies are helping to highlight the ways in which these changes are occurring. The report *Planning and Designing Academic* Library Spaces, for example, identified the approaches, challenges, and best practices in designing new academic library learning spaces. Through a series of interviews, the authors found that 77% of architects and 50% of librarians prioritized flexibility, favoring spaces that are movable and customizable based. Supporting a spectrum of learning needs was another shared goal. Most interviewees noted that new library spaces were being designed to support academic learning activities, with collaboration at 83%, individual study at 73%, and point-of-need services at 63%.62

The advancement of information and communication technologies has had a profound impact on spatial considerations. To better understand the role of physical spaces in libraries, a study titled "The Library as a Multidimensional Space in the Digital Age" was conducted by a researcher at the University of Tampere, Finland. Through interviews and the consultation of planning and design documents, the study concluded that libraries are now perceived as hybrid environments — a fusion of physical, social, and digital spaces and services. In analyzing the Helsinki University Main Library building project, the research indicated that the input of several stakeholders, including users, informed spatial consideration in the design process. The physical space dimension allows for multiple functions; the social space dimension fosters face-to-face interactions; and the digital space dimension facilitates greater responsiveness to patrons' mobile devices.63

Over time, academic libraries have been reconsidering their spaces based on the evolving needs of their patrons. Faculty are increasingly accessing resources online, such as journal articles, from their homes or offices. As a result, higher education institutions are encouraging educators to be more involved in building a vibrant learning community. For example, the Montana State University Library created the Innovation Learning Studio (ILS) to attract faculty back to the library. The ILS is an additional educational space in the library that enables more active teaching and flipped-classroom opportunities, as well as the exploration of new educational technologies.⁶⁴ While libraries are expected to become more involved in facilitating innovative instructional and research methods, new types of active learning spaces are emerging. "Beta spaces" are defined as "environments within a larger library ecosystem created to prototype and deploy new ventures." While nascent, these efforts are furthering the concept of makerspaces, emphasizing ideas over technology.65

Implications for Policy, Leadership, or

Policymakers at every level can apply emerging research about this trend to inform policies that anticipate the evolution of academic libraries. Since 2007, the New Zealand Ministry of Education has produced a series of documents titled "Digital Quality Learning Spaces" in partnership with the local Building Research Association. Version 2.0 of DQLS Acoustics is substantially updated from the first version; the document reflects the introduction of new pedagogies and greater interest in flexible learning spaces, and was rewritten to inform the work of architects, designers, and engineers. At the institutional level, Stony Brook University is devising new strategic goals towards creating a 21st century library that meets diverse user demands. This includes aligning technology with physical spaces and furnishings to support the bring your own device (BYOD) movement by providing adequate power outlets and charging stations, as well as high-speed Wi-Fi.⁶⁶

Several leading organizations have developed resources to help libraries worldwide to plan and evaluate their spaces. Since 2012, a core team consisting of the EDUCAUSE Learning Initiative, SUNY System, MERLOT, Society of College and University Planning, and others have helped create the FLEXspace Flexible Learning Environments eXchange Initiative — a robust, openaccess repository showcasing detailed examples of innovative learning spaces.⁶⁷ Using contemporary pedagogy as the starting point, the resources describe the kinds of spaces most appropriate to accelerate active learning.⁶⁸ Similarly, the Universities and Colleges Information Systems Association offers the UK Higher Education Learning Space Toolkit as a practical guide that shares best practices when creating learning spaces. Topics include managing a learning space project, change management in transition, and evaluation.⁶⁹ Assessment is at the core of the Learning Space Ratings System (LSRS). The LSRS is a tool developed to rate formal learning spaces on their effectiveness in encouraging active learning and is used for renovations or new building projects.⁷⁰

Academic and research libraries are actively updating their spaces and creating new ones to emulate the innovative vision established by leadership initiatives. The newly opened Auchmuty Library Learning Lounge at the University of Newcastle Australia is a 24-hour access facility with ergonomic group study spaces that supports BYOD and contains a "survival station" with hot water and a microwave.⁷¹ The Claremont Colleges Library is the campus hub for digital humanities and digital scholarship, and to further those focus areas, the library is constructing a Digital Tool Shed — an incubator for innovative digital research, teaching, and learning.⁷² Also in development is Virginia Commonwealth University's new Cabell Library where 90% of the space is intended for student use instead of book and material storage, and is designed with flexibility to support new technologies and student needs.73

For Further Reading

The following resources are recommended for those who wish to learn more about rethinking library spaces:

Coalition for Networked Information Introduction and Program Plan 2016-17

go.nmc.org/cnipro

(Consortium of Networked Information, accessed 20 February 2017.) CNI has produced a program plan that has three major features, including transforming organizations, professions, and individuals, under which spaces and services that support technology-enhanced research and learning reside.

Evaluating and Designing Learning Spaces Guide go.nmc.org/jisceval

(Jisc, accessed 20 February 2017.) Jisc's website provides a quick guide to the evaluation and design of learning spaces, covering assessment methods, project management, and the design process.

Imagine Our Library

go.nmc.org/ucdlib

(UC Davis University Library, accessed 20 February 2017.) The UC Davis Library is soliciting suggestions from students, faculty, and researchers about how the library's space, technology, and services can best serve their needs. Phase one involves visioning, phase two focuses on detailed programming, and phase three is the actual design.

Learning Spaces Collaboratory

go.nmc.org/lsc

(Learning Spaces Collaboratory, accessed 20 February 2017.) The Learning Spaces Collaboratory is synthesizing findings from research and practice in learning space design to build resources to shape and assess undergraduate learning environments, such as an "Emerging Template for Assessing Learning Spaces."

Library Refurbishments

go.nmc.org/refurbish

(The University of Western Australia Library, accessed 20 February 2017.) The University of Western Australia libraries are transforming to provide more interactive, flexible, and collaborative spaces. Once home to print collections, the Medical and Dental Library will be renovated with e-learning suites, computer training facilities, and collaborative learning areas.

Measure the Future

go.nmc.org/measure

(Measure the Future, accessed 20 February 2017.) Using inexpensive sensors that collect data about a building's usage, the Measure the Future project will help libraries track the number of visits, items patrons browsed, and which parts of the library were busy during specific times. The data collected will inform the strategic decisions of librarians, creating more effective operations.

Research Data Management

Short-Term Trend: Driving technology adoption in academic and research libraries over the next one to two years



he growing availability of research reports through online library databases is making it easier than ever for students, faculty, and researchers to access and build upon existing ideas and work. Archiving the observations that lead to new ideas has become a critical part of disseminating reports. Enhanced formats and workflows within the realm of electronic publishing have enabled experiments, tests, and simulation data to be represented by audio, video, and other media and visualizations. Emergence of these formats has led libraries to rethink processes for managing data throughout the research lifecycle, from collection to analysis, visualization, and preservation.74 Advancements in digital data management are leading to more accurate subject search results and citations, while enabling libraries to more effectively curate and display relevant resources for patrons. As libraries continue to update repositories with new data formats, they must look to future developments within higher education to prepare for emerging methods of data curation to incorporate cutting-edge technologies.

Overview

Methods of data generation and the capabilities for storing vast amounts are constantly expanding. Within academic and research libraries, the focus has evolved from exploring e-publishing, as described in the NMC Horizon Report > 2014 Library Edition, the impact of metadata standards in the 2015 edition, to the current role of librarians within the research lifecycle and ways to embrace new media data at present. While this trend is not new, it has gained momentum as openness in publishing and increases in data collection have further solidified libraries' role in research data management (RDM).75 A study conducted by LIBER and DataOne showcases an uptick in European university libraries providing support and training for staff in research data management.⁷⁶ Leveraging research conducted three years prior as a baseline, this study highlights a majority of libraries' movement towards staff development and collaboration with other sectors to create RDM policies and guidelines.77

Working with other university sectors, the library has transitioned into a role that can be synthesized into three overlapping parts: access, support, and data management.⁷⁸ Access, the most traditional role within

the library, includes identification of relevant data repositories for learners to apply existing research as well as providing the most up-to-date standards for citation and reference to be identifiable for future use. In order to ensure long-term discoverability of research, library staff have also increased their scope of work to include support systems for data research. Arguably one of the most important forms of support is the ability for libraries to identify metadata standards, which record a combination of source, purpose, and methods behind data. The third role, data management, encompasses both access and support, while also emphasizing storage planning and data curation to "preserve and add value to the data over time, extending from the lifecycle of the research project to its potential reuse."

The expansion of technology is diversifying the types of data formats, including graphics, audio, and video.82 This has led to creating infrastructure that can store, preserve, and manage new media data. Digital asset management (DAM) is a subset within research data management focused on developing processes to store digital formats, creating new metadata standards that encompass evolving formats.83 The International Press Telecommunications Council recently published recommendations for video metadata that includes specifications for content properties and technical implementation standards.84 Projects are already underway to incorporate digital data into library repositories. Smith College recently established the Collaboration for Technology Enhanced Learning, which convenes cross-disciplinary leaders to develop systems that incorporate multimedia data from research initiatives spanning the institution.85 To prepare for new formats of data curation, libraries can also benefit from keeping apprised of emerging technology trends including virtual reality and artificial intelligence.

Implications for Policy, Leadership, or Practice

An international study conducted by the White Rose University Consortium that surveyed institutions throughout North America, Australia, and Europe revealed that most RDM policies stem from leadership within campus libraries; however, the process of developing policies involves multiple stakeholders, with a range of participants that also includes information technology departments, research officers, legal officers, and others.⁸⁶ With emerging formats and new

technologies, universities must develop guidelines to ensure data is generated in deliberate and thoughtful ways. Both Monash University and the Imperial College London have published resources under their libraries' homepages to guide researchers in using best practices, understanding the legalities of data curation, promoting storage and data repositories, and more. ^{87,88} Privacy concerns are also at the forefront as data sharing increases. Librarians can look to the work being done through Jisc's Safeshare Pilot project with universities within the Farr Institute to ensure sensitive data is being shared safely. ⁸⁹

Leaders in RDM are being acknowledged for their work through multiple foundations' grant programs. Three awards were announced through the Institute of Museum and Library Services (IMLS) for academic library RDM initiatives this year. Totaling investments over \$200,000, these projects highlighted universities across the US and focused on ensuring librarians' role within RDM are sustainable over time, showcasing the continued growth of this trend within library spaces.90 As students become more involved within research initiatives, universities have a vested interest in supporting greater faculty involvement in RDM. While budgetary constraints have not allowed for the hiring of dedicated research librarians, North Carolina State University Libraries has overcome this obstacle by deploying their Data Management Review Service to train current staff on competencies needed to support RDM across multiple disciplines.91

Academic and research libraries that have successfully applied RDM strategies are exploring the impacts of these implementations on research disciplines. In South Africa, libraries are beginning to produce frameworks that outline effective policies, infrastructures, and staff training. For example, Cape Peninsula University of Technology Library has published research that investigates how e-research is being used within biomedical studies and details ways in which the university library can develop tools for data management.92 Another notable exemplar is the University of Michigan Library, which plans to launch a suite of data management services, including a repository that will assist researchers throughout all phases of the research lifecycle. The initiative, known as Deep Blue Data, is an extension of their current repository and will incorporate efforts of over 50 librarians and staff to develop data management plans, schematics, and preservation strategies.93

For Further Reading

The following resources are recommended for those who wish to learn more about research data management:

Academic Libraries and the EDUCAUSE 2017 Top 10 IT Issues

go.nmc.org/itlib

(Bohyun Kim, EDUCAUSE Review, 17 January 2017.) Academic libraries and institutional IT departments are facing similar challenges in data management. Staff from both sectors can work in tandem to develop operational guidelines to inform data-driven decisions to improve student success and operational efficiency.

Diving into Data: Planning a Research Data Management Event

go.nmc.org/datares

(Robyn B. Reed, *Journal of eScience Librarianship*, 16 July 2015.) Librarians can leverage their data management work to support research and scholarship across disciplines at their institutions. In developing a data management symposium, library staff at Penn State Hershey engaged the researcher community to identify unmet needs and topics of interest.

A Practical Approach to Digital Preservation Planning at a Mid-Sized Academic Library (PDF)

go.nmc.org/preserve

(Christine S. Wiseman, IFLA World Library and Information Congress, 24 June 2016.) The Atlanta University Center Robert Woodruff Library recognizes the shift to an increase in the amount of digital data. Collaborative efforts have proved essential to the curation and preservation of these vast amounts of data.

Researcher-library collaborations: Data Repositories as a Service for Researchers

go.nmc.org/datarep

(Andrew S. Gordon et al., Journal of Librarianship and Scholarly Communication, 22 September 2015.) The digital repository Databrary has collaborated with NYU Libraries to harness library staff skills in developing technical infrastructure for data management and sharing. Libraries can also benefit from adopting Databrary's practices of working with scholars to better understand how to support their research processes.

UO Libraries Invites Researchers to 'Love Your Data' This Week

go.nmc.org/lovedata

(University of Oregon, 13 February 2017.) The second annual Love Your Data week served as an awareness-building event for best practices in the rapidly evolving field of data management.

Using Scenarios in Introductory Research Data Management Workshops for Library Staff

go.nmc.org/pdscen

(Sam Searle, *D-Lib Magazine*, November 2015.) As academic and research libraries progressively focus on RDM, there is a need for staff to develop the requisite competencies. An exemplar professional development model used scenario-based learning to identify challenges and find solutions in data management.

Valuing the User Experience

Short-Term Trend: Driving technology adoption in academic and research libraries over the next one to two years







ser experience (UX) refers to the quality of a person's interactions with services and products.94 The term is commonly applied to assess exchanges with websites, mobile devices, and operating systems, but libraries are also applying the same usability principles to physical spaces.95 In the digital realm, easy navigation, digestible content, and practical features are encompassed in effective website and database designs. Further, companies such as Amazon and Google are identifying patterns in users' online behaviors to better tailor search results at the individual level.96 Direct feedback from users in the form of ratings on websites including NetFlix and TripAdvisor help companies customize content and adjust user interface design. The result is a more efficient and personal experience for users. Librarians are now favoring more user-centric approaches, leveraging data on patron touchpoints to identify needs and develop high-quality engaging experiences. Library publishing services can also benefit from understanding how user interface and design decisions impact both authors and readers.⁹⁷

Overview

UX embraces ethnography and design to understand and improve patrons' experiences with library services. Ethnography studies of student research behavior, such as the ERIAL Project at Illinois Academic Libraries, 98 have been central to how libraries address student needs in service design.99 While ethnography encompasses observational and participatory research to recognize how users work and the unique challenges they encounter, there is still a need for library staff to adopt a more unified approach. For example, an important facet of UX is desirability, which incorporates elements like aesthetics, emotional appeal, and personal connections. In addition to ensuring web text is clear, concise, and friendly, proactive customer service impacts visitors' decisions about using library services. 100 Conversational user interfaces that leverage virtual chatbots can respond to patrons' questions, guiding them to the appropriate services, databases, and articles. 101

A holistic approach to library UX considers the library experience from many different touchpoints, including signage, the search and retrieval of a text, and the entire web experience across a range of devices. Library UX designers are better understanding patrons

by analyzing multiple resources, combining surveys and ethnographic studies with digitally-captured metrics that track the searching and access of digital resources. Data on how and where people are using library spaces, for example, has helped Grand Valley State University Libraries identify its busiest rooms so they can avoid using them for events and activities. Further, they found that displaying space use data on digital displays throughout the library conveniently informs students of open seating. The display informs students of open seating.

To implement better UX, some libraries are employing design thinking, which uses design principles to accommodate people's needs with technologically feasible strategies.¹⁰⁴ This model helps define and resolves issues based on the needs and aspirations of patrons and prospective users.¹⁰⁵ The University of Technology Sydney, Australia recently leveraged a design thinking process, documenting user behaviors and engaging them in informal conversations over a several month period to conduct a signage audit. They found that library staff mistakenly believed that many inquiries from students visiting the information desk had already been addressed in various signs. A number of issues were surfaced, including too many signs and confusing language. Additionally, some information previously made visible in the physical library space was more pertinent to the website or mobile experience, such as how to print from a laptop, tablet, or phone. Revising the library's website became an essential part of their overall approach to advancing UX.¹⁰⁶

Implications for Policy, Leadership, or Practice

While there are no known government policies specifically addressing the quality of UX within institutions' services, academic libraries looking to develop or implement standards can start with IDEO's Design Thinking for Libraries toolkit. IDEO partnered with the Chicago Public Library and Denmark's Aarhus Public Libraries to observe librarians in ten countries and subsequently develop a toolkit that guides libraries through inspiration, ideation, and iteration. Library stakeholders can improve planning and design by viewing challenges as opportunities to generate and test new ideas — and then implement those that prove to be beneficial to their users. 107 Further, many libraries have developed positions or departments devoted to ensuring that UX plays a role in any library decision-

making and planning. North Carolina State University's department of user experience works across all its libraries, focusing on how patrons can better navigate library spaces, services, and collections.¹⁰⁸

Prioritizing user experience in libraries requires a leadership-driven commitment to regularly incorporate practices that better illuminate patron needs. The User Experience Working Group is leveraging digital collaboration tools along with monthly meetings to develop guidelines and best practices for digital library user and usability studies; they share resources and expertise to help library leaders understand user behavior, learnability, and accessibility of library services.¹⁰⁹ For face-to-face training and professional development, UXLibs Conferences convene globally diverse groups of librarians to explore ethnography, usability, and human-centered design, and share their own research results.¹¹⁰ Some library leaders are developing tools to enable more efficient and personalized interactions with resources. For example, the EEXCESS project aims to bring library content directly to patrons by analyzing their research and automatically providing recommendations from connected databases such as Europeana, EconBiz, and Mendeley. This tool can inject additional background information sources and infographics into a Wikipedia or WordPress page.111

Libraries are recognizing that an ongoing focus on UX is vital to making digital library services relevant as user needs change with the advent of new interfaces and technologies. Duke University Libraries has published "Vision and Values" for maintaining a high-quality web presence with user-centric design priorities and strategies for evolving services by anticipating future needs.¹¹² Based on user feedback, the University of the Arts London Library recently updated its library search tool, which searches across both printed and electronic resources, making it more visual and dyslexia-friendly. They also aim to assess accessibility of the tool from the staff's perspective in the same manner they have focused on the customer side.¹¹³ Linköping University Library has implemented continuous systematic inhouse usability testing applied to all digital services as a grassroots initiative in which they organized their own usability team that routinely gathers to conduct testing. This initiative has informed updates to their library website, search box, and discovery tool, as well as holdings information and the link resolver interface.¹¹⁴

For Further Reading

The following resources are recommended for those who wish to learn more about valuing the user experience:

Designing the Future: A Design Thinking Workshop qo.nmc.org/libjourn

(*Library Journal*, 5 October 2016.) *Library Journal* provides UX-focused professional development opportunities, offering a design thinking workshop for library staff to practice strategies for learning about library users through observation and empathy exercises.

Explora

go.nmc.org/explora

(ETH Library, accessed 20 March 2017.) The Explora platform recontextualizes and presents information to library users in novel ways by creating stories from the multimedia contents, holdings, and services of ETH Library that are further enhanced with data visualizations and infographics.

Improving Library Websites

go.nmc.org/implib

(Carrie Smith, American Libraries Magazine, 3 January 2017.) Libraries looking to optimize the user experience on their websites can explore these tips and product recommendations to help them give patrons more efficient access to a wider online catalog.

Library Collections in the Life of the User: Two Directions

go.nmc.org/inthelife

(Lorcan Dempsey, *Liber Quarterly*, 11 October 2016.) In the current digital, networked environment, libraries are evolving toward an increased focus on user activities. In response, libraries are increasingly playing a larger role in managing outputs of the university as well as facilitating access to a broader range of resources.

Mobile Website Ease of Use: An Analysis of Orbis Cascade Alliance Member Websites

go.nmc.org/easof

(Zebulin Evelhoch, Digital Commons, 2016.) This paper identifies ways to improve academic library mobile websites based on an analysis of library websites made by members of the Orbis Cascade Alliance.

Speed Matters: Performance Enhancements for Library Websites

go.nmc.org/speed

(Scott W.H. Young, Weave Journal of Library User Experience, 2016.) A Montana State University researcher developed and implemented the seven-step "Library Web Performance Enhancement Plan" to improve PageSpeed Insights score, YSlow score, page weight, and HTTP requests — ultimately saving time for patrons.

User Experience in Libraries: Can Ethnography Help? qo.nmc.org/canethn

(Helen Edwards, referisg, 2 July 2016.) Ethnography can be a valuable avenue to a broader understanding of UX in libraries because it focuses on how users behave — not just their direct feedback; in some cases, users cannot articulate their own needs or incorrectly predict how they may use a service.

Challenges Impeding Technology Adoption in Academic and Research Libraries

he six challenges described on the following pages were selected by the project's expert panel in a series of Delphi-based cycles of discussion, refinement, and voting; the expert panel was in consensus that each is very likely to impede the adoption of one or more new technologies if unresolved. A complete record of the discussions and related materials was captured in the online work site used by the expert panel and archived at horizon.wiki.nmc.org/Challenges.

Because not all challenges are of the same scope, the discussions here are sorted into three categories defined by the nature of the challenge. The NMC Horizon Project defines solvable challenges as those that we both understand and know how to solve; difficult challenges are ones that are more or less well-understood but for which solutions remain elusive; and wicked challenges, the most difficult, are categorized as complex to even define, and thus require additional data and insights before solutions will be possible. Once the list of challenges was identified they were examined through three meta-expressions: their implications for policy, leadership, and practice. Below are summaries of the six significant challenges that will be explored more in-depth in this section, with citations and resources included.

Solvable Challenges: Those that we understand and know how to solve

Accessibility of Library Services and Resources.

Although libraries have served as leaders in welcoming disabled patrons, new obstacles are surfacing as technology changes the way users access information. A growing focus on enhancing the accessibility of digital resources will impact the types of skills library professionals must possess. To meet the charge of antidiscrimination legislation and institutional policies, librarians are challenged to implement technologies and learning resources that may not be created with diverse needs in mind. The incorporation of universal design principles in library programming can improve the user experience for all patrons. Additional strategies being deployed include usability testing, digital accessibility audits, and the development of accessibility standards for learning technologies. Integrating the student voice will be paramount in meeting this challenge. Libraries can pave the way for their campuses by working with other institutional stakeholders to implement policies that ensure equality of opportunity for disabled students, faculty, and scholars.

Improving Digital Literacy. The productive and innovative use of technology encompasses 21st century practices that are vital for success in the workplace and beyond. Digital literacy transcends gaining isolated technological skills to generate a deeper understanding of the digital environment, enabling intuitive adaptation to new contexts, co-creation of content with others, and an awareness of both the freedom and risks that digital interactions entail. Libraries are positioned to lead efforts to develop students' digital citizenship, ensuring mastery of responsible and appropriate technology use, including online identity, communication etiquette, and rights and responsibilities. This category of competence is affecting curriculum design, professional development, and student-facing services resources. Due to the multitude of elements comprising digital literacy, library leaders are challenged with continuously championing institution-wide efforts that connect students and staff with growth opportunities. Libraries are playing a major role in developing overall strategies to implement digital literacy practices.

Difficult Challenges: Those that we understand but for which solutions are elusive

Adapting Organizational Designs to the Future of Work. There is increasing attention to the organizational structure of academic and research libraries to better align them with the agile and 21st century practices of the future workplace. Technology, shifting information demands, and the evolving roles of librarians are forcing them to rethink the traditional functional hierarchy. Libraries must adopt more flexible, team-based matrixlike structures to remain innovative and responsive to campus and patron needs. At Ithaka S+R, researchers are beginning a new study to examine the effect of academic libraries' organizational structure on decisionmaking. The findings from this project have implications for institutions' structures and policies. In order to adapt, libraries are examining motivating factors for flexible designs, but often face steep learning curves and resistance among staff.

Maintaining Ongoing Integration, Interoperability, and Collaborative Projects. To earn funding from agencies, research institutions have become more reliant on creating partnerships with other institutions to enhance their visibility and reinforce their standings. In this climate, libraries are under intense pressure to produce high-quality research and quantify outputs. Despite improvements in recent years, existing infrastructure for publication and dissemination often requires researchers to undergo many steps to share their work. For a growing number of academic and research libraries seeking to improve the research ecosystem, satisfy requirements of funding agencies, and alleviate administrative burdens on researchers, interoperability has become a key priority. Interoperability, in this context, is the ability to make research systems operate together harmoniously so that scientific knowledge and data can be exchanged seamlessly across institutions, sectors, and disciplines. Ultimately, the aim is to bolster the ease with which institutions can share their findings with funders and other stakeholders.

Wicked Challenges: Those that are complex to even define, much less address

Economic and Political Pressures. Flat or declining college enrollments, increasing subscription fees and publishing output, and decreasing government support contribute to a web of complexities for academic and research libraries. As a result, they are increasingly prioritizing technologies and digital resources that reduce the expenses associated with delivering services. Complicating this challenge is the notion that technology adoption can trigger a variety of costs. The adoption and creation of open educational resources (OER) are viewed as a potential solution for reducing costs. Open access is a strategy to not only combat the rising costs of paid journal subscriptions, but also to expand the accessibility of research, changing the way libraries work with scholarly outputs. Expanding responsibilities, such as provision of researcher profile systems and open data repositories for their institutions, without expanding resources also brings economic and political pressures. Further, new administrations and government policy action are raising concerns, particularly as academic libraries are organized around core intellectual freedom principles that are being challenged.

Embracing the Need for Radical Change. Academic and research libraries are facing ongoing leadership issues that impact every aspect of their facilities and offerings, including updating staffing models and addressing a lack of financial resources. The advent of mobile technologies is impacting the accessibility of

information: would-be patrons can now begin their searches from their personal devices without setting foot in a library. As information is now increasingly stored in the cloud rather than in a tangible format, libraries are rethinking acquisition strategies and how physical library space can best be utilized. Further, libraries must position themselves as allies in helping institutions meet student success benchmarks by designing new services that align with campus priorities. Staff are challenged to help faculty and students understand and maximize the value proposition of libraries, encouraging the integration of library offerings into academic study and instruction.

Accessibility of Library Services and Resources

Solvable Challenge: Those that we understand and know how to solve





Ithough libraries have served as leaders in welcoming disabled patrons, new obstacles are surfacing as technology changes the way users access information. A growing focus on enhancing the accessibility of digital resources will impact the types of skills library professionals must possess.115 To meet the charge of anti-discrimination legislation and institutional policies, librarians are challenged to implement technologies and learning resources that may not be created with diverse needs in mind.116 The incorporation of universal design principles in library programming can improve the user experience for all patrons. Additional strategies being deployed include usability testing, digital accessibility audits, and the development of accessibility standards for learning technologies. Integrating the student voice will be paramount in meeting this challenge. Libraries can pave the way for their campuses by working with other institutional stakeholders to implement policies that ensure equality of opportunity for disabled students, faculty, and scholars.117

Overview

The library profession has long been committed to providing services to disabled persons and promoting inclusivity. This leadership was formalized over 100 years ago when the ALA formed its first committee for services to people with disabilities.¹¹⁸ As technology evolves, the skills and digital competencies to meet disabled patrons' needs are also changing. The Ontario Library Association has noted that job listings for Canadian library positions are increasingly seeking candidates with experience in creating accessible web destinations and conducting usability testing. 119 Libraries can look to the principles of universal design for learning — guidelines for curriculum development grounded in flexibility and acknowledgment of learner differences¹²⁰ — as they select technologies and create programming. By eliminating barriers and promoting access for a wide range of abilities, these principles help libraries better serve all users.121

While legislation in many countries prohibits institutions from discriminating against persons with disabilities and requires equal access to educational and employment opportunities, 122,123 institutions continue to grapple with compliance. With the advent of leasing digital items in lieu of physical acquisitions, libraries must find ways

to improve accessibility across extensive collections of database subscriptions. ¹²⁴ Additionally, commercial publishers and education technology companies are not obligated to create accessible products, ¹²⁵ placing the burden on decision-makers to sift through the array of learning resources, reviewing accessibility policies on an individual basis; alternatively, they must ensure that supplemental assistive technologies such as text-to-voice are compatible with selected products. Library professionals are challenged to integrate these duties into their workflows alongside additional priorities such as improving digital literacy and supporting curriculum design.

In a survey of learners registered with Student Accessibility Services at the University of Guelph, 60% of respondents revealed that they regularly encounter inaccessible documents and websites.¹²⁶ There is an opportunity for library staff to help faculty understand legal obligations and manage accessibility of resources for assignments and classroom learning technologies. Libraries can also support their institutions in becoming more attuned to how disabilities have potential to impact academic achievement. Following a study of disabled students' experiences with library services at the University of Limpopo in South Africa, recommendations included conducting individual assessments and creating user profiles to ensure students receive the help they need; forming partnerships with publishers to increase availability of materials in accessible formats; and providing extended library service hours for students with disabilities.¹²⁷ To improve inclusivity for instructors with disabilities, libraries can also partner with on-campus groups such as Temple University's Committee on Faculty Disabilities Concerns to better understand their challenges and integrate best practices for serving these communities. 128

Implications for Policy, Leadership, or Practice

Recent policy developments stand to greatly enhance access to printed materials for disabled populations. The Marrakesh Treaty to Facilitate Access to Published Works for Persons Who Are Blind, Visually Impaired, or Otherwise Print Disabled recently went into effect following ratification by 22 countries. This treaty mandates participating countries to enact laws that allow the creation of accessible-format copies of copyrighted works that can be shared domestically.

Additionally, libraries are permitted to distribute these copies across borders, allowing cooperating countries to grow their collections. ¹²⁹ While the US and the EU have not yet ratified the Marrakesh Treaty, ^{130, 131} proposed US legislation aims to address the challenges faced by libraries and other higher education stakeholders in identifying accessible technologies for campus deployment. The Accessible Instructional Materials in Higher Education Act, introduced in the US House of Representatives in 2016, would convene a commission to develop a set of voluntary accessibility standards for electronic learning resources and technologies. These guidelines have potential to shape the vendor marketplace, ultimately improving educational access for disabled students. ¹³²

Establishing best practices and professional development will help libraries address this challenge. The University of Wisconsin-Milwaukee has received a National Leadership Grant from the IMLS for a project intended to help digital libraries serve the blind and visually impaired (BVI) in compliance with the Americans with Disabilities Act. A research team will review current efforts of digital libraries to assist BVI users with accessibility and usability queries. The findings will steer the development of design guidelines to better satisfy BVI users' needs. 133 Librarians can also look to Ontario Council of University Libraries' Accessibility Information Toolkit for guidance on meeting diverse needs. 134 The Lithuanian Library for the Blind recently held its Libraries for an Inclusive Society conference focused on library outreach to disabled populations, organizational strategies to enhance accessibility of library services, and implications of the Marrakesh Treaty. 135

To understand barriers within its library's online resources, Western Washington University ran an automated accessibility checker on its most frequently used systems and used its results to prioritize solution development. The library is planning a future partnership with the campus's student-run Disability Outreach Center to conduct usability testing and improve responsiveness. 136 The University of Central Florida provides several services to enhance accessibility. The library's streaming video collection is equipped with audio transcripts; instructors can easily pull video clips tailored to their assignments. Patrons can also request one-on-one research assistance with library staff to accommodate cognitive and physical disabilities. Additionally, an "Ease of Access" folder appears on every public use computer in its libraries, containing tools for magnifying text and text narration.137

For Further Reading

The following resources are recommended for those who wish to learn more about accessibility of library services and resources:

Access Is Not Problem Solving: Disability Justice and Libraries (PDF)

go.nmc.org/accessjust

(Alana Kumbier and Julia Starkey, *Library Trends*, Winter 2016.) The authors champion a transformative value of equal access to information for all users as a way for libraries to enhance diversity at their institutions and advance social justice.

Dispelling the Top 5 Myths of Library Web Accessibility (Video)

go.nmc.org/libmyths

(Marc Zablatsky, ALA Midwinter Conference 2016, 3 March 2016.) This presentation identifies the limits of compliance rules in meeting disabled patrons' needs and offers actionable solutions to help libraries improve the accessibility of their online resources.

Feds Single Out Library as International Model for Disabled Patrons

go.nmc.org/libmodel

(Mike Nichols, *Grand Rapids Business Journal*, 11 April 2016.) The US State Department has collaborated with Colleagues International to foster knowledge-sharing between American and international disability rights advocates. Representatives from the Middle East and Africa recently visited a Michigan library to learn about their accessible programming.

Obtaining Alternative Formats

go.nmc.org/altforms

(Jisc, 27 February 2016.) This resource provides a workflow to meet user requests for written materials in accessible formats with the goal of promoting learner independence. Strategies will vary depending upon the amount of text involved.

Web Accessibility Toolkit

go.nmc.org/arltools

(Association of Research Libraries, accessed 17 February 2017.) This seminal guide aims to help research libraries meet the charge of inclusivity in digital space. Guidance on universal design and technical standards is offered to improve accessibility of web content; users can also view a directory of other institutional policies addressing these challenges.

World Book Day: ABC Award Winners on the Importance of Accessible Books

go.nmc.org/nepalaccess

(Accessible Books Consortium, 22 April 2016.) The Accessible Books Consortium (ABC) recognized the work of Action on Disability Rights and Development, a Nepalese NGO, with its ABC International Award for Accessible Publishing. The organization was selected for its commitment to making Braille books and audiobooks available to students with disabilities following Nepal's massive earthquake in 2015.

Improving Digital Literacy

Solvable Challenge: Those that we understand and know how to solve



he productive and innovative use of technology encompasses 21st century practices that are vital for success in the workplace and beyond. 138 Digital literacy transcends gaining isolated technological skills to generate a deeper understanding of the digital environment, enabling intuitive adaptation to new contexts, co-creation of content with others, and an awareness of both the freedom and risks that digital interactions entail.139 Libraries are positioned to lead efforts to develop students' digital citizenship, ensuring mastery of responsible and appropriate technology use, including online identity, communication etiquette, and rights and responsibilities. 140 This category of competence is affecting curriculum design, professional development, and student-facing services and resources. Due to the multitude of elements comprising digital literacy, library leaders are challenged with continuously championing institution-wide efforts that connect students and staff with growth opportunities. Libraries are playing a major role in developing overall strategies to implement digital literacy practices.

Overview

In today's digital information environment, library staff, faculty, and students are expected to evaluate information through a lens of credibility that is dependent on the context in which information is used.141 While they are often familiar with a variety of digital tools and platforms, they may not be in the habit of thinking critically about how they use these resources, interpret information, and prepare content to share online. As social networking platforms proliferate and more interactions take place digitally, there are more opportunities for propagation of misinformation, 142 copyright infringement, and privacy breaches. Libraries cannot solve this challenge alone; cross-disciplinary teams can help to expand research capabilities. For example, Project Information Literacy has convened a group of faculty, library professionals, and others to engage in a national study on how young people find, evaluate, and select information in educational settings and beyond.143

Mindful media consumption is one facet of digital literacy that has proven to be critical in combatting "fake news." The Stanford History Education Group released a report revealing that many students have trouble distinguishing credible sources from unreliable

ones.144 Recent instances of widely-circulated fake news and resources have fueled socially divisive and dangerous activities, from anti-abortion groups intentionally masquerading as government health resources in France, to lies about crimes committed by refugees in Germany being circulated by anti-Islam groups.¹⁴⁵ Libraries are challenged to leverage the current public attention on the severity of these widespread issues to advance the embedding of digital literacy across university curricula. These competencies must be authentically integrated into all courses to help students manage knowledge creation dissemination across disciplines, while practicing empathy. Alfred University has elevated its information literacy offerings from a single session into a First Year Experience Introduction to Sociology course that includes five hands-on information literacy sessions along with the development of personal e-portfolios and one-on-one meetings with a librarian.146

While the expert panel has identified this challenge as solvable, digital literacy efforts will remain ongoing as advancements in technology, as well as the real-world skills valued in the workforce, continue to evolve. Jisc has defined digital literacies broadly as "capabilities which fit an individual for living, learning and working in a digital society." ¹⁴⁷ Tools, such as Jisc's Student Digital Experience Tracker, can assist libraries in gathering evidence from learners about their digital experience and shifting needs while tracking changes over time. 148 Further, the University of Michigan School of Information pinpoints data and statistical literacies as key crossdisciplinary skills. They are training future librarians in instructional strategies for teaching understanding of data practices with the belief that these competencies will aid learners in developing new ways of thinking and communicating within digital environments. 149

Implications for Policy, Leadership, or Practice

Governments are prioritizing digital literacy initiatives to encourage economic development and enable citizens' full participation in digital society. Ireland has set an example with its All Aboard project, funded by the National Forum for the Enhancement of Teaching & Learning. By identifying the skills that higher education faculty and graduates need to feel confident and creative when learning and working in the digital world, the project has produced a framework, digital badging

initiative, and events aimed at building the country's digital capacity. These outputs will be useful to librarians in developing and updating their own policies and initiatives. ¹⁵⁰ Libraries can also inform policy design by learning from initiatives that target specific aspects of digital literacy, such as the Library Freedom Project, a partnership among librarians, technologists, attorneys, and privacy advocates aimed at helping libraries become more attuned to protecting patrons' privacy. ¹⁵¹

Leading organizations are developing resources to guide libraries in integrating digital literacy efforts into day-to-day operations. The Association of College & Research Libraries' (ACRL) "Framework for Information Literacy for Higher Education" provides groundwork in defining universal information literacy outcomes for today's graduates that can help shape digital literacy initiatives.¹⁵² The Public Library Association's site, DigitalLearn.org, offers a collection of self-directed tutorials for users to increase their digital competencies, as well as a community of practice for educators to share relevant materials and best practices. Libraries can also create their own digital literacy training sites that allow learners to customize their courses, track progress, and receive certifications.¹⁵³ Professional development can be built into digital literacy services and initiatives. Library leaders are contributing resources that aid this process, such as Library Intelligence, a free diagnostic tool to assess the digital literacy capabilities of library staff along with self-paced online courses. 154

Uniquely situated as information literacy authorities, libraries can help take the reins on campus digital literacy initiatives. The Open University's (OU) Library Services has launched a university-wide project to establish resources and approaches to grow the digital capabilities of OU staff, tutors, researchers, and students. They are developing a set of minimum competencies for digital literacy and providing programs and training so staff and students can achieve them.¹⁵⁵ Penn State University Library has implemented an information literacy digital badging initiative that offers students personalized and flexible activities to build competencies underlying ACRL's Information Literacy Competency Standards for Higher Education. The badges can be exported to students' LinkedIn profiles to reveal progress towards goals.¹⁵⁶

For Further Reading

The following resources are recommended for those who wish to learn more about improving digital literacy:

Beyond Library Walls: Supporting Academic Capacity Building with Digital Technologies

go.nmc.org/beyondlib

(Sharon Chua, VALA 2016.) The author explains how librarians can support faculty by identifying ways to promote capacity building in digital literacy, and

describes the digital tools that have helped Deakin University Libraries address skill gaps.

DigiComp 2.0: The Digital Competence Framework for Citizens

go.nmc.org/digicomp

(European Commission, 2016.) To support curriculum modernization and planning for the digital future, the DigComp framework can serve as a good starting point for libraries; it describes digital competencies to aid the assessment of digital knowledge and support the design of targeted educational initiatives.

DIY Digital Privacy and Security for Students go.nmc.org/privsec

(Adam Rogers, Knight Foundation, 21 March 2016.) North Carolina State University Libraries is prototyping a toolkit and workshop materials that combine a realistic assessment of privacy and security threats with recommendations on how students can be more proactive in protecting their own digital lives.

From Written to Digital: The New Literacy

go.nmc.org/newlit

(Phillip Ventimiglia and George Pullman, *EDUCAUSE Review*, 7 March 2016.) Digital literacy enables more variety in the ways students think and communicate and has become a prerequisite for employment and intellectual independence. For example, Georgia State University has added coding to their Honors English Composition curriculum as a digital literacy that allows graduates to better understand e-publication options.

Opportunities for Academic and Research Libraries and Wikipedia

go.nmc.org/wikiped

(The International Federation of Library Associations and Institutions, 2016.) This paper describes the potential for collaborations between Wikipedia editors and academic and research libraries to promote open knowledge resources, improve students' critical assessment skills, and help develop and disseminate toolkits for reusing Wikipedia's content and metadata.

Rethinking Digital Literacy to Serve Library Staff and Users eCourse

go.nmc.org/ecour

(American Library Association, 8 September 2016.) ALA is facilitating a four-week online course to help participants incorporate evolving definitions of digital literacy into learning opportunities and promote digital literacy in their institutions through developing frameworks and designing learning opportunities.

Adapting Organizational Designs to the Future of Work



Difficult Challenge: Those that we understand but for which solutions are elusive

here is increasing attention to the organizational structure of academic and research libraries to better align them with the agile and 21st century practices of the future workplace. Technology, shifting information demands, and the evolving roles of librarians are forcing them to rethink the traditional functional hierarchy. Libraries must adopt more flexible, team-based matrix-like structures to remain innovative and responsive to campus and patron needs. At Ithaka S+R, researchers are beginning a new study to examine the effect of academic libraries' organizational structure on decision-making.157 The findings from this project have implications for institutions' structures and policies. In order to adapt, libraries are examining motivating factors for flexible designs, but often face steep learning curves and resistance among staff.

Overview

As the contemporary workforce is evolving to favor higher social and analytical skills,158, 159 the nature of work is also changing in libraries. Historically, most organizational structures, including those found in libraries, have been hierarchical. In this scenario, one director oversees a number of employees that are responsible for traditional services. They operate according to a rigid ladder of authority and regulations, with strong emphasis on technical over interpersonal skills. Decision-making power rests predominately at the top with less power cascading down organizational levels.^{160, 161} This type of structure is straightforward but does not accommodate the sheer quantity of information needed for libraries to adjust in a continuously changing environment. Libraries are challenged to cater to shifts in visitor demographics and expectations when they are not structured in an agile

To meet the need of today's patrons, libraries must draw from different functional areas and adopt a flexible, matrix-like organizational structure. 163, 164 Matrix designs are advantageous because they formulate experts from different functional areas into teams that can undertake projects temporarily or permanently. Originally developed at NASA, organizations including IBM, Kaiser Permanente, and Citibank all leverage the matrix management model and are seeing higher margins

on knowledge-related work.¹⁶⁵ In 2016, approximately one-third of Institute of Museum and Library Services (IMLS) grants supported digital library projects.¹⁶⁶ These initiatives require expertise on a broad range of areas including digitization, metadata, preservation, and technology solutions. The advent of makerspaces (as exemplified in the Patrons as Creators trend in this report) is enabling the creation of conceptual and physical products.^{167, 168} However, developing successful environments necessitates the knowledge and skills of a diverse library staff including instructional designers, technologists, social media experts, and more.

While there are advantages in deploying this kind of flexible structure, such as seamless exchanges of information, increased technical competence, and more efficient use of resources, obstacles are preventing seamless adoption. For example, there are steep learning curves associated with changing roles, resistance to change, 169 and added confusion as people report to multiple bosses.¹⁷⁰ A technologist assigned to work on a library makerspace may feel torn between responsibilities to the makerspace project manager and functional team manager, struggling to manage schedules and demands across multiple reporting relationships. Libraries can consider implementing matrices so that relationships, information management, and priorities between multiple managers are clear and explicit.¹⁷¹ The University of Adelaide Library aims to foster greater agility by simplifying its organizational structure. Leadership plans to eliminate redundancies and non-essential positions to create four or five functional units to enhance coordination between units and improve the library's ability to respond to a changing context.¹⁷² Productivity technologies such as Slack also have the potential to bolster and streamline project communications. 173

Implications for Policy, Leadership, or Practice

Recently, leading organizations have implemented policies that elevate the importance of matrix-like structural flexibility. In March 2015, employees across various divisions of academic libraries attended the Academic Library Planning and Revitalization Institute conference and converged on four areas that need attention to inform better policies that focus on

serving students' needs. One point of consensus was that libraries should resemble a learning community. To promote this goal, participants suggested that libraries encourage collaboration inside the facility, provide integrated service, foster flexibility, and take interdisciplinary approaches to solving problems.¹⁷⁴ A matrix-like design is one important way to support this goal as it not only allows libraries to pull from many different expertise areas, but also increases interactions and openness — two factors that promote innovative processes and learning.

Any system-wide change requires explicit support and commitment from senior leadership.¹⁷⁵ In solving this challenge, individuals at all levels of library leadership are advocating for integrating greater agility across structures. For example, the University of Virginia's new university librarian and dean of libraries is pressing for more cross-collaboration in research activities. The dean envisions librarians partnering with faculty on externally-funded research projects. Major funding agencies are also recognizing the cross-disciplinary nature of effective initiatives. The National Institute of Health provides funding to programs that bring library information specialists into biomedical research teams. Librarians' function in these teams is to ensure effective record-keeping, storage, and circulation of data. This strategy to embed librarians into external research programs is one that requires a flexible structure, along with vital support from the top.¹⁷⁶

To solve this challenge, more libraries are trending toward models with greater flexibility. University of Manchester Library, for example, abandoned the traditional subject-based team model comprised of five areas and moved to three function-based teams research services, teaching and learning, and academic engagement. This shift allowed them to cull different expertise to work on projects directly linked to the university's strategies. While change agents foresee challenges, they are convinced this restructuring will eliminate redundancy and help the library adapt to changing needs. Already, they have seen strides in their ability to build and enhance services. For example, the new function-based teams have developed services such as Manchester e-scholar, the institutional repository. These teams are also engaging in a project aimed at monitoring, disseminating, and creating a publishing strategy to increase Manchester researchers' citation levels.177

For Further Reading

The following resources are recommended for those who wish to learn more about adapting organizational designs to the future of work:

2016 Top Trends in Academic Libraries

go.nmc.org/top2016

(Association for College & Research Libraries, 2016.) This article discusses the top trends in academic libraries including research data services, digital scholarship, and agile collection assessment approaches. Many of the trends outlined point to an increasing need for flexible organizational designs.

Changing Roles and Changing Needs for the Academic Librarians

go.nmc.org/changin

(Danny Kingsley, University of Cambridge Office of Scholarly Communication, 29 November 2016.) Librarians'roles are changing to require greater research, data management, and curation skills. Before leaders can talk about changes in libraries' organizational structure, there is a need to understand the changing roles and needs for librarians.

Follow the (Grant) Money

go.nmc.org/follow

(Brian Kenney, *Publishers Weekly*, 14 October 2016.) Grant announcements indicate what the future of libraries holds. Digital library projects, maker activities, and community outreach activities are receiving funding and will require agile organizational designs.

Making Matrix Organizations Actually Work

go.nmc.org/matrix

(Herman Vantrappen and Frederic Wirtz, *Harvard Business Review*, 1 March 2016.) This article outlines principles for making organizational matrices work. While written for a general audience, library leadership can apply these guidelines to their organizations.

Organizing the Work of the Research Library go.nmc.org/organi

(Roger C. Schonfeld, Ithaka S+R, 18 August 2016.) In this research project, Ithaka S+R interviewed selected library directors to gain insight into the leadership and change management issues associated with the organizational structure of research libraries.

Subject Matrices: An Innovative, Collaborative Approach to Serving the Agricultural Sciences

go.nmc.org/submat

(Jenny K. Oleen et. al., *Western Libraries Faculty & Staff Publications*, 8 January 2015.) Kansas State Libraries moved from subject-based departments to user-based departments. During this transition, an agricultural and biological sciences matrix emerged, drawing librarians and professional staff from across departments, including content development librarians, data service librarians, and scholarly communications librarians.

Maintaining Ongoing Integration, Interoperability, and Collaborative Projects







Difficult Challenge: Those that we understand but for which solutions are elusive

o earn funding from agencies, research institutions have become more reliant on creating partnerships with other institutions to enhance their visibility and reinforce their standings.¹⁷⁸ In this climate, libraries are under intense pressure to produce high-quality research and quantify outputs. Despite improvements in recent years, existing infrastructure for publication and dissemination often requires researchers to undergo many steps to share their work. For a growing number of academic and research libraries seeking to improve the research ecosystem, satisfy requirements of funding agencies, and alleviate administrative burdens on researchers, interoperability has become a key priority. Interoperability, in this context, is the ability to make research systems operate together harmoniously so that scientific knowledge and data can be exchanged seamlessly across institutions, sectors, and disciplines. Ultimately, the aim is to bolster the ease with which institutions can share their findings with funders and other stakeholders. 179

Overview

Libraries balance universities' interests in institutional success with the support of information flows and the individual researchers' needs. As a result, they manage boundaries between the institution's separate sometimes-overlapping research information management system (RIMS) and digital repository, along with the metadata they encompass. RIMS aggregate information about institutional research activities for reporting at the institutional, national, or funder level, while digital repositories store and grant access to data and objects. As open access initiatives and open-source repository platforms grow, libraries are challenged to keep pace with the evolution of repositories. The Open Archive Protocol for Metadata Harvesting (OAI-PMH) was established as a seminal interoperability protocol for standardizing information exchange between repositories. Data providers are repositories that expose structured metadata via OAI-PMH, while service providers make OAI-PMH service requests to harvest that metadata.¹⁸⁰

Despite progress, significant obstacles persist with integrating open-access repositories and making them interoperable with RIMS, journal publishing platforms, indexing and abstracting services, and search engines. Challenges to interoperability between repositories and repository networks derive from many sources, such

as the resources available for network development; speed of network development; and directives for the repositories and networks that undermine common goals. Additionally, language barriers and cultural, organizational, and legal variances present impediments. In this diverse landscape, the creation of a unified body of research materials hinges on whether repositories and other systems follow consistent standards for interoperability that allow for transfer of metadata and digital objects between systems. The University of Florida (UF) is piloting a solution by linking their repository with ScienceDirect, Elsevier's online journal and e-book catalog.¹⁸¹ Using application programming interfaces (APIs), the university routinely searches ScienceDirect for UF researchers' articles and stores the metadata, allowing researchers to find links to over 30,000 articles.

Researchers' fragmented online identities across a variety of platforms, along with a lack of persistent unique identifiers, are compounding this challenge. It is especially difficult for would-be collaborators to view the full scope of another scholar's work and determine whether partnerships would be beneficial. Fortunately, the ORCID ID has emerged as the standard research identification structure across all disciplines. ORCID helps researchers distinguish themselves from those with similar or identical names; maintain connection to their research, funders, and publishers despite job or affiliation changes; and automate linkages to publications, grants, and patents. Due to its interoperability with other systems, researchers can synchronize publication records by linking their ORCID to their Scopus Author ID or ResearchersID, as well as to Researchfish, a UK research impact assessment system. These capabilities save time on research management tasks, making it easier for institutions and funding agencies to link research funding with research outputs or commercial interests. 182

Implications for Policy, Leadership, or Practice

Libraries globally are challenged in selecting standards and strategies to inform technology policies. In the US, there is an opportunity for libraries to influence the adoption of institutional guidelines addressing data access issues, as less than half of the 206 American universities surveyed in the *Journal of Librarianship and Scholarly Communication* have standalone comprehensive policies. Presently, there is a disconnect between funder policies

emphasizing sharing, dissemination, and openness with institutional policies focused on legal issues and ownership. As institutions respond to evolving funding parameters and government policies, libraries will have a unique opportunity to shape institutional data policies that align with overarching trends toward increased openness and accessibility. Librarians from the University of Wisconsin-Milwaukee, University of Illinois at Chicago, and Carnegie Mellon University are currently conducting research to inform development of best practices for institutional data policies.¹⁸⁴

Successfully increasing integration, interoperability, and collaboration between research institutions across numerous interfaces worldwide necessitates strong partnerships. In the US, the Big Ten Academic Alliance (BTAA)¹⁸⁵ Library Deans and Directors investigated challenges related to providing a more seamless user experience from information discovery to fulfillment. Library leadership recognized a need for greater interplay, planning, and vetting of collective decisions between public services, resource sharing services, and technology services units to optimize BTAA libraries' ability to develop and integrate systems and service layers. The resulting report series provides a framework and recommendations for a discovery to delivery model.¹⁸⁶ To better address interoperability in the open access movement, national and regional repository networks have also emerged. The Digital Repository Federation, for example, is a network of Japanese institutional repositories; the Chinese Academy of Sciences network harvests records from 96 affiliated institutional repositories; and OpenAIRE, a European network, provides a central portal for aggregated ECfunded research.187

Several academic libraries worldwide, including Vienna University Library and Archives Services, Peking University Library, Helsinki University Library, and Lund University Libraries, have joined the Confederation of Open Access Repositories (COAR). COAR has created a forum to better align the technical interoperability policies and services with repositories to aggregate their content. The initiative aims to build services that track research outputs, monitor publication use, mine text and data, and facilitate peer review. COAR's members have identified highest priorities for interoperability work that will impact individual libraries, including exposing citation formats and bibliographic information, supporting data export functions, and supporting search engine optimization.¹⁸⁸ In Australia, 13 public institutions have launched HuNI, a research and discovery platform developed by and for humanities and creative arts scholars. HuNI focuses on integration and interoperability of 30 of the nation's most significant cultural datasets, comprising more than two million authoritative records.189

For Further Reading

The following resources are recommended for those who wish to learn more about maintaining ongoing integration, interoperability and collaborative projects:

European Cloud Initiative - Building a Competitive Data and Knowledge Economy in Europe

go.nmc.org/eci

(Eur-Lex, 19 April 2016.) The European Commission has proposed the European Science Cloud and European Data Infrastructure as solutions to interoperability challenges. This document provides a comprehensive outline of the development steps.

Green OA and the Interoperability of Institutional Repositories

go.nmc.org/interop

(John Parsons, *Library Journal*, 31 May 2016.) Global initiatives are underway to share common strategies and technologies for improving metadata standardization to promote interoperability.

Harvard Medical School Launches Digital Repository of Medical Evidence

go.nmc.org/libofevid

(HIT Consultant, 16 September 2016.) A team of librarians, clinicians, and engineers have developed the Harvard Library of Evidence, which aids practicing physicians in selecting imaging tests for patients based on recommendations generated by literature review.

Overview of Systems Interoperability Project (PDF) ao.nmc.org/osipreport

(lan Lyne et al., Research Councils UK, 17 June 2015.) Findings are shared from the Overview of Systems Interoperability Project (OSIP), which reviewed the complex landscape of research interoperability. The authors make recommendations for maximizing the interoperability of the research data systems used by the Research Councils UK.

The Research Data Alliance

go.nmc.org/rd-a

(Research Data Alliance, accessed 21 February 2017.) The Research Data Alliance provides a forum for members to come together in working groups to develop and adopt infrastructure that promotes data-sharing and data-driven research.

Status of Open Access Institutional Digital Repositories in Agricultural Sciences

go.nmc.org/openasia

(Bijan Kumar Roy et al., Library Philosophy and Practice, February 2016.) In a review of 43 open access repositories for agricultural sciences in Asia, 79% lacked standard guidelines for researchers to self-archive open access scholarship. The authors recommend mandatory archiving policies to improve accessibility and usability of resources.

Economic and Political Pressures

Wicked Challenge: Those that are complex to even define, much less address





lat or declining college enrollments, increasing subscription fees and publishing output, and decreasing government support contribute to a web of complexities for academic and research libraries. 190 As a result, they are increasingly prioritizing technologies and digital resources that reduce the expenses associated with delivering services. Complicating this challenge is the notion that technology adoption can trigger a variety of costs. 191 The adoption and creation of open educational resources (OER) are viewed as a potential solution for reducing costs. Open access is a strategy to not only combat the rising costs of paid journal subscriptions, but also to expand the accessibility of research, changing the way libraries work with scholarly outputs.¹⁹² Expanding responsibilities, such as provision of researcher profile systems and open data repositories for their institutions, without expanding resources also brings economic and political pressures. Further, new administrations and government policy action are raising concerns, particularly as academic libraries are organized around core intellectual freedom principles that are being challenged. 193

Overview

Since the economic downturn of 2008, academic and research libraries have been challenged with increasing competition for funding, prompting them to rethink how to effectively allocate resources and decipher the impact of globalization on budgets. ALA's State of the Library Report 2016 underscores this challenge with a sobering statistic regarding economic pressures in the US; they report that last year, nearly 50% of chief academic officers believed their institutions had not yet recovered from the recession.¹⁹⁴ State cuts to public higher education are putting extra pressures on campus libraries. 195 According to a poll conducted by Wiley, budget concerns were cited as the top challenge for academic librarians around the world.196 The global impact of currency fluctuations is also creating financial burdens for academic libraries. 197 In South Africa, a sluggish commodities market has depreciated their currency. This impacts local libraries because university subscriptions to international journals are typically priced in dollars and euros. 198, 199

Academic libraries are increasingly working with new forms of scholarly publications to provide greater accessibility and lower costs. Many scholars and funders view the open access movement as the future of scholarly

publications, with potential implications for face-to-face services; the expansion of open access resources for conducting research is prompting libraries to shift their roles from housing collections to fostering deeper connections around the information via spaces that are scholar-centered rather than collection focused.^{200, 201} Unfortunately, Jisc reports that for many years, the academic journal market has been largely dominated by large publishing companies that are driving up costs; though they see open access as a solution, the current path to widespread implementation is glacial and expensive.²⁰²

Political action, whether through changes in policy or government administrations, is also a source of stress for libraries.²⁰³ The EU referendum known as the Brexit has had unintended consequences for libraries in the UK. For example, in addition to the devaluation of the British pound, a decrease in scholarly collaboration will impact academic libraries because fewer European partnerships means a reduction in the number of co-authored articles available in British Open Access collections.²⁰⁴ Overall measures of austerity in the UK have threatened libraries for years, stirring up political activism in defending their critical role in society.²⁰⁵ In the US, the recent presidential election is causing concern across the library community as speculation mounts about President Trump's potential slashing of government agencies. Stakeholders fear cuts may impact innovation funding in research and cultural organizations.²⁰⁶ The new administration could also affect trade between nations, raising the cost of the mobile devices that have fostered the growth of digital publishing over the past decade. Further, there is concern that US libraries must defend their core values of information privacy and intellectual freedom, while advocating against policies that support corporate over public interests through net neutrality laws.^{207, 208}

Implications for Policy, Leadership, or Practice

As more academic libraries look to open access to lower costs and broaden the availability of research, policies are needed to ensure quality control. Hundreds of academic institutions have open access policies that govern faculty and staff-authored publications, and international funding agencies often require supported research projects to provide open access to journal articles.²⁰⁹ In the US under the Obama administration, a memorandum directed federal departments with annual

research and development expenses of over \$100 million, including the Department of Homeland Security and Environmental Protection Agency (EPA), to prioritize the accessibility of federally-funded scholarly publications and digital data. Consequently, more than 20 federal departments representing 99% of federal research and development expenditures have instated plans in 2017.²¹⁰The future impact of this policy is uncertain given the current speculation on the Trump administration plans to drastically cut or potentially eliminate federal agencies and departments, such as the EPA,²¹¹ impacting scholarly research and academic libraries.

Libraries around the world are collaborating with each other and external organizations to address rising financial pressures. The Canadian Association of Research Libraries (CARL) brings together more than 30 institutions to improve access to knowledge, promote effective and sustainable scholarly communication, and the sharing of best practices and policies for Canada's research community.212 Their white paper, "Canadian Universities and Sustainable Publishing (CUSP)," explores how libraries can move forward under a growing oligopoly of international publisher and university budget constraints.²¹³ Similarly, the international Open Access 2020 initiative of more than 560 signatory institutions is helping to accelerate the movement of scholarly journals from subscription to open access publishing.214 They have created a transformation roadmap for five core areas of activity; topics include framework, analysis, reorganization, negotiation, and sharing.²¹⁵

In response to escalating publications costs, efforts are underway to help academic libraries take charge of their futures. While major publishers such as Elsevier and Wiley-Blackwell bundle their services, requiring libraries' purchases to include journals they may not need, institutions like the University of Missouri Libraries have attempted to pass on library fees to students with mixed success.²¹⁶ Other academic libraries are sidestepping large publishers altogether by creating their own scholarly presses. Concordia University Press is an open access academic press publishing in both English and French. They intend to create a sustainable operation for disseminating research on the arts, humanities, and social science through free ebooks.²¹⁷ Similarly, Lever Press is a collaborative project involving more than 40 US liberal arts college libraries to publish open access, digitally native, scholarly monographs. Each library contributes to the cost of identifying, editing, and producing scholarly material.218

For Further Reading

The following resources are recommended for those who wish to learn more about economic and political pressures:

The Forbidden Forecast: Thinking About Open Access and Library Subscriptions

go.nmc.org/forbid

(Rick Anderson, *The Scholarly Kitchen*, 21 February 2017.) At the Researcher to Reader Conference in London, a library thought leader ponders whether Green Open Access (GOA) is likely to reduce paid journal subscriptions in academic libraries. He concludes that if GOA gains traction, the cost of identifying expendable titles will be considerably reduced.

Funding Open Access Monographs

go.nmc.org/fund

(Rupert Gatti and Marc Mierowksy, *College & Research Libraries News*, October 2016.) Recent studies from Ithaka S&R and OAPEN-NL have provided academic libraries with reliable data on the costs and revenue associated with publishing open access monographs in relation to traditional publishing models.

Gale Gets Ready to Toast to the New Year go.nmc.org/toast

(*Gale Blog*, 20 December 2016.) Library leaders share their thoughts on academic library trends in 2017, which include libraries undertaking more visible roles in shifting budget priorities through the coordination of OER as well as providing more support for improving student skill acquisition.

Has the Library Outlived its Usefulness?

go.nmc.org/outli

(Donald A. Barclay, *University World News*, 6 May 2016.) In the US, academic libraries are under increasing pressure to eliminate non-critical expenses. Recent trends such as the rise of the e-book, drops in annual circulations, and reallocation of space are shifting budgets to maximize their relevance.

Research Libraries, University Presses Oppose Trump's Immigration Order

go.nmc.org/oppose

(Richard Senese, *EdSurge*, 30 January 2017.) When President Trump issued an executive order temporarily barring entry of immigrants from seven countries, the Association of Research Libraries and Association of American University Presses publically opposed it. They asserted that the order not only immediately blocks students and academics from entering or returning to the US, but will also undermine international academic collaboration.

The Wrench in the Gears: How Independent Academic Presses Can Disrupt the Publishing Model go.nmc.org/wrench

(Brian Gaines and David Blakesley, *Digital Rhetoric Collaborative*, 28 November 2016.) In this interview, a Clemson University professor describes the rise of independent academic presses and their implications for academic libraries.

Embracing the Need for Radical Change

Wicked Challenge: Those that are complex to even define, much less address





cademic and research libraries are facing ongoing leadership issues that impact every aspect of their facilities and offerings, including updating staffing models and addressing a lack of financial resources. The advent of mobile technologies is impacting the accessibility of information: would-be patrons can now begin their searches from their personal devices without setting foot in a library. As information is now increasingly stored in the cloud rather than in a tangible format, libraries are rethinking acquisition strategies and how physical library space can best be utilized.²¹⁹ Further, libraries must position themselves as allies in helping institutions meet student success benchmarks by designing new services that align with campus priorities.²²⁰ Staff are challenged to help faculty and students understand and maximize the value proposition of libraries, encouraging the integration of library offerings into academic study and instruction.

Overview

Technology is increasingly shifting the focus of the library from management of acquisitions to the provision of services and support for faculty and students.²²¹ As this transition unfolds, library professionals are witnessing a sea change in the types of skills valued by their institutions, facing uncertainty on how to maintain their own relevance. These struggles closely relate to another difficult challenge in this report, Adapting Organizational Designs to the Future of Work. In hiring new staff and redistributing duties, leadership must identify not only which skills are critical to serve today's patrons, but also anticipate the future of library services.²²² Innovative libraries are identifying unmet user needs, implementing technologies to enhance the user experience, and engaging in campus outreach.²²³ Helping existing staff garner new skills and adjust to reimagined roles requires support and training,²²⁴ which can prove difficult as budgets contract.

Libraries are also challenged to rethink the marketing of their offerings within their campus communities. Ithaka S+R's survey of over 9,000 US faculty found that the vast majority are not utilizing library staff or services for their own scholarly pursuits; just 2% of respondents begin explorations of disciplinary literature by asking librarians. Further, when faculty encounter articles not accessible through their institutions' collections, they

are more likely to search for freely available versions online than to seek interlibrary loan services. However, the findings indicate that faculty value librarians' role in improving undergraduates' information literacy competencies, with half of respondents strongly agreeing that librarians assist students in developing research skills and contribute significantly to student learning by helping them locate and integrate sources into their coursework. While undergraduate support was identified as the library's second-most important function (behind acquisitions), 40% of faculty report that their students "rarely" interact with campus librarians.²²⁵ Instead of waiting for patrons to come in for assistance, libraries must adopt an outward-facing orientation to raise awareness of their services.²²⁶

As budgetary tensions mount, institutions are facing greater pressures to adopt programming and technologies to increase student success and retention. Libraries are aligning their work with larger institutional goals that support teaching and learning.²²⁷ Thought leaders have suggested strategies for libraries to unbundle library services, build relationships, and bring the library perspective into larger institutional conversations — including appointing library professionals to university committees and collaborating with student services and faculty.^{228, 229} To increase responsiveness to future needs, libraries must foster greater agility. Maintaining a positive atmosphere through uncertainty and transition is no small feat; many organizations are incorporating change management principles elucidated by John Kotter, including communicating urgency, developing a shared vision, obtaining stakeholder buy-in, and celebrating progress.²³⁰

Implications for Policy, Leadership, or Practice

Libraries are creating policies to clarify their vision and drive change. In its strategic declaration, "The University Library: Entering Its Third Century," the University of Virginia Library notes the persistence of its central mission in promoting the creation of new knowledge, but acknowledges the limits of 20th century models built around physical collections and reference desks. The document details a framework of services centered on innovation. For example, staff provide face-to-face and online training on new learning technologies and develop programs on issues such as digital copyright

law.²³¹ At the University of Adelaide, the Library of the Future committee's "Recommendations for a Bold and Agile University Library" outlines plans to adopt a client-facing service model, forging close working relationships with faculty on pedagogical design to further institutional commitments emphasizing students as creators. They will also shift to a "closed-stack" access model, aggressively reducing the onsite collections' footprint to allow space for studying and learner collaboration, while promoting use of digital resources.²³²

Addressing these challenges will require visionary leadership, and professional development is helping library staff envision new solutions and thrive in evolving environments. The Harvard Graduate School of Education's "Library Leadership in a Digital Age" event series convenes annually to help participants think critically about the future of learning and technology's impacts, as well as to identify opportunities for libraries to contribute to the intellectual progress of their institutions.²³³ Similarly, the theme of the University of Hong Kong Libraries' annual Library Leadership Institute for 2017 is "Libraries at the Crossroads: Challenges for Leadership." Library directors from Asia will gather in Bangkok to develop management and leadership skills through hands-on, interactive simulations and discussions on topics including strategic planning, branding and awareness-building, and fostering innovation.234

Library staff at the University of Western Australia have teamed up with student services to promote learner success. At WRITESmart Drop-in sessions, students meet with Learning Skills Advisors to strengthen their writing, while librarians improve students' research techniques and provide guidance on citation formats. The collaboration provides a one-stop destination for learners and increases visibility of library services. 235 The UK's University of Huddersfield is using findings from its Library Impact Data Project to identify evidencebased approaches to marketing and increasing student engagement. The Roving Librarian program positions library staff at booths in high-traffic areas on campus to advertise their services and assist students via iPads. Pop-up banners at the booths use branding consistent across email and social media campaigns, so students associate the logos with library offerings. Librarians are also offering personalized visits to academic staff offices to promote discipline-specific resources; this outreach builds personal relationships and increases the likelihood that staff will refer students to the library.²³⁶

For Further Reading

The following resources are recommended for those who wish to learn more about embracing the need for radical change:

Effective Techniques for the Promotion of Library Services and Resources (PDF)

go.nmc.org/libpromo

(Zhixian Yi, Information Research, March 2016.) A study of academic libraries at Australian universities examined the prevalence and efficacy of a variety of techniques for marketing library services to their campus communities. Digital promotions were considered effective, especially social media campaigns that foster interactivity and support user-generated content.

Empathy as the Leader's Path to Change

go.nmc.org/empathy

(Steven Bell, *Library Journal*, 27 October 2016.) As library directors implement novel processes and guide their organizations in the direction of new priorities, they may encounter resistance from staff. The author advocates for empathy as a key trait allowing leaders to unite their teams.

How Libraries Are Boldly Innovating to Meet the Needs of Changing Communities

go.nmc.org/boldlib

(Anna Pratt, Truthout, 26 November 2016.) With persistent budget challenges, academic and public libraries are making efforts to increase user engagement to foster a sense of ownership among patrons. Librarians are working to change public perceptions by creating pop-up events and programming designed to meet unique community needs.

Institute-wide Task Force on the Future of Libraries qo.nmc.org/mitfuture

(MIT Ad Hoc Task Force on the Future of Libraries, 24 October 2016.) A task force consisting of faculty, staff, and students reviewed procedures at MIT Libraries and issued a series of recommendations to best position the libraries in supporting content creation and knowledge sharing with the global community.

Leadership in Disruptive Times

go.nmc.org/iflalead

(James M. Matarazzo and Toby Pearlstein, *IFLA Journal*, 27 September 2016.) This article draws distinctions between managers, focused on operational objectives and day-to-day services, and leaders, who contribute vision towards achieving organizational sustainability. Both roles must work in harmony to guide library staff in meeting current challenges.

Yale Libraries Adapt in Digital Age

go.nmc.org/yaleadapt

(Ishaan Srivastava and Ryan Gittler, *Yale Daily News*, 13 October 2016.) At Yale University, the Personal Librarian Program provides students with a single point of contact throughout their time at the institution.

Important Developments in Technology for Academic and Research Libraries

ach of the six developments in technology detailed in this section were selected by the project's expert panel using the Horizon Project's Delphi-based process of iterative rounds of study, discussion, and voting. In the NMC Horizon Project, technology is defined in a broad sense as tools and resources that are used to improve teaching, learning, creative inquiry, research, and information management. While many of the technologies considered were not developed solely for academic and research libraries, they have clear applications in the field.

The developments, which the members of the expert panel agreed are very likely to drive technology planning and decision-making over the next five years, are sorted into three time-related categories — nearterm developments in technology that are expected to achieve widespread adoption in one year or less; midterm developments in technology that will take two to three years; and far-term developments in technology, which are forecasted to enter mainstream use in libraries within four to five years.

The initial list of topics considered by the expert panel was arranged into categories that were based on the primary origin and use of the technology. The potential applications of the technologies featured, specifically in the context of global academic and research libraries, were considered in a series of online discussions that can be viewed at horizon.wiki.nmc.org/Horizon+Topics.

The expert panel was provided with an extensive set of background materials when the project began that identified and documented a range of existing technologies used in both education and beyond. The panel was also encouraged to consider emerging technologies whose applications for academic and research libraries may still be distant. A key criterion for the inclusion of a new technology in this edition was its potential relevance to academic and research libraries worldwide.

In the first round of voting, the expert group reduced the master set, shown on the next page, to 12 technology developments that were then researched in much greater depth by the NMC staff before the list was cut in half during the final round of voting. Technologies that do not make the interim results or the final report are often thoroughly discussed on the project wiki at horizon.wiki.nmc.org. Sometimes a

candidate technology does not get voted in because the expert panel believes it is already in widespread use, or, in other cases, they believe the technology is more than five years away from widespread adoption. Some technologies, while intriguing, do not have enough credible project examples to substantiate them.

A key criterion for the inclusion of a new technology in this edition was its potential relevance to academic and research libraries worldwide.

There are currently seven categories of technologies, tools, and strategies for their use that the NMC monitors continuously. These are not a closed set, but rather are intended to provide a way to illustrate and organize emerging technologies into pathways of development that are or may be relevant to academic and research libraries. The list of seven categories has proven fairly consistent, but new technologies are added within these categories in almost every research cycle; others are merged or updated. Collectively, the categories serve as lenses for thinking about innovation; each is defined below.

- Consumer technologies are tools created for recreational and professional purposes and were not designed, at least initially, for educational use though they may serve well as learning and research aids and be quite adaptable for use in libraries. These technologies find their ways into institutions because people are using them at home or in other settings.
- Digital strategies are not so much technologies as they are ways of using devices and software to enrich teaching, learning, research, and information management, whether inside or outside the library. Effective digital strategies can be used in both formal and informal learning; what makes them interesting is that they transcend conventional ideas to create something that feels new, meaningful, and 21st century.

- > Enabling technologies are those technologies that have the potential to transform what we expect of our devices and tools. The link to learning in this category is less easy to make, but this group of technologies is where substantive technological innovation begins to be visible. Enabling technologies expand the reach of our tools, making them more capable and useful.
- Internet technologies include techniques and essential infrastructure that help to make the technologies underlying how we interact with the network more transparent, less obtrusive, and easier to use.
- > Learning technologies include both tools and resources developed expressly for the education sector, as well as pathways of development that may include tools adapted from other purposes that are matched with strategies to make them useful for learning. These include technologies that are changing the landscape of learning, whether formal or informal, by making it more accessible and personalized.
- > Social media technologies could have been subsumed under the consumer technology category,

- but they have become so ever-present and so widely used in every part of society that they have been elevated to their own category. As well-established as social media is, it continues to evolve at a rapid pace, with new ideas, tools, and developments coming online constantly.
- Visualization technologies run the gamut from simple infographics to complex forms of visual data analysis. What they have in common is that they tap the brain's inherent ability to rapidly process visual information, identify patterns, and sense order in complex situations. These technologies are a growing cluster of tools and processes for mining large data sets, exploring dynamic processes, and generally making the complex simple.

The following pages provide a discussion of the six developments in technology highlighted by the 2017 NMC Horizon Project Library Expert Panel, who agree that they have the potential to foster real changes in academic and research libraries. As such, each section includes an overview of the technology; a discussion of its relevance to academic and research libraries; and curated project examples and recommendations for further reading.

Consumer Technologies

- > Drones
- > Real-Time Communication
- > Robotics
- > Wearable Technology

Digital Strategies

- > Location Intelligence
- > Makerspaces
- > Preservation & Conservation Technologies

Internet Technologies

- > Blockchain
- > Digital Scholarship Technologies
- > The Internet of Things
- > Library Services Platforms
- > Syndication Tools

Learning Technologies

- > Adaptive Learning Technologies
- > Microlearning Technologies
- > Mobile Learning
- > Next-Generation LMS
- > Virtual & Remote Labs

Social Media Technologies

- > Crowdsourcing
- > Online Identity
- > Social Networks
- > Virtual Worlds

Visualization Technologies

- > 3D Printing
- > Information Visualization
- > Mixed Reality
- > Virtual Reality

Enabling Technologies

- > Affective Computing
- > Artificial Intelligence
- > Big Data
- > Electrovibration
- > Flexible Displays
- > Mesh Networks
- > Mobile Broadband
- > Natural User Interfaces
- > Near Field Communication
- > Next-Generation Batteries
- > Open Hardware
- > Speech-to-Speech Translation
- > Virtual Assistants
- > Wireless Power

Big Data

Time-to-Adoption Horizon: One Year or Less



oday, almost any interaction made over the internet or through the consumption of goods and services is being tracked, stored, and used in targeted ways. This has led to the notion of big data — massive amounts of data that reflect the behavior and actions of various populations.²³⁷ Data scientists and data collection platforms are now able to computationally organize petabytes and exabytes of data, making it easy to analyze and identify patterns that may have otherwise gone undetected. With the complexity surrounding such large, diverse sets of data, displaying the information in a digestible format is crucial to its success. Visual data analysis blends highly advanced computational methods with sophisticated graphics engines to illuminate patterns, and structure even the most complex visual presentations. Information visualization uses infographics, the graphical representation of technical data designed to be quickly and easily understood. Libraries are thus ideally situated to serve academia, government, and business as information collectors, curators, and analysts. In particular, libraries can serve an integral function as collaborators and enable education institutions to make informed decisions that reflect and serve real learner needs.

Overview

Big data has become a major focus of academic and research libraries due to the rapid evolution of data mining technologies and the proliferation of data sources like mobile devices and social media. Although definitions vary, big data is typically understood through the 3Vs framework: volume, variety, and velocity.²³⁸ Volume refers to data set size (typically terabytes and petabytes); variety indicates that big data is unstructured and varied (e.g., text, audio, video, and images); and velocity denotes the high frequency at which this data is generated — 90% of world data was created in the last two years alone.²³⁹ SAS embraces two other dimensions in its consideration of big data: variability, or the peaks and valleys of data generation, and complexity, which refers to heterogeneous data from diverse sources.²⁴⁰ IBM includes veracity (data uncertainty) as yet another characteristic.²⁴¹

The exponential growth and availability of big data has led to data-driven science, a new research paradigm founded on three core activities: capture, curation, and analysis.²⁴² Essentially, data-driven inquiry requires research data management (RDM), which affords

libraries the opportunity to be active and integrated participants in the overall research process at their institutions.²⁴³ In response, a number of academic libraries have established research data services departments which offer a range of consulting services including data curation, developing data management workflows, identifying and selecting appropriate data storage and repository tools, and archiving and publishing project results.²⁴⁴ Texas A&M University, for example, supports data-driven research by focusing on the development of structured, curated data sets that use ontologies and metadata schemas to organize the highly heterogeneous data streams that make up big data or help aggregate small data.²⁴⁵

However, the promise of big data is also accompanied by the ethical challenges of patron privacy and confidentiality during collection, analysis, and usage. For instance, born-digital firms such as Netflix and Amazon routinely collect and share personal information for monetizing and content recommendations. For libraries, on the other hand, the American Library Association asserts, "protecting user privacy and confidentiality is necessary for intellectual freedom and fundamental to the ethics and practice of librarianship."²⁴⁶ It behooves libraries, especially as they actively use social networks, to connect with their user base and develop comprehensive data confidentiality and security policies that uphold the ethical values that matter to academic librarianship, in addition to remaining compliant with the legal parameters within which they operate.²⁴⁷

Relevance for Academic and Research Libraries

Big data has significant implications for academic libraries in their roles as facilitators and supporters of the research process. Although the emphasis of data-centric research is in the hard and social sciences, researchers and librarians are beginning to note the possibilities of big data use in the form of digital humanities research. This area comprises large-scale digital objects that contain text or visual data such as Google Earth, photos and micromessages shared on social media, and the ever-growing corpus of academic scholarship citations. These data repositories can create new knowledge and expand human understanding in unprecedented ways through text mining and topic modeling techniques. Consider the Robots Reading *Vogue* project at Yale University comprising 2,700 covers, 400,000 pages, and 6 terabytes

of data. The initiative has leveraged the analytical and quantitative methods of the digital humanities librarian and the outreach skills of the public service librarian to create research studies across a range of disciplines from gender studies to art history to computer science.²⁴⁹

Additionally, libraries themselves generate data through their online resources and services, and the social media services they use to promote their programs and amenities.²⁵⁰ Digital collections purchased by libraries, as well as campus scholarship in the form of documents and data, could also be construed as big data sets.²⁵¹ This in-house data can be analyzed to identify strategic services that are personalized to the needs of the library patrons.²⁵² As a result of this growing emphasis on data and analytics, academic data librarianship has emerged as a vital aspect of library services in recent years. Typically, data librarians provide analytical research assistance as well as instructional programming.²⁵³ As such, they are expected to be data literate, possessing the understanding and the ability to analyze, transform, and present data for knowledge creation. They are often very knowledgeable about multiple data formats and familiar with data analysis and visualization software such as SPSS and Tableaux. Strong communication and presentation skills are also critical in their role as information consultants and research collaborators.

Libraries are increasingly seeking to recruit for positions such as research data librarians, data curation specialists, or data visualization specialists, while library and information science programs are developing curricula to address this need, particularly for future library professionals. For example, the School of Information Sciences at the University of Illinois offers a specialization in data curation as part of its MS/LIS program.²⁵⁴ The Council on Library Information Resources' Data Curation Fellowships provide recent PhDs with professional development, education, and training opportunities in data curation.²⁵⁵ In the UK, the Digital Curation Centre (DCC) offers a range of services, products, and training on RDM. As part of its institutional engagement program, the DCC partnered with the Open University, UK in developing an institutional RDM framework through support of requirements gathering, training, and developing guidance materials.256

Big Data in Practice

The following links provide examples of big data in use that have direct implications for academic and research libraries:

Big Data, Small Library (PDF)

go.nmc.org/bigsmall

Shell Australia's Technical Librarians worked with colleagues in geosciences, information technology, and data management to ensure efficient management of Shell's growing volume of geoscientific data. Their

support services included identifying metadata fields, developing controlled vocabularies and naming conventions, defining required search parameters, and developing workflow procedures.

HathiTrust Digitized Library Big Data Project go.nmc.org/hathitrust

The HathiTrust project uses data mining tools to interpret vast volumes of digitized text without violating copyright laws. Computational analysis and metadata is leveraged to collect, connect, and visualize data acquired from large-scale digitized texts.

Library Data Labs Project

go.nmc.org/libdat

In this project, five cross-institutional teams from 23 universities supported by Jisc analyzed library data to gain specific insights on library-related services and present them using appropriate data visualizations. Issues addressed included electronic resources usage, using dashboards to support excellence frameworks, and use and impact of library facilities and spaces.

For Further Reading

The following articles and resources are recommended for those who wish to learn more about big data:

Directions for Research Data Management in UK Universities (PDF)

go.nmc.org/direc

(Sheridan Brown et al. Jisc, March 2015.) This report outlines a vision for the direction of research data management over the next five years in the UK. Five key topics are identified in this domain: policy development and implementation; skills and capability; infrastructure and interoperability; incentives for researchers and support; and business case and sustainability.

The Paradox of Privacy: Revisiting a Core Library Value in an Age of Big Data and Linked Data

go.nmc.org/paradox

(D. Grant Campbell and Scott R. Cowan, *Library Trends, Vol. 64, No. 3,* 2016.) The authors address concerns around protecting the privacy of patrons within the context of big data and social media use by libraries. The authors suggest linked data as a better alternative to big data to maintain the balance between confidentiality and intellectual freedom.

Research Data Services in Academic Libraries: Data Intensive Roles for the Future?

go.nmc.org/intensive

(Carol Tenopir et al., *Journal of eScience Librarianship*, 2015.) This article reports the findings of a research study conducted to identify levels of research data service (RDS) academic libraries have provided since 2011. The study was conducted across academic institutions in North America with the intent to assess RDS growth and identify avenues and challenges to future growth.

Digital Scholarship Technologies

Time-to-Adoption Horizon: One Year or Less





igital scholarship technologies refer to the suite of digital and computational tools currently being used to advance scholarship in higher education. The Chartered Institute of Library and Information Professionals (CILIP) defines digital scholarship as the implementation of technology to support the access, retrieval, and application of knowledge.257 Products of digital scholarship can include digital media, websites, archives of scholarly information, and digital exhibits.²⁵⁸ Although encompassing the digital humanities, digital scholarship is a cross-disciplinary field where participants from various backgrounds, including programmers and researchers, engage in collaborative scholarly inquiries.²⁵⁹ Academic libraries are as focused on helping scholars understand new processes for research as they are in supporting the production of scholarly inquiry, requiring them to work with diverse workflows, tools, and content.

Overview

The concept of digital scholarship has origins in the late 1990s in the UK. Originally referred to as e-science, the idea of applying new technology and data analysis tools to scholarship cycled through other names like cyberinfrastructure and e-scholarship before landing on the current umbrella term. Comprising a series of information technologies including high performance computing, visualization technologies, technologies, and high performance networking, digital scholarship has ushered in a new paradigm of data-intensive science.260 Academic libraries were quick to position themselves as incubators for this transformation of research. Through a collaborative approach, libraries developed shared virtual and physical places for fostering scholarly inquiry. Early exemplars include the University of Richmond's Atlas of the Historical Geography of the United States portal and College of William and Mary and Virginia Commonwealth University's Center for Conservation Biology Project Portal.²⁶¹

As new technologies for scholarly inquiry are implemented, many libraries are developing digital scholarship centers on their campuses. The Consortium of Networked Information (CNI) characterizes these spaces as being placed in academic libraries rather than faculty-run institutes, focused on digital humanities, and cross-disciplinary in nature.²⁶² One example of this new type of environment is the University of Leiden's Centre for Digital Scholarship that recently opened in the Dutch university's library. Its focus is to support and facilitate research projects at the institution in conjunction with other research institutes and national and international support organizations. The Centre fields inquiries regarding the creation and management of digital collections, long-term preservation, and metadata, among other topics.²⁶³

College and Research Libraries News listed digital scholarship as a top trend in 2016, citing that academic libraries are extending traditional research methods to include the application of new technologies such as GIS data, information visualization, and big data. In addition to training scholars to use new technologies, libraries offer services such as digital asset management, digital preservation, as well as consultation and resources.²⁶⁴ The increasing interest in leveraging data-focused technologies for scholarly inquiry has prompted new job roles within the library; now-common titles such as science data librarian and data visualization coordinator were unheard of 20 years ago.²⁶⁵ It is no simple task for librarians to gain the skills necessary to work with a variety of disciplines and methods. Therefore, academic libraries are working to build capacity internally to better serve their communities. At the Library Data Carpentry workshop, for example, data-minded librarians in Australia investigated the practice of digital scholarship and the data science lifecycle. The program built on materials from several existing library training initiatives to help familiarize attendees with techniques for data extraction, analysis, and visualization.²⁶⁶

Relevance for Academic and Research Libraries

Emerging digital scholarship technologies helping libraries more effectively preserve and mine their collections as well as surface collaborative opportunities. The California College of the Arts Libraries' digital scholarship services department features cooperative projects such as "African Art: A Pedagogical Hypertexted Journey." Created in Twine, an open-source, non-linear digital storytelling platform, the art history curriculum represented the collective work of a professor, an instructional designer, and a digital scholarship librarian.²⁶⁷ Similarly, the Project for the Study of Dissidence and Samizdat at the University of Toronto Libraries is a large-scale partnership between multiple research institutions and scholars. It highlights the library's collection of Soviet dissidence and nonconformist culture in an electronic archive featuring periodicals, electronic editions of journals, and illustrated timelines of dissident movements.²⁶⁸

Increasingly, digital humanities scholars are leveraging new tools to aid in their work. In Australia, researchers can use library APIs to build their own customizable interfaces to catalogs and collections. For example, QueryPic enables the seeing, searching, understanding of digitized newspapers from Australia and New Zealand. Scholars can follow changes over time, map trends, and explore patterns.²⁶⁹ Similarly, Archives Viewer of the National Archives of Australia is an experimental portal for viewing digitized files in the national archives of Australia's RecordSearch database.270 With the ubiquity of new forms of communication including social media, text analysis software such as Umigon is helping researchers gauge public sentiment. The tool aggregates and classifies tweets as negative, positive, or neutral.271 The online text mining tool Voyant allows scholars to generate graphs of frequently used words across a body of work, compare multiple documents, and sort categories by geographical location.²⁷² One Rice University researcher used the tool to study the entire corpus of runaway slave advertisements from their library's collection and shared the results on GitHub.273

Digital scholarship technologies have had the dual effect of increasing the relevance of scholarly research and opening new realms of scholarship through data visualization. At the Digital Scholarship Lab at the Chinese University of Hong Kong Library, the visualization room contains a digital display wall as well as an 80-inch interactive touch screen consisting of twelve 55-inch high resolution LED monitors with a resolution of over 24 million pixels, allowing greater interactivity with data and digital objects.²⁷⁴ Carnegie Mellon University (CMU) is developing a new digital scholarship center and two-year postdoctoral fellow position for data visualization and curation. Partnering with CMU Libraries and the Department of Statistics, the fellow will play a key role in creating a sustainable program for data visualization at the university.²⁷⁵

Digital Scholarship Technologies in Practice

The following links provide examples of digital scholarship technologies in use that have direct implications for academic and research libraries:

The Digital Humanities as an Emerging Field in China qo.nmc.org/dhchina

The first digital humanities center was established in 2011 at Wuhan University, and since then, several Chinese universities have been developing digital scholarship projects. Peking University, for example, is working with Harvard and Academia Sinica on the China Biographical Database Project; the initiative contains 370,000 historical figures spanning from the 7th to the 19th centuries.

The DiRT Directory

go.nmc.org/dirt

Evolving from the directory developed by Project Bamboo, the Digital Research Tools (DiRT) Directory aggregates information about digital scholarship technologies, making it easier for scholars to find and compare resources.

Oxford University Bodleian Libraries' Centre for Digital Scholarship

go.nmc.org/oxds

Oxford University's Centre for Digital Scholarship works with diverse partners across campus including the Bodleian Libraries, medical sciences, social sciences, and the humanities. They conduct multi-disciplinary research, host trainings for researchers, and highlight other departments' work that combine physical and digital library resources.

For Further Reading

The following articles and resources are recommended for those who wish to learn more about digital scholarship technologies:

Digital Scholarship Week Explores Ways of Adapting New Technologies to Research

go.nmc.org/digschol

(Bert Gambini, University of Buffalo News, 25 February 2016.) The University of Buffalo's Humanities Institute and the Committee on Digital Scholarship and Cultures held a series of programs on the impact of digital technologies on scholarship. Topics included the digital reconstruction of St. George's Bermuda, the oldest town in English America.

Laying the Foundation: Digital Humanities in Academic Libraries

go.nmc.org/layfo

(John White and Heather Gilbert, Purdue University Press, 15 March 2016.) This series of essays addresses core themes from a College of Charleston convening on digital scholarship, including the case for digital humanities in libraries and building infrastructure and partnerships.

Libraries as Content Producers

go.nmc.org/libasco

(Daniel Tracy, College and Research Library, accessed 10 February 2017.) As libraries increasingly contribute to multimedia and digital humanities projects, the user experience must be considered. This study provides a foundation on the ways library publishing services implement user studies and their barriers.

Library Services Platforms

Time-to-Adoption Horizon: Two to Three Years





ibraries are at a critical point with regard to automation and resource management. The library systems landscape is growing increasingly complex. Patrons expect ubiquitous access across a multitude of devices, and library resource management needs to account for materials in multiple formats; as a result, librarians are assuming new roles as data custodians and analysts. On the other hand, legacy library management systems developed on 20th century technology for print resources are no longer adequate to confront the challenges of the knowledge era. Library services platforms (LSP) represent a new conceptual approach to library automation, meeting current needs for a cohesive system that is web-centric, provides comprehensive print and electronic resources management, and keeps pace with the operational needs of changing library environments. In essence, LSP offer libraries the opportunities to consciously address the intricacies of content, workflows, and discovery to better integrate with their patron community.²⁷⁶

Overview

Library services platforms comprise a genre of library automation systems that have emerged in recent years. Marshall Breeding, founder and editor of *Library* Technology Guides, coined the term in 2011 to describe products being developed to address growing library engagement with digital content.²⁷⁷ LSP emerged as a direct response to the operational challenge of managing increasingly diverse resources and formats.²⁷⁸ Concurrently, libraries were beginning to develop institutional repositories to store and manage all materials owned, licensed, and produced by their institutions.²⁷⁹ Thus, the notion of a library collection expanded to encompass a broad spectrum of materials including journal articles, dissertations, theses, e-books, reports, and digital assets — all of which need to be stored, cataloged, and made accessible to patrons. Diversity of format and materials, in turn, required new approaches to content collection and curation that were unavailable in the incumbent integrated library systems (ILS), which are primarily designed for print materials.²⁸⁰

LSP is different from ILS in numerous ways. Conceptually, LSPs are modeled on the idea of software as a service (SaaS), which entails delivering software applications over the internet. The software provider hosts the application and is responsible for management, access, updates,

security, and performance.²⁸¹ In contrast, ILS is managed in-house and installed at individual workstations. Thus, maintenance is handled internally and has to be conducted on each computer running that software. ILS takes a modular approach with discrete software for core functions such as cataloging, acquisitions, circulation, and public interface. Additionally, libraries previously invested in ancillary products such as link resolvers, electronic resource management systems, and digital asset management systems if absent in the core ILS.²⁸² However, LSP takes an inclusive approach by integrating resource management and operational tasks into a unified system that is "deployed through webbased platforms, with workflows streamlined through built-in knowledge bases."283 LSP applications, therefore, eliminate the need for multiple software installations and maintenance on staff computers.

The transition from ILS to LSP is primarily occurring in large academic universities in the US, Australia and New Zealand, and Western Europe.²⁸⁴ However, international vendors such as Ex Libris are also catalyzing LSP adoption in specific regions where they have presence. One such example is Beijing National University's (BNU) transition from Ex Libris' Aleph ILS to Alma in order to provide "a unified workflow for BNU's print, electronic, and digital resources."285 Collections in developing nations, on the other hand, continue to have a larger proportion of print resources compared to electronic subscriptions. These countries are also constrained by access to and price of commercial proprietary products, along with unique needs such as product availability in local languages. As a result, they opt for ILS rather than LSP products, and particularly open-source options such as Koha.286

Relevance for Academic and Research Libraries

Library services platforms provide multiple benefits unavailable in legacy systems including time and cost efficiencies, new functionality, and transformative opportunities. For the University of Wales Trinity Saint David, the immediate value of moving to Ex Libris Alma and Primo platforms proved to be increased efficiency through a unified library management system and discovery service accessible to students and staff across all its campuses and on diverse devices.²⁸⁷ HELIN Library Consortium needed a cloud-based library management system that would facilitate ease of material sharing

across consortium members and provide monetary savings. The consortium selected OCLC WorldShare Management Services (WMS) as it offered both features in one comprehensive platform.²⁸⁸ An added benefit was the opportunity to communicate with other WMS users through the OCLC Community Center, which enabled them to discover best practices and stay updated on new product releases.

The time and fiscal savings that libraries recoup by investing in LSP enables them to develop new initiatives that improve operational efficacy. The library at Saddleback College, for example, recently conducted a full systematic inventory of its collection for the first time in over 40 years because the WMS LSP enabled streamlined workflows for routine tasks.²⁸⁹ Saddleback librarians have also improved the quality of their physical collection as they now have time to visit the stacks and seek out and repair damaged items. In other instances, libraries are using LSP applications to enhance visibility and outreach. The Army's Engineer Research and Development Center, an early adopter of BLUEcloud Visibility, is sharing the scholarship available in its digital repository to a larger audience via search engines like Google and Yahoo.²⁹⁰ Garland County Library, another Visibility user, is reaching users who have never previously visited the library. Although LSP is still a budding technology, it holds potential for significant gains for libraries, as evidenced by the Houston Area Library Automated Network (HALAN). A Texas consortium serving Houston and the East Central region, HALAN has seen exponential growth in web visits since its adoption of BLUEcloud Visibility in early 2016.²⁹¹

Data analytics and metrics are other opportune areas as LSP products feature advanced functionality for data collection and analysis.²⁹² For example, the University of Leeds, which uses Innovative Interfaces' Sierra LSP, creates custom queries of user and other data to offer reading recommendations, expedite the ordering of in-demand titles, and identify suspicious activity such as hack threats.²⁹³ For Radboud University, a research university in the Netherlands that has implemented OCLC WMS, library services platforms offer the opportunity to share library data with other libraries globally to develop best practices, identify innovations, and improve the overall library services experience.²⁹⁴ Additionally, library data can be integrated with institutional big data, allowing libraries to play a stronger role in helping their institutions serve their academic community.²⁹⁵

Library Services Platforms in Practice

The following links provide examples of library services platforms in use that have direct implications for academic and research libraries:

Stellenbosch University — First South African Customer to Choose Ex Libris Alma for Optimizing Library Services

go.nmc.org/stellen

Investing in Ex Libris Alma was a strategic decision for Stellenbosch University. The university plans to leverage the advantages of a unified library management system to better manage its print and electronic resources, improve user experience, and maintain its ranking as a top-tier academic institution.

Swiss Library Service Platform (SLSP)

go.nmc.org/slsp

The collaborative project SLSP aims to help academic libraries in Switzerland use resources in a more cost-effective and efficient manner by establishing a centralized service platform incorporating technical solutions, standards, and library networking services.

Three Universities Choose SirsiDynix Solution for Unique Collaboration

go.nmc.org/sirsi

Canterbury Christ Church University, the University of Greenwich, and the University of Kent will share a Unified Library Management System on the BLUEcloud platform to improve student services and enhance collaboration.

For Further Reading

The following articles and resources are recommended for those who wish to learn more about library services platforms:

Approaching Discovery as Part of a Library Service Platform

go.nmc.org/approa

(Nathan Hosburgh, Rollins College Rollins Scholarship Online, 2016). The author details how Olin Library at Rollins College transitioned to the Ex Libris Alma platform. The chapter describes the underlying motivation, the assessment and selection processes, and also provides an evaluation framework.

How to Conduct a Library Platform Services Review and Selection

go.nmc.org/lspreview

(Matt Gallagher, *Information Today*, October 2016.) This article offers a practical guide to critically assessing and selecting an LSP. The author recommends that libraries situate LSP considerations within the broader context of institutional technology infrastructure.

Implementing Kuali OLE at SOAS Library

go.nmc.org/kuali

(Simon Barron, ARIADNE, 29 June 2015.) SOAS Library at the University of London is the first library in Europe to implement an open source library services platform. This report describes the functional and technical details of implementing the Kuali OLE system.

Online Identity

Time-to-Adoption Horizon: Two to Three Years



nline identity, also referred to as digital identity, is the idea that everything interacting in the digital realm has or acquires a set of data or attributes, both inherent and changeable, that uniquely identify them as a person or entity online.296 Relevant to issues of privacy and authentication,²⁹⁷ online identity encompasses a wide array of contextual and technical identifiers that exist in an ontological taxonomy. Traits can be understood in mutually agreed upon contexts, such as providing one's name and address for a transaction, and in the more technical view that describes the relationships of entities and objects to each other in cyberspace. Another dimension of this topic is the persona one forges through online profiles and avatars. This development is escalating in importance for libraries for two reasons: 1) online identity is part of the broader view of digital literacy, and 2) research outputs can be attributed to an author across the web to reveal their growing body of work, also crystalizing the content's relationships to other scholarly research.

Overview

The proliferation of the internet and its tapestry of social networks has led to the concept of digital footprints. From the websites people visit to the discussions they participate in to the purchases they make, virtually every action is traceable and contributes to individuals' identities.²⁹⁸ People's behaviors, viewpoints, relationships, and hobbies can all be illuminated by examining patterns and interactions over time. In the age of personal branding, the messages one shares online help define who they are. This notion bears substantial weight in academia as the work that faculty, students, and researchers disseminate across the web is attributed to their professional personas. As a result, online identity is an important facet of the everexpanding subject of digital literacy. The University of Edinburgh and the School of Information Sciences at University of Illinois are among a growing host of institutions that have incorporated the management of digital footprints into their programming and resources.299,300

Researchers from Savitribai Phule Pune University in India simplify the idea of digital footprint as "data about the data" that people are searching or using online. This data can take the form of a passive footprint, where users are not largely conscious that data is being collected

(e.g., browsing websites) or an active footprint, where users have intentionally released personal data (e.g., creating a LinkedIn profile).³⁰¹ Entities that encompass vast canyons of user information and interactions have developed systems for crystalizing every relationship; Facebook's Open Graph enables any web page to become a rich object in a social graph based on the inclusion of metadata.³⁰² In turn, companies are able to tailor the content and advertisements they deliver to each user.³⁰³ Privacy concerns have emerged with many feeling uncomfortable with their every move being monitored; Pew Research reports that 86% of internet users in America have taken steps to mask their digital footprints, such as clearing cookies or avoiding their real names when using social networks.

As resident champions for advancing digital literacy,³⁰⁴ academic and research libraries are well-positioned to guide the process of understanding and crafting online identities. The UK's Open University Library Services developed a digital information and literacy framework that includes collaborating and sharing content as an essential element; they assert that digital literacy entails providing evidence of engagement in online communities and professional groups.³⁰⁵ Online identity is also tied to the research outputs that patrons create, and the relationship of their content to other content on the web. For example, one student or researcher's study on climate change can be connected to a published paper on the same subject, creating a more visible pathway to an entire body of research, illuminating and substantiating key findings. Libraries play a significant role in creating standards for organizing outputs and making them discoverable through the semantic web and linked data.306

Relevance for Academic and Research Libraries

Libraries are becoming integral players in helping students understand how to create and manage their online identities. The Association for College and Research Library's (ACRL) "Framework for Information Literacy for Higher Education" includes the ability to "make informed choices regarding their online actions in full awareness of issues related to privacy and the commodification of personal information" among their list of skills literacies.³⁰⁷ In Australia, the Queensland University of Technology Library specifically focuses on the productive use of social media and the role it

plays in identity. Their website includes a social media skills portal that enables students to view their digital presence through the lens in which others see them, and then learn how they compare to their peers. Their goal is to aid students in becoming more favorable candidates for employment and in understanding their social media rights and responsibilities.

Faculty also need assistance from campus libraries to create and maintain their academic digital presence. Texas A&M Libraries has published a guide, "Managing Your Brand," to help faculty and researchers establish credible online identities and build citations profiles on Google Scholar to make their scholarly products more linkable and trackable across the web.309 Online self-publishing and research-sharing platforms are on the rise, including ResearchGate, 310 Academia.edu, 311 Mendeley,312 and SSRN.313 Often linked to in-library repositories, these tools allow faculty and researchers to disseminate their findings and connect with peers. The Thomas G. Carpenter Library at University of North Florida guides faculty in making smart decisions about which online platforms to choose for publishing and peer review, providing a comparison of different systems.314 At Washington University in St. Louis, the Bernard Becker Medical Library website helps academics to establish author profiles across multiple platforms and integrate social networking sites specific to the medical field.315

Further, it is essential for libraries to help faculty and researchers connect their names to their growing bodies of research and scholarly work across multiple sites. ORCID (Open Researcher and Contributor ID), a nonprofit organization, provides a persistent digital identifier that distinguishes one researcher or author from another;316 previously, a specific person's contributions to publications were difficult to track as many names are not unique or are listed inconsistently. Now, researchers' work is tied to them, allowing them to continuously build their public portfolios and connect their ORCID records with their LinkedIn pages and other professional accounts. This system is gaining traction worldwide. In the Netherlands, ORCID has replaced the Dutch Digital Author Identifier system SURF.³¹⁷ Leiden University Libraries recently hosted a conference to educate the academic community on persistent identifiers and providers.318 Last year, University of Pretoria signed an agreement with ORCID to become one of eleven South African institutional members.319

Online Identity in Practice

The following links provide examples of online identity in use that have direct implications for academic and research libraries:

Digital Identity: Making Your Mark

go.nmc.org/latrobeu

A team of academics, instructional designers, and librarians leveraged Smart Sparrow's Learning Design Studio to develop an adaptive, personalized online module that helps students understand the power of social media in crafting their digital identities. Lessons include evolving privacy policies and career influence.

Employability Skills and Resources

go.nmc.org/manchester

The UK's Manchester Metropolitan University Library provides resources for students to leverage social media for job hunting and networking as well as tips to help them manage an effective and engaging digital presence.

Managing Your Online Reputation

go.nmc.org/reput

Claremont Colleges Library provides open access resources for faculty, librarians and students to bolster their credibility in the digital realm. They provide pertinent videos on the subject as well as examples of altmetrics in use for scholarly research and publications tracking.

For Further Reading

The following articles and resources are recommended for those who wish to learn more about online identity:

Digital Identity Development

go.nmc.org/gful

(Robin Ashford, Digital Commons @ George Fox University Libraries, June 2015.) This publication guides readers through important definitions of digital identity and describes the high stakes of building a credible online presence for securing employment.

Digital Literacy, Identity and a Domain of One's Own go.nmc.org/domainof

(Doug Belshaw, DML Central, 15 September 2016.) As more people develop their personal and professional websites and profiles on borrowed domains, the author posits that identity is at stake; he suggests that owning one's domain is the equivalent of building a customized house versus renting an apartment with a short-term lease.

Exploring Researchers' Participation in Online Research Identity Management Systems (PDF)

go.nmc.org/explorerim

(Shuheng Wu et al., ASIST, October 2016.) In this study, nine motivations were identified for leveraging research identity management (RIM) systems, including connecting with peers and staying up to date on scholarly work. The authors also found that there are three general levels of RIM system participation — readers, personal record managers, and community members — with most falling under the personal record manager category.

Artificial Intelligence

Time-to-Adoption Horizon: Four to Five Years





n the field of artificial intelligence (AI), computer science is being leveraged to create intelligent machines that more closely resemble humans in their functions. Having access to abundant knowledge, including categories, properties, and relationships between various information sets, is the basis of the knowledge engineering that allows computers to simulate human perception, learning, and decision-making. Machine learning is a subset of Al that refers to computers programmed with algorithms that respond to new inputs after being trained on a different learning data set, resulting in their ability to act and react without being explicitly programmed to do so. As academic and research libraries begin to uncover ways in which AI can improve patron services, research processes, and learner outcomes, there is a need to develop guidelines informed by research to ensure ethical use of student data.320

Overview

In recent years, advancements in artificial intelligence (AI) have further blurred the line between synthetic and human intelligence. Like people, Al-enabled machines and applications can learn over time. While completing a task, these entities simultaneously collect data, store the information, and use it to improve responses in the future.321 Although the concept of Al is not new, recent years have seen major implementations within the consumer sector. From Google's heavy financial and research investments in self-driving cars³²² to the voice recognition capabilities of Amazon's Echo,323 Al is penetrating day-to-day life. A recent milestone for Al took place when computers beat the world's best Texas Hold 'Em players in a 20-day "Brains vs. Artificial Intelligence" poker tournament, triumphing over human rivals by a margin of over \$1 million in poker chips.³²⁴ Futurists in academic and research libraries are beginning to better conceptualize how these use cases of AI can translate into increased learner success.

Intelligent capabilities of machines have led to more sophisticated databases within libraries.³²⁵ Machines can tailor content to meet the needs of learners in an instant, replacing the need for individuals to sift through hundreds of readings to locate relevant research. Scholarly processes are evolving as Al increases the capacity to learn from and draw on multiple users' experiences.326 In fact, strategic implementations of Al could lead to more cross-disciplinary alignment

within academic research by aiding scholars in locating connections within large sets of data, exposing them to a variety of viewpoints that might have otherwise been overlooked. The ability for technology to learn as the user progresses can also lead to an increase in personalization, as seen in the retail sector. Online stores have harnessed machine learning to gain insight into customer habits and recommend items for purchase based on these observed behaviors.³²⁷ These developments hold potential for libraries to surface new ways to support learners.

As technology continues to facilitate a high percentage of learning interactions, community leaders have raised concern around a lack of governing guidelines to highlight the ethical use of personal data and analytics. The novelty of AI and its upward trajectory across multiple sectors has led industry leaders to develop consortia dedicated to outlining proper uses of Al. Google, Facebook, Amazon, IBM, and Microsoft recently joined forces to create the Partnership on Artificial Intelligence to Benefit People and Society, an organization devoted to developing best practices through research and open publishing.328 Similarly, the Ethics and Governance of Artificial Intelligence fund is set to allocate \$27 million to technology leaders and institutions including Harvard and MIT to "advance the development of ethical AI in the public interest."329 As Al gains traction in academic and research libraries, resources must be devoted to protect student data and provide ethical guidance.

Relevance for Academic and Research Libraries

While academic and research libraries are still working to understand the different aspects of AI to effectively incorporate it into their systems, current uses could lead to potential breakthroughs. Semantic Scholar, an academic search engine launched in 2016, provides insight into research applications. In contrast to similar programs, which simply highlight key information at the top of search fields, Semantic Scholar leverages data mining and natural language processors to compare thousands of articles with the capacity to make judgments about which studies better align with a researcher's needs. Equipped with sophisticated abilities to draw conclusions about the methods. citations, and relevant data within each article, this artificially intelligent search engine contains over ten

million studies that have been vetted to include only those meeting highest quality standards.³³⁰

The range of capabilities afforded through AI has led some academic and research libraries to investigate how this technology can be applied to their mission. Exemplars in the field have already begun leveraging machine learning to improve learner outcomes. Research in law library settings is considering how Al agents, such as chatbots and location-based services, are shifting the focus of librarians, while also optimizing search engine results to increase student success. Initial conclusions indicate that artificially intelligent agents can alleviate the burden on librarians answering technical questions and free up time to increase focus on other duties, such as teaching and improving research. Al agents can also assist students using large databases by locating relevant resources based on personalized data. For example, an agent can take into consideration students' past course experiences to locate articles that align with their knowledge levels.331

As more data is being generated online, futurists and technology companies are beginning to look for ways in which this information can be leveraged to advance Al. For example, Yahoo is set to release what is being dubbed the largest online database — 13.5 terabytes of data — in hopes of spurring innovation within academic research. The company is already enlisting academic partners such as the University of California, San Diego in an effort to improve current research initiatives for emerging technologies including machine learning and Al.³³² Google Translate has also made waves within academic research following the release of its Google Neural Machine Translation, which is able to translate research papers into any language. This development could prove invaluable, as researchers now have access to international papers that were once unusable due to a language barrier or a lack of additional resources to translate, like time and money.333

Artificial Intelligence in Practice

The following links provide examples of artificial intelligence in use that have direct implications for academic and research libraries:

Artificial Intelligence Laboratory at the University of Michigan

go.nmc.org/umail

A key focus of the University of Michigan's Al lab is researching and developing assistive technology for those with physical and cognitive impairments. One such project is the design of a computer interface that automatically adjusts to cater to the needs of the visually-impaired — a compelling development for libraries as they strengthen resource accessibility.

IBM, Eight Universities to Train Watson for Cybersecurity Sleuthing

go.nmc.org/watson

IBM is partnering with universities across North America in a year-long research project that aims to move the needle in cybersecurity. The Al-based technology known as Watson will be deployed across eight campuses in an effort to improve security for student data, an issue currently confronting libraries as they move to more open online publishing.

Robot Librarian Designed by Aberystwyth University Students

go.nmc.org/hugh

Students at Aberystwyth University in Wales have prototyped "Hugh," an artificially intelligent robot that accesses electronic card catalog information to lead library patrons to materials' physical locations following a verbal query. Library staff are working with the students as they test the robot's location awareness and navigation capabilities.

For Further Reading

The following articles and resources are recommended for those who wish to learn more about artificial intelligence:

Artificial Intelligence: Computer Says YES (But is it Right?)

go.nmc.org/policy

(Louise Walsh, University of Cambridge, 20 October 2016.) Driverless cars and healthcare applications allow AI systems to make choices that impact human lives. To build user trust, researchers stress the need for increased transparency into AI's data-driven decisions.

Libraries in an Artificially Intelligent World

go.nmc.org/focus

(Kristin Whitehair, Public Library Association, 11 February 2016.) As AI continues to close the gap between users and their access to vast amounts of information, libraries are in the unique position to streamline some processes, shifting focus and resources towards deeper engagements with learners.

Reinforcement Learning as a Framework for Ethical Decision Making (PDF)

go.nmc.org/reinforce

(David Abel et al., Association for the Advancement of Artificial Intelligence, 2016.) The authors explore current capabilities of reinforcement learning to improve Al systems' use of ethical considerations in decision making; challenges and areas for further inquiry are also identified.

The Internet of Things

Time-to-Adoption Horizon: Four to Five Years



he Internet of Things (IoT) consists of objects endowed with computing power through processors or imbedded sensors that are capable of transmitting information across networks. These connections allow remote management, status monitoring, tracking, and alerts.334 Municipal governments are applying the capabilities of IoT, leveraging data to streamline processes and promote sustainability such as to conserve public resources by using energy-efficient smart LED lights,335 and addressing transportation management through smart traffic sensors and mobile traffic apps. 336 Library leaders are discussing how libraries can benefit from similar environmental monitoring capabilities of networked devices to optimize energy use and track objects like A/V resources and books. IoT providers may also begin to look to libraries to contribute to the reference layer of the IoT, connecting objects to resources that contextualize their use. Further, linked data will likely be embedded into many IoT sensors to amplify the reach of library services by connecting their resources to web services and cloud-based applications, applying metadata in new ways.337

Overview

Gartner predicts that by 2020, nearly 21 billion connected objects will be in use.338 Many libraries are already familiar with the concept of connecting objects to the web because they have been leveraging Radio Frequency Identification (RFID) technology, which provides books and other objects unique identifiers for more efficient check-out, inventory, and theft deterrence.339 More recently, beacons are another iteration of the IoT that libraries have adopted; these small wireless devices transmit a small package of data continuously so that when devices come into proximity of the beacon's transmission, functions are triggered based on a related application.340 The University of Oklahoma's Bizzell Library has installed Aruba Bluetooth low-energy beacons to link digital resources to physical locations, guiding patrons to these resources through their custom navigation app and augmenting the user experience with location-based information, tutorials, and videos.341

However, privacy and security concerns are rising in tandem with the growth of connected objects. A study by HP Enterprise Security Research revealed a high average number of vulnerabilities per IoT device: 70% use unencrypted network service, 60% provide user interfaces susceptible to basic attacks, and 80% use weak passwords.342 In 2016, hundreds of thousands of poorly secured internet-connected devices such as DVRs and routers were hacked and infected with malware that led to a distributed denial-of-service attack on Dyn, a major provider of internet infrastructure. Major web services were disrupted including Netflix, Twitter, Spotify, and Reddit. The incident drew public attention to the impacts of future large-scale security breaches.³⁴³ Academic libraries are well-positioned to advocate for transparency in data collection and privacy, keeping their visitors educated about risks and steps to maintain privacy. The ALA's Privacy Toolkit can help library leaders develop or revise privacy policies that protect themselves and their patrons from security breaches.³⁴⁴

Further, libraries have a stake in making information openly available while still protecting the interests of their users, positioning them as optimal resources for advancing IoT best practices. Decentralized systems in particular can help foster the free flow of information.³⁴⁵ Because the IoT is decentralized by nature, libraries will need to consider protections throughout the generation and analysis of data produced by connected objects and devices. One possible solution is blockchain technology, which can record digital interactions in a way that is designed to be secure, transparent, resistant to outages, and auditable.346 Blockchain enables an open distributed ledger shielded from manipulation by malicious entities because it does not exist in any single location. This concept can scale IoT networks so that billions of devices share the same network without the need for additional cloud or centralized network authorities.347

Relevance for Academic and Research Libraries

The IoT can bolster awareness among students and faculty of available library resources by allowing them to push personalized recommendations, information, and services directly to patrons' devices.³⁴⁸ Technical University of Munich students and their computer science professor have partnered with Bavaria's State Library to develop a library app that triggers supplementary information about its art collection or other points of interest as users explore the space.³⁴⁹ Meanwhile, a campus-wide network of collaborators at Western Michigan University is also working with

location-based services, enabled by beacons and LED sensor systems, that will interact with users' smartphones; this activity is part of their multi-year initiative for prototyping and deploying IoT solutions to develop a smart library infrastructure with Waldo Library currently serving as the testbed.³⁵⁰

Access to more data enabled by smart devices will allow libraries to better understand their patrons, informing strategies to meet evolving visitor needs. By tracking visitor traffic patterns to see the amount of time visitors spend in various sections, smart devices and beacons are becoming more adept at collecting information on library usage. Additionally, smart devices may alert staff and providers on equipment that needs servicing before a problem presents itself.351 The smartLAB project in Germany is a model of a future lab based on the IoT that allows all laboratory components to be connected and self-sustainable, from self-cleaning lab benches to smart safety goggles that use VR to project safety information.³⁵² Libraries could take advantage of similar setups to manage tasks like preserving the stability of the temperature and humidity in areas housing books, or to maintain makerspaces and other library equipment.

Academic libraries are partnering with industry to educate patrons on the potential of IoT technologies and equip them with experience to apply to solving real-world problems. Pennsylvania State University has teamed up with New York-based startup littlebits to open an Invention Studio housed within the Penn State Knowledge Commons in Pattee Library, where students can prototype inventions that leverage the power of the IoT to collect and exchange data.353 The D.H. Hill Makerspace recently held an interactive workshop on IoT as part of North Carolina State University Libraries' Making Space initiative geared toward women in STEM fields. Students in the workshop designed an IoT product that could aid processes related to cultivating vegetables, including local distribution and transportation.354

The Internet of Things in Practice

The following links provide examples of the Internet of Things in use that have direct implications for academic and research libraries:

Carnegie Mellon to Lead Internet of Things Expedition

go.nmc.org/carmell

A joint project between Carnegie Mellon University, Cornell, Stanford, Illinois at Urbana-Champaign, and Google is developing an open infrastructure called GloTTO that enables an easier entry point for their campus communities to experiment with diverse IoT use cases.

Internet of Things Lab Fosters Student Innovation, Adds Industrial Partners

go.nmc.org/iotwisc

The University of Wisconsin–Madison provides an example of the potential in university-industry collaboration to enable innovative research that advances businesses and economic development by identifying areas where IoT makes processes more efficient.

UT Start Living Smart Campus

go.nmc.org/utsmart

In the Netherlands, the University of Twente's Living Smart Campus program is offering resources and funding to a collection of pilot projects in which students use IoT concepts and tools to experiment with solutions related to efficiency and sustainability, using their own campus community as a testbed.

For Further Reading

The following articles and resources are recommended for those who wish to learn more about the Internet of Things:

Internet of Things Applications in Academic Libraries go.nmc.org/iotapp

(Ashwini Nag, Research India Publications, 2016.) This paper explores how IoT concepts such as magic mirror technology, pressure sensor pads, and wireless sensor networks can enhance academic library services and resource utilization and management.

The Internet of Things: Seizing the Benefit and Addressing the Challenges

go.nmc.org/seiz

(OECD, 2016.) The OECD encourages governments worldwide to implement policies that promote research and funding for IoT initiatives and the development of open data frameworks. They expect the IoT and resulting aggregated data to drive innovation and optimize services, leading to more targeted solutions to a number of global issues.

Understanding the Opportunities and Risks of the Internet of Things Environment on Campus

go.nmc.org/opprisk

(Chuck Benson, *The evolllution*, 27 January 2017.) IoT systems can change institutional facility management models, improve the capabilities of safety systems on campus, and facilitate a better research environment for faculty and students. However, institutions must prepare for substantial complexity in managing IoT before making investments.

Methodology

he process used to research and create the NMC Horizon Report: 2017 Library Edition is rooted in the methods used across all the research conducted within the NMC Horizon Project. All editions of the NMC Horizon Report are informed by both primary and secondary research. Dozens of meaningful trends, challenges, and important developments in technology are examined for possible inclusion in the report for each edition.

Every report draws on the considerable expertise of an international expert panel that first considers a broad set of topics and then examines each of them in progressively more detail, reducing the set until the final listing of 18 topics is selected. This process takes place online, where it is captured in the NMC Horizon Project workspace. The workspace is intended to be a completely transparent window into the project, one that not only provides a real-time view of the work as it happens, but also contains the entire record of the process for each of the various editions published since 2006. The workspace used for the NMC Horizon Report: 2017 Library Edition can be found at horizon.wiki.nmc. org.

The panel was composed of 75 education and technology experts from 14 countries on five continents this year; their names and affiliations are listed at the end of this report. Despite their diversity of backgrounds and experience, they share a consensus view that each of the profiled topics will have a significant impact on the practice of academic and research libraries around the globe over the next five years.

The procedure for selecting the topics in the report is based on a modified Delphi process refined over the now 15 years of producing the NMC Horizon Report series, and began with the assembly of the panel. The panel represents a wide range of backgrounds, nationalities, and interests, yet each member brings a relevant expertise. Over the decade of the NMC Horizon Project research, more than 2,000 internationally recognized practitioners and experts have participated on the panels; in any given year, a third of panel members are new, ensuring a flow of fresh perspectives each year. Nominations to serve on the expert panel are encouraged; see go.nmc.org/panel.

The panel was composed of 75 education and technology experts from 14 countries on five continents.

Once the panel for a particular edition is constituted, their work begins with a systematic review of the literature — press clippings, reports, essays, and other materials — that pertains to emerging technology. Members are provided with an extensive set of background materials when the project begins, and are then asked to comment on them, identify those that seem especially worthwhile, and add to the set. The group discusses existing applications of emerging technology and brainstorms new ones. A key criterion for the inclusion of a topic in this edition is its potential relevance to the services and practices of academic and research libraries. A carefully selected set of articles from hundreds of relevant publications ensures that background resources stay current as the project progresses. They are used to inform the thinking of the participants.

Following the review of the literature, the expert panel engages in the central focus of the research — the research questions that are at the core of the NMC Horizon Project. These questions were designed to elicit a comprehensive listing of interesting technologies, challenges, and trends from the panel:

What key trends do you expect to accelerate technology adoption and progress in academic and research libraries worldwide over the next five years?

What do you see as the significant challenges that will impede technology adoption and progress in academic and research libraries worldwide will face over the next five years?

Which of the important developments in technology will be most impactful for academic and research libraries worldwide within the next five years?

What important developments in technology are missing from our list? Consider these related questions:

- > What would you list among the established developments in technology that some academic and research libraries are using today that arguably all academic and research libraries should be using broadly?
- > What developments in technology that have a solid user base in consumer, entertainment, or other industries should academic and research libraries be actively looking for ways to apply?
- > What are the important developments in technology you see developing to the point that academic and research libraries should begin to take notice during the next five years?

In the first step of this approach, the responses to the research questions are systematically ranked and placed into adoption horizons by each expert panel member using a multi-vote system that allows members to weight and categorize their selections. These are compiled into a collective ranking, and inevitably, the ones around which there is the most agreement are quickly apparent.

From the comprehensive list of trends, challenges, and developments in technology originally considered for any report, the dozen that emerge at the top of the initial ranking process in each area are further researched and expanded. Once these interim results are identified, the group explores the ways in which these topics impact learning and research in academic and research libraries. A significant amount of time is spent researching real and potential applications for each of the topics that would be of interest to library professionals. The semifinalist topics of the interim results are then ranked yet again. The final topics selected by the expert panel are those detailed here in the NMC Horizon Report: 2017 Library Edition.

The 2017 NMC Horizon Project Library Expert Panel

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Carnegie Mellon University United States

Ryan Wetzel

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Endnotes and Links

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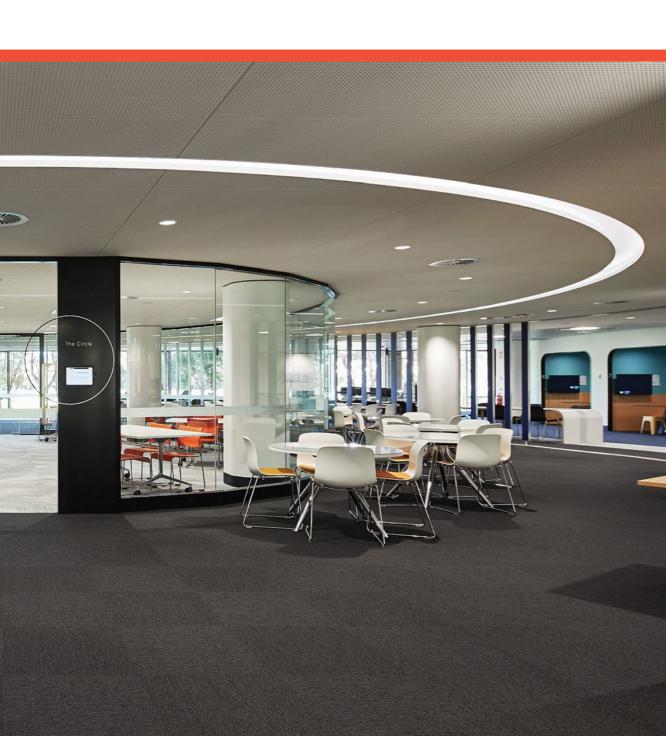
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The NMC Horizon Report > 2017 Library Edition examines key trends, significant challenges, and important developments in technology for their impact on academic and research libraries across the globe.





ISBN 978-0-9986242-8-0

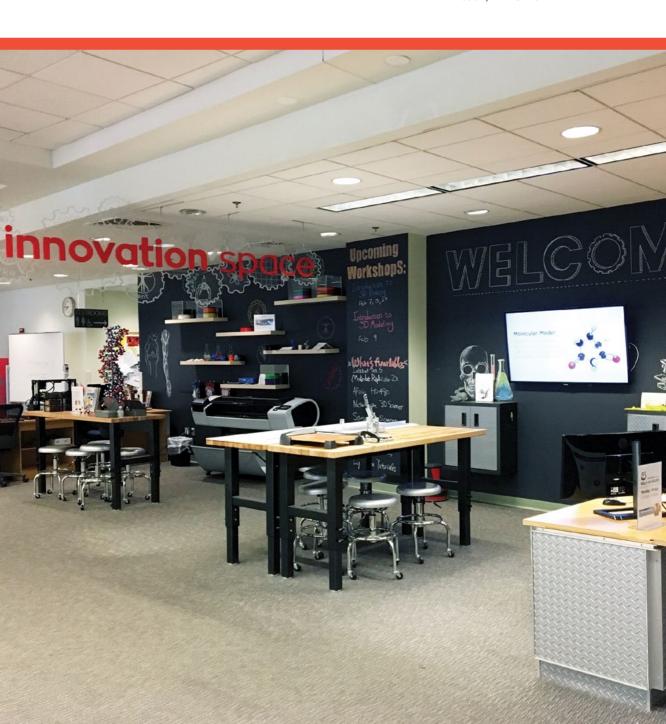
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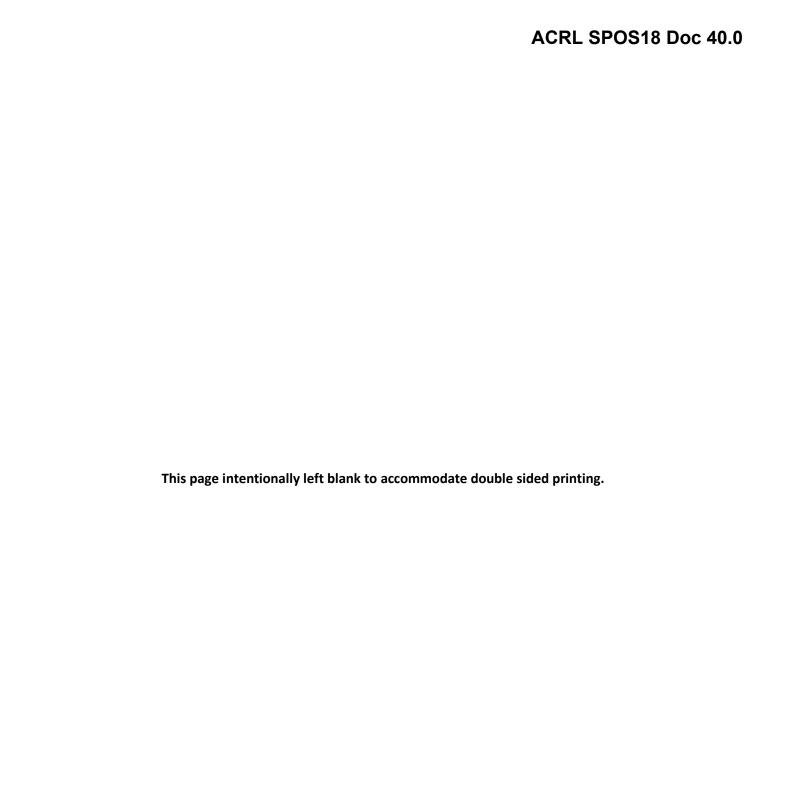
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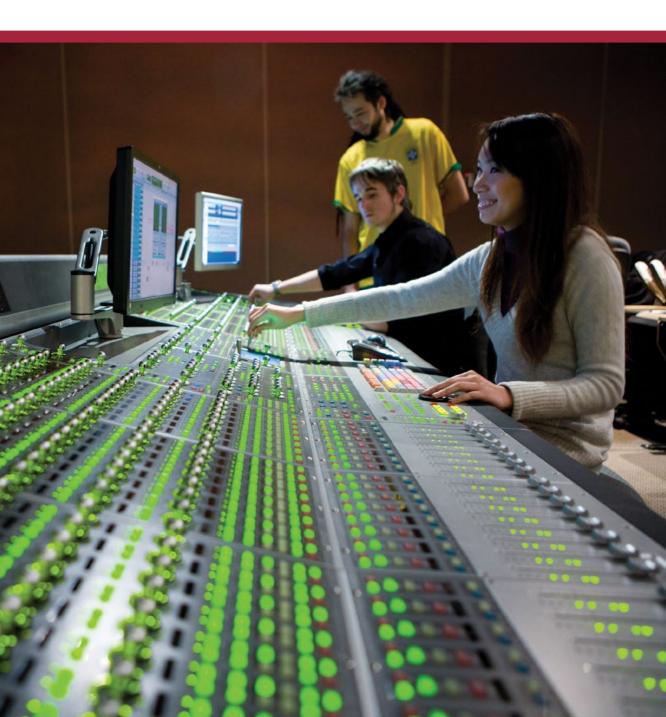
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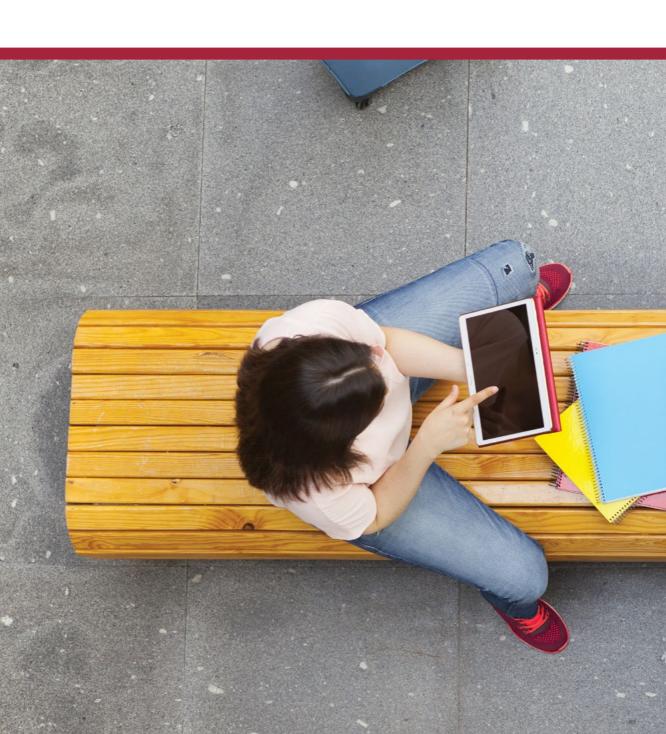


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The NMC Horizon Report: 2018 Higher Education Edition is a collaboration between the New Media Consortium and the EDUCAUSE Learning Initiative, an EDUCAUSE Program.

The research behind the *NMC Horizon Report: 2018 Higher Education Edition* was jointly conducted by the New Media Consortium (NMC) and the EDUCAUSE Learning Initiative (ELI). To learn more about ELI, visit www.educause.edu/eli; to learn more about the NMC, visit www.nmc.org.

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ISBN 978-1-933046-01-3

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Citation

Samantha Adams Becker, Malcolm Brown, Eden Dahlstrom, Annie Davis, Kristi DePaul, Veronica Diaz, and Jeffrey Pomerantz. *NMC Horizon Report: 2018 Higher Education Edition*. Louisville, CO: EDUCAUSE, 2018.

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Executive Summary

hat is on the five-year horizon for higher education institutions? Which trends and technology developments will drive educational change? What are the critical challenges and how can we strategize solutions? These questions regarding technology adoption and educational change steered the discussions of 71 experts to produce the NMC Horizon Report: 2018 Higher Education Edition brought to you by EDUCAUSE. This Horizon Report series charts the five-year impact of innovative practices and technologies for higher education across the globe. With more than 16 years of research and publications, the Horizon Project can be regarded as one of education's longest-running explorations of emerging technology trends and uptake.

Six key trends, six significant challenges, and six developments in educational technology profiled in this higher education report are likely to impact teaching, learning, and creative inquiry in higher education. The three sections of this report constitute a reference and technology planning guide for educators, higher education leaders, administrators, policymakers, and technologists.

The 2018 expert panel agreed on two long-term impact trends: advancing cultures of innovation and an increase in cross-institution collaboration. Whereas the long-term trends indicate a broad evolution in higher education, the mid-term trends are more pragmatic. The proliferation of open education resources is a midterm trend that has matured beyond reusable, lowcost content toward defining complete programmatic initiatives. A rise in new forms of interdisciplinary studies is introduced in this report for the first time as a midterm trend that will drive technology adoption in the next three to five years through the tools that advance multidisciplinary collaboration. The physical learning environment design on campuses remains a short-term trend, one the panel believes will continue to influence pedagogical practice and advance technology adoption in the near future. The panelists also once again agreed that a growing focus on measuring learning continues to push technology adoption, a trend in this report since 2013. This reoccurrence might be explained by the increased sophistication of the technology by which we can measure learning and the efficacy of that technology.

Regarding the major obstacles for higher education, authentic learning experiences and an advanced need to improve digital literacy are considered to be the solvable challenges—those that are already being addressed by programs at individual institutions. Challenges we understand but for which solutions remain difficult to scale include advancing digital equity and adapting traditional organizational models to more flexible designs that advance the future of the workplace. The experts identified political and economic pressures as those that create a wicked challenge—one that is difficult to define and even more challenging to solve. Similarly, rethinking the roles of educators is also considered a complex problem to define and solve. As educational technology is rapidly advancing and evolving, it is difficult to discern how to overcome these challenges to advance and scale technology adoption to increase student success, at least in the discernible future.

The panel identified technological developments that could support these drivers of innovation and change. Analytics technologies are expected to be increasingly adopted by higher education institutions in one year's time or less to make use of student data that can be gathered through a proliferation of sources. Makerspaces fit along a similar adoption horizon as institutions continue to create and integrate these spaces into the curriculum. The time-to-adoption for adaptive learning technologies and artificial intelligence is estimated within two to three years, acknowledging the advances in these technologies and their promise to positively impact teaching and learning. Mixed reality and robotics are expected to be more prominent in colleges and universities within four to five years.

The three key sections of this report constitute a reference and technology-planning guide for educators, higher education leaders, administrators, policymakers, and technologists. It is our hope that these essays and the resources provided to complement each topic will help inform the choices that institutions are making about technology to improve, support, or extend teaching, learning, and creative inquiry in higher education across the globe. Education leaders worldwide look to the Horizon Project as key strategic technology planning references, and it is for that purpose that the *Horizon Report: 2018 Higher Education Edition* is presented.

NMC Horizon Report > 2018 Higher Education Edition at a Glance

Key Trends Accelerating Higher Education Technology Adoption

2019 2020 2021 2022

Short-Term

Driving technology adoption in Higher Education for the next one to two years



Growing Focus on Measuring Learning Redesigning Learning Spaces

Mid-Term

Driving technology adoption in Higher Education for the



Proliferation of Open Educational Resources The Rise of New Forms of Interdisciplinary Studies

Long-Term Driving technology adoption in Higher Education for five or more years



Advancing Cultures of Innovation

Cross-Institution & Cross-Sector Collaboration

Significant Challenges Impeding Higher Education Technology Adoption



Solvable Those that we understand and know how to solve

Authentic Learning Experiences Improving Digital Literacy



Difficult Those that we understand but for which solutions are elusive

Adapting Organizational Designs to the Future of Work Advancing Digital Equity



Wicked Those that are complex to even define, much less address

Economic and Political Pressures Rethinking the Roles of Educators

Important Developments in Technology for Higher Education

2018 2019 2020 2021 2022

Time-to-Adoption Horizon: One Year or Less



Time-to-Adoption Horizon: Two to Three Years



Adaptive Learning Technologies Artificial Intelligence

Time-to-Adoption Horizon: Four to **Five Years**



Analytics Technologies Makerspaces

Mixed Reality Robotics

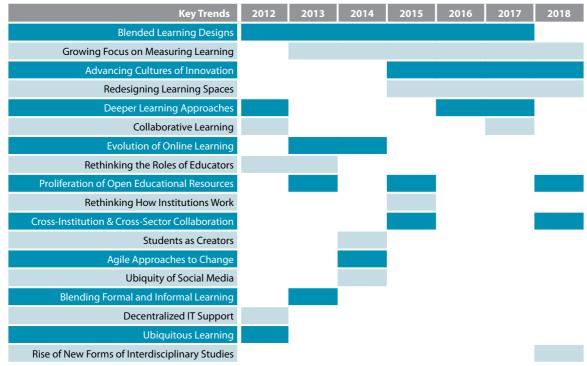
Introduction

he NMC Horizon Report: 2018 Higher Education Edition research and topic selection was completed by the NMC Higher Education Expert Panel in December of 2017, with EDUCAUSE completing the production and publication of the work in the summer of 2018. The internationally recognized Horizon Report series was established by the NMC in 2002 to identify and describe important developments in educational technology poised to have an impact on technology planning and decision-making in higher education around the globe. The Horizon Report highlights six trends, six challenges, and six developments relating to educational technology and practices that are likely to enter mainstream use within their focus sectors over the next five years (2018–22).

Over the 16 years of the NMC Horizon Project, there have been numerous overlaps from edition to edition, as individual technologies have matured or become obsolete. It is important to note that while topics may

repeatedly appear, they only represent the broad strokes of educational change; each trend, challenge, and technology development evolves over time, informed by innovative campus approaches and by technological advances every year. Several trends have consistently been selected by the panel, including the focus on measuring learning and the redesign of learning spaces; the recurrence of these trends suggests that the panel views an ongoing progression of these trends in higher education. Certain topics reappear over time as well. Open educational resources (OER), for instance, have been a trend since 2013, yet initial advances in the authoring platform or curation method of open resources is now overshadowed by campuswide OER initiatives and sophisticated publishing options that blend adaptive elements into an OER text. The chart below shows the findings from the past six higher education editions and from the 2018 edition. (For consistency, in some cases the topic names

Seven Years of the NMC Horizon Report Higher Education Edition



Significant Challenges Competition from New Models of Education Blending Formal and Informal Learning Improving Digital Heracy Integrating Technology in Faculty Education Personalizing Learning Authentic Learning Experiences Rewarding Teaching Insufficient Metrics for Evaluation Embracing the Need for Radical Change Rethinking the Roles of Educators Achievement Gap Advancing Digital Equity Managing Knowledge Obsolescence Balancing Our Connected and Unconnected Lives Teaching Complex Thinking Scaling Teaching Innovations Expanding Access Academics' Attitude about Technology Documenting and Supporting New Forms of Scholaship Adapting Organizational Designs to the Future of Work Economic and Political Pressures Developments in Technologies Games and Gamification The Internet of Things Mabile Learning Natural User Interfaces Bring Your Own Device Makerspaces Filipped Classroom Wearable Technology 3D Printing Tablet Computing Artificial Intelligence Next-Generation LMS Affective Computing Mixed Reality Robotics Quantified Self Virtual Assistants Massive Open Online Courses								
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Virtual Assistants	Analytics Technologies Adaptive Learning Technologies Games and Gamification The Internet of Things Mobile Learning Natural User Interfaces Bring Your Own Device Makerspaces Flipped Classroom Wearable Technology 3D Printing Tablet Computing Artificial Intelligence Next-Generation LMS Affective Computing Mixed Reality	2012	2013	2014	2015	2016	2017	2018
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have been slightly modified from the report where they originally appeared.) Taken together, the topics featured in the report from year to year tell a larger story about the overarching themes driving progress in—or impeding—teaching, learning, and creative inquiry.

In the pages that follow, 18 topics selected by the 2018 NMC Higher Education Expert Panel related to the educational applications of technology are explored. The topics are placed directly in the context of their likely impact on the core missions of universities and colleges, and they are detailed in succinct, nontechnical, and unbiased presentations.

Individual topics in the report are published as two-page spreads to make them useful as stand-alone essays and guides. Taken together, they generate a holistic vision of how they all coalesce. In some instances, the challenges represent the obstacles hindering positive trends from scaling, while the technologies are accelerators, revealing a convergence between all three sections.

Larger themes have emerged as the trends, challenges, and developments have been analyzed. Each topic can be placed into one (or more) of six meta-categories that reflect movements in higher education.



Expanding Access and Equity

People expect to be able to learn and work anywhere, with constant access to learning materials and to one other. Colleges and universities have made great strides in generating more

methods and platforms for faculty, students, and staff to collaborate and be productive wherever they are. The advent of always-connected devices has provided more flexibility in how, when, and where people learn, and many institutions have updated their IT infrastructures accordingly. But simply having a device that turns on and connects to the internet is not sufficient. Support of success in learning requires digital equity as well. All aspects of the learning environment must be equally accessible and usable for all learners and instructors. This includes considerations such as universal design for learning, adaptive learning engagements, and overall affordability.



Spurring Innovation

If education is viewed as a vehicle for advancing the global economy, then it must be the North Star that enables societies to illuminate new ideas that solve pressing challenges and to create opportunities to shape

a better future. In this sense, institutions are incubators of inventions and developments as well as the most important product of all: graduates who not only fulfill evolving job market needs but redefine and improve the workforce they enter. Advancing cultures of entrepreneurial thinking and designing new forms of artificial intelligence are just two of many areas of higher education that are spreading innovation.



Fostering Authentic Learning

Project-based learning, challenge-based learning, and competency-based learning—all of these pedagogical trends are in service to creating hands-on, real-world experiences for

students. As higher education institutions prioritize active learning over rote learning, learners are becoming partners in learning, invention, and knowledge creation. The embedding of maker culture in higher education has made students active contributors to the knowledge ecosystem. They learn by experiencing, doing, and creating, demonstrating newly acquired skills in more concrete and creative ways. Students do not have to wait until graduation to change the world. However, institutions continue to be challenged to generate these opportunities in spaces and with paradigms that lean on traditional practices.



Leveraging Data

What good is a new approach or technology deployment if the results are not carefully measured and analyzed, with the program adjusted based on the results? Institutions

are becoming more adept at capturing a bevy of programmatic data. This same principle has been applied to tracking student performance, engagement, and behavior and leveraging such data to inform decision-making across departments and campuses. This information is also fueling more personalized learning experiences through adaptive learning tools that analyze areas for improvement and deliver content tailored to each student. As this data-driven theme proliferates in higher education, leaders must consider how to scale the data in a way that presents a more holistic picture of student success and makes it useful across all disciplines. Embracing a culture of sharing that breaks down silos while maintaining ethical and privacy standards will be paramount.



Improving the Teaching Profession

The emphasis on hands-on, technology-enhanced learning has impacted every facet of campus life, with teaching as a central force. With students inventing, iterating, and collaborating regularly, instructors have been trans-

planted from their position as "sage on the stage" to "guide on the side." There is a need for mentoring and coaching as students work through complex problems to explore new frontiers and gain concrete skills. As student-led class discussions delve deeper into the material, faculty must balance the student-centered approach with subtle but effective facilitation. However, institutions are often set up in ways that indicate a value on research over teaching. As such, educators are not always sufficiently motivated to improve their teaching craft or rewarded when they do. Programs that recognize and scale positive teaching practices are a necessity. Further, just as there is a need to advance digital literacy among students, faculty must also engage in ongoing professional development, with support from institutions.

Spreading Digital FluencyTechnology and digital to

Technology and digital tools have become ubiquitous, but they can be ineffective or distracting if they are not integrated into the learning process in meaningful ways. The

contemporary workforce calls for digitally savvy employees who can seamlessly work with different media and new technologies as they emerge. A major element of fostering this fluency is recognizing that simply understanding how to use a device or certain software is not enough; faculty, staff, and students must be able to make connections between the tools and the intended outcomes, leveraging technology in creative ways that allow them to more intuitively adapt from one context to another. Ownership of this movement must be shared and supported among institutional divisions

as digital fluency is an important thread that runs through practically every facet of teaching and learning.

In the report that follows, icons appear next to each topic, indicating which of these meta-categories applies to it, to illuminate the connections between topics. The report's first two sections focus on an analysis of the trends driving technology decision-making and planning, and the challenges likely to impede the adoption of new technologies. Each includes an explicit discussion of the trend or challenge's implications for policy, leadership, and practice in higher education-focused institutions and organizations. The inclusion of these three elements acknowledges that it takes a combination of governance, vision, and action to advance positive trends and surmount pressing challenges. Relevant examples and readings conclude each topic for further elaboration.

The report's third section focuses on important developments in technology—consumer technologies, digital strategies, enabling technologies, internet technologies, learning technologies, social media technologies, and visualization technologies—all positioned to impact higher education over the next five years. Each development contains a discussion of its relevance to teaching, learning, or creative inquiry and concludes with a set of project examples and further readings.

Taken together, the three sections constitute a straightforward guide for strategic planning and decision-making for postsecondary education leaders across the world.

Key Trends Accelerating Technology Adoption in Higher Education

he six trends described in the following pages were selected by the project's expert panel in a series of Delphi-based voting cycles, each accompanied by rounds of desktop research, discussions, and further refinements of the topics. These trends, which the members of the expert panel agreed are very likely to drive technology planning and decision-making over the next five years, are sorted into three movement-related categories—longterm trends that typically have already been affecting decision-making and will continue to be important for more than five years; mid-term trends that will likely continue to be a factor in decision-making for the next three to five years; and short-term trends that are driving educational technology adoption now, but will likely remain important for only one to two years, either becoming commonplace or fading away in that time.

While long-term trends have already been the topic of many education leaders' discussions and extensive research, short-term trends often do not have an abundance of concrete evidence pointing to their effectiveness and future directions.

The NMC Horizon Project model derived three metadimensions that were used to focus the discussions of each trend and challenge: policy, leadership, and practice. Policy, in this context, refers to the formal laws, regulations, rules, and guidelines that govern institutions; leadership is the product of experts' visions of the future of learning, based on research and deep consideration; and practice is where new ideas and pedagogies take action, in universities and colleges and related settings. Below are summaries of the six key trends that will be explored more in-depth in this section, with citations and resources included.

Long-Term Trends: Driving Ed Tech adoption in higher education for five or more years

Advancing Cultures of Innovation

As campuses have evolved into hotbeds for entrepreneurship and discovery, higher education has become widely regarded as a vehicle for driving innovation. The focus of this trend has shifted from understanding the value of exploring new ideas to finding ways to replicate that exploration across unique and diverse learning institutions. Ongoing research examines how institutions can nurture cultures that promote experimentation. A significant element in

advancing this movement is the call for higher education to accept failure as an essential part of the learning process. The act of integrating entrepreneurship into higher education further acknowledges that every big idea has to start somewhere, and students, faculty, and staff can be equipped with the tools needed to spark real progress. To keep pace, institutions must critically assess their curriculum and institutional culture and change their evaluation methods to remove barriers that limit the development of new ideas.

Cross-Institution & Cross-Sector Collaboration

According to the World Higher Education Database, there are more than 18,500 postsecondary institutions in 186 countries across the world. Today's global environment, which is increasingly connected via technology, allows institutions to unite across international borders and work toward common goals concerning teaching and learning, research, and shared values. By forging partnerships, institutions facing financial constraints can pool their resources so that faculty and learners can access a larger variety of digital course materials, data, and technologies than might otherwise be unavailable locally. Increasingly, institutions are joining forces to combine their intellectual capital or to align themselves strategically with innovative efforts in the field. Cross-sector collaborations and partnerships are also becoming more common, with industry looking to institutions for research and development to solve pressing challenges and institutions looking to business to prepare students for the digitally focused workforce, aligning programs and degree pathways with industry needs.

Mid-Term Trends: Driving Ed Tech adoption in higher education for the next three to five years

Proliferation of Open Educational Resources

The Hewlett Foundation defines open educational resources (OER) as "high-quality teaching, learning, and research materials that are free for people everywhere to use and repurpose." OER gained momentum in 2001 when MIT founded the OpenCourseWare initiative, making instructional materials for nearly 2,000 courses available free online. OER became an issue on the world political stage in 2012 with the adoption of the Paris OER Declaration, which explicitly linked OER to the Universal Declaration of Human Rights, which states that "Everyone has the right to education." Adoption

of OER has been driven largely by efforts to reduce the costs associated with higher education, though perhaps the most powerful potential outcome of OER is the opportunity for institutions to develop a broader set of investments in course development and infrastructure.

The Rise of New Forms of Interdisciplinary Studies

Multidisciplinary approaches to higher education are being introduced by institutions that see valuable alternatives to a traditional, singular degree path. Faculty members, administrators, and instructional designers are creating innovative pathways to college completion through interdisciplinary experiences, nanodegrees, and other alternative credentials, such as digital badges. Researchers, along with academic technologists and developers, are breaking new ground with data structures, visualizations, geospatial applications, and innovative uses of open-source tools. Further, widespread social movements have opened up global conversations about gender, race, class, and politics, which have catalyzed efforts to support new disciplines. These emerging areas could lead to exciting new developments in education, but effective organizational structures must exist to support the collaborations.

Short-Term Trends: Driving Ed Tech adoption in higher education for the next one to two years

Growing Focus on Measuring Learning

This trend encompasses the interest in assessment and the wide variety of methods and tools that educators use to evaluate, measure, and document academic readiness, learning progress, and skill acquisition. As societal and economic factors redefine the skills needed in today's workforce, colleges and universities must rethink how to define, measure, and demonstrate

subject mastery and soft skills such as creativity and collaboration. The proliferation of data-mining software and developments in online education, mobile learning, and learning management systems are coalescing toward learning environments that leverage analytics and visualization software to portray learning data in a multidimensional and portable manner.

Redesigning Learning Spaces

As universities engage with strategies that incorporate digital elements and accommodate more active learning in the physical classroom, they are rearranging physical environments to promote these pedagogical shifts. Educational settings are increasingly designed to support project-based interactions with attention to greater mobility, flexibility, and multiple device usage. To improve remote communication, institutions are upgrading wireless bandwidth and installing large displays that allow for more natural collaboration on digital projects. Some are exploring how mixed-reality technologies can blend 3D holographic content into physical spaces for simulations, such as experiencing Mars by controlling rover vehicles, or how they can enable multifaceted interaction with objects, such as exploring the human body in anatomy labs through detailed visuals. As higher education continues to move away from traditional, lecture-based lessons toward more hands-on activities, classrooms are starting to resemble real-world work and social environments that foster organic interactions and cross-disciplinary problem solving.

The following pages provide a discussion of each of the trends highlighted by this year's expert panel, including an overview of the trend, its implications, and a set of curated recommendations for further reading on the topic.

Advancing Cultures of Innovation

Long-Term Trend: Driving Ed Tech adoption in higher education for five or more years





s campuses have evolved into hotbeds for entrepreneurship and discovery, education has become widely regarded as a vehicle for driving innovation. The focus of this trend has shifted from understanding the value of exploring new ideas to finding ways to replicate that exploration across unique and diverse learning institutions. Ongoing research examines how institutions can nurture cultures that promote experimentation. A significant element in advancing this movement is the call for higher education to accept failure as an essential part of the learning process. The act of integrating entrepreneurship into higher education further acknowledges that every big idea has to start somewhere, and students, faculty, and staff can be equipped with the tools needed to spark real progress. To keep pace, institutions must critically assess their curriculum and institutional culture and change their evaluation methods to remove barriers that limit the development of new ideas.

Overview

For centuries, higher education has been a key locus for scholarship and discovery—the innovative yet disciplined acquisition and dissemination of knowledge. Whether achieved by integrating entrepreneurship into education, supporting internal changes, or encouraging pedagogical and technological ingenuity, innovation continues to dominate the conversation around higher education's mission. In a recent Online Learning Consortium and Learning House survey, 68 percent of schools ranked student success as a top-three goal for innovation, with just under half considering it their top goal. Their report—The State of Innovation 2018 defined innovation as "The implementation of new initiatives in order to drive growth, increase revenue, reduce cost, differentiate experience, or adjust the value proposition."¹ Other priorities included creating new degree programs, decreasing costs, creating alternative credentials, and developing new teaching methods.²

A cultural shift toward participatory learning has brought faculty, staff, and students onto more equal ground and has encouraged a collaborative approach to problem solving, with a greater diversity of voices and perspectives represented. Traditional hierarchies and power dynamics are being reconsidered to enable

a flow of information and ideas. New and innovative teaching models and the technologies that enable them—such as in-class engagement and assessment tools, and hybrid and fully online courses—continue to democratize experiences and broaden access for students worldwide.3 Many colleges and universities are finding new ways to position themselves in an age of increasingly smart technologies, including artificial intelligence, virtual reality, and machine learning; a burgeoning and highly competitive global gig economy; and a virtual marketplace focused on securing data collection, analysis, sharing, and privacy, both now and in the long term. Various consortia are collaborating to foster innovation in learning. Among these is Canada's Council of Ontario Universities, which includes evidence-based online simulations as well as the country's first research hub focused on digital inclusion to support users with disabilities, varying language needs, and diverse cultural preferences.

Rather than retrofitting an existing environment to be conducive to innovation, some countries are bringing it into the equation from the beginning. The Russian government, for example, established Innopolis, a new "innovation city" in Tatarstan focused on education.4 In fall 2016, Innopolis University—the higher education institution constructed as part of the city—welcomed its first student cohort. Along with K-12 "feeder" schools, the state-of-the-art university aims to produce highly skilled graduates for the local workforce, and it can serve as a model for other countries seeking to build similar metropolitan tech and innovation hubs from the ground up. Students are also involved in this effort; for example, Pakistan's student-founded Social Innovation Hub at Lahore University provides research and consultancy services, publications, and early-stage incubation opportunities for entrepreneurs interested in building sustainable social enterprises that contribute to economic growth and society at large.

Implications for Policy, Leadership, or Practice

Recently, the Organization for Economic Co-operation and Development and France's Institute of Research for Development hosted a convening of higher education researchers, science policy experts, and development agencies to discuss the ways in which

colleges and universities can encourage, support, and capitalize on the research and innovation happening within institutions. They agreed that three of the most significant recent developments in academia are an internationalization of higher education and research, an increased reliance on performance-based funding, and a "new generation of policies for increasing returns from research to innovation." Considering the ways in which learning environments and other physical resources such as makerspaces can engender innovation will be critical.

Institutions and consortia that support and encourage cross-campus collaboration are well poised to launch and iterate on innovations in areas such as teaching and learning, student services, campus operations, and technology transfer. Institutions such as Carnegie Mellon University (CMU) have established offices solely dedicated to the latter. Its Center for Technology Transfer and Enterprise Creation (CTTEC) offers resources for university-affiliated entrepreneurs, provides legal guidelines for inventors on intellectual property and related topics, and facilitates negotiations for commercial tech transfer agreements-all while ensuring institutional compliance with regulations.7 Over the past decade, 261 companies have been created through CTTEC: 158 indirect start-ups by faculty, students, and staff and 103 direct start-ups that licensed CMU-owned intellectual property through CTTEC.

Across many institutions, employability is a watchword, if not a driving force, to guide on-campus innovation centers as well as curricula, including student projects. At Falmouth University in the United Kingdom, photography students are already gaining experience with a new dimension of professional photography while still in the classroom: learning the intricacies of running a successful independent enterprise. As part of MAYN Creative, the university's agency, students receive critical feedback both internally and from external clients; as a result, they are learning how to incorporate changes and find solutions before entering the professional world as solopreneurs or small business owners. The institution has also begun forming collaborative partnerships with industry players that are seeking fresh talent. The benefits for students are a mix of intangible and substantial: they gain real-world experience within the "safe" zone of academia while earning compensation for their professional pursuits.8

For Further Reading

The following resources are recommended for those who wish to learn more about advancing cultures of innovation.

Crafting an Innovation Landscape

educau.se/craftinnov

(Shirley Dugdale and Brian Strawn, *EDUCAUSE Review*, February 13, 2017) The Innovation Landscape Framework can help coordinate physical planning with organizational initiatives, engage a wide range of stakeholders, and enable a culture of innovation across campus.

Higher Education and Silicon Valley: Connected But Conflicted

educau.se/stanfordprofs

(W. Richard Scott and Michael W. Kist, *Stanford News*, August 10, 2017) Two Stanford University professors explore the cultural and economic factors motivating these entities to collaborate.

How to Launch a Campus Innovation Center

educau.se/launchinnov

(David Rats, *Campus Technology*, February 17, 2016) This article offers elements to consider before getting too far into the process. (Hint: having a well-articulated mission and vision in place will be more important and provide more longevity than the novelty factor.)

How to Navigate Public-Private Partnerships in Higher Ed

educau.se/navpartner

(Rita Karma and Charles A. Goldman, *The RAND Blog*, May 26, 2017) A RAND Corporation study of 12 Texas public universities shows that large-scale online courses can generate income to support other important activities, such as graduate research.

The State of Digital Learning in Australia

educau.se/stateofdli

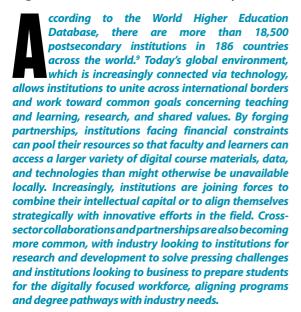
(Ashley Coolman, Learning Design News—Smart Sparrow, January 5, 2018) Australian universities are innovating in digital learning and successfully improving student outcomes along the way. The five dimensions of learning innovation laid the foundation of this research and report; the initial survey consisted of questions mapped to each dimension.

World Bank Higher Education Innovation Initiatives educau.se/tertiedu

(Patricia da Camara, *Understanding Poverty*) The advent of and innovation in tertiary education can also serve to uplift economically depressed areas, and numerous projects aim to do so—among them, those led and financed by the World Bank.

Cross-Institution & Cross-Sector Collaboration

Long-Term Trend: Driving Ed Tech adoption in higher education for five or more years



Overview

Leaders across a variety of sectors are working together to form collaborative initiatives that connect postsecondary institutions with industry. Incorporating the viewpoints of a diverse set of stakeholders, including students and faculty, is critical to furthering research initiatives, improving learning experiences, and developing technological advancements to support the increasingly connected world. Likewise, crosssector collaborations—particularly between industry and higher education—can equip students with the skills they need to keep pace with evolving workforce needs. Because these collaborations span local and international boundaries, technology is both a focus for innovation initiatives and the medium for facilitating successful collaboration. Further, education leaders are developing a new vision, referred to as the meso scale, that combines these two collaborative opportunities into practices that are "shared among institutions and between education and the private sector."10

Cross-institution collaborations often share resources to mitigate financial restraints and enact social change. The Chronicle of Higher Education highlights this concept of "networked universities" working together to reduce institution and student costs, and it outlines four factors for success: achieving buy-in from all leadership levels,







identifying peer organizations, leveraging technology to facilitate key administrative services, and building faculty trust and confidence in the programs.11 Technology has played a crucial role in enabling such collaborations. The Teagle Foundation conducted a three-year study across eight institutions to better understand how collaborative online learning platforms could offer high-quality, cost-effective liberal arts education. Findings indicated that structured collaboration to "redesign academic offerings with technology" yielded positive results at the institutional, faculty, and student levels in terms of lower cost and higher success rates.¹² The University of Hong Kong and the Education University of Hong Kong announced a joint initiative, Connect*Ed, that leverages popular social media applications to create dynamic virtual communities of learning where students share their experiences across a variety of health disciplines in efforts to advance cultures of professionalism through best practices.¹³

While cross-institutional collaborations focus on sharing high-quality—and often digitally enabled—resources to reduce costs, the impetus for cross-sector initiatives is two-fold: to develop students' skillsets to match those of the 21st-century workforce, and to use research and innovation centers on campus to generate and iterate new ideas. For example, the European Commission recently approved the +CityxChange program, which aims to develop sustainable technology-enabled solutions in efforts to create smart cities. The Norwegian University of Science and Technology will lead the project, which spans seven cities across Europe and combines efforts from 11 organizations, ranging from large enterprises to nonprofits to educational institutions. 14 Another notable cross-sector collaboration is the partnering of China's Peking University with the Germany-based pharmaceutical company Boehringer Ingelheim to advance research and spur medical discoveries at the forefront of science and technology.¹⁵

Implications for Policy, Leadership, or Practice

Although a variety of collaborations between higher education and industry have emerged, more-explicit frameworks and guidelines are needed to define how these partnerships should proceed to have the greatest impact. The need for this is clear in the many conferences devoted to creating and improving standards for optimal partnerships, including the Yes We Must Coalition National Conference, which focuses on crossinstitutional collaborations to scale efforts at degree attainment for underrepresented student populations¹⁶; Dalhousie University's workshop aimed at fostering crossinstitutional collaboration throughout Nova Scotia by leveraging educational technology¹⁷; and the University-Industry Interaction Conference, which will convene more than 500 education leaders and policymakers in London to outline potential cross-sector collaborations between knowledge, financial, and start-up businesses.¹⁸ One promising model stems from Africa's increased focus on producing 21st-century learners to build a "digital continent." The framework, Digital4Development (D4D) Public-Private Governance Model, identifies synergies across various sectors, including education, that can be modeled for effective policies within collaborations.¹⁹

With numerous collaborations coming to fruition and many more on the horizon, leaders across disciplines and sectors are developing pathways to foster growth, share best practices, and expand their reach. For example, two US-based educational leaders recently launched the Empirical Educator Project, which aims to identify potential cross-sector collaborations, align projects based on institutional needs and capabilities, and highlight the technology tools helping spur innovation to increase student success.²⁰ In addition, three Detroit universities have developed a consortium in the city's postsecondary education sector focused on increasing enrollment of underrepresented student populations and equipping them with the skills required to meet the local economy's needs.21 Institutions are also working across international borders to advance change. The Japan-US Digital Innovation Hub is an ambitious partnership between 16 universities—eight in the United States and eight in Japan—that will create education projects aimed at developing the skillsets required to be successful in the digital age.²²

The Stanford Social Innovation Review addresses the need for today's leaders to obtain and develop a skillset from a variety of different sectors over the course of their professional careers; it also highlights the ability of postsecondary collaborations to begin developing these skillsets in students.23 A notable example is Ravensbourne University London's cross-sector project, which emphasizes the benefits of collaborative projects for students and industry partners. By partnering academic teams with the university's Enterprise and Innovation Centre, teachers are able to embed industry-standard curriculum into the classroom, which allows students to gain real-world working experience by leading projects with actual clients. Additionally, industries benefit from the added client-relations management that students can provide; they can also encourage students to present new ideas and processes that are not yet stifled by the typical business culture, which can lead to untapped innovations in current systems.²⁴

For Further Reading

The following resources are recommended for those who wish to learn more about cross-institution and cross-sector collaboration.

Bridging the Gap: Cross-Sector Collaboration for Skills Development

educau.se/bridgegap

(McGraw-Hill Education, October 11, 2017) The CEO of McGraw-Hill Education moderates a panel discussion that surfaces collaborations aimed at bridging the gap between the skills taught at postsecondary institutions and the skills needed by future employers.

Institutional Collaboration on MOOCs in Education—A Literature Review

educau.se/instcoll

(Anne-Mette Nortvig and René B. Christiansen, *International Review of Research in Open and Distributed Learning*, September 2017) This research explores the barriers and enablers for creating a national massive open online course program across Denmark.

Institutions' Use of Data and Analytics for Student Success: Results from a Landscape Analysis

educau.se/datastudent

(Amelia Parnell, Darlena Jones, Alexis Wesaw, and D. Christopher Brooks, NASPA–Student Affairs Administrators in Higher Education, 2018) As this report describes, three leading member-based associations conducted a survey to examine how student and institutional data could be used to make informed decisions for student success.

Museum-University Partnership Initiative educau.se/mupimatch

(National Co-ordinating Centre for Public Engagement, 2018) During this two-year project, the Museum-University Partnership Initiative developed a matchmaking guide that identifies alignment for programs as well as funding to spur these types of collaborations.

Stronger Together: Increasing Connections Between Academic and Public Libraries

educau.se/collablib

(Maureen Richards, *Collaborative Librarianship*, July 11, 2017) This article shares the positive outcomes possible when academic and public libraries work together to share resources, and it highlights one easy solution: hyperlinking.

Supporting Postsecondary Success: Understanding the College Access and Success Landscape in Boston educau.se/bostoncas

(Eliot Levine, Jill Capitani, and Sarah Young, The Boston Foundation, May 2018) This report showcases a well-executed, cross-sector collaboration between a Boston-based university, a nonprofit, and a national government agency aimed at increasing access to higher education.

Proliferation of Open Educational Resources

2000





Mid-Term Trend: Driving Ed Tech adoption in higher education for the next three to five years

he Hewlett Foundation defines open educational resources (OER) as "high-quality teaching, learning, and research materials that are free for people everywhere to use and repurpose." OER gained momentum in 2001 when MIT founded the OpenCourseWare initiative,25 making instructional materials for nearly 2,000 courses available free online. OER became an issue on the world political stage in 2012 with the adoption of the Paris OER Declaration,²⁶ which explicitly linked OER to the Universal Declaration of Human Rights, which states that "Everyone has the right to education." Adoption of OER has been driven largely by efforts to reduce the costs associated with higher education, though perhaps the most powerful potential outcome of OER is the opportunity for institutions to develop a broader set of investments in course development and infrastructure.

Overview

OER, which can be acquired by anyone, are part of a decades-old movement around open resources that are used at no cost and can be modified by anyone.²⁷ Just as the open-source and open-access communities seek to make certain work products freely available, the OER community aims to do the same for curricular materials. Adopting OER is an alternative to contracting with commercial publishers, whose textbook costs are frequently passed down to students. In contrast, OER are made available under open licenses, such as those from Creative Commons,²⁸ to ensure that they provide the "5R" legal permissions to users: the rights to retain, reuse, revise, remix, and redistribute the content. With OER, instructors have the freedom and flexibility to adapt materials to their specific local needs.

A primary driver of OER adoption is that they decrease textbook costs for students. From 2002 to 2012, textbook costs in the United States increased by 82 percent—triple the rate of inflation²⁹; indeed, College Board estimates that, as of 2018, textbooks cost full-time undergraduates a minimum of \$1,220 per academic year.³⁰ According to a 2014 US study, 65 percent of students said that they had not purchased an assigned textbook because it was too expensive, despite being concerned that not buying it would hurt their grade.³¹ The European Commission's Joint

Research Centre has developed a support framework for higher education institutions to reduce costs and other barriers to education.³² The impact of widespread OER adoption can be magnified when embedded in an overall strategic direction for the institution. The adoption of OER presents an opportunity for instructors to rethink their pedagogies and for institutions to shape how teaching and learning is connected to the broader institutional strategy.³³

OER encompass a wide range of materials, including full courses, course materials, modules, textbooks, videos, assessments, and software. Many OER repositories exist. Some institutions make versions of their course materials available as OER. Examples include the OpenCourseWare initiative and MERLOT, which offers peer-reviewed OER across a range of resource types, disciplines, and audiences.³⁴ Moving beyond individual courses, Lumen Learning offers collections of OER to support specific degrees,³⁵ and OpenStax continues to decrease student textbook costs with Rice University's open publishing initiative.³⁶

Implications for Policy, Leadership, or Practice

The U.K.'s Open University was one of the earliest higher education institutions to adopt OER institution-wide, having launched the OpenLearn platform in 2006.37 Many other institutions around the world have followed suit,38 while projects such as OER Africa are promoting OER adoption across entire regions of the globe. Further, government policy has followed institutional policy in many regions. Europe has invested heavily in open education: In 2013, the European Commission unveiled the Opening Up Education action plan, which encompasses multiple dimensions of open education, including pedagogy, collaboration between individuals and institutions, leadership, strategy, and policy.³⁹ China has likewise integrated OER into government policy through the Ministry of Education's Chinese Quality Courses Project, which funds the development and maintenance of OER and mandates that teaching excellence awards consider OER development.⁴⁰ The United States lags on the policy front. In September 2017, the Affordable College Textbook Act was once again introduced in both the US House of Representatives and the Senate "to expand the use of open textbooks in order to achieve savings for students" and establish a grant program under the Department of Education to create and expand OER use and require its evaluation. It is unlikely that ACTA will pass, however, as it has been unsuccessfully introduced to two previous Congresses.

In the United States, the OER Degree Initiative, led by Achieving the Dream, seeks to further accelerate OER adoption by redesigning courses and degree programs to use OER. In Europe, the European Commission's OpenEdu Project is increasing rates of adoption.⁴¹ Among other goals, such projects aim to reduce costs for students and determine whether OER degree options enable students to complete more college credits and thus progress more quickly toward degrees. Regardless of who creates OER, however, sustainability is an issue; while OER may be free to use and reuse, open is not synonymous with free: OER, like anything else, entail costs for creation and distribution. Stephen Downes articulates several sustainability models for OER, 42 while David Wiley articulates several models for sustaining OER initiatives. 43 The CARE Framework builds on both to address how an individual, institution, or organization can be a good OER steward, by both developing OER and supporting others in doing the same.44

Some US institutions have heavily invested in building OER degree options, launching degrees with "zero textbook cost," or *Z-degrees*. In 2013, Tidewater Community College became the first accredited US institution to launch such a degree; after four academic years, the program has served 10,200 students, with total textbook cost savings of more than \$1 million. Further, a smaller percentage of students dropped courses using OER compared to those using traditional textbooks, and a greater percentage achieved a grade of C or better in both face-to-face and online courses. Such initiatives are gaining traction as entire systems adopt OER. In 2016, the University System of New Hampshire launched a year-long open education initiative, 45 while in 2017 the New York state budget included \$8 million to provide OER to students in the City University and State University of New York systems.46

For Further Reading

The following resources are recommended for those who wish to learn more about the proliferation of OER.

A Collaborative Approach to OER Policy and Guidelines Development in the Commonwealth: The Case of Botswana, Cameroon, and Sri Lanka

educau.se/collabpol

(Ishan Sudeera Abeywardena, Shironica P. Karunanayaka, Michael N. Nkwenti, and Lekopanye Tladi, OER Africa, 2018) One of many publications from OER Africa, this

paper discusses the process of OER policy development across Botswana, Cameroon, and Sri Lanka.

Factors Influencing Open Educational Practices and OER in the Global South: Meta-synthesis of the ROER4D Project

educau.se/opened

(Cheryl Hodgkinson-Williams, Patricia Arinto, Tess Cartmill, and Thomas King, The Research on Open Educational Resources for Development project, 2017) This report synthesizes findings from multiple studies conducted by the Research on Open Educational Resources for Development (ROER4D) project over its five-year lifespan.

Launching OER Degree Pathways: An Early Snapshot of Achieving the Dream's OER Degree Initiative and Emerging Lessons

educau.se/degreepath

(Rebecca Griffiths et al., SRI International, 2017) Led by Achieving the Dream, the OER Degree Initiative seeks to boost college access and student success by supporting the redesign of courses needed for a degree using OER in place of proprietary instructional materials.

Opening the Textbook: Educational Resources in US Higher Education, 2017

educau.se/opentex

(Julia E. Seaman and Jeff Seaman, Babson Survey Research Group, 2017) This study found that while awareness and adoption of OER remains low among faculty in higher education, both show significant yearto-year increases.

Policy Approaches to Open Education— Case Studies from 28 EU Member States

educau.se/polopen

(Andreia Inamorato et al., European Union, 2017) This study provides the first-ever EU-wide overview of the state of play with policies on open education involving all 28 member states. The study provides a full account of each member state's understanding of open education and strategic policy approach.

Survey on Governments' Open Educational Resources (OER) Policies

educau.se/surveyoer

(Sarah Hoosen, UNESCO, 2012) This study is several years old but remains the most recent global data available on government OER policies, regional activity by education level, and funding.

The Rise of New Forms of Interdisciplinary Studies

Mid-Term Trend: Driving Ed Tech adoption in higher education for the next three to five years

ultidisciplinary approaches to higher



education are being introduced by institutions that see valuable alternatives to a traditional, singular degree path. Faculty members, administrators, and instructional designers are creating innovative pathways to college completion through interdisciplinary experiences, nanodegrees, and other alternative credentials, such as digital badges. Researchers, along with academic technologists and developers, are breaking new ground with data structures, visualizations, geospatial applications, and innovative uses of opensource tools. Further, widespread social movements have opened up global conversations about gender, race, class, and politics, which have catalyzed efforts to support new disciplines. These emerging areas could lead to exciting new developments in education, but effective organizational structures must exist to support the collaborations.

Overview

One of the ways in which higher education is at a crossroads is the existential crisis with respect to some traditional disciplines, such as the humanities and history. The increasing interest in interdisciplinary studies offers one way to address the crisis: maintaining the relevance of traditional academic disciplines by fostering new and creative programs of study. Although the advantages of interdisciplinary studies might be self-evident, this trend does conflict with long academic traditions of specialization; interdisciplinary studies can be tenuous. The first in a series of studies on interdisciplinary study in higher education lists ten characteristics that are essential to successful interdisciplinary collaborations, at the top of which are leadership, management, and effective communication. The author warns that the "lack of 1 or more of these 10 characteristics is what causes many higher education [interdisciplinary] ventures to fail."47 The article lists several organizations that are particularly effective in promoting interdisciplinary collaboration, such as the Association des États Généraux des Étudiants de l'Europe and the Interdisciplinary Research Group in Organizational Communication at the University of Ottawa, Canada.

Interdisciplinary studies could potentially solve many complex problems, including emergent issues on the fringes of science, mathematics, fine arts, and the humanities. The founding vision for Humboldt University of Berlin was the provision of a rounded, interdisciplinary experience for its students. Today, its leadership is experimenting with new teaching methods and academic modules such as Diversity of Knowledge, where students of different majors explore topics from multiple angles, as well as multidisciplinary studentled research teams designed to foster internal debate and critical inquiry.⁴⁸ Washington State University (WSU) announced major realignments in terms of combined personnel and resources. WSU's Department of Foreign Languages and Cultures will merge with its Department of Critical Cultures, Gender and Race Studies and its General Studies Humanities and Social Sciences programs to form an entirely new School of Languages, Cultures and Race. With this reorganization in place, undergraduate and graduate students will access courses addressing important current issues that provide in-demand skills and diversity training.⁴⁹

This cross-pollination is also intended to encourage greater collaboration among faculty, staff, and researchers and to address the rapidly changing competencies students need to succeed in the world of work. If today's students will indeed hold a series of jobs throughout their career, as predicted by Argentinean and Nigerian education leaders, then an academic background that enhances their intellectual flexibility and adaptability will surely be an asset. Oreating an experiential curriculum (or permitting students to develop their own) offers myriad possibilities, as well as a new share of potential complications related to issues such as course scheduling and acquiring the requisite credits for graduation.

Implications for Policy, Leadership, or Practice

Today the STEMM disciplines (science, technology, engineering, mathematics, and medicine) are seeing dramatic increases in the number of majors and investment by institutions and foundations. But a report from the National Academies of Sciences, Engineering, and Medicine warns against hyperspecializing within these disciplines. A press release announcing the report asserts that an "emerging body of evidence" shows that STEMM integration with the humanities "is associated with positive learning outcomes that may help students enter the workforce, live enriched lives,

and become active and informed citizens."⁵¹ Attesting to the growing interest in interdisciplinary studies, the National Academies' report also includes a 20-page compendium of more than 200 programs in the United States alone that are interdisciplinary by design.⁵²

In a similar vein, Katherine Bergeron, the president of Connecticut College, recognized this need for interdisciplinary education when she noted that future professions will take graduates all over the world to work in industries that have yet to be defined.53 The desire to adapt higher education to suit modern needs and challenges has led entire institutions, or schools situated within them, to reconsider their current structure. At Hiram College, a liberal arts school in Ohio, discussions about a sweeping redesign of the institution are under way. Among the proposals are to create new interdisciplinary majors in several fields, including fine, performing, and digital arts; crime and justice; and sports management. The institution cited the need to address "urgent challenges of our time" as a catalyst for these changes, which will impact its faculty positions and departments.54

Interdisciplinary studies and initiatives can happen at both the macro and micro levels within institutions. One model is an interdisciplinary center within a school, such as the Cukier, Goldstein-Goren Center for Mind, Cognition and Language at Tel Aviv University's Sagol School of Neuroscience. More than 160 researchers, representing disciplines such as life sciences, medicine, social sciences, exact sciences, education, humanities, and arts, are studying neuroscience and collaborating on a framework for teaching and research in the discipline.⁵⁵ The Applied Communication, Leadership, and Culture program at the University of Prince Edward Island is a new interdisciplinary undergraduate degree that expands the traditional liberal arts curriculum to include cultural awareness, visual communication, and workplacegenerated projects to prepare undergraduates for a variety of careers.⁵⁶ At the micro level, faculty and students at Northeastern University have formed a new interdisciplinary lab, the Violence and Justice Research Laboratory, housed in the School of Criminology and Criminal Justice. The disciplines participating in the lab include psychology, criminal justice, sociology, public health, medicine, and social work.⁵⁷

For Further Reading

The following resources are recommended for those who wish to learn more about new forms of interdisciplinary studies.

Challenge-Led Interdisciplinary Research Programs educau.se/challenge

(Tamantha Stutchbury, Chris Gibson, Lorna Moxham, Clive Schofield, and Geoffrey Spinks, University of Wollongong, Australia, 2013) This white paper reports on challenge-led research programs as an innovative response to the need for a new approach to building interdisciplinary capacity.

A Conference on Interdisciplinary Social Science Studies That Spans Continents

educau.se/filelearn

The Academic International Conference on Interdisciplinary Social Science Studies (ICISSS) provides a platform for academics, practitioners, consultants, scholars, researchers, and policy makers of different backgrounds and experiences to present papers and share their experiences, new ideas, and research.

Interdisciplinary Education and the Student Voice educau.se/interdisc

(Michael Hogan, *Psychology Today*, April 20, 2017) This blog addresses the need to better understand what it takes to be a good interdisciplinary practitioner. Reflecting the research of a new Bachelor in Arts and Sciences (BASc) at University College London, the author summarizes extensive interviews with students enrolled in this program, which launched in 2012.

Interdisciplinary Global Studies

educau.se/integcyb

(Daryl Bockett, *The International Journal of Interdisciplinary Global Studies*, 2018) The Conference on Interdisciplinary Social Sciences regularly publishes research in the form of submitted stand-alone articles and curated journals, which are geared toward a variety of disciplines.

Role of Interdisciplinary Studies in Higher Education in India

educau.se/indiahe

(Auditi Pramanik, Journal of Education and Human Development, June 2014) Published by the American Research Institute for Policy Development, this white paper explores the ways in which new hybridized courses of study have enabled the growth, expansion, and status of interdisciplinary academic inquiry as a field in its own right, and how that approach helps students broaden their disciplinary perspective and job opportunities.

The University of the Future Will Be Interdisciplinary

educau.se/futureuni

(Zahir Irani, *The Guardian*, January 2018) The author of this article argues that cross-disciplinary programs (where one field of expertise serves to inform another) and interdisciplinary programs (where the fields are integrated) enable more context-specific learning tailored to industry needs and job readiness.

Growing Focus on Measuring Learning

Short-Term Trend: Driving Ed Tech adoption in higher education for the next one to two years



his trend encompasses the interest in assessment and the wide variety of methods and tools that educators use to evaluate, measure, and document academic readiness, learning progress, and skill acquisition. As societal and economic factors redefine the skills needed in today's workforce, colleges and universities must rethink how to define, measure, and demonstrate subject mastery and soft skills such as creativity and collaboration. The proliferation of data-mining software and developments in online education, mobile learning, and learning management systems are coalescing toward learning environments that leverage analytics and visualization software to portray learning data in a multidimensional and portable manner.

Overview

According to a recent study by Georgetown University's Center on Education and the Workforce, the economy will have 165 million jobs by 2020 and 65 percent of them will require some form of higher education. Of the 55 million jobs that must be filled by 2020, 5 million requiring postsecondary credentials are estimated to go unfilled due to new job creation and Baby Boomers leaving the workforce. Although this may suggest a gap between qualified graduates and workplace needs, some instead posit a communications gap in learners' abilities to articulate what they have learned and connect it to workforce needs.⁵⁸

So great is the need to measure learning and verify skills that a host of third-party providers have emerged to certify what individuals have learned and can do, regardless of where they obtained their skills.59 This process measures learning and codifies it into competencies, thereby simplifying employers' ability to recruit qualified talent. Employers are increasingly seeking what is called the "T-shaped" graduate: the combination of deep vertical knowledge in a particular domain with a broad set of horizontal soft skills such as teamwork, communications, facility with data and technology, an appreciation of diverse cultures, and advanced literacy skills.60 Institutions therefore need to assist faculty in measuring the learning that leads to skill development so that graduates can showcase and articulate the wide-ranging knowledge and skills they have developed both formally and informally via internships, study abroad programs, supplemental coursework, and so on.

The ability to measure learning supports competencybased hiring. To help learners develop proficiencies and $skills, in stitutions \, are \, increasingly \, of fering \, microlearning$ experiences and alternative credentials to document all forms of learning. A recent study of US colleges and universities found that 94 percent offer alternative credentials.61 Southern New Hampshire University, for example, is building an assessment platform designed to map in-demand soft skills.⁶² The University System of Maryland's Center for Academic Innovation is developing digital microcredentials to help students showcase their knowledge and demonstrate their career readiness.⁶³ As a broader example, the Education Design Lab has partnered with 12 institutions and more than 50 employers to develop learning experiences and microcredentials supporting soft-skill development such as critical thinking, collaboration, and resiliency.64 The creation of granular learning experiences and the increased documentation of learning and skills via alternative credentials indicates a larger trend toward measured learning and personalization.

Implications for Policy, Leadership, or Practice

A shift in postsecondary credentialing is taking place. Although there are more than 4,000 certifying bodies in the United States, only 10 percent are accredited. 65 To the extent that accreditation continues to be valuable in the future, higher education institutions are still in the best position to certify knowledge and make transparent the skills learners gain from their experiences. The need for increasing transparency necessitates the transformation of the traditional transcript. This new transcript would capture a broad range of learning experiences from multiple institutions, perhaps including factors such as research, service learning, internships, study abroad, badges, and co-curricular achievements—along with discrete competencies and outcomes—to better represent what students have learned and are capable of doing.66

Given this move toward greater measurement of learning and evidence-based skills, students should understand the knowledge and skills they will gain before they begin and eventually complete a learning experience of any kind. To this end, platforms are emerging, such as Connecting Credentials, with universal taxonomies that help learners and employers make sense of and compare the value of all postsecondary creden-

tials.⁶⁷ Workcred is another example of a system that helps both learners and employers understand how particular credentials translate into competencies and applicable skills.⁶⁸ These platforms and frameworks are still in their infancy, but they point to a shift toward measured and outcome-based learning in support of adult and lifelong learners who need agility, quality, and transparency in their learning experiences.

Royal Melbourne Institute of Technology (RMIT) is developing RMIT Creds through its 21CC Initiative to complement and enhance its traditional programs, providing the skills and capabilities industry has requested and graduates need. RMIT Creds has two delivery models: its open access model offers a diverse portfolio of microcredentials, adaptable to multiple careers and open to all, while its embedded model exists within its formal programs. RMIT Creds is being developed to provide a more integrated, seamless way for students to acquire critical skills and personal attributes tailored to a particular career choice. Moving forward, the 21CC initiative will work more broadly across RMIT to develop microcredentials to fulfill the breadth of industry capabilities and skills identified for the future workforce.⁶⁹ Another example is Grading Soft Skills (GRASS), a European lifelong learning project in which eight educational institutions from four countries are working together to award badges for soft skills. For example, students at the University of Belgrade who took a Java programming course on a voluntary basis could earn badges for collaboration and communication skills as well as for hard skills such as programming in Java.⁷⁰ In the United States, students in the Illinois State University Honors Program can showcase their accomplishments—including academic excellence, research, and leadership—on their transcripts.⁷¹ Oregon Tech Online currently offers more than 20 microcredentials in health care and information technology and may expand to other assessment-based offerings, including exams, awards, and the successful completion of coding boot camps.⁷² In 2014, Harvey Mudd College began offering microcredentials to students who participate in scientific and high-performance computing workshops and have demonstrated certain levels of competency in programming in environments such as Matlab and Mathematica.73

For Further Reading

The following resources are recommended for those who wish to learn more about the growing focus on measuring learning.

10 Things We've Learned from 21st Century Skills Badging

educau.se/learnbadg

(Education Design Lab, June 2017) Education Design Lab shares findings from its 21st Century Skills Badging

Challenge, including results of its pilot, which included more than 300 university students and 50 employers.

Credentials Reform: How Technology and the Changing Needs of the Workforce Will Create the Higher Education System of the Future

educau.se/credref

(Jamie Merisotis, EDUCAUSE Review, May 2016) This article summarizes the shift in postsecondary credentialing and the needs of the 21st-century workforce; it also discusses how colleges and universities can be positive agents in supporting this change.

Demographic Shifts in Educational Demand and the Rise of Alternative Credentials

educau.se/demoshift

(Jim Fong, UPCEA; Peter Janzow, Pearson; and Kyle Peck, Penn State University, 2016) This research explored the role that alternative credentials play in higher education as reported by 190 institutions, including community colleges, baccalaureate colleges, masters' colleges or universities, and doctorate-granting universities.

Royal Melbourne Institute of Technology (RMIT) 21CC (Micro-credentialing) Project

educau.se/rmit

(Royal Melbourne Institute of Technology, July 2018) RMIT is a global university of technology, design, and enterprise with a proud 130-year history of partnering with industry to develop educational experiences. RMIT developed a leading role within the digital credentialing community both nationally and internationally.

SURFnet Whitepaper on Open Badges and Micro-Credentials

educau.se/enmicro

(SURFnet, 2016) In 2016, SURFnet's Open and Online Education project studied the opportunities that badges might offer in Dutch higher education, which served as the foundation for this white paper on open badges and microcredentials.

Today's Comprehensive Record: An Evolutionary Case Study

educau.se/comprec

(Rodney Parks and Jesse Parrish, *EDUCAUSE Review*, July 2017) Models for curricular gains—including badges, certificates, competencies, and experiential transcripts—become more accessible and valuable. This article discusses the expansion and evolution of the academic transcript.

Redesigning Learning Spaces

Short-Term Trend: Driving Ed Tech adoption in higher education for the next one to two years



s universities engage with strategies that $incorporate {\it digital elements} \ and {\it accommodate}$ more active learning in the physical classroom, they are rearranging physical environments to promote these pedagogical shifts. Educational settings are increasingly designed to support projectbased interactions with attention to greater mobility, flexibility, and multiple device usage. To improve remote communication, institutions are upgrading wireless bandwidth and installing large displays that allow for more natural collaboration on digital projects. Some are exploring how mixed-reality technologies can blend 3D holographic content into physical spaces for simulations, such as experiencing Mars by controlling rover vehicles, or how they can enable multifaceted interaction with objects, such as exploring the human body in anatomy labs through detailed visuals. As higher education continues to move away from traditional, lecture-based lessons toward more hands-on activities, classrooms are starting to resemble real-world work and social environments that foster organic interactions and cross-disciplinary problem solving.74

Overview

According to widespread research and several metaanalyses, active learning is the most effective mode for learning.⁷⁵ Internationally, higher education has embarked on an evolutionary path away from reliance on the lecture to active learning engagements—a shift visible in the design of its learning spaces. The diffusion of active learning practices is mirrored in the rapid growth of the active learning classroom (ALC) in higher education. Attendance at ALC-related events has increased significantly, and EDUCAUSE research identified the ALC as the top strategic technology for 2017.⁷⁶ Together with makerspaces, ALC designs increasingly promote coursework that helps learners discover, invent, solve problems, and create knowledge.

A study at Seattle Pacific University suggests that a course conducted in an ALC increases student engagement and also motivates instructors to engage in more active learning.⁷⁷ Another study conducted at lowa State University investigated how learning space design can impact learner engagement. The study found that removing the spatial barrier between learner and instructor is a key ingredient of active learning engagements and that flexibility and openness were important

factors in promoting a community of learners.⁷⁸ As part of the 4TU project in the Netherlands, four technical universities—Eindhoven, Twente, Delft, and Wageningen—are aiming to develop expertise in engineering education, including by integrating makerspaces into the curriculum.⁷⁹ An Eastern Kentucky University research project studied student usage patterns in learning spaces to determine natural "hot spots"— locations in a room's design that learners use most heavily for specific course activities.⁸⁰ The variety of options in a campus library often can allow nuanced spaces.

As promising as the new learning space technologies are, some studies caution against over-reliance on them. These studies suggest that learning in classrooms that are equipped with the basics of moveable furniture and copious writing surfaces often can be on par with the learning in high-end, technology-laden ALCs. Moreover, the complexities of learning space technology itself can discourage faculty adoption of ALCs and even impose impediments. Given the significant costs associated with building and maintaining high-end ALCs, most institutions can outfit only a small portion of their classrooms in this manner. This has prompted discussion around issues of access equity and led to proposals for an alternative in the form of *learning-ready* classrooms. Such classrooms are equipped with basic, affordable active learning technologies that institutions can implement in more classrooms.81 Leaders in learning space design can take these discussions as a starting point for developing an institutional learning space master plan that includes various ALC designs and diffuses active learning engagements as widely as possible.

Implications for Policy, Leadership, or Practice

Several tools are available to assist institutions with learning space policies, as well as with managing strategic and tactical aspects of learning spaces. The Learning Space Rating System is a set of criteria for scoring a classroom's design with respect to its support for active learning.⁸² FLEXspace is an international collection of detailed examples of learning spaces.⁸³ Examples of toolkits for learning space design include the U.K. Higher Education Learning Space Toolkit.⁸⁴ and North Carolina State University's Learning Space Toolkit.⁸⁵ McGill University has published its own guidelines for designing teaching and learning spaces.⁸⁶

Resources such as these can assist with the creation of learning space master plans, which in turn can promote the alignment of learning space designs with an institution's overall strategic priorities.

Successful leadership in learning space development requires a holistic approach. On one hand, research indicates that the design of learning spaces impacts instructor and learner perceptions and engagement levels and can lead to gains in learning outcomes.87 However, learning space design alone does not guarantee better learning outcomes. Unless the course designs are explicitly adapted to take advantage of the room, outcomes may fall short of expectations. Further, students unfamiliar with ALCs and active learning practices may even resist them.88 To succeed in adopting and implementing these practices, an institution's teaching culture must evolve.89 Even when using an ALC, much depends on the instructor. Ultimately, the goal of greater learner achievement results from a confluence of factors beyond classroom design, including instructor development, tailored course design, and ongoing student support.

To maximize flexibility and ease of use, learning space technology is becoming fully wireless, supported by wireless projectors and roving mobile devices.90 Experimentation is also under way with voice activation for learning space technology, often using off-the-shelf products such as Alexa to leverage a room's technology through a natural language interface.⁹¹ Institutions and vendors are already experimenting with the integration of extended reality (XR) technologies—that is, virtual, augmented, and mixed reality—into learning spaces to support both individual and team learning.92 XR applications span the range of academic disciplines. Dynamic Anatomy is a project at Leiden University and the Leiden University Medical Center to explore the application of virtual reality in medical education.93 Visual display walls, which are similar to XR technology, are becoming a standard part of learning space strategy at various institutions. Examples include Indiana University's IQ-Wall⁹⁴ and Georgia State University's interactWall, which lets students examine close-up images of human organs and take 360-degree tours of Mayan archaeological sites. Stanford University has equipped one of its spaces with a synthetic acoustic system consisting of 40 hanging microphones and 76 speakers to support both class-wide discussion and small group work.95

For Further Reading

The following resources are recommended for those who wish to learn more about redesigning learning spaces.

Educational Equity and the Classroom: Designing Learning-Ready Spaces for All Students

educau.se/eduequity

(Maggie Beers and Teggin Summers, EDUCAUSE Review, May 7, 2018) The authors advocate for a universal design approach to learning spaces, arguing that highend ALCs are typically expensive and account for only 2–5 percent of the classrooms on a campus. As an alternative, they make the case for ubiquitous "learning-ready" spaces that support the needs of all students.

FLEXspace

educau.se/flexspac

FLEXspace is an open and international collection of detailed examples of learning spaces. Each learning space description may contain classroom details, floor plans, photos, and the room's LSRS score.

A Guide to Teaching in Active Learning Classrooms: History, Research, and Practice

educau.se/activclas

(Paul Baepler, J.D. Walker, D. Christopher Brooks, Kem Saichaie, and Christina I. Peterson, Stylus Publishing, 2016) This book offers a thorough treatment of ALC-related teaching topics and challenges, such as managing student resistance and convincing students that working in an ALC is beneficial.

Journal of Learning Spaces

educau.se/jourls

(University of North Carolina at Greensboro) This open, peer-reviewed journal—which is published biannually by the UNCG library—includes research reports, position pieces, case studies, and book reviews and addresses all aspects of learning space design, including operation and pedagogy.

Learning Space Rating System (LSRS)

educau.se/lsrs

(EDUCAUSE) The Learning Space Rating System (LSRS) project provides a set of measurable criteria to assess how well a classroom's design supports and enables active learning. The LSRS credits form the basis for a rating system that will allow institutions to benchmark their environments against best practices in the higher education community.

The U.K. Higher Education Learning Space Toolkit educau.se/lspace

(Universities and Colleges Information Systems Association) This document offers a thorough treatment of learning space design in higher education and is written, as the authors describe, "from the point of view of the professional support services who play a key role in such projects."

Significant Challenges Impeding Technology Adoption in Higher Education

he six challenges described on the following pages were selected by the project's expert panel in a series of Delphi-based cycles of discussion, refinement, and voting; the expert panel was in consensus that each is very likely to impede the adoption of one or more new technologies if unresolved.

Because not all challenges are of the same scope, the discussions here are sorted into three categories defined by the nature of the challenge. The Horizon Project defines solvable challenges as those that we both understand and know how to solve; difficult challenges are ones that are more or less well-understood but for which solutions remain elusive; and wicked challenges, the most difficult, are categorized as complex to even define, and thus require additional data and insights before solutions will be possible. Once the list of challenges was identified, they were examined through three meta-expressions: their implications for policy, leadership, and practice. Below are summaries of the six significant challenges that will be explored more in-depth in this section, with citations and resources included.

Solvable Challenges: Those that we understand and know how to solve

Authentic Learning Experiences

Authentic learning experiences that connect students with real-world problems and work situations are still not pervasive in universities. Authentic learning is an umbrella term for several important pedagogical strategies that seek to immerse learners in environments where they can gain highly practical, lifelong learning skills; these strategies include vocational training, apprenticeships, scientific inquiries, and course projects situated in the community. Additionally, advocates of authentic learning underscore the importance of metacognitive reflection and self-awareness as cornerstones. An increasing number of institutions have begun bridging the gap between academic knowledge and concrete applications by establishing relationships with the broader community; through active partnerships with local organizations, learners can experience the future that awaits them outside the campus.

Improving Digital Literacy

The use of technology encompasses 21st-century practices that are vital for success in the workplace and citizenship. Digital literacy transcends gaining discrete technological skills to generating a deeper understanding of the digital environment, enabling intuitive and discerning adaptation to new contexts and co-creation of content. Institutions are charged with developing students' digital citizenship, promoting the responsible and appropriate use of technology, including online communication etiquette and digital rights and responsibilities in blended and online learning settings. This expanded concept of digital competence is influencing curriculum design, professional development, and student-facing services and resources. Due to the multitude of elements of digital literacy, higher education leaders must obtain institution-wide buy-in and provide support for all stakeholders in developing these competencies. Frameworks are helping institutions assess current staff capabilities, identify growth areas, and develop strategies to implement digital literacy practices.

Difficult Challenges: Those that we understand but for which solutions are elusive

Adapting Organizational Designs to the Future of Work

Increasing attention is being paid to the organizational structure of colleges and universities to better align them with the practices of the 21st-century workplace. Technology, shifting information demands, and evolving faculty roles are forcing institutions to rethink the traditional functional hierarchy. Institutions must adopt more flexible, team-based, matrixed structures to remain innovative and responsive to campus and stakeholder needs. At Ithaka S+R, researchers are beginning a new study to examine the effect of academic organizational structure on decision-making. The findings from this project have implications for institutions' structures and policies. In order to adapt, higher education institutions are examining flexible designs, but they often face steep learning curves and resistance among staff.

Advancing Digital Equity

This challenge was introduced in last year's Horizon Report, with a particular focus on accessibility to broadband internet. In 2017, UNESCO reported that 41

percent of the population in developing countries was online. Further, a 2018 International Telecommunication Union report stated that all 47 least-developed countries "have launched 3G services and over 60% of their population are covered by a 3G network." Although this advancement in internet access is crucial to fostering digital equity, other barriers have surfaced. A lack of high-speed internet, disproportionate access based on socioeconomic status and gender, and recent legislative decisions have hampered progress. Efforts to mitigate these issues are necessary to promote full participation, communication, and education within global society. This challenge directly impacts education because online learning is enabled by high-speed internet access. Furthermore, the bring your own device (BYOD) movement has widened the access gap because not all students have the technology—smartphones, tablets, and laptops—needed to participate.

Wicked Challenges: Those that are complex to even define, much less address

Economic and Political Pressures

Higher education faces a crossroads in sustainability. A spate of collapses for both for-profit and nonprofit institutions in the past two years is calling into question traditional economic models. Some colleges and universities are unable to provide adequate financial aid, which is critical for bolstering enrollment and making education attainable for underserved communities. Further, federal policy shifts are threatening key sources of funding; for example, tightening immigration policies could translate into a decrease in international students—a key population for some institutions.

With faculty and researchers unable to depend on government-funded grants as a source for devising progressive programs and exploring emergent themes, support from corporations and private foundations is more important than ever. However, such partnerships must be nurtured in ways that lead to real student success. External pressures are also requiring institutions to rethink learning paradigms.

Rethinking the Roles of Educators

Educators are increasingly expected to employ a variety of technology-based tools, such as digital learning resources and courseware, and engage in online discussions and collaborative authoring. Further, they are tasked with leveraging active learning methodologies such as project- and problem-based learning. This shift to student-centered learning requires instructors to act as guides and facilitators. Adding to this challenge is the evolution of learning through the rise of competency-based education, which further customizes the academic experience to students' needs. As these technology-enabled approaches gather steam, many institutions are rethinking the primary responsibilities of educators. Related to these shifting expectations are the implications of societal changes and evolving faculty models, in which an increasing percentage of classes are being taught by non-tenuretrack instructors.

The following pages provide a discussion of each of the challenges highlighted by this year's expert panel, including an overview of the challenge, its implications, and a set of curated recommendations for further reading on the topic.

Authentic Learning Experiences

Solvable Challenge: Those that we understand and know how to solve



uthentic learning experiences that connect students with real-world problems and work situations are still not pervasive in universities. Authentic learning is an umbrella term for several important pedagogical strategies that seek to immerse learners in environments where they can gain highly practical, lifelong learning skills; these strategies include vocational training, apprenticeships, scientific inquiries, and course projects situated in the community. Additionally, advocates of authentic learning underscore the importance of metacognitive reflection and selfawareness as cornerstones. An increasing number of institutions have begun bridging the gap between academic knowledge and concrete applications by establishing relationships with the broader community; through active partnerships with local organizations, learners can experience the future that awaits them outside the campus.

Overview

A growing amount of learning takes place outside traditional institutional venues. Learning of course continues to happen in class meetings, laboratory sessions, and study in the library. Today, however, learning increasingly comes through job-shadowing initiatives and study-abroad programs; through projectbased learning with industry and start-ups; and via onsite apprenticeships, virtual internships, and capstone projects for external clients. Such activities are often a key element of authentic learning. Authentic learning is active and experiential, and it can provide students with many of the skills they need when they enter the world of work. Further, it shows students the real-world impact that their academic work can have. For example, the University of Buenos Aires offers extension projects that link academic studies to the community. These projects help students develop critical thinking and reflective capacities, as well as see the direct impact of their decisions and subsequent actions.96

Course experiences situated in real-world contexts can provide students with the intellectual momentum needed in a growing job market. In the United States, more than six million jobs currently remain unfilled, while across Asia, youth unemployment, underemployment, and job dissatisfaction are on the rise.⁹⁷ In addition, most African countries are

facing shortages of human resources and capacity in science, technology, engineering, and mathematics, as well as in agriculture and health disciplines, as the continent's current pattern of skills production does not match labor market demand or development needs. A lack of investment in high-quality facilities and human resources also remains a significant obstacle.⁹⁸ Authentic learning has the potential to shrink these gaps by equipping students with the knowledge and skills needed in today's workplace.

For students, authentic learning augments theory to offer a glimpse into the world of work and a concrete idea of how they might fit within it. Authentic learning can take place early in a student's academic career to complement in-class instruction, or it can serve as part of a professional's midcareer pivot. Through internships, apprenticeships, and job-shadowing scenarios, students are trained or mentored and often earn a stipend or college credit. Simultaneously, they have the flexibility to explore interdisciplinary fields—such as game design, neuromarketing, and informatics—or try out specific roles without having to commit to a full-time engagement. Many companies and higher education institutions recognize the mutual benefit of partnerships; those in industry offer various programs as a means for building their talent pipelines and giving back to the broader community, while academics and students can gain access to leading experts, state-of-the-art facilities, and new methods being tested in practice. These relationships are available to institutions of various types and sizes. A recent report from the American Enterprise Institute asserts that, with the right strategies in place, community colleges "may be able to provide the widest on-ramp to expanding apprenticeships."99

Implications for Policy, Leadership, or Practice

In 2017, the U.K. government introduced the Apprenticeship Levy to change the way apprenticeships are funded and to ultimately meet an ambitious goal to create three million apprenticeships by 2020. These authentic learning experiences provide students with a university-level qualification and employment experience while sharing the cost of education with employers.¹⁰⁰

Learning by doing is a key tenet of authentic learning

and figures prominently in education frameworks such as the Lumina Foundation's Degree Qualifications Profile¹⁰¹ and the Association of American Colleges and Universities' LEAP initiative. 102 Such programs help educational leaders to evaluate new or restructured programs' affordability, as well as their capability to provide high-quality learning for all students—including those historically underserved by higher education.¹⁰³ In many industrialized nations, shorter technical programs that incorporate authentic learning experiences also tend to reduce dropout rates and increase labor participation. In countries such as the United States, Germany, Sweden, and Switzerland, dual programs that combine on-the-job apprenticeships with technical or vocational training have led to youth labor participation rates between 50 and 65 percent.¹⁰⁴ Another example is found at the University of the Western Cape in South Africa, which sets the foundation for students' authentic learning in perpetuity, as becoming a lifelong learner is one of the three "graduate attributes" that all students are expected to attain.105

The trend toward incorporating authentic learning experiences into degree programs continues to grow globally as institutions are pressured to compete for prospective students. This incorporation may involve embedded experiences within a program's curriculum. For example, at Kinneret College, an institution in Israel, upperclassmen can enroll in an elective tourism management course that allows them to assist in the administration of a Mediterranean cruise. According to Dr. Uzi Freund-Feinstein, "We want our students to have a firsthand experience of the elements that are drawing increasingly younger consumers into one of the highest growth categories in tourism."106 Although the students have the same accommodations as regular passengers, they also participate in operational meetings with the ship's dining, housekeeping, engineering, marketing, and sales staff—and they are graded on presentations and field reports that articulate their experiences.

For Further Reading

The following resources are recommended for those who wish to learn more about fostering authentic learning experiences.

Authentic e-Learning in Higher Education

educau.se/desprin

(Jan Herrington, University of Wollongong, 2006) This paper argues that e-learning technologies afford the design and creation of truly innovative authentic learning tasks in higher education environments. The paper also includes a framework outlining 10 elements of authentic tasks.

Innovative Colleges That Give Students Real-World Experiences

educau.se/innovcol

(KQED Mindshift excerpt from Nikhil Goyal's book *Schools on Trial*, 2017) Innovative colleges often share particular characteristics, including small class sizes; a focus on interdisciplinary, seminar, and project-based classes; close contact between professors and students; and opportunities for students to do apprenticeships, real-world projects, or research for credit.

University-Industry Collaboration in Science and Technology in Kuwait and the United Arab Emirates

educau.se/unind

(Rebecca Stern, Afreen Siddiqi, Laura Diaz Anadon, and Venkatesh Narayanamurti, Belfer Center for Science and International Affairs, Harvard Kennedy School, 2017) This policy brief provides new insights into the current state of and future opportunities for strengthening university-industry collaboration in science and engineering in the Persian Gulf; it also presents key findings and policy recommendations.

Vanderbilt Center of Teaching: Extending Learning Outside the Classroom

educau.se/teachoutsi

(Lily Claiborne, John Morrell, Joe Bandy, and Derek Bruff, Vanderbilt University Center for Teaching) From the collaborative learning atmosphere that results as relationships develop outside the classroom to the deep learning that occurs when students practice in the real world what they have theorized about at their desks, field experiences are unmatched in the learning potential they offer.

Why Companies and Universities Should Forge Long-Term Collaborations

educau.se/compunicoll

(Kenneth R. Lutchen, *Harvard Business Review*, 2018) Industry and academia stand to benefit from long-term cooperation; companies gain greater access to cutting-edge research and scientific talent at a time when corporate R&D budgets are increasingly under pressure, and institutions gain access to financial support and research partners at a time when government funding is shrinking.

Work-Based Learning in the States

educau.se/workblearn

(Pat Steele and Anne Kilzer, webinar, National Skills Coalition) This webinar provides an overview of the Work-Based Learning Toolkit and a federal policy update. The presenters also discuss apprenticeship initiatives in their states.

Improving Digital Literacy

Solvable Challenge: Those that we understand and know how to solve



he use of technology encompasses 21stcentury practices that are vital for success in the workplace and citizenship. Digital literacy transcends gaining discrete technological skills to generating a deeper understanding of the digital environment, enabling intuitive and discerning adaptation to new contexts and cocreation of content.¹⁰⁷ Institutions are charged with developing students' digital citizenship, promoting the responsible and appropriate use of technology, including online communication etiquette and digital rights and responsibilities in blended and online learning settings. This expanded concept of digital competence is influencing curriculum design, professional development, and student-facing services and resources. Due to the multitude of elements of digital literacy, higher education leaders must obtain institution-wide buy-in and provide support for all stakeholders in developing these competencies. Frameworks are helping institutions assess current staff capabilities, identify growth areas, and develop strategies to implement digital literacy practices.

Overview

Digital literacy is complex and ever-changing, relevant to all disciplines. It impacts how information is taught, learned, and shared, and it shapes both the technical and social skills needed to succeed. Academic experiences are increasingly influenced by the ways in which students discover, gather, and use the information they encounter. This creates challenges in terms of institutional innovation and resource allocation, and it also ushers in opportunities to prepare students for knowledge work, which is increasingly accomplished online. In its 2017 report Digital Literacy in Higher Education, Part II, the NMC explained how digital literacy is a top priority for higher education, citing a World Economic Forum prediction that by 2020, "35% of the skills considered vital for workplace success will have changed. [...] Fields such as robotics, autonomous transportation, biotechnology, and genomics call for skill sets that revolve around a blend of technical savvy, creativity, and complex thinking." 108

In a recent speech at the U.K. Department of Education's inaugural Skills Summit, Secretary of State for Education Justine Greening explained that U.K. businesses will

need approximately 1.2 million new digitally skilled workers by 2022. When considered on a global level, this need represents a call to action for colleges and universities in countries with larger or expanding economies. Those institutions that have made digital literacy and technology a priority will thrive, according to Robin Ghurbhurun, principal and CEO of Richmond upon Thames College and a Jisc Board of Trustees member.¹⁰⁹

The growing importance of digital literacy is documented in the results of the EDUCAUSE Learning Initiative's annual Key Issues survey, in which digital literacy leaped from 11th in the 2016 survey to 3rd in 2017 (and was 5th in 2018). Despite its growing importance, it remains a complex topic that can be challenging to pin down. Vanderbilt University established an ad hoc group of faculty, administrators, and staff that created a working definition of digital literacy on campus and produced a white paper recommending how to implement digital literacy to advance the university's mission. 111

Implications for Policy, Leadership, or Practice

As digital literacy becomes increasingly important in higher education, initiatives to promote it need explicit definition and support. Those served by higher education also recognize the need for improved digital literacy and articulate where colleges and universities may be falling short. In its report Student digital experience tracker 2017: the voice of 22,000 U.K. learners, Jisc showed that 80 percent of higher education students felt that digital skills are important in their respective careers; however, only half indicated that their courses are preparing them to enter the digital workplace. Jisc Chief Executive Paul Feldman said, "The full benefits of technology to support learning are yet to be realized, with technology more commonly used for convenience rather than to support more effective pedagogy."112 In its 2017 student and faculty studies, EDUCAUSE determined that higher education has a good way to go in adequately promoting literacy. One finding was that "only half of faculty agreed or strongly agreed that their students are prepared to use institutionally specific technology," and another was that "only 25% of students said that they ask their instructors, and only 6% ask their teaching assistants, for technology support for schoolrelated activities."113

At most campuses, the library has long been in the forefront of issues such as information literacy. Recently, some libraries are recasting this issue in terms of the broader, more encompassing framework of technical facility, information literacy, and digital creativity. In 2018, the Virginia Tech University Libraries launched a framework for digital literacy to empower learners to "navigate the complex digital world as both consumers and creators, enabling them to achieve their personal, academic, and professional goals."114 The library at the University of Queensland in Australia also developed a strategic framework for information and digital literacy that is shaping the university's academic policies and practices. Overall, university leaders recognize librarians' potential to serve as digital facilitators, connectors, and collaborators.115

To further advance digital literacy skills, higher education institutions are working to make them a part of formal curricula. Librarians at the University of Western Cape in South Africa recently used the Association of College and Research Libraries' Framework for Information Literacy to create an online tutorial that facilitates collaboration between librarians and instructors in developing curricula to help students to better use digital resources.¹¹⁶ The University of Edinburgh in Scotland has developed a self-paced course, "23 Things for Digital Knowledge," that helps students develop digital and online skills through experimentation and application.¹¹⁷ Singapore Management University (SMU) hosted a "Digital Literacy Day" where a panel of academic and industry experts discussed current job trends and ongoing efforts to develop a digitally competent workforce, starting at the postsecondary level.¹¹⁸ Yet some faculty members have cautioned that digital literacy isn't secured solely through a degree program. "Students cannot completely rely on obtaining such skills from their universities," said Swapna Gottipati, assistant professor of information systems at SMU. "They need to go and get skills from other places—through internships, projects, workshops, or additional short courses."119

For Further Reading

The following resources are recommended for those who wish to learn more about digital literacy.

4 Things to Consider When Teaching Digital Literacy to College Students

educau.se/4thidiglear

(Laura A. Pasquini, EdTech, 2017) With so much emphasis on educating postsecondary students about digital literacy, there are many details to consider with regard to which materials and modes to use in teaching it. Laura Pasquini shares several insights in this article, including that it's critical to start with broad topics and let the conversations and questions flow from there.

Can a New Approach to Information Literacy Reduce Digital Polarization?

educau.se/digipol

(Jeffrey R. Young, EdSurge, 2018) Michael Caulfield, director of blended and networked learning at Washington State University in Vancouver, Washington, has created a manual for higher education institutions to use in teaching students how to discern propaganda from reputable information. This article examines the pros and cons within the subcategory of information literacy.

Developing the Digital Literacies of Academic Staff: An Institutional Approach

educau.se/digilit

(Barbara Newland and Fiona Handley, *Research in Learning Technology*, 2017) To get a handle on the complexities of digital literacy, the University of Brighton in the U.K. has created a Digital Literacies Framework (DLF) to help guide its academic staff. The DLF outlines 38 literacies, which are divided into four categories, and includes research demonstrating where they've succeeded and where work still needs to be done.

Empowerment, Experimentation, Engagement: Embracing Partnership Models in Libraries

educau.se/emexenem

(Brian Mathews, Stefani Metko, and Patrick Tomlin, *EDUCAUSE Review*, 2018) Gone are the days when university libraries were limited to housing books and periodicals and librarians were disconnected from institutional academia. This article shows how today's libraries and librarians are contributing to preparing students for life beyond higher education.

Information Literacy Model for Higher Education Institutions in India

educau.se/infolit

(Swapna G. and B. S. Biradar, *International Journal of Digital Library Services*, 2017) This paper addresses information literacy challenges and opportunities that India's higher education institutions are facing as they prepare their students to meet the demands of an increasingly digital age.

Adapting Organizational Designs to the Future of Work



Difficult Challenge: Those that we understand but for which solutions are elusive

ncreasing attention is being paid to the organizational structure of colleges and universities to better align them with the practices of the 21st-century workplace. Technology, shifting information demands, and evolving faculty roles are forcing institutions to rethink the traditional functional hierarchy. Institutions must adopt more flexible, teambased, matrixed structures to remain innovative and responsive to campus and stakeholder needs. At Ithaka S+R, researchers are beginning a new study to examine the effect of academic organizational structure on decision-making. The findings from this project have implications for institutions' structures and policies. In order to adapt, higher education institutions are examining flexible designs, but they often face steep learning curves and resistance among staff.

Overview

The traditional structure of higher education has been upheld across nearly a thousand years of geographical and cultural borders and through centuries of societal, economic, and political change.¹²⁰ Some higher education officials argue that the need for reliance on the traditional hierarchy has become obsolete because of the internet and unprecedented challenges that higher education faces today.¹²¹ Colleges and universities are finding new ways to integrate faculty from distance and interdisciplinary programs, incorporating a variety of teaching and learning models and mediums, introducing new schools through on-campus mergers or new constructs, and offering more-flexible degree paths and credential options. They're doing so as a means to break the "iron triangle" of postsecondary affordability, quality, and access. They're also making changes to prepare for a "new age" of lifelong learning by incorporating cloud-based software and other technologies—such as social networks, mobile computing, and big data that are helping create digital learning ecosystems that serve lifelong learners.¹²²

Organizational leaders are approaching change management in a variety of ways. Access to data has made business structures more transparent and, in some cases, has further democratized decision-making to ensure that staff, faculty, and leadership have a voice. According to leaders from the U.K.'s University of Surrey, King's College London, and Open University, this approach can help postsecondary institutions be more

inclusive, develop future strategies, and improve their graduate outcomes.¹²³ Attempts to avoid bureaucracy also align with a streamlined workforce and cost elimination. Emphasis has been placed on designing better business models through a stronger focus on return on investment. This involves taking a strategic approach that connects financial practice (such as analyzing cost metrics and resource allocation) with institutional change models and goals.¹²⁴

Recent research described in the report Competency-Based Education: A Study of Four New Models and Their Implications for Bending the Higher Education Cost Curve demonstrates the opportunity that focusing on competencies offers institutions to "break away from traditional, higher-cost instruction models that have proven resistant to change." A few postsecondary institutions, such as Purdue University, Alliant International University, and Rasmussen College, have created college benefit corporations. These represent an alternative business model that "could help colleges adapt to rapid changes and pressures being imposed on the sector." 126

Implications for Policy, Leadership, or Practice

Faculty roles have been and continue to be impacted by organizational change, as well as by broader economic movements. Reflective of today's "gig economy," twothirds of faculty members are now non-tenure, with half working part-time, often in teaching roles at several institutions. This stands as a stark contrast to 1969, when almost 80 percent of faculty were tenured or tenuretrack; today's figures are nearly inverted. Their wages are applying pressure to traditional organizational structures. Indeed, data from the American Community Survey suggest that 31 percent of part-time faculty are living near or below the federal poverty line. This growing contingent workforce of independent contractors and adjunct instructors is putting pressure on institutions to provide better working conditions, including job security, career mobility prospects, health care, and other benefit considerations, 127 and even to change academic spending patterns.¹²⁸ Rethinking tenure programs represents another change to organizational designs that aligns with the future of work. At the University of British Columbia, the revised promotion and tenure guide encourages the creation and use of open educational resources (OER). Pretenure faculty can now receive formal recognition in promotion and tenure for engaging in OER activities.¹²⁹

Organizational structures are continuing to evolve on the administrative side as well. With an emphasis on supporting student success, many institutions are rethinking their student services, which include financial aid, academic advising, and work-study programs. Much of this change is happening within the context of digital transformation, an umbrella term that denotes the transformation of an organization's core business to better meet customer needs by leveraging technology and data. Academic advising—one of the structures of higher education hierarchy projected to continue its evolution—is one area in which institutions are experimenting with new models. 130 This work is also evident through the Integrated Planning and Advising for Student Success (iPASS) cohorts, which support tech-enabled advising with funding from the Bill & Melinda Gates Foundation.¹³¹ Other studentcentered focus points that impact both faculty and administrative personnel include working with faculty and programs to convert courses to flipped and blended models; providing a variety of online learning options so students have enough courses to choose from at key points in their academic career; using technology to monitor student progress and success metrics and execute intervention protocols; and partnering with industry to provide digital badges and certificates to enhance career opportunities. 132

At the March 2017 General Assembly of the German Rectors' Conference, a number of resolutions echoed the ways in which decision-making serves as a key differentiator of the higher education system—specifically, how competition between institutions demands more effective leadership structures. "This [competition] creates tension between local and central structures, and consequently the potential for conflict." Given this, an institution's administration "plays an overarching role that is indispensable for the support processes," and decision-making should occur at both the local and central levels. 133

For Further Reading

The following resources are recommended for those who wish to learn more about adapting organizational designs to the future of work.

7 Things You Should Know about Leading Academic Transformation

educau.se/7thingslat

(EDUCAUSE Learning Initiative, 2015) Higher education's teaching and learning mission is under significant pressure, and colleges and universities are exploring a reorientation around learner success through new course models, learning space designs, and ways of

assessing academic progress. Factors include a focus on stakeholder-centered design, relevance of credentials, and the strategic use of technology.

The Future of Work and What It Means for Higher Education

educau.se/futurwork

(Jeffrey J. Salingo, Workday, 2017) The changing workplace and dual economic threats of automation and the gig economy are necessitating a shift in the purpose and structure of higher education, which must evolve in order to sufficiently equip students for a future of self-directed learning.

Infographic: The Evolution of Student Success educau.se/evolss

(Ed Venit, EAB infographic, 2016) Since student success emerged as a priority in the middle of the 20th century, the structure and models involved have undergone a number of evolutions. Fifty years ago, "student success" referred primarily to student engagement; today it has come to include the first-year experience, degree planning and progress, career development, and much more. This infographic charts how the definition of student success has evolved through six "eras" and ten practice areas over time.

Rethinking and Researching Transformation in Higher Education: A Meta-Study of South African Trends

educau.se/rrtransf

(Petro du Preez, Shan Simmonds, and Anne H. Verhoef, AOSIS Publishing, 2016) This meta-analysis of more than a thousand articles focusing on transformation in South Africa's postsecondary landscape reveals specific approaches and contexts that have influenced how the nation conceptualizes, explores, and researches the topic of change management and adaptation in higher education.

Seven Principles for Effective Change Management educau.se/effectch

(Deloitte, 2016) Effective transformation requires an institution-wide approach to improve and enhance organizational models, operating processes, technology, leadership, and talent models. This article offers seven steps colleges and universities can take to deliver more desirable outcomes.

Advancing Digital Equity

Difficult Challenge: Those that we understand but for which solutions are elusive





his challenge was introduced in last year's Horizon Report, with a particular focus on accessibility to broadband internet. In 2017, UNESCO reported that 41 percent of the population in developing countries was online. Further, a 2018 International Telecommunication Union report stated that all 47 least-developed countries "have launched 3G services and over 60% of their population are covered by a 3G network."134 Although this advancement in internet access is crucial to fostering digital equity, other barriers have surfaced. A lack of high-speed internet, disproportionate access based on socioeconomic status and gender, and recent legislative decisions have hampered progress. Efforts to mitigate these issues are necessary to promote full participation, communication, and education within global society. This challenge directly impacts education because online learning is enabled by high-speed internet access. Furthermore, the bring your own device (BYOD) movement has widened the access gap because not all students have the technology—smartphones, tablets, and laptops—needed to participate.

Overview

The rise of the internet revolutionized how technology is used. While institutions have integrated digital devices into teaching and learning practices, access to and comfort with these tools are uneven. In this context, digital equity refers to equal access to technology, as well as to educators who have the training to implement digital solutions. According to the National Digital Inclusion Alliance, the focus of access has shifted from the availability of broadband infrastructure to "the adoption of a residential broadband connection."135 Although internet access is still not evenly distributed, countries within Central Africa and Southern Asia report some of the highest adoption rates.¹³⁶ A number of countries have reported higher education attainment rates through digital learning solutions, like massive online courses (MOOCs) and open educational resources (OER).¹³⁷ So, while internet penetration has increased significantly, providing global high-speed internet remains a crucial component of this equity challenge, and it must be addressed.

Digital equity also encompasses tool implementation and an understanding of tool use. For learning tools to be effective, educators must have access to adequate and ongoing training and professional development before instructors can help students navigate tools for consumption and creation, they must be digitally fluent themselves. The time and financial commitments for these opportunities pose roadblocks for many institutions. Further, a deeper dive into the student-aged populations reveals a significant gap in usage based on gender, with a higher percentage of male users than female users globally. 138 Technology plays an important role in advancing higher education availability for underrepresented student populations and ensuring the accessibility of web materials for students with disabilities. According to a Connected Learning Alliance report, digital inequities correlate to the economic status of both learners and institutions—highly affluent educational institutions often use technology in more progressive ways, and OER disproportionately benefit these schools.139

Advancing digital equity is a quintessential social justice issue that impacts both developing nations and underrepresented groups throughout the world. In the United States, net neutrality protections—defined as ensuring that internet service providers offer equal access to all content¹⁴⁰—has been at the forefront of many political debates. Prior to the rollback of regulations that upheld net neutrality, 141 many leaders in higher education opposed that move on the grounds that the consequences will disproportionately affect community colleges and smaller institutions that lack the financial resources to ensure their content is prioritized online. Additional concerns include the inability to leverage technologies to provide higher education opportunities to anyone, in any location, exacerbating the digital divide.142

Implications for Policy, Leadership, or Practice

The expansion of technology access, in terms of adoption across a variety of sectors, has been unparalleled. This growth has outpaced the creation of formal policies to ensure equal access. However, countries are leveraging online and blended learning as one way to increase access and advance digital equity. For example, Malaysia's higher education system and its government's efforts to democratize access to it have grown significantly, in part because the government developed a blueprint that highlights blended learning environments as avenues to increase "enrollment and

completion rates for those from disadvantaged social backgrounds."¹⁴³ Digital solutions have also been identified to support postsecondary students with disabilities. Canada's OCAD University Open Research Repository published a report that defines disabilities in the context of formal education and cites a variety of research-supported guidelines aimed at improving access.¹⁴⁴

Education leaders are exploring the effects of bolstering digital equity within formal learning systems, predicting achievable outcomes and identifying lingering challenges. Studies are investigating how advancing digital equity can help close the achievement gap in academic performance between groups of students.¹⁴⁵ Other research cites various social, cultural, and political aspects that bar access for marginalized populations and necessitate better strategic planning. 146 In Australia, one report viewed digital inequity through the lens of an especially disenfranchised group—incarcerated students. As many aspects of education continue to move online, rules blocking prisoner access to the internet persist. This inhibits prisoners' ability to receive a postsecondary education, which is a crucial factor in decreasing recidivism. The study of incarcerated students takes the concept of access a step further, emphasizing the need for education leaders to incorporate marginalized student populations into their existing and future pedagogies.147

While well-defined solutions do not yet exist, many institutions are advancing digital equity through programs and pilots. The New School, a New Yorkbased university, has developed a Digital Equity Laboratory that aims to address persistent structural inequities within technology. The laboratory is intended to serve as an accelerator for innovative policy, practice, and research to develop practical opportunities that promote equitable models of digital access.¹⁴⁸ Massive open online courses (MOOCs) are another avenue to advancing digital equity by increasing distance learning opportunities. The book Routledge International Handbook of Schools and Schooling in Asia reports that "low- and middle-income populations make up 80% of MOOC users. "149 Indira Gandhi National Open University rolled out 11 free MOOCs in 2017, with plans to release over 40 more courses and broadcast 32 television channels comprised of educational programming for university students.150

For Further Reading

The following resources are recommended for those who wish to learn more about advancing digital equity.

Achieving Equity in Higher Ed

educau.se/achieveq

(Ruth Simmons et al., Postsecondary Success, March 26, 2018) This podcast episode shares five educators'

perspectives on strategies to advance equity in and beyond higher education.

How Is Technology Addressing the College Access Challenge? A Review of the Landscape, Opportunities, and Gaps

educau.se/techadd

(Pullias Center for Higher Education and Get Schooled, 2018) For students, the first step toward degree completion is navigating the complex application process. This report reviews technology applications that have contributed to closing the college opportunity gap.

Information Communication Technology in the Educational System of the Third World Countries as a Pivotal to Meet Global Best Practice in Teaching and Development

educau.se/icted

(Akarowhe K, American Journal of Computer Science and Information Technology, December 29, 2017) This article highlights the need for digital learning solutions to increase educational opportunities in developing countries and outlines the benefits, hindrances, and possible solutions.

Internet Access and Education: Key Considerations for Policy Makers

educau.se/intacc

(Internet Society, November 20, 2017) This Internet Society briefing tasks policymakers with developing guiding frameworks to ensure that technology-enabled pedagogies improve the quality of education for all learners.

Training Instructors to Use Tech Tools

educau.se/traininst

(Amy Rottmann and Salena Rabidoux, *Inside Higher Ed*, July 26, 2017) Two higher education leaders share strategies on how to better prepare teachers to incorporate educational technology into teaching and learning practices.

University System of Maryland Gives 21 Grants to Promote Open-Source Textbook Use

educau.se/usmtext

(Michael Brice-Saddler, *The Diamondback*, April 9, 2017) The University System of Maryland allocated 21 minigrants to its state universities to expand OER in an effort to lower costs and increase access to otherwise expensive learning materials.

Working Group on Education: Digital Skills for Life and Work

educau.se/digskil

(UNESCO, September 2017) This report explores the role of education in advancing digital equity as the rise of technology and ICT adoption in a majority of sectors continues to move the needle toward a "digital society."

Economic and Political Pressures

Wicked Challenge: Those that are complex to even define, much less address





igher education faces a crossroads in sustainability. A spate of collapses for both for-profit and nonprofit institutions in the past two years is calling into question traditional economic models. 151 Some colleges and universities are unable to provide adequate financial aid, which is critical for bolstering enrollment and making education attainable for underserved communities. Further, federal policy shifts are threatening key sources of funding; for example, tightening immigration policies could translate into a decrease in international students—a key population for some institutions.¹⁵² With faculty and researchers unable to depend on governmentfunded grants as a source for devising progressive programs and exploring emergent themes, support from corporations and private foundations is more important than ever.¹⁵³ However, such partnerships must be nurtured in ways that lead to real student success. External pressures are also requiring institutions to rethink learning paradigms.

Overview

Institutions across the world have felt the pain of insufficient resources, while enrolled and prospective students suffer in the face of rising tuition. The US Department of Education's National Center for Education Statistics reports that the number of financial aideligible colleges and universities declined by 5.6 percent between 2015–16 and 2016–17, the fourth consecutive decrease since 2012.¹⁵⁴ Many Australian universities are vocalizing concerns after the government announced significant cuts to higher education, a 7.5 percent tuition increase, and a questionable performancebased funding stream. Among the spending cuts being considered are those to research grants and programs that provide aid to low-income students.¹⁵⁵ Regional campuses are being hit especially hard, with 15 percent of anticipated funding being frozen.¹⁵⁶ In Great Britain, Brexit is raising concerns that potentially stricter visa policies will create barriers for international students and thus problems for local institutions already struggling with student demand. Further, the costs associated with conducting research, which is critical for economic innovation, have surpassed what tuition covers. 157

The dimensions of this challenge are nuanced by the location, history, and business model of each institution,

yet the common denominator is that colleges and universities across the board are feeling financial pressures while pursuing missions to ensure affordable education. Forging partnerships to recoup costs can cause institutions to make political decisions based on requests from funders rather than on proven institutional needs. When the University of Oklahoma partnered with the History Channel to provide a new online introductory history course, questions arose about whether the history department was consulted in the process, and several faculty members argued the course's substance and approach did not meet or raise the current value of the history degree.¹⁵⁸ The course was quietly eliminated two years later. Although there is much potential for industry-higher education partnerships, they must be designed and implemented in ways that yield authentic and measurable student gains. 159

Of course, innovation and partnerships are luxuries in war-torn countries, where education is secondary to a focus on survival. Many refugees who fled Syria and Iraq, for example, now reside in the European Union and countries where local governments and institutions are devising accessible and affordable education strategies. Germany's Kiron University launched a crowdfunding campaign to support the tuition-free enrollment of refugees in five different degree tracks. Meanwhile, the World University Service of Canada places refugees in universities across the country with funding from grants and student unions. ¹⁶⁰ The Prime Minister of Malaysia recently announced that the country would become an inclusive education hub for refugees who are willing to relocate there or who have access to online courses. ¹⁶¹

Implications for Policy, Leadership, or Practice

During periods of economic tumult, policy changes are more likely to directly impact the affordability of higher education because tuition rates and caps are often associated with governmental response to student debt. In the United States, the American Association of State Colleges and Universities reports that a national slowdown in state tax revenues is prompting many policymakers to slash or reconsider investments in higher education, raising issues such as performance-based funding and dual enrollment. [62] Institutions are exploring alternative avenues for reducing costs, including adopting open educational resources. [163] In

a number of European countries, policymakers have ensured tuition-free enrollment at public institutions, sparking a flurry of interest from international students. The Norwegian government has done so, deeming higher education a vital stimulant for the health of the national economy. Further, Iceland's Student Innovation Fund enables students to gain real-world experience working with institutions and companies on research projects. 165

Institutional leaders are finding creative ways to circumvent budget challenges, such as pooling resources around technology, research, and innovation agendas.¹⁶⁶ A transatlantic partnership between Arizona State University and Dublin City University is leading to a growing body of research on and applications for Internet of Things technologies, including the development of smart stadiums as a precursor to smart campuses. 167 Australia and Singapore formed the Comprehensive-Strategic Partnership to deepen cooperation on education programs.¹⁶⁸ Their forthcoming 2018 Innovation Festival will feature hackathons and workshops that convene university students, researchers, scientists, and others from both countries to collaborate on building science and business initiatives. 169

Despite economic downturns, institutions are finding solutions to support innovation among faculty, staff, and students. For example, in 2017, George Washington University pledged to expand agreements between corporations and faculty as a solution to competition for federal funding. Subsequently, a professor was awarded a \$5.3 million grant with a patent company to investigate plasma-based cancer treatment.¹⁷⁰ Oxford University champions opportunities for its community to start new businesses. Oxford University Innovation has raised more than £500 million in external investments, while its Startup Incubator has nurtured 70 Oxford University entrepreneurial ventures since 2011, including DeepReason.ai, "a Knowledge Graph Management System that can integrate seamlessly with various enterprise, and public, data sources to perform fast and intelligent reasoning."171

For Further Reading

The following resources are recommended for those who wish to learn more about the economic and political pressures confronting higher education institutions.

177 Private Colleges Fail Education Dept.'s Financial-Responsibility Test

educau.se/177priv

(Chris Quintana and Joshua Hatch, *The Chronicle of Higher Education*, 2017) With 112 nonprofit and 65 forprofit institutions failing the latest US Department of Education test for financial responsibility, questions

arise about institutions' operational strategies. However, the scoring methodology has been met with mixed feelings.

The Decline of the Midwest's Public Universities Threatens to Wreck Its Most Vibrant Economies

educau.se/midpub

(Jon Marcus, *The Atlantic*, 2017) This article articulates concerns over a lack of adequate federal funding for university research, which has been declining in the United States since 2008. As this article highlights, state universities in the Midwest receive significantly less in endowment money than major private institutions, even though they enroll more students.

From Status Quo to Status Go: Scaling Innovation in Higher Ed

educau.se/scalinno

(Vincent Del Casino Jr., *The Evolllution*, 2018) This article's author, a VP of academic initiatives and student success, refutes the narrative that higher education does not adapt to the continuous shifts in political climate. He posits that innovation and creative change are more common in institutions than typically perceived.

The High Human Costs of Defunding State Universities

educau.se/defustat

(Seth Sandronsky, *Capital & Main*, 2017) Leaders and practitioners from the California State University system convened at the state capitol to discuss and bring greater visibility to the funding issues plaguing its institutions and hampering faculty and student success.

South Africa Embraces Free Higher Education, But Concerns Remain

educau.se/saembr

(Ellie Bothwell, *Times Higher Education*, 2018) More than 90 percent of South African households are being promised free education, but institutional leaders express anxiety over the program's lack of sustainability; they also worry that the process to manage registration has yet to be fine-tuned.

Struggling Universities Will be Shut Down, Not Saved—It's Not Fair for Students

educau.se/struguni

(Gillian Evans, *The Guardian*, 2018) This article details the complex relationship between government and higher education in the U.K. While regulators may perceive shutting down institutions as an important weeding out process, the students enrolled in defunded universities become victims to lost recognition of learning.

Rethinking the Roles of Educators

Wicked Challenge: Those that are complex to even define, much less address



ducators are increasingly expected to employ a variety of technology-based tools, such as digital learning resources and courseware, and engage in online discussions and collaborative authoring. Further, they are tasked with leveraging active learning methodologies such as project- and problem-based learning. This shift to student-centered learning requires instructors to act as guides and facilitators. Adding to this challenge is the evolution of learning through the rise of competency-based education, which further customizes the academic experience to students' needs. As these technology-enabled approaches gather steam, many institutions are rethinking the primary responsibilities of educators. Related to these shifting expectations are the implications of societal changes and evolving faculty models, in which an increasing percentage of classes are being taught by non-tenure-track instructors.

Overview

Academic titles such as professor of biology, assistant professor of linguistics, and adjunct instructor of political science may communicate specific subject-matter expertise, but they fail to capture the breadth of knowledgeneeded to effectively educate current college and university students. In their service to the teaching and learning mission, faculty are increasingly expected to serve as learning architects, guides and facilitators, and assessment specialists. They are expected to understand and employ the latest technological tools for learning, teaching, and assessment in interactive classrooms; work with a variety of course models, including face-to-face, blended, flipped, and online learning; and nurture in their students skills such as critical thinking for evolving professional careers.

Postsecondary educators have always been expected to structure current information into a curriculum and make it interesting for all students. But never has the role demanded a heightened level of technological expertise and a sense of mounting pressure to attract, teach, and retain students who are bombarded by countless digital distractions via mobile devices. An article in the *Baraton Interdisciplinary Research Journal* addresses how information and communications technology (ICT) is shifting traditional teaching methods in academia; it concludes that "teachers should make a paradigm shift in their roles as knowledge experts to a

learning facilitator, since their ICT-savvy students have a lot to share with each other and their teachers." As educators rethink their roles, perhaps one of the biggest shifts is a willingness to more fully embrace the realities of teaching virtually. Indeed, some faculty have sought not only to embrace digital learning but to humanize it. For example, some are exploring various uses of technology that incorporate hand-drawn elements into online lectures, 174 while others are portraying characters to bring ancient languages to life. 175 Still others are taking advantage of virtual reality, such as health program faculty members who are using it to put students in the position of patients. 176

As the working world changes, so too must the roles of educators and higher education continue to evolve. Diane Harrison, president of California State Northridge, suggests that higher education has only begun its efforts to reinvent itself.¹⁷⁷ In the U.K., university faculty members are collaborating with industry professionals to develop degree apprenticeships that will better connect higher education to technical skills and employment. 178 In addition to changing how classes are taught, technology has added a more complex dynamic to the faculty-student relationship. Universities and colleges stress that faculty members should have a more personal connection with their students. Today, text messages, websites, email, instant messaging, and social media have led to a new landscape in which faculty are always accessible and visible to their students. While this appears to be a plus for students and parents looking to ensure faculty attention and accessibility, it places further demands on educators to seemingly always be on call.179

Implications for Policy, Leadership, or Practice

Educators must position themselves to respond to rapid changes in technology and its impact on teaching. In her research, University of Nigeria Professor Grace Offorma examined what universities must do to support the goals of Sustainable Development. This focus begins with rethinking university teaching, including everything from institutions' organizational structure, to curricula, methods, and instructional media. According to Offorma, "It requires a teaching process that is action-oriented, [involves] reconstruction of knowledge and active participation of learners with appropriate resource materials." 180

Faculty members' evolving roles naturally involve the medium through which they teach; how dramatically this shifts also impacts institutions at large. Wawasan Open University in Malaysia was established in 2006 to offer working Malaysians access to quality higher education via open distance learning. With its foundation in distance learning, WOU hosted a roundtable workshop in 2016 for education experts to look deeper into new forms of teaching, learning, and assessment in an interactive world. WOU Professor Santhiram Raman said, "Online learning, flexible learning, mobile learning, OERs and MOOCs, collaborative platforms supporting peer-to-peer learning and co-creation of knowledge supported by learning analytics are some of the interesting developments of our time that could lead to transformational changes in the way higher education institutions conduct their core activity and view the scope of their markets."181 For example, technologies such as lecture capture systems mitigate the need for faculty to revisit challenging content during class time, as recordings are available online and can sometimes be augmented with supporting resources for challenging concepts.182

As educators' roles have been transformed by new methods, media, and modalities, students' drive to enroll in online classes has heightened, signaling a shift toward virtual teaching. A 2018 Babson Survey Research Group report showed that between fall 2015 and 2016, the number of students enrolling in at least one online class increased by 5.6 percent, growing again this year to mark 15 consecutive years of enrollment increase.¹⁸³ Nevertheless, interest in the face-to-face dimension remains strong. The 2017 ECAR studies of undergraduates and faculty found that student and faculty preferences regarding learning environments are closely aligned, with 79 percent of students and 71 percent of faculty expressing preference for hybrid course models.¹⁸⁴ These studies further suggest that faculty remain interested in increasing engagement with options and technologies, including collaboration tools, video and media, and open educational resources (OER).

For Further Reading

The following resources are recommended for those who wish to learn more about rethinking the roles of educators.

5 Trends Poised to Shake Up Higher Education in 2018 educau.se/5trenshak

(Autumn A. Arnett, Education Dive, 2018) See what one higher education industry expert sees as the top factors that will shape colleges and universities this year and what it means for educators, students, and higher education institutions as a whole.

International Trends in Higher Education 2016–17

educau.se/trendglob

(International Strategy Office, Oxford University, 2017) This in-depth report from Oxford University addresses worldwide developments and changes in higher education. Specifically, it investigates changes that impact "international student mobility, international research collaborations, the relationship between universities and governments, rankings, and international expansion in the form of branch campuses."

It's Official—Higher Education Students Want Staff to Be Better with Digital, Not to Use More of It

educau.se/bettdigi

(Tabetha Newman and Helen Beetham, Jisc, 2017) When it comes to using digital resources and technology in the classroom and beyond, teachers and staff need to up their game. This is according to the 22,000 students surveyed, who indicated that they don't necessarily need more technology—they want instructors to better understand and use the tools they already have.

Knowledge for Professional Learning

educau.se/knowpl

(Institute of Educational Technology, The Open University) The Institute of Educational Technology highlights its research on professional learning, which has impacted higher education institutions in the U.K. and internationally. This article also offers insights into the students enrolled in MOOCs and the faculty who teach them.

Rethinking Higher Education and Its Relationship with Social Inequalities: Past Knowledge, Present State, and Future Potential

educau.se/socineg

(Theocharis Kromydas, Palgrave Communications, 2017) The issues of social justice and inequality are topics that have risen to points of people's interest, conversations, and actions. This research delves into these issues as they pertain to higher education and the roles it can play in making a difference in educating people of all economic backgrounds.

Rethinking Higher Education for Thailand 4.0 educau.se/thaihe

(Prompilai Buasuwan, *Asian Education and Development Studies*, 2018) Thailand 4.0, a policy adopted by the Royal Thai Government, was intended to foster creativity, innovation, inclusivity, and sustainability. This research discusses the key challenges and gaps that higher education institutions in Thailand are facing in following the policy's implementation.

Important Developments in Educational Technology for Higher Education

he six developments in educational technology detailed in this section were selected by the project's expert panel using the Horizon Project's Delphi-based process of iterative rounds of study, discussion, and voting. In the NMC Horizon Project, educational technology is defined in a broad sense as tools and resources that are used to improve teaching, learning, and creative inquiry. While many of the technologies considered were not developed for the sole purpose of education, they have clear applications in the field.

The technology developments that the members of the expert panel agreed are very likely to drive technology planning and decision-making over the next five years are sorted into three time-related categories—nearterm developments that are expected to achieve widespread adoption in one year or less; midterm developments that will take two to three years; and farterm developments, which are forecasted to enter the mainstream of education within four to five years. Each technology development opens with an overview of the topic.

The initial list of topics considered by the expert panel was arranged into categories that were based on the primary origin and use of the technology. The potential applications of the featured technologies, specifically in the context of global higher education, were considered in a series of online discussions by the expert panel.

The expert panel was provided with an extensive set of background materials when the project began that identified and documented a range of existing technologies used in education and other areas. The panel was also encouraged to consider emerging technologies whose applications for higher education institutions may still be distant. The panel also proposed developments in technology that were new to the NMC Horizon Project; a key criterion for the inclusion of a new topic in this edition was its potential relevance to teaching, learning, and creative inquiry in higher education.

In the first round of voting, the expert group reduced the master set, shown on the next page, to 12 developments in technology that were then researched in much greater depth by the NMC staff. Each was then written up in the format of the NMC Horizon Report and used to inform the final round of voting. Technology

developments that do not make the interim results or the final report are often thoroughly discussed. Sometimes a candidate technology does not get voted in because the expert panel believes it is already in widespread use in higher education, or, in other cases, they believe it is more than five years away from widespread adoption. Some technology developments, while intriguing, do not have enough credible project examples to substantiate them.

A key criterion for the inclusion of a new technology development in this edition was its potential relevance to teaching, learning, and creative inquiry in higher education.

There are currently seven categories of technologies, tools, and strategies. These are not a closed set but rather are intended to provide a way to illustrate and organize technologies into pathways of development that are or may be relevant to learning and creative inquiry. The list of seven categories has proven fairly consistent, but new technologies are added within these categories in almost every research cycle; others are merged or updated. Collectively, the categories serve as lenses for thinking about innovation; each is defined below.

- Consumer technologies are tools created for recreational and professional purposes and were not designed, at least initially, for educational use—though they may serve well as learning aids and be quite adaptable for use in colleges and universities. These technologies find their ways into institutions because people are using them at home or in other settings.
- Digital strategies are not so much technologies as they are ways of using devices and software to enrich teaching and learning, whether inside or outside the classroom. Effective digital strategies can be used in both formal and informal learning; what makes them interesting is that they transcend conventional ideas to create something that feels new, meaningful, and 21st-century.

- > Enabling technologies are those technologies that have the potential to transform what we expect of our devices and tools. The link to learning in this category is less obvious, but this group of technologies is where substantive technological innovation begins to be visible. Enabling technologies expand the reach of our tools, making them more capable and useful.
- Internet technologies include techniques and essential infrastructure that help make the technologies underlying how we interact with the network more transparent, less obtrusive, and easier to use.
- > Learning technologies include both tools and resources developed expressly for the education sector, as well as pathways of development that may include tools adapted from other purposes that are matched with strategies to make them useful for learning. These include technologies that are changing the landscape of learning, whether formal or informal, by making it more accessible and personalized.
- > Social media technologies could have been subsumed under the consumer technology category, but they have become so ever-present and so widely used in every part of society that they have been elevated

- to their own category. As well-established as social media technologies are, they continue to evolve at a rapid pace, with new ideas, tools, and developments continually coming online.
- > Visualization technologies run the gamut from simple infographics to complex forms of visual data analysis. What they have in common is that they tap the brain's inherent ability to rapidly process visual information, identify patterns, and sense order in complex situations. These technologies are a growing cluster of tools and processes for mining large data sets, exploring dynamic processes, and generally making the complex simple.

The following pages provide a discussion of the six technology developments highlighted by the 2018 Higher Education Expert Panel, who agree that they have the potential to foster real changes in education, particularly in the development of progressive pedagogies and learning strategies, the organization of teachers' work, and the arrangement and delivery of content. As such, each topic includes an overview of the technology; a discussion of its relevance to teaching, learning, or creative inquiry; and curated project examples and recommendations for further reading.

Consumer Technologies

- > Drones
- > Real-Time Communication
- > Robotics
- > Wearable Technology

Digital Strategies

- > Games and Gamification
- > Location Intelligence
- > Makerspaces
- > Mind Uploading
- > Preservation and
- Conservation Technologies

Enabling Technologies

- > Affective Computing
- > Analytics Technologies
- > Artificial Intelligence
- > Dynamic Spectrum and TV White Spaces
- > Electrovibration
- > Flexible Displays
- > Media Production Technologies
- > Mesh Networks
- > Mobile Broadband
- > Mobile broadband
- > Natural User Interfaces
- > Near Field Communication
- > Next Generation Batteries
- > Open Hardware
- Software-DefinedNetworking
- > Speech-to-Speech Translation
- > Virtual Assistants
- > Wireless Power

Internet Technologies

- > Bibliometrics and Citation Technologies
- > Blockchain
- > Digital Scholarship Technologies
- > Internet of Things
- > Next Generation LMS
- > Syndication Tools

Learning Technologies

- > Adaptive Learning
- Technologies
 > Microlearning
 Technologies
- > Mobile Learning
- > Online Learning
- > Virtual and Remote Laboratories

Social Media Technologies

- > Crowdsourcing
- > Online Identity
- > Social Networks
- > Virtual Worlds

Visualization Technologies

- > 3D Printing
- > GIS/Mapping
- > Information Visualization
- > Mixed Reality
- > Video Walls
- > Virtual Reality

Analytics Technologies

Time-to-Adoption Horizon: One Year or Less



growing focus on measuring learning is an accelerating trend in educational settings, and analytics technologies are the cornerstone. This category of technologies encompasses a diverse array of tools and applications that turn data into information. Data are the currency of the digital economy driving the information age, in which finding ways to collect, connect, combine, and interpret data to more clearly understand learner capabilities and progress can fuel personalized and adaptive learning experiences.¹⁸⁵ In the past 20 years, measuring student learning has evolved from passive and latent metrics including semester/quarter grades, grade-level promotion, and graduation rates to interactive and real-time metrics that recommend adjustments to meet learners' needs and inform faculty decisions about curriculum and pedagogy.¹⁸⁶ Understanding how to use new data tools and developing analytic skills, including data literacy, computational thinking, and coding, is essential for faculty and students to advance the understanding and use of big data in educational settings.

Overview

Consumer technologies and services have long embraced collecting and analyzing user data to improve customer experiences and increase efficiency. Higher education's early forays into analytics generally concerned administrative processes and since then have spread to include learning analytics focused on student success. The vast data collected by institutional systems can be used to track student activities, behaviors, performance, and interests to tell a story about individual learners' experiences. Analytics can benefit areas including students' time to degree, learning outcomes, recruitment, alumni relationship management, and research productivity.¹⁸⁷ Analytics technologies can move colleges and universities from having a surplus of data but a deficit of information to being able to make data-informed, researchbased decisions for students and for the institution. As analytics tools and capabilities increase, an area of growing concern are the ethical issues surrounding the ways data are used.¹⁸⁸

The principle underlying analytics is similar for education and commercial pursuits—examining large amounts of data, looking for correlations and patterns that would otherwise be difficult or impossible to discern, and

using that information to personalize and improve the experiences of end users.¹⁸⁹ A range of specific tools powers analytics, including database management systems, data warehouses (structured data) or data lakes (unstructured data), business intelligence reporting tools, visualization software, modeling and predictive analytics tools, and text analysis functions. 190 These technologies are typically implemented not by individual instructors but rather at the enterprise level of information technology architecture. Student information systems and LMSs increasingly feature real-time analytics dashboards with separate views for instructors, students, advisors, and administrative staff.¹⁹¹ These different perspectives support users in various roles across a campus in their efforts to describe and understand both what happened and also why it happened.

Institutions that can effectively harness the power of the data they collect, combined with sophisticated algorithms and machine learning that can analyze the data, will see benefits in both administrative and academic functions. Analytics can identify at-risk students and trigger interventions, while also informing adaptive learning tools that can help advanced students stay challenged. Gartner describes the power of analytics as being both predictive¹⁹² (what will happen) and prescriptive¹⁹³ (how we will make it happen). Harnessing the power of analytics technologies is key to achieving a better model for optimized learning.¹⁹⁴

Relevance for Teaching, Learning, or Creative Inquiry

The ability to survey historic, demographic, behavioral, programmatic, performance, social, and other quantifiable aspects of students and analyze vast amounts of such data provides an unprecedented opportunity for colleges and universities to improve student outcomes. The findings from analytics services can also be invaluable in helping individual students understand how to guide and improve their own learning. Empowering students to discover the educational paths that best suit them—and to be able to customize their learning path in real time—is one of the most significant opportunities for analytics. In this way, analytics technologies are changing expectations for how students navigate through the curriculum and degree programs.

In many ways, higher education today is undergoing a transformation from what it was just a generation or two ago, and central to much of that transformation is the introduction of technology into virtually all of an institution's administrative and academic functions. Many institutional faculty and staff, however, are unfamiliar or uncomfortable using technology in some of the ways that it promises to disrupt teaching and learning. Organizations such as the Learning Analytics Collaborative help make sense of the practical applications of analytics in education by bringing together a global community of educational visionaries, researchers, and data scientists to address analytics-powered issues like deeper learning approaches, to address concerns about data privacy, and to inform practices to humanize machine learning and Al support.¹⁹⁵ Other kinds of organizations, such as the Bill & Melinda Gates Foundation, have invested heavily in digital learning solutions that harness the power of analytics technologies to create personalized and adaptive learning experiences for students.¹⁹⁶ When adaptive technologies are paired with a learner dashboard, students stay informed of their individual progress and faculty can discover opportunities to make course corrections to better meet students' learning needs.

Analytics technologies can also enable students to investigate educational and career options. LinkedIn¹⁹⁷ and Khan Academy¹⁹⁸ are using analytics to provide customized college and career pathway recommendations, and institutional analytics services can help students understand how various course options would accelerate or slow their progress toward particular degrees. Meanwhile, analytics is becoming an academic subject in its own right. Arizona State University Online now offers a graduate certificate in Advanced Analytics in Higher Education, which "prepares professionals to conduct advanced analytics and assist university personnel in making data-driven decisions for higher and postsecondary education."199 In the U.K., the Higher Education Commission released a report that said "Learning analytics has the potential to be enormously powerful for improving the student experience of university,"200 and Jisc is leading an effort that includes 50 institutions to develop a national learning analytics service.201

Analytics Technologies in Practice

The following links provide examples of analytics technologies in use that have direct implications for higher education.

Driving Persistence and Retention with Data

educau.se/baysoul

The American Women's College at Bay Path University, an access institution supporting largely nontraditional

students, is committed to using learning and engagement analytics to drive intervention strategies aimed at student success and completion.

Learning Analytics Fellows Program

educau.se/indss

The Indiana University Bloomington's Learning Analytics Fellows Program supports faculty-driven research projects that use learning analytics to better understand and improve student engagement, retention, and success.

Lehman 360

educau.se/leh360

Developed by Lehman College/City University of New York, Lehman 360 brings student data from multiple data sources into a single, easy-to-use view that allows students to stay up-to-date with the information they need in an attractive mobile interface.

For Further Reading

The following articles and resources are recommended for those who wish to learn more about analytics technologies.

Institutions' Use of Data and Analytics for Student Success

educau.se/datass

(Amelia Parnell, Darlena Jones, Alexis Wesaw, and D. Christopher Brooks, EDUCAUSE, April 11, 2018) This joint report by EDUCAUSE, AIR, and NASPA examines the current landscape of institution's' use of data and analytics for student success.

Learning Analytics

educau.se/edtecla

(Office of Educational Technology, US Department of Education) This brief and companion publication summarize data mining and data analytics as it applies to learning. It outlines the research possibilities and practical applications of analytics in educational environments as related to the US Department of Education's National Educational Technology Plan. Specifically, it addresses ways to use online learning system data to improve instruction.

Machine Learning, Big Data and the Future of Higher Ed

educau.se/machle

(Vincent Del Casino Jr., Inside Higher Ed, March 21, 2018) Analytic technologies have much to offer colleges and their students, but we need to be mindful that the risks don't outweigh the gains.

Makerspaces

Time-to-Adoption Horizon: One Year or Less







he turn of the 21st century signaled a shift in the types of skills with value in a rapidly advancing world. The question of how to renovate or repurpose classrooms to meet the needs of the future continues to be addressed through makerspaces—workshops that provide tools and learning experiences to help people carry out their ideas. Makerspaces are rooted in the maker movement, a following that comprises artists, technology enthusiasts, engineers, builders, tinkerers, and others with a passion for making things. In this landscape, creativity, design, and engineering are making their way to the forefront of educational considerations, as tools such as 3D printers, robotics, and 3D-modeling web-based applications become accessible to more people. A recent addition to makerspaces is extended reality (XR), which eliminates limitations to physical space by harnessing 3D imagery to simulate a 360-degree view of an environment. Proponents of makerspaces for education highlight the benefit of engaging learners in nurturing higher-order problemsolving through hands-on learning.

Overview

A renewed emphasis on tangible innovations and inventions has brought makerspaces to the forefront of academic priorities. Makerspaces are empowering a new generation of creators, bringing together experts and novices from a variety of disciplines to design, build, invent, and rethink various products. In the process, they are transforming the educational landscape by promoting a hands-on aspect of learning once reserved for professionals in specific trades or those in product-focused roles. Makerspaces have emerged as promising experiential learning environments that support the development of future-ready skills, such as collaboration, critical thinking, creativity and innovation, communication, and problem solving.²⁰² Popular Science reports that there are nearly 1,400 makerspaces globally.²⁰³ While initially hailed as a bridge between higher education and industry, makerspaces have enabled students to design, prototype, create, and iterate using computers, power tools, 3D printers, arts and crafts, and electronics. They have also brought a playful, active, and hands-on dimension to the student experience.204

University makerspaces and fabrication laboratories ("fab labs") vary considerably, based on the goals of each space and the types of making they support. Some institutions, such as the University of Delaware, use the makerspace as a way to introduce design and creative thinking methods into the engineering curriculum. Other makerspace programs, such as the think[box] at Case Western Reserve University, have a community outreach dimension to encourage local entrepreneurship.²⁰⁵ In many cases, the spaces marry traditional and technological tools—it might not be surprising to find students alternating between using a sewing machine or laser cutter and designing using CAD software. Unlike a traditional lab, these spaces are typically open to students of any major, for purposes that are curricular, extracurricular, or simply of personal interest.206

There is no "one size fits all" version of academic makerspaces in terms of equipment or staffing guides. However, some institutions, such as the University of Washington, have created guides for others to use, with recommendations on tools and equipment, space configuration, and furniture.207 Other institutions, such as the University of Calgary, supply maker pedagogy resources, materials selection criteria, and project ideas.208 Academic makerspaces serve a powerful, highly democratized research purpose. As the Royal Society's Joanna Dally and Francis Downey noted in a recent article, "An increasingly connected global network of makerspaces and home-based researchers is also generating ground-breaking knowledge."209

Relevance for Teaching, Learning, or Creative Inquiry

Makerspaces can serve as a source for strong community ties. In fact, some government funding has been earmarked for such endeavors. For example, thanks to a \$350,000 grant from the California Community Colleges Maker Initiative (CCCMI), Sierra College can support full-time personnel who will create partnerships with community makerspaces near three of the college's campuses. CCCMI, which has awarded funding to 25 community colleges statewide, focuses on preparing graduates for STEM careers through the development of makerspaces, entrepreneurship, and maker-themed curriculum, as well as hands-on internships with local employers. Additionally, current and former students can teach others as makerspace instructors in areas such as 3D printing and Arduino programming.²¹⁰

International academic partnerships with strong maker components are also on the rise. The new Global Innovation Exchange graduate program, developed by the University of Washington and Tsinghua University in China, enables students to create and iterate in a learning environment constructed around a vast makerspace with built-in facilities and tools for brainstorming.²¹¹ This technology innovation program involves close collaboration with business and technology companies. Such facilities can also extend beyond academic programs to serve as a practical bridge between education and industry. For example, the FABlab Design and Technology Centre at Namibia University of Science and Technology is currently the largest makerspace on the African continent, serving as a laboratory for students and local entrepreneurs to bring their ideas to life.²¹²

Just as today's librarians are redefining their roles—shifting from "stewards of physical information to educators on digital literacy"—institutions are reexamining library facilities, which are increasingly viewed as a space that "engenders creativity and collaboration."²¹³ At North Carolina State, the Hunt Library is the institution's "library of the future." The library features a variety of spaces catering to makers, including a creativity studio, a gaming lab, recording studios, and, naturally, a makerspace. As in many academic makerspaces, NC State students can access resources beyond their own academic departments and engage in interdisciplinary collaboration with others from a variety of majors.²¹⁴

Makerspaces in Practice

The following links provide examples of makerspaces and makerspace programs that have direct implications for higher education.

Coconino Community College iLab

educau.se/coconino

The Cococino Community College iLab was versioned as a space to bring students, faculty, and the community together to foster ingenuity, creativity, and innovation.

Elon Kickbox

educau.se/elonkb

Elon Kickbox is a semester-long mini-grant program for students to use the campus makerspace. The program includes an introduction to a design process, a \$300 Visa card, a project sponsor (a faculty or staff person with content expertise), a Maker Mentor (a student staff person who can help them find and learn the equipment in the makerspace), and regular meetings with other Kickboxers.

The Maker Kits Project

educau.se/usqmake

The University of Southern Queensland Maker Kits project encourages the growth of maker culture and maker skills with a grant-funded pilot program to deliver 120 free maker kits to distance, online, and oncampus USQ students across Australia.

For Further Reading

The following articles and resources are recommended for those who wish to learn more about makerspaces.

Identifying and Sharing Best Practices in International Higher Education Makerspaces

educau.se/besprache

(Vincent Wilczynski and Malcolm N. Cooke, American Society for Engineering Education, 2017) The makerspace trend has rapidly spread internationally, with many higher education institutions adding facilities to create maker communities. This paper details the history behind the International Symposium on Academic Makerspaces, which drew 300 participants from 115 universities and included sessions with presenters from Austria, Brazil, Bolivia, China, Canada, Guatemala, New Zealand, Pakistan, Peru, South Korea, and the United States.

The International Symposium on Academic Makerspaces (ISAM)

educau.se/isam18

ISAM gathers and shares knowledge and best practices that institutions of higher education can use in various ways, including to form student maker communities; get students excited about using these spaces; perpetuate a culture of safe, fun, and responsible use; measure and maximize educational and social impact; and select appropriate practices, programming, safety policies, training, staffing, and equipment.

Makerspaces in Higher Education: The UR-Maker Experience at the University of La Rioja

educau.se/hemake

(Alpha Pernia-Espinoza et al., University of Helsinki, 2017) Makerspaces could become a bridge between universities and industry, particularly in science, technology, engineering, and math (STEM) careers. This paper evaluates makerspaces in the world's top 10 universities in engineering, as well as three of the most well-known Spanish facilities and the new campus makerspace created at the University of La Rioja.

Adaptive Learning Technologies

Time-to-Adoption Horizon: Two to Three Years



ncompassed by the personalized learning movement and closely linked to learning analytics, adaptive learning technologies that monitor student progress and use data to modify instruction at any time. Adaptive learning technologies "dynamically adjust to the level or type of course content based on an individual's abilities or skill attainment, in ways that accelerate a learner's performance with both automated and instructor interventions."215 Enabled by machine learning, these technologies can adapt to a student in real time, providing both instructors and students with actionable data. The goal is to move students through a learning path, empowering active learning, targeting at-risk student populations, and assessing factors affecting completion and student success. Advocates for adaptive learning believe that it can be a solution for the "iron triangle" of educational challenges: cost, access, and quality.²¹⁶

Overview

Faculty can no longer simply move through their syllabi, teaching the carefully crafted curricula and grading tests and papers at predetermined dates. Higher education is increasingly focused on learning outcomes, and waiting until grades are finalized is too late to ensure that students are acquiring the skills and knowledge necessary to succeed. Adaptive learning tailors educational content and activities to the particular needs of each student, increasing the likelihood of progress for all learners. Emerging adaptive learning technologies and data related to realtime assessments have captured the attention of higher education administrators; indeed, 92 percent of chief academic officers surveyed believe that it could improve student learning outcomes.217 Ithaka S+R surveyed a group of these leaders, who indicated that they viewed intelligent adaptive learning technologies as the most promising initiatives for improving the quality of student learning.²¹⁸ These results were first reported in early 2016, and colleges and universities are continuing to incorporate adaptive learning technologies, given financial and faculty support.

In 2017, National University in California launched a four-year, \$20 million project to develop a personalized education platform. The project integrates adaptive and

competency-based learning and predictive analytics for student retention, with the goal of incorporating the new platform into 20 general education courses for 2018. National University is regarded as an online learning pioneer—nearly 60 percent of its enrolled students attend online—and it was among the first universities to admit students on a rolling basis each month, rather than through a traditional system.²¹⁹

Many institutions are tapping into adaptive learning technology resources available through companies and ed tech start-ups such as CogBooks and Smart Sparrow, as well as through long-established academic publishers such as Pearson and McGraw-Hill Education. For example, a biochemistry professor at Qatar University looking for a way to offer an online and blended learning experience for his first-year chemistry students did so using a digital teaching and learning environment that let him increase active learning among his students and engage them in group discussion and problem solving.²²⁰ The professor believes it has not only increased the rigor of his course but that the technology also has boosted student success.²²¹ A variety of adaptive learning technologies support student learning by testing their understanding as they go, which helps build confidence and competencies.

Relevance for Teaching, Learning, or Creative Inquiry

Adaptive course materials have the potential to assist a wide variety of learners. For example, Oregon State University has deployed adaptive learning technology to create chemistry labs that can be personalized by the instructor for students; these labs assist both students requiring remediation as well as those who can accelerate their progress.222 The application of adaptive learning technology is not limited to the STEM disciplines. Through its humanities and European languages and studies discipline, the University of Western Australia is examining how desktop and mobile digital technologies impact students who are learning a second language. In 2017, a web-based e-learning platform for beginners studying Italian was added to the curriculum. This resource offers automated, adaptive, and personalized exercises, providing realtime feedback. Data from this project will be used to help professors cater to each student, including those

most at risk, and develop ideas to continue improving teaching and learning experiences; teachers will thus be better able to cater to students' needs, identifying at-risk students earlier and collecting data for further research.²²³

Research into the impact of adaptive technologies is not limited to student success and performance. In a transcontinental research project, the University of Leeds in the U.K. and the University of Cape Town in South Africa are investigating how digital technologies, including the development of adaptive learning paths, are affecting staff, students, and employers. The Unbundled University: Researching Emerging Models in an Unequal Landscape project is examining the relevance of a traditional university. In addition to looking at how digital technology is disrupting higher education, their research explores how the involvement of alternative providers and external partners is impacting higher education. The project represents an international collaboration between two research-intensive universities separated by a continent and many other contexts yet facing overlapping challenges."224

In some ways, adaptive learning technologies are making college more affordable. North Carolina's Central Piedmont Community College is among the largest community colleges in the Carolinas. In 2014, the institution joined a Bill & Melinda Gates Foundation–funded Next Generation Courseware Challenge project, and in 2015 it began implementing Smart Sparrow's BioBeyond technology. According to one biology instructor, the adaptive technology has enabled the institution to replace more costly traditional lab kits and textbooks, which saved students nearly \$200 each.²²⁵

Adaptive Learning in Practice

The following links provide examples of adaptive learning technologies and programs that have direct implications for higher education.

CS1301x

educau.se/gtxpython

Georgia Institute of Technology leverages adaptive learning technologies with a custom McGraw-Hill Smartbook and artificial intelligence autograder infrastructure.

How People Learn

educau.se/harvhpl

How People Learn is a project funded by the Chan Zuckerberg Initiative to create an online, personalized course that will be part of a common core experience for all incoming master's students at Harvard Graduate School of Education.

Mixed Realty—Paramedic Mass Casualty

educau.se/humber

Humber College educates first-responder professionals by using the talents of Media Studies students in game programming, game animation, and graphics. Participants are invited to explore the immersive world of virtual reality and its potential to enhance paramedic student resilience in preparation for real-world stress exposure.

For Further Reading

The following articles and resources are recommended for those who wish to learn more about adaptive learning technologies.

Adaptive Learning in Medical Education: The Final Piece of Technology Enhanced Learning? educau.se/meded

(Neem Sharma, lain Doherty, and Chaoyan Dong, *Ulster Med Journal*, September 12, 2017) When it comes to adaptive learning in higher education, much of the attention has concentrated on traditional undergraduate and graduate programs. This article explores ways in which these technologies can provide more personalized learning for students pursuing medical degrees.

Personalized Education Using Adaptive Learning Technology: One Size Doesn't Have to Fit All

educau.se/ltact

(Paul Smith, *Learning and Teaching in Action*, 2016) Amid all the discussions, hypotheses, and debates about adaptive learning technologies, this paper investigates how personalized training using adaptive learning software impacts student learning. It found that "this student-centered teaching method can lead to significant educational gains."

The Role of Adaptive Learning in Education educau.se/roleadap

(Ravindra Savaram, Ed Tech Review, September 11, 2017) This article provides a concise overview of the growth of adaptive learning technologies in higher education and highlights current trends. It includes recommendations for institutions to adopt when incorporating adaptive learning technologies.

Artificial Intelligence

Time-to-Adoption Horizon: Two to Three Years







n the field of artificial intelligence (AI), advancements in computer science are being leveraged to create intelligent machines that accomplish tasks and make decisions in ways that closely resemble those of humans. To achieve this, Al draws inferences based on machine learning, which informs a computer's capacity to make decisions and predictions through exposure to massive data sets, and natural language processing. This helps humans interact with machines in ways similar to how they interact with other humans. These capabilities are driving a host of developments in industries such as health care, financial services, and education. As the underlying technologies continue to develop within the education sector, AI has the potential to enhance online learning, adaptive learning software, and research processes in ways that more intuitively respond to and engage with students while also relieving instructors of tedious tasks. Some reports forecast a 43 percent market growth for AI technologies in the education sector by 2022.²²⁶

Overview

Since being featured in last year's *Horizon Report: 2017 Higher Education*, Al has continued to make headlines in a variety of sectors, from Tesla's self-driving cars²²⁷ to Apple's newest facial-recognition software debuted in the iPhone X.²²⁸ Education leaders have had a wide range of reactions to Al's impacts on teaching and learning strategies, with sentiments ranging from optimism about its potential to transform and democratize education²²⁹ to skepticism because of its role in automating teaching and reducing jobs.²³⁰ Further, a recent Northeastern University and Gallup study revealed that although only 22 percent of those with a postsecondary degree believed that their studies prepared them to work with Al systems, 77 percent of respondents think Al will positively impact their lives.²³¹

As Al continues to develop across sectors, students who become knowledgeable about Al and gain more experience working with it could have a competitive edge in the workforce. India and China have made notable commitments to advancing and integrating Al into education. New Delhi's Bennett University, in partnership with several U.K. institutions, received a grant to begin large-scale adoption, training, and skilling in Al across 25 postsecondary institutions.²³²

In China, the previous head of the country's Google operations is working with the government on a five-year plan to develop a two-step process for increasing AI knowledge transfer. The plan starts by upskilling educators in AI techniques such as machine learning; those educators will then leverage their new expertise to inform students about AI and share best practices across the country.²³³

While notable examples of AI are being implemented in the classroom, administrative tasks are also using it to streamline their processes. Institutions are improving teacher evaluations using Al-enabled chatbots to record, organize, and provide detailed feedback from students.²³⁴ Georgia State was recognized for creating Pounce, a chatbot that helps incoming students navigate the complex application process, presenting a personalized checklist for completing financial aid and enrolling in courses.²³⁵ Al is advancing areas other than teaching and learning as well, including campus safety and management. The University of Texas at Austin (UT), for example, is using AI systems to track, label, and analyze traffic patterns in efforts to increase safety measures for pedestrians and alleviate high traffic burdens.²³⁶ UT is also using data to develop self-adjusting irrigation systems to reduce water consumption and significantly cut costs.²³⁷

Relevance for Teaching, Learning, or Creative Inquiry

Al is a useful tool for implementing today's leading pedagogical trends, such as personalized learning, while also encompassing a variety of technologybased solutions, such as machine learning and open educational resources. Carnegie Learning and OpenStax have partnered to create an affordable learning solution for developmental math students. By leveraging Carnegie's Mika, an online math course enabled by machine learning and Al, and OpenStax's free online textbooks, the joint effort aims to increase math scores through personalized tutoring and real-time feedback while also reducing costs to postsecondary students.²³⁸ To better expose students to real-world uses of Al, universities are partnering with corporations to research and identify use cases for the technology. The University of Technology Sydney recently announced an ongoing project with a major bank's insurance practice aimed at increasing customer satisfaction. The resulting OnePath system leverages years of data from behavior modeling, text mining, and natural language processing to understand and distinguish the most relevant policy questions.²³⁹

Al is also changing how students and teachers interact with learning materials. The University of Michigan announced that students enrolled in statistics courses would be using the newly developed M-Write, which uses machine-learning algorithms to help improve and streamline the writing process. By using automated text analysis techniques that can match vocabulary and topics, the system helps students identify weakness in their analysis, speeds up the grading process, and alerts educators about which students need additional assistance.²⁴⁰ As another example, by using learning analytics, online learning can adapt to automatically fit students' needs and provide interventions to deliver "just-right, just-in-time learning." Oregon State University piloted adaptive courseware in eight highenrollment courses to deliver personalized content to students who might not otherwise receive individual attention. The university's goal is to increase retention rates in these classes by proactively helping students succeed.241

Even as AI is increasingly used to help students and institutions make informed decisions, a body of literature has emerged that cautions against relying strictly on Al systems. For example, in terms of admissions, education leaders are concerned about the "gray area" in Al decisions—that is, AI systems cannot determine which college is best for every student because such decisions are not wholly fact-based, and relying on AI in all such situations could diminish diversity in institutions.²⁴² However, Al is proving useful for completing timeconsuming, tedious tasks, freeing instructors to focus on creating engaging learning experiences. A professor from Shenzhen University and Huazhong University of Science & Technology developed an Al-based framework for creating realistic textures that could further improve virtual worlds. By developing a process to automate these textures at a large scale, researchers can devote more time and resources to improving video game design, virtual reality, and animation.²⁴³

Artificial Intelligence in Practice

The following links provide examples of artificial intelligence in use that have direct implications for higher education.

Applying Machine Learning to Scale Up Microcredentials

educau.se/dbadgeai

Penn State University Libraries married the areas of information literacy and competency-based education to create information literacy digital badges. They are

piloting artificial intelligence to evaluate student work submitted for the badge, which provides real-time feedback for student responses.

CSUN AI Innovation Collection

educau.se/aiexp

California State University, Northridge held a yearlong faculty exploration program to explore AI and held a student competition to find new and interesting applications for AI. They also created an AI-powered chatbot, with the goal of helping students, faculty, and staff get 24/7 help to the most common questions anytime, anywhere.

Developing Virtual Patients for Medical Education educau.se/vrmed

Virtual patients are avatar representations of human standardized patients controlled by AI so students can carry on a conversation using natural language. The system, from The Ohio State University, provides immediate feedback on student performance, allowing students to rehearse professional behaviors and interviewing skills prior to working with real patients.

For Further Reading

The following articles and resources are recommended for those who wish to learn more about artificial intelligence.

7 Roles for Artificial Intelligence in Education

educau.se/roleaied

(Matthew Lynch, *Tech Edvocate*, May 5, 2018) This article outlines a variety of ways in which Al continues to be integrated into teaching and learning practices to increase student success.

Artificial intelligence (AI) Makes Learner-Centered Learning Successful

educau.se/aisucc

(Open Access Government, June 1, 2018) Two professors from Chemnitz University of Technology outline how Al-enabled learning solutions can provide learner-centered education to students through real-time assessments.

Next Gen Robotics, Artificial Intelligence, and Education Informatization: The Future Is at TechCrunch Hangzhou

educau.se/robai

(*Technode*, June 26, 2018) Five technology leaders in China discuss their experiences with Al, along with the trends moving Al forward and the ways in which the education sector can integrate it into existing online learning.

Mixed Reality

Time-to-Adoption Horizon: Four to Five Years







t the intersection of virtual and physical realities is an emerging environment known as mixed reality (MR), where digital and physical objects coexist. This hybrid space integrates virtual technologies into the real world so that viewers often cannot distinguish where one world begins and the other ends. MR's virtual aspect comes from the use of devices equipped with 3D viewing technologies that seamlessly layer digital objects onto the real world. Another major MR component is the integration of augmented reality (AR), which layers information over 3D space. A key AR characteristic is its ability to respond to user input, which offers significant potential for learning and assessment; learners can construct new understanding based on interactions with virtual objects that bring underlying data to life. Holographic devices are also being used to create MR environments, as their video displays project 3D images into a physical space.

Overview

The market for MR applications is growing exponentially and is expected to double in the next five years.²⁴⁴ As equipment becomes more affordable and schools have greater access to technology, the interest in using virtual reality (VR) and MR as educational tools is growing. In a recent survey of faculty, 81 percent of respondents said that VR, AR, and MR will be key educational technologies over the next decade.²⁴⁵ These new technologies comprise real and virtual combined environments and human-machine interactions generated by computer technology and wearables.

The affordability of MR has encouraged widespread adoption in postsecondary education, with features including voice activation and collaborative virtual experiences. Learners are becoming immersed in curricula that span medicine, science, art, history, and teacher training and are experiencing scenarios and objects that would not be possible in traditional classrooms. Effectively integrating these technologies into the curriculum requires careful planning and numerous resources; in addition to adopting and incorporating the technology itself, institutions must consider related efforts, including faculty development, instructional design, learning space integration, infrastructure assessments, and governance, policy, ethics, and access equity.²⁴⁶ For example, because VR places greater demands on campus wireless networks, infrastructure upgrades might be necessary. Educators from University College London believe that MR has considerable potential with regard to an institution's academics, innovation efforts, and community impact. The educators assert that MR can serve to better integrate research and education through active participation in research and inquiry and that it can support interdisciplinary ties to students' academic

VR is already being employed by some institutions as a recruitment tool. If prospective students and their families cannot afford to attend an on-campus tour, for example, they can get a sense of an institution's layout and surroundings through VR. Such technologies let institutions reach a broader audience without having to hire additional admissions staff. The technologies also let institutions communicate their innovative approach in a way that resonates with young people. For members of Generation Z—the first college-aged cohort to grow up entirely in the internet era—this fresh approach to traditional recruiting speaks to their personal experiences.²⁴⁷

Relevance for Teaching, Learning, or **Creative Inquiry**

Some professors who have studied and developed MR believe these technologies are slowly but surely asserting themselves into the higher education classroom. They cite the highly stimulating, interactive nature of the VR experiences and how the brain's response to them is similar to that of an actual event. Yet the technologies' applications for more abstract learning, such as theoretical concepts, will require more consideration from educators than simply bringing students into VR to explore a physical space.²⁴⁸

MR technologies offer students new opportunities to assume roles of co-creators by creating MR environments as a part of their coursework, often with authentic or real-world application. At the University of Illinois, students are the ones designing virtual experiences—in this case, to help members of the prison population adjust to life after incarceration. While the average person might think nothing of stopping by a local café for coffee, such routine tasks can be daunting for someone who has spent years behind bars. The project's goal is to help former inmates better assimilate into society and thereby reduce recidivism.²⁴⁹ At the European School of Management and Technology in Berlin, students in the Leading Digital Transformation executive education program are using VR to solve company problems or discover new business opportunities. For example, a course alumnus who works for an engineering equipment maker has gone on to use VR to help engineers pinpoint problems in faulty machines, which has sped up repairs while reducing downtime and maintenance costs.²⁵⁰

Possibilities for MR applications in research are also promising. At Imperial College London, researchers have shown how surgeons can use Microsoft HoloLens headsets to see through the limbs of patients while conducting reconstructive surgery. The Imperial team overlaid images of CT scans—which include the position of bones and key blood vessels—onto each patient's leg, offering surgeons a first-of-its-kind inside view during an operation.²⁵¹

Mixed Reality in Practice

The following links provide examples of mixed reality in use that have direct implications for higher education settings.

Improving Patient Safety Using VR to Train and Assess Emergency Personnel

educau.se/dissim

Ohio State has designed a virtual reality simulation to train and assess medical students, residents, fellows, paramedics, and others responding to a mass casualty incident.

Maritime Simulation Training

educau.se/maritime

South Metropolitan TAFE is a Technical and Further Education institution based in Fremantle, Western Australia. The maritime simulation center in Fremantle enables the TAFE to work with the Fremantle Port Authority to enable the roughly 300–400 maritime students to experience all facets of ship operations via simulation experience.

XR for Historical Reconstructions

educau.se/bates

Bates College faculty in the humanities incorporate 3D modeling in their courses for the digital reconstruction of historical structures, such as ancient mosques and Roman theatres. VR tools are used to provide students with the opportunity to immerse themselves in their reconstructions, offering unique perspectives on how these structures may have impacted the lived experiences of the people who resided in these ancient cities.

For Further Reading

The following resources are recommended for those who wish to learn more about MR in higher education.

Augmented Reality: Application in Higher Education

educau.se/arhe

(Danny Munnerley, Matt Bacon, Robert N. Fitzgerald, and James Steele, Australian Government Office for Learning and Teaching, Dec. 2014) Researchers from Australian National University, the University of Canberra, and Macquarie University believe that AR has particular value for higher education in the areas of learner mobility and flexibility. Their ARstudio project explored the uses of AR in higher education over the course of two years, with a specific focus on tools for mapping its uptake and evaluating its effectiveness.

Virtual Reality: A Tool for Preservice Teachers to Put Theory into Practice

educau.se/vrsim

(Charles Anazalone, Department of Learning and Instruction, June 29, 2017) The University at Buffalo Neurocognition Science Laboratory is working on a multifaceted project to investigate, compare, and characterize interactive VR-based preservice teacher clinical teaching environments with those of real-life teaching environments. The project incorporates elements of MR, instructional design and technologies, artificial intelligence, and learning analytics.

VR and AR: Pioneering Technologies for 21st-Century Learning

educau.se/vrpioneer

(Maya Georgieva and Emory Craig, EDUCAUSE Review, May 17, 2018) This series of Transforming Higher Ed blog posts provides an in-depth exploration of VR and AR and their impacts on higher education. Authored by MR experts and educators Maya Georgieva and Emory Craig of Digital Bodies, the series includes topics such as immersive storytelling and journalism, STEM education, learning space design, and ethical challenges.

Robotics

Time-to-Adoption Horizon: Four to Five Years







obotics refers to the design and application of robots, automated machines that accomplish a range of tasks. The first robots were integrated into factory assembly lines to streamline and increase the productivity of manufacturing, most notably for cars. Today, the integration of robots into mining, the military, and transportation has helped improved operations for industries by taking over tasks that are unsafe or tedious for humans. The global robot population is expected to double to four million by 2020, a shift that is expected to reshape business models and economies throughout the world.²⁵² There is a substantial debate on how workers will be affected by the global economy's growing dependence on robots, especially now that robots are more autonomous and cheaper than ever. In higher education, robotics programs are focusing on solving broader and emergent societal problems, including advancing high-level surgical medicine, mitigating significant workforce imbalances, personalizing learning at scale, and expanding access to on-site experiences previously limited by disabilities or geographic constraints.

Overview

The integration of robotics into everyday life, whether on campuses, in offices, or at home, is a development filled with both promise and legitimate concerns. As an indication of the potential of robotics, institutions such as Carnegie Mellon and Stanford have played key roles in the development of self-driving cars, along with a bevy of automakers and other technology companies.²⁵³ On the flip side, however, workers remain concerned about losing jobs to ultra-efficient robotic automation, despite some evidence to the contrary (specifically, that at the present time aggregate productivity has not risen sharply, and various jobs do not appear to be harder to obtain than in the past²⁵⁴). However, some professions formerly assumed to be safe may face an uncertain future.255 With claims that the related technology of artificial intelligence (AI) may make half of today's jobs obsolete within 20 years, at least some level of concern seems warranted.256

Yet the field of robotics is also supporting humans, from both personal and professional perspectives, as many new applications of automated technologies are humanistic in their aspirations.²⁵⁷ In the world of medical technology, surgeons will have a helping hand during complicated procedures, thanks to the assistance of robots.²⁵⁸ At the 2018 Winter Olympics in Seoul, South Korea, robots designed to help with facilities maintenance provided cleaning and painting services.²⁵⁹ Additionally, nations that lack workforce numbers to adequately support aging populations are using robotics powered by Al. Japan, for example, is experimenting with the kinder, gentler side of robots by programming them for caregiving roles in nursing homes.²⁶⁰

In higher education, such technologies are positively impacting student services and applicant access to the campus as well. Some universities are using drones to give applicants a bird's-eye view of campus, which accommodates people unable to travel for in-person tours. Such video tours are swiftly becoming a powerful recruitment tool.²⁶¹ And telepresence technology, which is already used in both the private sector and in medicine, may help bridge the social gap for distance learning students whose educational options would otherwise be limited by geographic constraints.²⁶²

Relevance for Teaching, Learning, or Creative Inquiry

Higher education faces a significant challenge: preparing students for success in the next generation workforce.²⁶³ Nearly 9 in 10 jobs lost since 2000—including many jobs that require college degrees—were lost due to advancements in automation.²⁶⁴ To address this, institutions of education must reevaluate teaching methods and the curricula they offer. Some of the necessary changes will require higher education to invest in facilities and programs that prepare students to work directly with robotics technologies and even invent new ones. Institutions such as the University of Michigan, which is situated in a historical manufacturing region, have risen to the occasion by expanding their campuses with dedicated robotics facilities.²⁶⁵ Scheduled to open in 2020, Michigan's 140,000-square-foot robotics facility will include a fly zone for autonomous aerial vehicles, an outdoor obstacle course for walking robots, a high-bay garage space for self-driving cars, and space for rehabilitation and mobility robots involving prosthetics and exoskeletons.266

A growing number of robotics partnerships are focused on developing novel solutions to societal issues. For example, the MIT Media Lab spinout Orio has responded to the high-density housing explosion in urban centers by developing smart robotic furniture that transforms into a bedroom, a working or storage area, or a large closet—or simply slides back against the wall—to optimize space in small apartments or classrooms.²⁶⁷ Sony and Carnegie Mellon are collaborating on the development of robots for food preparation, which may help address a number of health issues linked to poor nutrition.²⁶⁸ Researchers at Singapore's Nanyang Technological University are developing solutions that make ready-to-assemble furniture less burdensome for consumers.²⁶⁹ Institutions are increasingly harnessing robotics and automation in service of higher education's mission to send graduates into the workforce who are prepared to use these technologies to tackle largerscale problems.²⁷⁰

Robotics offers new possibilities for integration into existing curricula and contributing to student success. With respect to makerspaces, the DeArmond Makerspace at the University of Oregon partners with the Department of Computer Science to support projects involving the building of planetary rovers for the A-Rocket-Launch-for-International-Student-Satellites (ARLISS) competition.²⁷¹ Robotics also offers almost unlimited opportunities for exploration and discovery, such as a project at the Robotic Lab in the Department of Biological Physics at Eötvös University in Budapest in which a flock of drones self-organized into a coherent swarm, much like starlings.²⁷²

Robotics in Practice

The following links provide examples of robotics and robotics programs that have direct implications for higher education.

Insect-Sized Robots

educau.se/robofly

A team of engineers at the University of Washington has created a robot that weighs about the same as a toothpick. Too small for a propeller, this robot achieves liftoff by flapping its wings. Once equipped with moreadvanced sensor systems, robots such as this could be used to detect methane leaks.

MIT Distributed Robotics Lab

educau.se/bldrobot

Under the direction of Professor Daniela Rus, this MIT lab has pursued her vision of "pervasive robotics integrated into the fabric of everyday life, helping everyone with physical work and cognitive tasks." The lab has worked on projects such as drones to assist with the navigation of self-driving cars and pill-sized robots that can work internally to treat human wounds.

Virginia Drones Project

educau.se/jmudrone

In an undergraduate course on drones, students from James Madison University and Old Dominion University partner with state and national organizations to use unmanned systems to investigate a range of ecological issues.

For Further Reading

The following articles and resources are recommended for those who wish to learn more about robotics technologies.

The Al Invasion Is Coming to Africa (and It's a Good Thing)

educau.se/aiinva

(Lexi Novitske, Stanford Social Innovation Review, February 12, 2018) Across the African continent, from Ghana to Zimbabwe, Al and robotics have the potential to bring positive changes in sectors such as health care and finance while bridging the gap between physical infrastructure inadequacies and consumer demands and freeing up time for skilled labor and increased labor productivity. Yet governments, investors, and NGOs must train workers for complex tasks and reform laws and education to meet the demands of tomorrow's economy.

Skill Shift: Automation and the Future of the Workforce

educau.se/skilaut

(Jacques Bughin et al., McKinsey Global Institute, May 2018) The adoption of automation will raise the demand for certain skills while lowering the demand for others. This briefing quantifies time spent on 25 core workplace skills today and in the future for five European countries and the United States.

Why a Robot-Filled Education Future May Not Be as Scary as You Think

educau.se/robfill

(Michelle R. Weise, EdSurge, June 21, 2017) In this article, a researcher from Southern New Hampshire University explores how higher education can get beyond its fears, pessimism, and anxiety about the increasing role technology may play in K–20 education.

Methodology

he process used to research and create the NMC Horizon Report: 2018 Higher Education Edition is rooted in the methods used across all the research conducted during the NMC Horizon Project. The Horizon Report is informed by both primary and secondary research. Dozens of meaningful trends, challenges, and important developments in technology are examined for possible inclusion in the report for each edition before the expert panel selects the 18 topics profiled here.

Every report draws on the expertise of an international panel of individuals who first consider a broad set of trends, challenges, and developments in technology and then explore each of them in progressively more detail, reducing the set until the final listing of topics is selected. This process took place online and was intended to be a completely transparent window that provided a real-time view of the work as it happened.

This year, the panel was composed of 71 education and technology experts from 19 countries on 6 continents; their names and affiliations are listed at the end of this report. Despite their diversity of backgrounds and experience, they share a consensus view that each of the profiled topics will have a significant impact on the practice of higher education around the globe over the next five years.

The procedure for selecting the topics in the report is based on a modified Delphi process refined over more than 16 years of producing the Horizon Report series. The panel represents a wide range of backgrounds, yet each member brings a relevant expertise. Over the years of the NMC Horizon Project research, more than 2,500 internationally recognized practitioners and experts have participated on the panels; in any given year, a third of panel members are new, ensuring a flow of fresh perspectives.

Once the panel for a particular edition was constituted, their work began with a systematic review of the literature—press clippings, reports, essays, and other materials—that pertains to technology developments, trends and challenges, current research and reports, and more. Panelists were provided with an extensive set of background materials when the project began and were asked to comment on them, identify those that seemed especially worthwhile, and add to the set.

Following the review of the literature, the expert panel engaged in the central focus of the process—the research questions that are at the core of the NMC Horizon Project. The group discussed existing applications and manifestations of trends, challenges, and technology developments and also brainstormed new ones. A key criterion for the inclusion of a topic in this edition was its potential relevance to teaching, learning, and creative inquiry in higher education.

These research questions were designed to elicit a comprehensive list of interesting technology developments, challenges, and trends from the panel:

Which of the important developments in educational technology catalogued in the NMC Horizon Project Listing will be most important to teaching, learning, or creative inquiry for higher education within the next five years?

- What important developments in educational technology are missing from our list? Consider these related questions:
 - > What would you list among the established developments in technology that some institutions are using today that arguably all higher education institutions should be using broadly to support or enhance teaching, learning, or creative inquiry?
 - > What technologies that have a solid user base in consumer, entertainment, or other industries should higher education institutions be actively looking for ways to apply?
 - > What are the developments in technology you see advancing to the point that higher education institutions should begin to take notice during the next four to five years?
- What key trends do you expect to accelerate educational technology uptake in higher education?
- What do you see as the significant challenges impeding educational technology uptake in higher education during the next five years?

In the first step of this approach, the responses to the research questions were systematically ranked and placed into adoption horizons by each expert panel member using a multi-vote system that allowed members to weight and categorize their selections. These were compiled into a collective ranking, and the ones around which there was the most agreement were advanced.

From the comprehensive list of trends, challenges, and developments in technology originally considered for any report, the dozen that emerge at the top of the initial ranking process in each area were further researched and expanded. Once these interim results were identified, the group explored the ways in which these topics impacted teaching and learning in colleges and universities. A significant amount of time was spent researching real and potential applications for each of the topics that would be of interest to practitioners. The semifinalist topics of the interim results were then ranked yet again. The final topics selected by the expert panel are those detailed here in the NMC Horizon Report: 2018 Higher Education Edition.

The 2018 Higher Education Expert Panel

Samantha Adams Becker

Co-Principal Investigator New Media Consortium United States

Malcolm Brown

Co-Principal Investigator EDUCAUSE Learning Initiative

United States

Eden Dahlstrom Co-Principal Investigator

New Media Consortium United States

Michele Cummins

Horizon Project Operations

New Media Consortium **United States**

Veronica Diaz

Researcher

EDUCAUSE Learning Initiative United States

Bryan Alexander

Bryan Alexander Consulting, **United States**

Joseph Antonioli

Middlebury College **United States**

Kumiko Aoki

Open University of Japan Japan

Kevin Ashford-Rowe

Australian Catholic University Australia

Maha Bali

The American University in Cairo

Elizabeth Barrie

University of Nevada Las Veaas United States

Helga Bechmann

Multimedia Kontor Hamburg **GmbH** Germany

Kelvin Bentley

United States

Jean-Pierre Berthet

Sciences Po

Jorge Bossio

Universidad Peruana de Ciencias Aplicadas

Dr. Braddlee

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Marwin Britto

University of Saskatchewan Canada

Simone C.O. Conceição

University of Wisconsin Milwaukee United States

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Paulo Dantas

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Rebecca Frost Davis St. Edward's University

United States Yvette Drager

Department of Training and Workforce Development Australia

Kimberly Eke

University of Pennsylvania **United States**

Kenn Fisher

University of Melbourne

Australia

Maya Georgieva

Digital Bodies - Immersive Learnina **United States**

Aline Germain-Rutherford

University of Ottawa Canada

David Gibson

Curtin University Australia

Rob Gibson

Emporia State University United States

Stella Hadiistassou

University of Cyprus Cyprus

Tom Haymes

PBK Architects **United States**

Doug Hearrington

James Madison University **United States**

Anthony Helm

Dartmouth College **United States**

Susan Hines

Chadron State College **United States**

Bill Hogue

University of South Carolina **United States**

AJ Kelton

Emerging Learning Design / Montclair State University **United States**

Whitney Kilgore

iDesign United States

Jessica Knott

Michigan State University **United States**

Lisa Koster

Conestoga College Institute of Technology and Advanced Learnina Canada

Melissa Langdon

Curtin University Australia

Ole Lauridsen

Aarhus University Denmark

Fernando Ledezma University of Chihuahua

Deborah Lee

Mississippi State University **United States**

Joan Lippincott

Coalition for Networked Information (CNI) United States

Sheila MacNeill

Glasgow Caledonian University Scotland

Damian McDonald

University of Leeds United Kingdom

Courtney Miller

University of Southern California **United States**

Ruth Nemire

American Association of Colleges of Pharmacy **United States**

Javier No Sanchez

Loyola University Andalusia Spain

Sunav Palsole

Texas A&M University **United States**

David Parkes

De Montfort University United Kingdom

Andrew Phelps

Rochester Institute of Technology United States

Alexandra M. Pickett

State University of New York **United States**

Ruben Puentedura

Hippasus **United States**

Michael Reese

Johns Hopkins University **United States**

Jaime Reinoso

Pontificia Universidad Javeriana Cali Colombia

Gilly Salmon

University of Liverpool United Kingdom

Javier Sarsa

University of Zaragoza Spain

Ramesh Sharma

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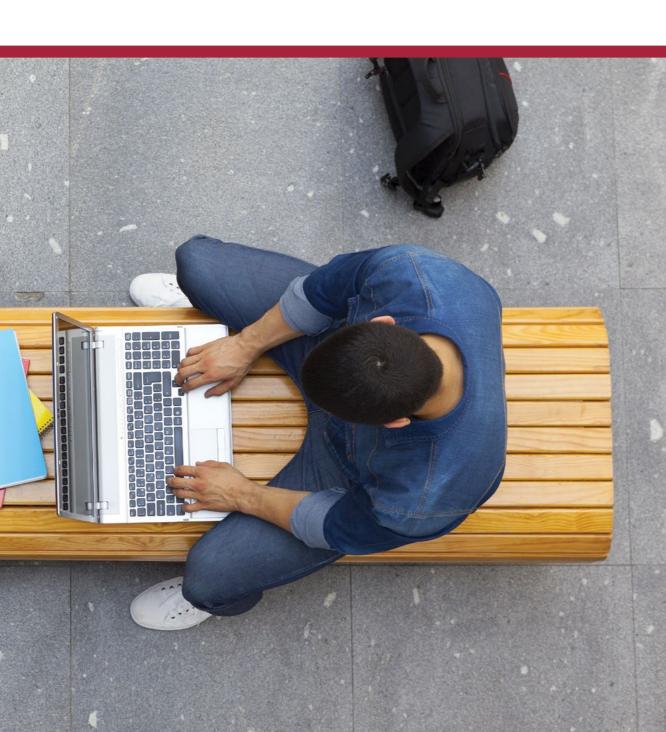
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- 249 https://illinoisnewsroom.org/2018/06/07/vr-for-incarcerated/
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ACRL SPOS18 Doc 40.1

For the *NMC Horizon Report*: 2018 Higher Education Edition, an expert panel identified 18 topics very likely to impact technology planning and decision-making: six key trends, six significant challenges, and six important developments in educational technology.



ACRL SPOS18 Doc 40.1



EDUCAUSE

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ISBN 978-1-933046-01-3



Evaluation Distribution Plan

The Board approved at its MW17 Board Update meeting the Evaluation Effectiveness Working Group's recommendation to distribute two evaluations per the following timeline.

At Board Update, the Board agreed to add a name blank to both surveys. Answers will be aggregated and not attributed to any one person.

Meeting Effectiveness Evaluation (Doc 30.1)

- Sent after each
 - o SPOS
 - o MW
- Not sent after
 - o AC
 - Spring Meeting
 - o Fall Meeting

Overall Board Effectiveness Evaluation (Doc 30.2)

- Sent after
 - o AC





ACRL Board Meeting Evaluation

1. Please enter your r	name. Answers will be	aggregated and not a	attributed to any one pe	erson.
First name				
Last name				
2. There is a climate of	of respect and trust am	nong Directors, Execu	utive members, and sta	ff.
Strongly Agree	Agree	Disagree	Strongly disagree	I don't know/Not applicable
Comments and suggestion	is:			
3. There is a clear con	mmitment to building o	consensus on issues	discussed in Board mee Strongly disagree	etings. I don't know/Not applicable
Comments and suggestion	ns:			
4. The meeting time a	ullotted for reaching de	cisions on issues is a	appropriate.	
Strongly Agree	Agree	Disagree	Strongly disagree	I don't know/Not applicable
Out of the state o	, tgree	Disagree		
Comments and suggestion	ns:			

ACRL SPOS18 Doc 41.1

5. There is effective and appropriate communication between the Board and the Executive Committee and the Board and the Executive Director.

Strongly Agree	Agree	Disagree	Strongly disagree	I don't know/Not applicable
Comments and suggestions:			_	
6. What worked well at	this meeting?		_	
7. What should we do d	ifferently at our next	meeting?		
0.04				
8. Other comments or s	uggestions?		\neg	



ACRL Overall Board Effectiveness Evaluation

Please complete the follow	ving Board effectiveness survey based on your experience during the past cycle.	
1. Please enter your r	name. Answers will be aggregated and not attributed to any one perso	on.
First name		
Last name		

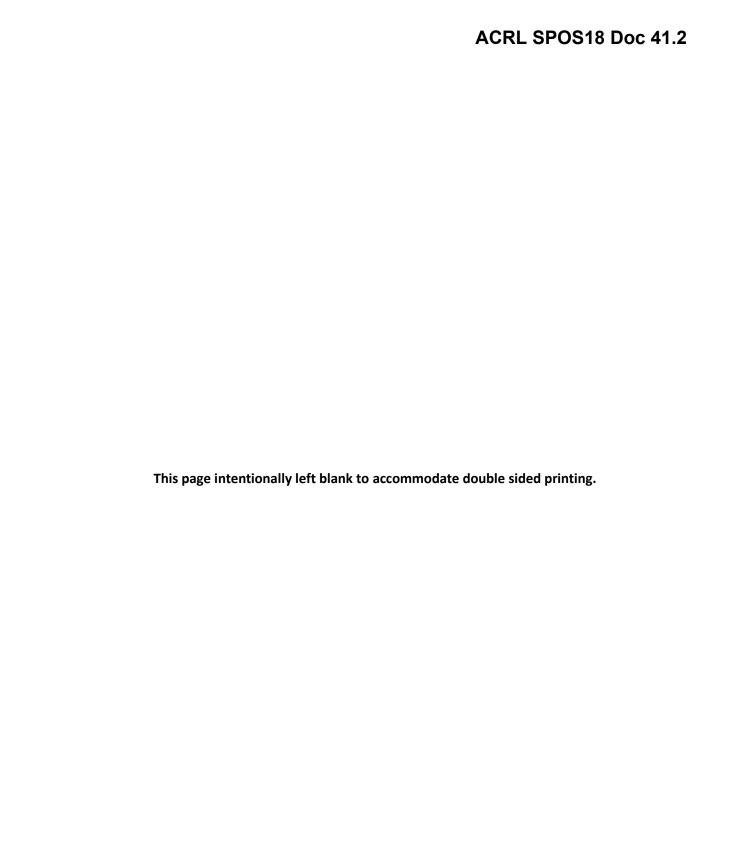
ACRL SPOS18 Doc 41.2

2. Please respond to each statement:

	1 - Strongly			4 - Strongly	
	Disagree	2 - Disagree	3 - Agree	Agree	N/A
There is a climate of respect and trust among Directors, Executive members, and staff.					
If you "strongly disagree" or "disagree," plea	ase elaborate.				
The Board makes strategic decisions that are responsive to trends and other changes in the environment.	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
If you "strongly disagree" or "disagree," plea	ase elaborate.				
The Board's decision-making processes are effective.					
If you "strongly disagree" or "disagree," plea	ase elaborate.				
Board members effectively use information about members' needs, expectations, and satisfaction to make decisions about programs and services.	\bigcirc			\bigcirc	
If you "strongly disagree" or "disagree," plea	aco olaborato				
ii you strongry disagree or disagree, pied	ase elaborate.				
Board members communicate effectively with each other.	\bigcirc	0			
If you "strongly disagree" or "disagree," plea	ase elaborate.				
Board members communicate effectively with ACRL staff.					
If you "strongly disagree" or "disagree," plea	ase elaborate.				
Board members communicate effectively with sections, committees, and other groups.					
If you "strongly disagree" or "disagree," plea	ase elaborate.				

ACRL SPOS18 Doc 41.2

3. What ideas or suggestions do you have for how the Board can be $\ensuremath{\text{I}}$	more effective during the next year?



Top Ten Workplace Issues

Based on responses to the 2017 ACRL Conference evaluation. As of May 5, 2017, there were 1,041 completed returns for a response rate of 29.7%

Q. 23. List the top two issues facing you as an information professional today.

1. Budget Constraints

This was by far the top issue and includes staffing cuts, flat/decreased funding, rising cost of resources and doing more with less. This finding is reflected in the 2016 ACRL Academic Trends and Statistics survey which found that in the last 5 years only 21% of all academic libraries saw increases for staffing while 19% saw decreased funding and 60% had flat budgets.

2. Human Resource Issues

As a result of doing more with less, many academic librarians are experiencing burnout, stress, job insecurity, and are increasingly challenged to balance work and life because of understaffing. Many are concerned about low pay, seeing it as evidence of the "devaluation of feminized labor." Other personnel issues include staff retention, faculty status, succession planning, diversity, equity, and inclusion.

3. Keeping Up with Change

Many respondents are struggling to keep up with and anticipate changes in higher education, technology, the political environment, and higher education. Finding time to keep current is a challenge for many.

4. Information Literacy and Student Success

This issue includes concerns with the ACRL Framework and how to best assess student learning outcomes.

5. Professional Development

Many respondents want to advance and learn new skills, noting that there is an increasing demand for new skills not taught in library schools. Many see staff development as a management challenge that needs to be addressed so staff can take on new roles.

6. Demonstrating Value/Assessing Impact

This issue is connected to budget constraints. Many academic librarians are still struggling to gain the respect and support of their campus administration. Others see a need to demonstrate value on the state and federal level.

7. The Trump Administration

Many report a fear of the future, heightened uncertainty, and great concern for the impact of the Trump Administration on higher education.

8. Collaboration with Faculty

Connecting with faculty is a large issue for many liaison librarians and teaching librarians.

9. Scholarly Communication

Includes the copyright, open science, faculty buy-in for institutional repositories, infrastructure for digital scholarship, OERs, open access.

10. Data Management

The 2016 ACRL Academic Library Trends & Statistics survey found that data management was the #3 area where libraries provide specialized assistance.

Top Issues for the Profession

Based on responses to the 2017 ACRL Conference evaluation. As of May 5, 2017, there were 1,041 completed returns for a response rate of 29.7%

Q. 24. List the top two issues facing academic and research libraries today.

1. Financial Challenges

This was far and away the top issue with almost 50% of respondents mentioning the economic pressures on higher education.

2. Value of Academic Libraries

Many respondents are concerned with how to assess value, demonstrate impact and relevance, gain respect of campus units. There seems to be widespread belief that demonstrating value is more difficult in the current political climate.

3. Information Literacy and Student Success

How to best support student learning and success and assess the impact.

4. Change

Many respondents are being challenged to grapple with and respond to changes in government policies, culture, roles, duties, and technology. Keeping current is an ongoing challenge.

5. Staffing

The need for re-training in response to changing roles was frequently mentioned. *Note:* the 2016 ACRL Academic Trends & Statistics survey found that in the last 5 years almost 48% of community colleges have cross-trained or repurposed staff; 62% of baccalaureate school libraries have cross-trained or repurposed staff; almost 72% of comprehensive university libraries have cross-trained or repurposed staff; and more than 85% of doctoral school libraries have cross-trained or repurposed staff.

6. Collection Management

Includes accessibility, balancing print and electronic acquisitions.

7. The Trump Administration

This reflects a broad concern with the future of higher education, growing anti-intellectualism in the U.S., and lack of tolerance.

8. Scholarly Communication

Includes open access issues, OERs, serial price inflation, changing world of scholarly publishing.

9. Diversity

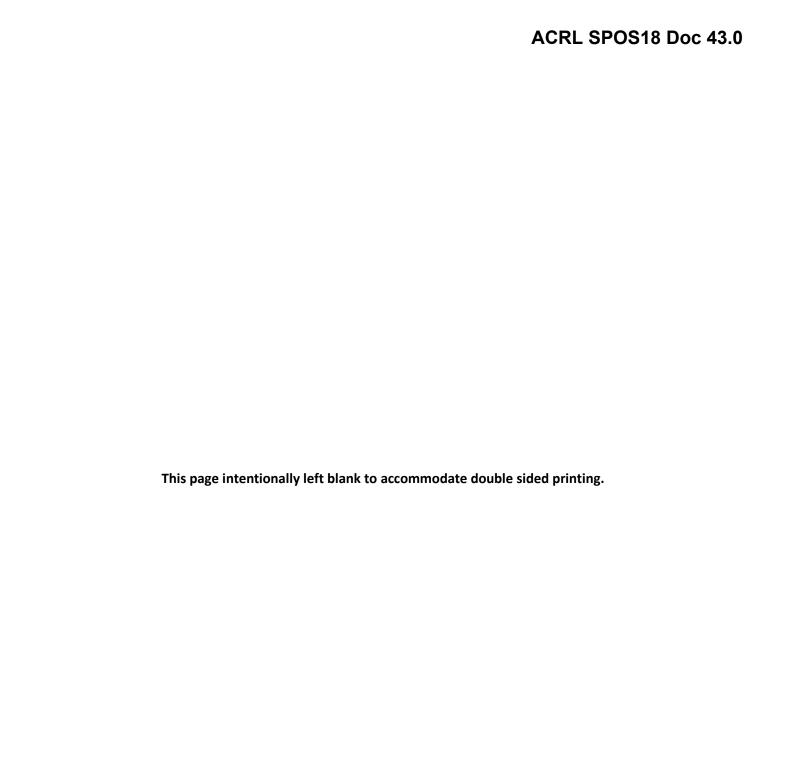
Includes the lack of diversity in the profession and the need for academic libraries to be a voice for equity, inclusion, and justice.

10. Physical Space

Libraries are grappling with the lack of space for still growing print collections and services.

ACRL Midwinter 2019 Report

	Report	
Unit Name	Unit Type	Comments
Dr. E. J. Josey Spectrum Scholar Mentor Committee	Committee	No longer meeting face-to-face.
Excellence in Academic Libraries Award Committee	Committee	Meeting virtually.
Hugh C. Atkinson Memorial Award Committee	Committee	Not meeting face-to-face.
Information Literacy Framework and Standards Committee	Committee	Meeting virtually.
Leadership Recruitment & Nomination Committee	Committee	Meeting virtually.
Membership Committee	Committee	Meeting virtually.
Professional Development Committee	Committee	Not meeting face-to-face.
Publications Coordinating Committee	Committee	Meeting virtually.
Research Planning and Review Committee	Committee	Meeting virtually.
Section Membership Committee	Committee	Meeting virtually.
Continuing Education/Professional Development Discussion Group	Discussion Group	No reply from Convener.
First Year Experience Discussion Group	Discussion Group	Not meeting face-to-face.
Global Library Services Discussion Group	Discussion Group	No reply from Convener.
Hip Hop Librarian Consortium Discussion Group	Discussion Group	No reply from Convener.
International Perspectives on Academic and Research Libraries	Discussion Group	No reply from Convener.
	Discussion Group	No reply from Convener.
Discussion Group Leadership Discussion Group	Discussion Group	No reply from Convener.
Learning Commons Discussion Group	Discussion Group	Meeting virtually.
Library Support for Massive Open Online Courses (MOOCs) Discussion	Discussion Group	meeting virtually.
Group	Discussion Group	No reply from Convener.
Media Resources Discussion Group	Discussion Group	No reply from Convener.
MLA International Bibliography in Academic Libraries Discussion Group	Discussion Group	indireply from convener.
THE International bibliography in Academic Libraries Discussion Group	Discussion Group	Meeting virtually.
New Members Discussion Group	Discussion Group	No reply from Convener.
Student Retention Discussion Group	Discussion Group	No reply from Convener.
C&RL News Editorial Board	Editorial Board	Meeting virtually.
College & Research Libraries Editorial Board	Editorial Board	Meeting virtually.
New Publications Advisory Board	Editorial Board	Meeting virtually.
Publications in Librarianship Editorial Board	Editorial Board	Meeting virtually.
RBM Editorial Board	Editorial Board	3 /
Resources for College Libraries Editorial Board	Editorial Board	Meeting virtually. Meeting virtually.
Academic Library Services to International Students Interest Group	Interest Group	No reply from Convener.
African-American Studies Librarians Interest Group	Interest Group	No reply from Convener.
Asian, African, and Middle Eastern Studies Interest Group	Interest Group	Meeting virtually.
Contemplative Pedagogy Interest Group	Interest Group	No reply from Convener.
Digital Badges Interest Group	Interest Group	No reply from Convener.
Health Sciences Interest Group	Interest Group	Not meeting face-to-face.
History Librarians Interest Group	Interest Group	No reply from Convener.
Image Resources Interest Group	Interest Group	No reply from Convener.
Institutional Research Interest Group	Interest Group	No reply from Convener.
Librarianship in For-Profit Educational Institituions Interest Group	Interest Group	No reply from Convener.
Systematic Reviews and Related Methods Interest Group	Interest Group	No reply from Convener.
Virtual Worlds Interest Group	Interest Group	No reply from Convener.
Anthropology and Sociology Section (ANSS)	Section	Only has an off-site Social scheduled but may cancel it.
Arts Section	Section	Meeting virtually.
College Libraries Section (CLS)	Section	Only one of their Discussion Groups is meeting.
Community and Junior College Libraries Section (CJCLS)	Section	Meeting virtually.
Distance Learning Section (DLS)	Section	Meeting virtually.
Education and Behavioral Sciences Section (EBSS)	Section	Meeting virtually.
Instruction Section (IS)	Section	No longer meeting face-to-face.
Literatures in English Section (LES)	Section	Meeting virtually.
Politics, Policy and International Relations Section (PPIRS)	Section	Meeting virtually.
ACRL/ALA/ARL IPEDS Task Force	Task Force	Not meeting face-to-face.
ACRL/RBMS-SAA Joint Task Force to Revise the Statement on Access to	Task Force	Not meeting face-to-face.
Research Materials in Archives and Special Collections Libraries		
Project Outcome for Academic Libraries Task Force	Task Force	Meeting virtually.
	•	· · · · · · · · · · · · · · · · · · ·



Donations by Unit and Program

(includes in-kind donations)

	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	10 Yr. Total
ACRL (Division)											
Conference	\$347,550		\$246,223		\$276,800		\$257,650		\$335,900	\$196,100	\$1,660,223
Division-level Awards	\$20,550	\$19,850	\$14,000	\$17,000	\$17,000	\$17,000	\$17,000	\$17,000	\$17,000	\$17,000	\$156,400
Candidates Forum	\$3,750	¥ 10,000	+ 1 1,000	¥ 11 ,000	4 11,000	4 11,000	411,000	¥ 11,000	\$ 11,000	¥ 11,000	\$3,750
President's Program	+ - ,					\$6,000					\$6,000
Value of Academic Libraries						. ,					. ,
Initiative			\$950								\$950
General				\$500							\$500
IFLA Satellite Conference				·				\$500			\$500
ion Literacy Committee Dinner								·	\$500		\$500
AAMES											
Conference Program			\$2,000								\$2,000
General			\$1,500								\$1,500
AFAS											
Conference Program	\$1,400	\$300									\$1,700
ANSS											
Conference Program		\$1,500	\$1,500		\$1,000						\$4,000
General				\$50							\$50
40th Anniversary Celebration				\$500							\$500
Special Event				\$50							\$50
Arts											
Program		\$200									\$200
Reception	\$1,625										\$1,625
CJCLS											
Awards	\$1,300	\$650	\$1,000	\$1,000	\$1,000	\$1,000		\$1,500	\$1,500	\$750	\$11,200
Dinner (or Dinner Cruise)		\$1,050	\$1,200	\$1,000	\$1,000	\$1,200	\$1,200	\$1,200	\$1,200	\$1,200	\$10,250
Breakfast	\$950										\$950
CLS											
Dinner (Friday Night Feast)		\$3,000	\$2,000	\$1,500	\$3,000	\$1,500		\$1,000	\$1,000	\$3,000	\$13,000
Awards	\$3,600	\$3,600	\$3,000	\$3,000	\$3,000	\$3,000				\$1,000	\$19,200
Program						\$100					\$100
General				\$1,500							\$1,500
Social						\$500			\$500		\$1,000
DLS											
Awards	\$1,500	\$1,500	\$1,200	\$1,200	\$1,200	\$1,200		\$1,200	\$1,200	\$1,200	\$11,400
Luncheon						\$3,000	\$4,000	\$4,000	\$4,000	\$4,000	\$15,000

Donations by Unit and Program

(includes in-kind donations)

	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	10 Yr. Total
ED00	2000-03	2003-10	2010-11	2011-12	2012-13	2013-14	2014-13	2013-10	2010-17	2017-10	10 11. 10tai
EBSS	#4.700	#0.400	Ф0.000	#0.500	#0.500	#0.500					# 44.000
Awards	\$1,700	\$2,400	\$3,000	\$2,500	\$2,500	\$2,500				* 4 000	\$14,600
50th Anniversary Reception		*		^						\$4,000	\$4,000
Program		\$1,500		\$500							\$2,000
ESS (WESS)		A	A	A	A	A	0= 000		A	*	**
Cruise	\$3,950	\$3,500	\$5,600	\$6,500	\$5,800	\$5,000	\$5,200	\$8,400	\$8,700	\$8,600	\$61,250
Program	\$1,000	\$4,250	\$1,000	\$900	\$500		\$1,700			\$500	\$9,350
Awards	\$3,250		\$3,000		\$3,200	\$3,435	\$2,638				\$15,523
Dinner	\$500	\$100									\$600
Reception				\$1,000							\$1,000
General	\$200	\$600		\$500	\$1,150	\$500	\$1,000	\$500	\$500		\$4,950
IS											
Awards	\$8,450	\$7,700	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$3,000	\$6,000	\$6,000	\$61,150
Soiree	\$2,500	\$2,500									\$5,000
PPIRS (LPSS)											
Awards	\$1,200	\$1,200	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$9,400
Program		\$50	\$500								\$550
Luncheon			\$2,000								\$2,000
Social			\$406								\$406
RBMS											
Preconference	\$36,750	\$68,200	\$50,050	\$53,050	\$55,500	\$60,400	\$85,210	\$85,300	\$81,275	\$91,650	\$667,385
Program	·			\$850			·				\$850
STS											
Reception	\$2,750										\$2,750
Program	•			\$2,400							\$2,400
Dinner	\$3,000	\$3,000	\$2,250	\$5,500	\$2,100	\$3,000	\$3,500	\$5,400	\$3,000	\$6,000	\$36,750
General	\$6,750	\$15,250			\$13,150			\$12,800	\$16,300	\$15,300	\$139,160
Awards	¥ = , : 3 0	Ţ::,_ 0 0	\$3,000	\$3,000	\$3,000	Ţ::,_ 0 0	Ţ::,: 00	¥ :=,200	Ţ, - 0 0	4 · 2,200	\$9,000
ULS			+-,	+-,	+ -, - 0 0						+=,=00
General		\$4,500									\$4,500
Award		ψ.,σσσ						\$1,000	\$1,000	\$1,000	\$3,000

Donations by Unit and Program

(includes in-kind donations)

						-					
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	10 Yr. Total
WGSS (WSS)											
Awards	\$1,200	\$1,200	\$1,000							\$1,500	\$3,400
Chapters Council											
Chapters Breakfast	\$700										\$700
Health Sciences IG											
Social		\$500	\$500	\$500	\$500	\$500					\$2,500
Breakfast						\$500					\$500
TOTAL	\$456,125	\$148,100	\$372,789	\$120,250	\$398,400	\$132,085	\$405,498	\$143,800	\$480,575	\$359,800	\$3,017,422

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(Ranked by Rolling 10-Year Total Amount Given)

	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	10 Yr. Total
EBSCO Information Services	\$38,650	\$1,700	\$17,200	\$2,000	\$21,000	\$6,900	\$20,700	\$6,700	\$21,700	\$37,450	\$174,000
Elsevier (formerly Elsevier Science)	\$34,000	\$2,750	\$33,000	\$3,000	\$33,000	\$3,000	\$28,000	\$3,000	\$33,000	\$4,500	\$172,750
YBP Library Services	\$6,500	\$18,750	\$18,000	\$17,900	\$18,900	\$18,000	\$18,000	\$18,000	\$0	\$0	\$134,050
ProQuest CSA (ProQuest)	\$41,050	\$6,650	\$23,750	\$6,500	\$17,000	\$7,000	\$0	\$0	\$15,000	\$0	\$116,950
Thomson Gale/Gale Cengage Learning											
(formerly Cengage Learning, before that											
Gale Cengage, before that Thomson											
Gale, and before that Gale Group											
(Thomson))	\$14,000	\$0	\$14,000	\$0	\$10,000	\$0	\$0	\$0	\$25,000	\$29,500	\$92,500
Thomson Reuters (formerly Thomson											
Scientific and before that Thomson/ISI)	\$19,050	\$9,050	\$19,780	\$3,000	\$9,500	\$2,000	\$7,000	\$1,000	\$0	\$0	\$70,380
Springer	\$5,000	\$0	\$5,000	\$0	\$10,000	\$0	\$15,000	\$0	\$25,000	\$0	\$60,000
Innovative Interfaces, Inc.	\$15,000	\$0	\$10,000	\$0	\$12,000	\$0	\$12,500	\$0	\$10,000	\$0	\$59,500
Alexander Street Press	\$10,200	\$0	\$10,000	\$1,500	\$10,000	\$750	\$0	\$0	\$10,000	\$0	\$42,450
Taylor & Francis Group (formerly Taylor											
& Francis Publishing Services)	\$11,000	\$0	\$4,500	\$0	\$3,000	\$3,000	\$8,000	\$4,500	\$7,000	\$4,500	\$41,000
IEEE	\$2,700	\$2,700	\$6,780	\$6,000	\$6,000	\$3,000	\$5,000	\$3,000	\$5,000	\$5,500	\$40,180
Antiquarian Booksellers Association of											
America	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$5,500	\$5,000	\$5,000	\$36,500
OCLC (formerly Online Computer											
Library Center)	\$5,000	\$0	\$10,000	\$0	\$5,000	\$0	\$5,000	\$0	\$10,000	\$0	\$35,000
Sage Publications, Inc.	\$0	\$0	\$1,500	\$0	\$4,000	\$0	\$15,000	\$0	\$12,000	\$2,000	\$34,500
Atlas Systems	\$3,500	\$3,000	\$300	\$3,000	\$3,000	\$3,250	\$3,500	\$3,500	\$4,000	\$6,100	\$33,150
Emerald Group Publishing Limited	\$7,350	\$3,600	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$0	\$3,000	\$3,000	\$31,950
CHOICE	\$10,000	\$0	\$10,000	\$0	\$10,000	\$0	\$0	\$0	\$0	\$0	\$30,000
IOP Publishing	\$3,000	\$3,000	\$2,250	\$2,500	\$2,100	\$3,000	\$3,500	\$3,000	\$4,500	\$3,000	\$29,850
Ex Libris, Inc.	\$5,000	\$0	\$5,000	\$0	\$10,000	\$0	\$9,750	\$0	\$0	\$0	\$29,750
Morgan & Claypool Publishers	\$2,000	\$2,000	\$2,800	\$2,250	\$2,550	\$2,250	\$2,400	\$2,400	\$4,000	\$2,500	\$25,150
Willliam Reese Company	\$500	\$500	\$2,500	\$2,500	\$2,000	\$2,500	\$3,500	\$3,000	\$4,000	\$4,000	\$25,000
OverDrive, Inc.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,500	\$22,500	\$25,000
Texas A&M University	\$0	\$0	\$3,000	\$0	\$15,000	\$0	\$0	\$0	\$5,000		\$23,000
Pennsylvania State University Libraries	\$0	\$0	\$5,000	\$0	\$5,000	\$0	\$0	\$0	\$5,000	\$8,000	\$23,000
American Psychological Association	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,000	\$12,000	\$22,000

(Ranked by Rolling 10-Year Total Amount Given)

	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	10 Yr. Total
The Philadelphia Rare Books and											
Manuscripts Company	\$500	\$2,500	\$1,500	\$750	\$2,000	\$2,000	\$2,500	\$2,500	\$3,250	\$3,000	\$20,500
Purdue University Libraries	\$500	\$0	\$4,000	\$0	\$5,000	\$0	\$4,000	\$0	\$3,000	\$3,000	\$19,500
University of Iowa Libraries	\$0	\$0	\$0	\$0	\$0	\$0	\$5,000	\$0	\$6,000	\$7,500	\$18,500
John Wiley & Sons, Inc.	\$4,500	\$2,400	\$3,000	\$2,500	\$2,500	\$2,500	\$0	\$0	\$0		\$17,400
McMaster University Library	\$16,000	\$0	\$0	\$0	\$750	\$0	\$0	\$0	\$0	\$0	\$16,750
Serials Solution	\$0	\$3,000	\$11,500	\$1,500	\$0	\$0	\$0	\$0	\$0	\$0	\$16,000
Kansas State University Libraries	\$3,000	\$0	\$3,000	\$0	\$5,000	\$0	\$0	\$0	\$5,000		\$16,000
University of Wyoming Libraries	\$3,000	\$0	\$3,000	\$0	\$5,000	\$0	\$0	\$0	\$3,000	\$2,000	\$16,000
The Ohio State University	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7,500	\$8,000	\$15,500
Temple University Libraries	\$750	\$5,000	\$5,000	\$0	\$3,000	\$0	\$0	\$0	\$750	\$750	\$15,250
Preservation Technologies, LP	\$0	\$0	\$0	\$0	\$3,000	\$3,000	\$2,500	\$2,500	\$4,000	\$0	\$15,000
University of Washington Libraries	\$5,000	\$0	\$1,000	\$0	\$1,000	\$0	\$0	\$0	\$3,000	\$5,000	\$15,000
West Virginia University Libraries	\$0	\$0	\$0	\$0	\$0	\$0	\$10,000	\$0	\$2,000	\$2,000	\$14,000
University of Pennsylvania Libraries	\$1,000	\$5,000	\$5,000	\$0	\$2,500	\$0	\$0	\$0	\$0	\$0	\$13,500
University of California at Berkeley											
Library	\$0	\$0	\$500	\$0	\$500	\$0	\$11,510	\$0	\$500		\$13,010
University of Miami Libraries	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$13,000	\$0	\$0	\$13,000
Bonhams (formerly Bonhams &											
Butterfields)	\$1,000	\$1,000	\$250	\$750	\$1,500	\$1,500	\$1,500	\$1,500	\$2,000	\$2,000	\$13,000
OCLC Research	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$12,000	\$12,500
Casalini Libri, S.P.A.	\$2,200	\$1,000	\$1,000	\$1,000	\$1,300	\$1,000	\$1,000	\$1,000	\$1,300	\$1,500	\$12,300
Blackwell's Book Services	\$12,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$12,000
Coutts Information Services (formerly											
Coutts Nijhoff International)	\$4,250	\$3,250	\$4,000	\$0	\$0	\$0	\$0	\$0	\$0		\$11,500
Henry Sotheran Limited	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,500	\$4,000	\$4,000	\$11,500
American Chemical Society	\$0	\$0	\$0	\$0	\$0	\$0	\$2,750	\$1,000	\$3,000	\$4,500	\$11,250
Aux Amateurs de Livres International											
S.A.R.L.	\$1,500	\$1,500	\$1,700	\$1,700	\$3,300	\$1,500	\$0	\$0	\$0	\$0	\$11,200
Jonathan A. Hill, Bookseller, Inc.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,500	\$5,600	\$11,100
University of Pittsburgh Libraries	\$5,000	\$0	\$5,000	\$0	\$0	\$0	\$0	\$0	\$1,000		\$11,000
Oregon State University Library	\$4,000	\$2,500	\$0	\$0	\$1,500	\$0	\$1,000	\$0	\$1,000	\$1,000	\$11,000
John Windle, Antiquarian Bookseller	\$0	\$0	\$0	\$0	\$0	\$0	\$500	\$3,500	\$3,000	\$3,600	\$10,600
American Association for the											
Advancement of Science	\$800	\$800	\$1,120	\$900	\$900	\$1,000	\$1,000	\$0	\$3,000	\$1,000	\$10,520
Chemical Heritage Foundation	\$0	\$9,000	\$1,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,500

(Ranked by Rolling 10-Year Total Amount Given)

	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	10 Yr. Total
Princeton University Library	\$1,000	\$0	\$1,000	\$0	\$2,000	\$0	\$3,000	\$0	\$3,000	\$750	\$10,000
University of California, San Diego	\$0	\$0	\$0	\$10,000	\$0	\$0	\$0	\$0	\$0	\$0	\$10,000
University of Minnesota Libraries	\$1,000	\$0	\$1,000	\$0	\$6,000	\$0	\$0	\$0	\$1,000	\$1,000	\$10,000
SPIE	\$0	\$0	\$0	\$0	\$1,500	\$1,500	\$1,500	\$1,500	\$2,500	\$1,500	\$10,000
AMALIVRE	\$0	\$0	\$0	\$0	\$0	\$0	\$2,200	\$2,500	\$2,500	\$2,500	\$9,700
CIS/Lexis-Nexis/UPA	\$4,000	\$5,100	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,600
Saint John's University, Saint John's Bible	\$0	\$0	\$0	\$4,000	\$5,500	\$0	\$0	\$0	\$0	\$0	\$9,500
University of Delaware	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,000	\$7,500	\$9,500
Bruce McKittrick Rare Books	\$500	\$3,500	\$500	\$500	\$500	\$500	\$500	\$1,250	\$1,100	\$600	\$9,450
University of Kansas Libraries	\$1,000	\$0	\$2,000	\$0	\$5,000	\$0	\$0	\$0	\$750	\$500	\$9,250
Routledge/Taylor & Francis Group											
(formerly Routledge)	\$1,500	\$1,500	\$1,200	\$1,200	\$1,200	\$1,200	\$1,200	\$0	\$0	\$0	\$9,000
Adam Matthew Digital (formerly Adam											
Matthew Publications Ltd)	\$750	\$0	\$750	\$0	\$2,500	\$750	\$1,250	\$1,750	\$1,250	\$1,250	\$9,000
Sage-CQ Press (formerly CQ Press)	\$1,200	\$1,200	\$3,206	\$1,000	\$1,000	\$1,000	\$0	\$0	\$0	\$0	\$8,606
Otto Harassowitz	\$0	\$500	\$150	\$200	\$750	\$500	\$3,100	\$1,100	\$1,850	\$1,100	\$8,150
Walter de Gruyter	\$0	\$500	\$500	\$0	\$0	\$3,435	\$2,638	\$500	\$0	\$500	\$8,073
Rutgers University Libraries	\$3,500	\$0	\$1,000	\$0	\$3,500	\$0	\$0	\$0	\$0	\$0	\$8,000
Duke University Libraries	\$1,500	\$0	\$1,500	\$0	\$1,500	\$0	\$0	\$0	\$2,000	\$1,500	\$8,000
Iowa State University Library	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,000	\$3,000	\$8,000
GOBI Library Solutions	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,000	\$4,000	\$8,000
Marquette University Libraries	\$1,500	\$0	\$1,950	\$0	\$1,500	\$0	\$0	\$0	\$2,000	\$1,000	\$7,950
LexisNexis	\$7,600	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7,600
Rulon-Miller Books	\$500	\$500	\$500	\$500	\$3,000	\$500	\$500	\$500	\$500	\$600	\$7,600
Jarndyce Antiquarian Booksellers	\$0	\$0	\$0	\$0	\$0	\$1,500	\$1,500	\$2,000	\$400	\$2,000	\$7,400
Statewide California Electronic Library											
Consortium	\$6,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,100	\$7,100
Liber Antiquus, Early Imprinted Books	\$0	\$0	\$500	\$500	\$500	\$500	\$500	\$2,000	\$1,250	\$1,350	\$7,100
Nature Publishing Group	\$0	\$0	\$0	\$0	\$2,000	\$0	\$5,000	\$0	\$0	\$0	\$7,000
University of Virginia	\$7,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7,000
LSU Foundation	\$0	\$0	\$6,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,500
Brigham Young University Libraries	\$1,000	\$0	\$1,500	\$0	\$1,000	\$1,000	\$0	\$0	\$1,000	\$1,000	\$6,500
de Gruyter Foundation	\$0	\$0	\$0	\$3,273	\$3,200	\$0	\$0	\$0	\$0	\$0	\$6,473
University of Florida Libraries	\$0	\$0	\$1,000	\$0	\$0	\$0	\$0	\$5,250	\$0	\$0	\$6,250
Oberlin College Libraries	\$0	\$0	\$250	\$0	\$250	\$0	\$0	\$0	\$750	\$5,000	\$6,250
Oxford University Press	\$0	\$0	\$0	\$0	\$1,000	\$0	\$5,000	\$0	\$0	\$0	\$6,000

(Ranked by Rolling 10-Year Total Amount Given)

	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	10 Yr. Total
Hallis and Madel Edge (former sho Madel Edge)	0050	Φ.0	Ф.	Φ.0.	45 00	* 0=0	#0.500	#0.500			
Hollinger Metal Edge (formerly Metal Edge)	\$250	\$0	\$0	\$0	\$500	\$250	\$2,500	\$2,500	\$0	\$0	\$6,000
North Carolina State University	\$0	\$0	\$3,000	\$0	\$3,000	\$0	\$0	\$0	\$0	\$0	\$6,000
Swets Information Services (formerly	Φ= 000	0.0		Φ.0.	4. 000		Φ.0			0.0	
Swets-Blackwell)	\$5,000	\$0	\$0	\$0	\$1,000	\$0	\$0	\$0	\$0	\$0	\$6,000
The Gladys Krieble Delmas Foundation	\$0	\$0	\$0	\$0	\$0	\$0	\$6,000	\$0	\$0	\$0	\$6,000
University of Houston Libraries	\$0	\$0	\$3,000	\$0	\$3,000	\$0	\$0	\$0	\$0	\$0	\$6,000
University of Maryland - College Park		•	•	• -		•		•			
Libraries	\$5,000	\$0	\$0	\$0	\$1,000	\$0	\$0	\$0	\$0	\$0	\$6,000
Clarivate Analytics	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,500	\$500	\$6,000
Bartleby's Books	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$1,100	\$900	\$6,000
University of Notre Dame Libraries	\$800	\$0	\$0	\$0	\$5,000	\$0	\$0	\$0	\$0	\$0	\$5,800
Bibliographical Society of America	\$500	\$0	\$750	\$1,150	\$500	\$500	\$500	\$500	\$600	\$600	\$5,600
University of Cincinnati Libraries	\$4,000	\$0	\$750	\$0	\$750	\$0	\$0	\$0	\$0	\$0	\$5,500
University of Illinois at Urbana-											
Champaign	\$0	\$0	\$1,000	\$0	\$1,000	\$0	\$0	\$0	\$2,000	\$1,500	\$5,500
Johns Hopkins University Libraries	\$1,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,000	\$2,500	\$5,500
University of Arizona Library	\$0	\$0	\$0	\$0	\$0	\$1,000	\$0	\$0	\$2,000	\$2,500	\$5,500
University of California at Irvine	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,000	\$3,500	\$5,500
Tavistock Books	\$500	\$0	\$500	\$500	\$500	\$500	\$500	\$1,000	\$600	\$750	\$5,350
Knovel	\$500	\$500	\$700	\$600	\$600	\$0	\$800	\$800	\$800	\$0	\$5,300
Indiana University	\$0	\$0	\$0	\$0	\$5,250	\$0	\$0	\$0	\$0	\$0	\$5,250
Case Western Reserve University, Kelvin											
Smith Library	\$0	\$0	\$0	\$0	\$0	\$250	\$0	\$0	\$0	\$5,000	\$5,250
Ten Pound Island Book Co.	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$600	\$5,100
Arizona State University Libraries	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,000	\$0	\$5,000
CCS Content Conversion Specialists	\$0	\$0	\$0	\$0	\$0	\$0	\$5,000	\$0	\$0	\$0	\$5,000
Cambridge University Press	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,000	\$5,000
Columbia University Libraries	\$1,000	\$0	\$1,000	\$0	\$1,000	\$0	\$0	\$0	\$2,000	\$0	\$5,000
Glenn Horowitz Bookseller	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,000	\$0	\$0	\$5,000
McGraw-Hill Professional	\$0	\$0	\$0	\$0	\$0	\$0	\$5,000	\$0	\$0	\$0	\$5,000
USMAI Library Consortium	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,000	\$0	\$5,000
Florida State University Libraries	\$0	\$0	\$1,000	\$0	\$1,000	\$0	\$1,000	\$0	\$1,000	\$1,000	\$5,000
University of Colorado at Boulder											
Libraries	\$500	\$0	\$500	\$0	\$1,000	\$0	\$1,000	\$0	\$1,000	\$1,000	\$5,000
Baylor University	\$0	\$0	\$0	\$0	\$1,000	\$0	\$0	\$0	\$2,000	\$2,000	\$5,000
Brown University Library	\$1,000	\$0	\$1,000	\$0	\$1,000	\$0	\$0	\$0	\$0	\$2,000	\$5,000

(Ranked by Rolling 10-Year Total Amount Given)

	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	10 Yr. Total
Puvill Libros, S.A.	\$750	\$0	\$750	\$450	\$500	\$500	\$500	\$500	\$500	\$500	\$4,950
University of California at Los Angeles											
(UCLA) Library	\$0	\$0	\$0	\$750	\$0	\$0	\$0	\$0	\$4,000	\$0	\$4,750
University of Texas at Austin	\$0	\$0	\$0	\$0	\$0	\$0	\$1,750	\$0	\$3,000	\$0	\$4,750
B&L Rootenberg Rare Books	\$500	\$0	\$500	\$500	\$500	\$500	\$500	\$500	\$1,100	\$0	\$4,600
Johanson Rare Books	\$0	\$1,100	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$0	\$4,600
Nevada State Museum	\$0	\$0	\$0	\$0	\$0	\$4,600	\$0	\$0	\$0	\$0	\$4,600
Palinurus Antiquarian Books	\$500	\$500	\$500	\$0	\$500	\$500	\$500	\$500	\$500	\$600	\$4,600
Between the Covers - Rare Books	\$1,500	\$500	\$1,000	\$0	\$0	\$0	\$0	\$500	\$500	\$600	\$4,600
Eclectibles	\$0	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$600	\$4,600
Royal Books, Inc	\$0	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$600	\$4,600
Massachusetts Institute of Technology											
Libraries	\$2,000	\$0	\$500	\$0	\$1,000	\$0	\$0	\$0	\$1,000		\$4,500
University of Michigan Library	\$0	\$0	\$0	\$0	\$0	\$750	\$0	\$0	\$3,750	\$0	\$4,500
Winston-Salem State University - O'Kelly											
Library	\$1,500	\$0	\$1,000	\$0	\$1,000	\$0	\$1,000	\$0	\$0	\$0	\$4,500
Caladex	\$0	\$0	\$750	\$750	\$750	\$2,000	\$0	\$0	\$0	\$0	\$4,250
Wayne State University Libraries	\$2,000	\$0	\$750	\$0	\$500	\$0	\$0	\$0	\$1,000	\$0	\$4,250
Lux Mentis	\$500	\$250	\$250	\$0	\$250	\$0	\$500	\$500	\$900	\$1,000	\$4,150
Eric Chaim Kline, Bookseller	\$0	\$0	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$600	\$4,100
Musinsky Rare Books, Inc.	\$0	\$500	\$500	\$0	\$500	\$500	\$500	\$500	\$500	\$600	\$4,100
Michael R. Weintraub, Inc.	\$500	\$500	\$500	\$500	\$500	\$500	\$0	\$1,000	\$0	\$0	\$4,000
Thomas A. Goldwasser Rare Books	\$0	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$0	\$4,000
Brick Row Book Shop	\$0	\$0	\$500	\$0	\$0	\$0	\$3,500	\$0	\$0	\$0	\$4,000
Buddenbrooks	\$250	\$500	\$1,250	\$500	\$500	\$0	\$0	\$500	\$500	\$0	\$4,000
Capella University	\$0	\$0	\$4,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,000
Carnegie Mellon University Library	\$4,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,000
Dartmouth College Library	\$1,000	\$0	\$1,000	\$0	\$1,000	\$0	\$1,000	\$0	\$0	\$0	\$4,000
Form & Reform	\$0	\$0	\$0	\$0	\$0	\$0	\$4,000	\$0	\$0	\$0	\$4,000
Georgetown University	\$3,000	\$0	\$1,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,000
IGI Global	\$2,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,500	\$0	\$4,000
Jean Touzot Libraire Internationale											
(formerly Jean Touzot Libraire-Editeur)	\$1,000	\$1,000	\$1,000	\$1,000	\$0	\$0	\$0	\$0	\$0	\$0	\$4,000
Rice University - Fondren Library	\$1,000	\$0	\$1,000	\$0	\$1,000	\$0	\$1,000	\$0	\$0	\$0	\$4,000
Royal Society of Chemistry	\$0	\$0	\$0	\$0	\$0	\$1,000	\$1,000	\$1,000	\$1,000	\$0	\$4,000
State University of New York at Albany	\$4,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,000

(Ranked by Rolling 10-Year Total Amount Given)

	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	10 Yr. Total
The University at Albany Foundation	\$0	\$0	\$0	\$0	\$4,000	\$0	\$0	\$0	\$0	\$0	\$4,000
University of Massachusetts Libraries	\$1,000	\$0	\$1,000	\$0	\$1,000	\$0	\$0	\$0	\$1,000		\$4,000
Wiley-Blackwell	\$1,000	\$0	\$0	\$0	\$3,000	\$0	\$0	\$0	\$0		\$4,000
Wittenberg University Library	\$500	\$0	\$500	\$0	\$750	\$0	\$750	\$0	\$750	\$750	\$4,000
University of Utah Libraries	\$500	\$0	\$750	\$0	\$750	\$0	\$0	\$0	\$1,000	\$1,000	\$4,000
Bromer Booksellers	\$0	\$0	\$500	\$500	\$500	\$0	\$500	\$0	\$800	\$1,200	\$4,000
Northwestern University Libraries	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,000	\$2,000	\$4,000
Sotheby's	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,000		\$4,000
Virginia Tech Libraries	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,000	\$2,000	\$4,000
Western Michigan University Libraries	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,000		\$4,000
Arthur Fournier Fine & Rare	\$0	\$0	\$0	\$0	\$0	\$0	\$750	\$750	\$900	\$1,400	\$3,800
James Cummins Bookseller, Inc.	\$0	\$500	\$500	\$500	\$0	\$2,250	\$0	\$0	\$0		\$3,750
Whitman College Library	\$750	\$0	\$750	\$0	\$750	\$0	\$0	\$0	\$750		\$3,750
Martayan Lan Inc.	\$0	\$0	\$0	\$0	\$0	\$500	\$500	\$500	\$1,000		\$3,700
Boston Rare Maps	\$0	\$500	\$0	\$0	\$500	\$500	\$500	\$500	\$500	\$600	\$3,600
Ken Sanders Rare Books	\$0	\$0	\$500	\$500	\$500	\$500	\$500	\$0	\$500	\$600	\$3,600
The Book Shop, LLC	\$0	\$0	\$0	\$0	\$500	\$500	\$500	\$500	\$1,000	\$600	\$3,600
Ars Libri	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$0	\$0		\$3,500
Colby College Libraries	\$500	\$0	\$500	\$0	\$500	\$0	\$1,000	\$0	\$1,000		\$3,500
DeWolfe & Wood	\$0	\$500	\$500	\$500	\$500	\$500	\$0	\$500	\$500	•	\$3,500
Five Colleges of Ohio Inc.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,500	\$3,500
Michael Brown Rare Books	\$500	\$3,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,500
University of Nebraska - Lincoln											
Libraries	\$1,000	\$0	\$500	\$0	\$1,000	\$0	\$0	\$0	\$1,000		\$3,500
University of Tennessee Library	\$0	\$0	\$1,500	\$0	\$0	\$0	\$0	\$0	\$2,000	•	\$3,500
Utah State University Libraries	\$0	\$0	\$0	\$0	\$1,000	\$0	\$1,000	\$0	\$1,500		\$3,500
Cairn.info	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,800	\$1,600		\$3,400
Kenneth Karmiole Bookseller	\$500	\$0	\$500	\$500	\$500	\$250	\$500	\$0	\$0		\$3,350
L&T Respess Book	\$750	\$500	\$500	\$0	\$500	\$0	\$0	\$500	\$0	\$600	\$3,350
Read 'Em Again Books	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$750	\$1,250	\$1,350	\$3,350
American Society of Mechanical											
Engineers	\$0	\$0	\$0	\$0	\$0	\$0	\$1,500	\$0	\$1,800		\$3,300
Auburn University Libraries	\$500	\$0	\$500	\$0	\$750	\$0	\$0	\$0	\$750	\$750	\$3,250
ABC-CLIO	\$1,000	\$1,200	\$1,000	\$0	\$0	\$0	\$0	\$0	\$0		\$3,200
Franklin Gilliam :: Rare Books	\$500	\$500	\$500	\$0	\$0	\$0	\$0	\$250	\$400	\$1,000	\$3,150

(Ranked by Rolling 10-Year Total Amount Given)

	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	10 Yr. Total
	40.050	•	Ф.	Φ.0			•	•		•	
State University of New York at Buffalo	\$3,050	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$3,050
American Philosophical Society	\$0	\$3,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$3,000
Copyright Clearance Center	\$0	\$0	\$0	\$0	\$3,000	\$0	\$0	\$0	\$0		\$3,000
Lorne Bair Rare Books	\$0	\$0	\$500	\$500	\$500	\$0	\$500	\$500	\$500		\$3,000
Oklahoma State University Libraries	\$3,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$3,000
Rowman & Littlefield	\$0	\$0	\$0	\$0	\$3,000	\$0	\$0	\$0	\$0		\$3,000
SAE International	\$0	\$0	\$0	\$0	\$0	\$0	\$1,500	\$0	\$1,500		\$3,000
Simon Beattie Ltd.	\$0	\$0	\$0	\$1,500	\$250	\$500	\$500	\$250	\$0		\$3,000
Stony Brook University	\$3,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$3,000
Texas Tech University Libraries	\$0	\$0	\$3,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,000
University of Nevada-Las Vegas Libraries	\$0	\$0	\$0	\$0	\$0	\$3,000	\$0	\$0	\$0	\$0	\$3,000
University of New Mexico Libraries	\$2,000	\$0	\$0	\$0	\$1,000	\$0	\$0	\$0	\$0		\$3,000
Erasmus Boekhandel by	\$0		\$0	\$0	\$500	\$500	\$500	\$500	\$500	\$500	\$3,000
Colorado State University Libraries	\$500	\$0	\$0	\$0	\$1,000	\$0	\$0	\$0	\$750	\$750	\$3,000
Emory University Libraries	\$0	\$0	\$0	\$0	\$1,000	\$0	\$0	\$0	\$1,000	\$1,000	\$3,000
Library Juice Academy	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000	\$1,000	\$1,000	\$3,000
Maggs Bros. Ltd.	\$0	\$0	\$0	\$0	\$0	\$0	\$750	\$1,750	\$0		\$2,900
The H.W. Wilson Foundation	\$0	\$1,200	\$1,680	\$0	\$0	\$0	\$0	\$0	\$0		\$2,880
Geographic Research/Simply Map	\$0	\$0	\$0	\$0	\$0	\$0	\$1,250	\$0	\$1,500		\$2,750
Tulane University Libraries	\$0	\$0	\$500	\$0	\$750	\$0	\$750	\$0	\$750	•	\$2,750
University of San Francisco Libraries	\$750	\$0	\$2,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,750
White Fox Rare Books and Antiques	\$0	\$0	\$0	\$0	\$0	\$0	\$500	\$750	\$900	\$600	\$2,750
University of Arkansas Libraries	\$100	\$0	\$0	\$0	\$1,000	\$0	\$0	\$0	\$1,500		\$2,600
Bolerium Books	\$0	\$0	\$500	\$500	\$0	\$500	\$500	\$0	\$500	\$0	\$2,500
Marc Selvaggio, Bookseller	\$500	\$500	\$0	\$500	\$0	\$0	\$500	\$0	\$500		\$2,500
B & B Rare Books, Ltd.	\$0	\$500	\$500	\$0	\$500	\$500	\$0	\$500	\$0	\$0	\$2,500
Begell House Inc. Publishers	\$0	\$0	\$0	\$0	\$0	\$0	\$1,500	\$0	\$1,000	\$0	\$2,500
Ken Lopez - Bookseller	\$0	\$0	\$0	\$500	\$500	\$500	\$500	\$500	\$0	\$0	\$2,500
Michigan State University	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,500	\$0	\$2,500
New England Journal of Medicine	\$0	\$500	\$500	\$500	\$500	\$500	\$0	\$0	\$0		\$2,500
Ovid Technologies	\$0	\$0	\$0	\$0	\$0	\$500	\$2,000	\$0	\$0	\$0	\$2,500
Priscilla Juvelis, Inc.	\$500	\$500	\$500	\$500	\$0	\$500	\$0	\$0	\$0	\$0	\$2,500
Roy Young Bookseller, Inc.	\$0	\$0	\$0	\$500	\$500	\$500	\$500	\$500	\$0	\$0	\$2,500
Syracuse University Library	\$1,500	\$0	\$0	\$0	\$1,000	\$0	\$0	\$0	\$0	\$0	\$2,500

(Ranked by Rolling 10-Year Total Amount Given)

	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	10 Yr. Total
Washington University in St. Louis	\$0	\$0	\$500	\$0	\$1,000	\$0	\$0	\$0	\$1,000	\$0	\$2,500
Brill Academic Publishing USA	\$0	\$0	\$500	\$0	\$500	\$0	\$500	\$0	\$500	\$500	\$2,500
Phillip J. Pirages Fine Books and											
Manuscripts	\$0	\$0	\$0	\$0	\$0	\$0	\$500	\$500	\$500	\$1,000	\$2,500
Consortium of Academic and Research											
Libraries in Illinois (CARLI)	\$1,950	\$0	\$500	\$0	\$0	\$0	\$0	\$0		\$0	\$2,450
F.A. Bernett, Inc	\$0	\$0	\$750	\$500	\$0	\$0	\$0	\$0	\$500	\$600	\$2,350
Archival Products	\$0	\$0	\$0	\$0	\$0	\$500	\$500	\$500	\$750	\$0	\$2,250
Ebrary	\$750	\$0	\$0	\$1,500	\$0	\$0	\$0	\$0		\$0	\$2,250
Safari Books Online	\$750	\$0	\$0	\$0	\$0		\$0	\$0	\$1,500	\$0	\$2,250
University of Connecticut Libraries	\$500	\$0	\$750	\$0	\$1,000	\$0	\$0	\$0	\$0	\$0	\$2,250
University of Wisconsin - Madison											
General Library System	\$0	\$0	\$1,000	\$0	\$1,250	\$0	\$0	\$0	\$0	\$0	\$2,250
VALE - Virtual Academic Library											
Environment New Jersey	\$0	\$0	\$750	\$0	\$750	\$0	\$0	\$0	\$0	\$750	\$2,250
Voyager Press Rare Books &											
Manuscripts	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$750	\$750	\$750	\$2,250
Bloomsbury Publishing	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,250	\$2,250
Brepols Publishers	\$0	\$200	\$0	\$0	\$150		\$300	\$500	\$500	\$500	\$2,150
James Arsenault Rare Books	\$0	\$0	\$0	\$500	\$500		\$500	\$0	\$0	\$600	\$2,100
Rabelais	\$0	\$0	\$500	\$0	\$0		\$500	\$500	\$0	\$600	\$2,100
Antiquariat Inlibris-Gilhofer	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$2,000	\$0	\$2,000
Florida Atlantic University Libraries	\$500	\$0	\$500	\$0	\$500		\$500	\$0		\$0	\$2,000
Garrett Scott, Bookseller	\$0	\$500	\$500	\$0	\$500	\$0	\$0	\$0	\$500	\$0	\$2,000
George Washington University Libraries	\$0	\$0	\$0	\$0	\$0		\$2,000	\$0		\$0	\$2,000
Harvard College Library	\$1,000	\$0	\$1,000	\$0	\$0		\$0	\$0	\$0	\$0	\$2,000
Harvard University, Houghton Library	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$2,000	\$0	\$2,000
Ingram Content Group	\$0	\$0	\$0	\$0	\$1,000		\$1,000	\$0		\$0	\$2,000
Jett W. Whitehead Rare Books	\$500	\$500	\$0	\$0	\$500	\$500	\$0	\$0	\$0	\$0	\$2,000
JoVE - Journal of Visualized											
Experiments	\$0	\$0	\$0	\$0	\$0	\$0	\$2,000			\$0	\$2,000
Loyola University Chicago	\$0	\$0	\$500	\$0	\$500	\$0	\$500	\$0	\$500	\$0	\$2,000
Oak Knoll Books	\$500	\$500	\$0	\$0	\$0		\$0	\$0	\$500	\$0	\$2,000
Project Muse	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,000	\$0	\$2,000
Santa Clara University	\$0	\$0	\$0	\$0	\$1,000	\$0	\$0	\$0	\$1,000	\$0	\$2,000

(Ranked by Rolling 10-Year Total Amount Given)

	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	10 Yr. Total
University of Calgary	\$0		\$1,000	\$0	\$1,000	\$0	\$0	\$0	\$0	\$0	\$2,000
University of Kentucky Libraries	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,000	\$2,000
University of Rochester Libraries	\$1,000	\$0	\$1,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,000
University of San Diego Library	\$0	\$0	\$500	\$0	\$500	\$0	\$500	\$0	\$500	\$0	\$2,000
Washburn University Library	\$0	\$0	\$0	\$0	\$0	\$0	\$2,000	\$0	\$0	\$0	\$2,000
Washington State University Libraries	\$2,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$2,000
Credo Reference	\$0	\$0	\$0	\$0	\$0	\$0	\$750	\$0	\$500	\$750	\$2,000
Bowling Green State University	\$0	\$0	\$0	\$0	\$1,000	\$0	\$0	\$0	\$0	\$1,000	\$2,000
Vamp & Tramp Booksellers, LLC	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$250	\$1,000	\$600	\$1,850
University of Iowa Special Collections	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,775	\$0	\$1,775
Appalachian State University - C.G. Belk											
Library	\$1,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$750		\$1,750
E. Wharton & Co.	\$750	\$500	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,750
Kelmscott Books (formerly The Kelmscott											
Bookshop)	\$500	\$500	\$500	\$0	\$0	\$250	\$0	\$0	\$0		\$1,750
American Society of Civil Engineers	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$750	\$1,000	\$1,750
California Rare Book School	\$0	\$0	\$0	\$0	\$250	\$250	\$250	\$250	\$400	\$300	\$1,700
Ben Kinmont, Bookseller	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500	\$500	\$600	\$1,600
Howard Karno Books, Inc.	\$0	\$0	\$0	\$500	\$0	\$0	\$0	\$500	\$0		\$1,600
Dawson's Book Shop	\$0	\$0	\$0	\$500	\$0	\$500	\$500	\$0	\$0		\$1,500
Productive Arts	\$0	\$500	\$0	\$500	\$0	\$0	\$0	\$500	\$0		\$1,500
Agati	\$0	\$0	\$1,500	\$0	\$0	\$0	\$0	\$0	\$0		\$1,500
Books Tell You Why, Inc.	\$0	\$0	\$0	\$500	\$0	\$0	\$500	\$500	\$0		\$1,500
Carpe Diem Fine Books	\$0	\$0	\$0	\$500	\$0	\$500	\$500	\$0	\$0		\$1,500
Coconut Rose Books	\$0	\$0	\$0	\$500	\$0	\$500	\$500	\$0	\$0		\$1,500
CRC Press LLC	\$0	\$0	\$0	\$0	\$500	\$500	\$500	\$0	\$0		\$1,500
Data-Planet	\$0	\$0	\$0	\$0	\$0	\$0	\$750	\$0	\$750		\$1,500
Drexel University Libraries	\$0	\$1,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,500
Iberbook International (Iberbook-Sanchez											
Cuesta)	\$0	\$0	\$500	\$500	\$500	\$0	\$0	\$0	\$0		\$1,500
IET USA	\$0	\$0	\$0	\$0	\$0	\$0	\$750	\$0	\$750	•	\$1,500
Mary Ann Liebert, Inc., Publishers	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,500	\$0	\$1,500
National Archives Mid-Atlantic Region -											
Philadelphia	\$0	\$1,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$1,500
PolicyMap	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,500		\$1,500
Southern Methodist University	\$0	\$0	\$0	\$0	\$500	\$0	\$500	\$0	\$500	\$0	\$1,500

(Ranked by Rolling 10-Year Total Amount Given)

	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	10 Yr. Total
Springshare	\$0	\$0	\$0	\$0	\$1,500	\$0	\$0	\$0	\$0	\$0	\$1,500
The Lawbook Exchange	\$500	\$500	\$0	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$1,500
University of British Columbia Library	\$1,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,500
University of California at Los Angeles (UCLA), Charles E. Young Research Library Department of Special Collection	\$0	\$0	\$0	\$1,000	\$0	\$500	\$0	\$0	\$0	\$0	\$1,500
University of Manitoba Libraries	\$500	\$0	\$1,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,500
University of Missouri	\$0	\$0	\$500	\$0	\$1,000		\$0	\$0		\$0	\$1,500
University of Missouri - St. Louis - The Saint Louis Mecantile Library	\$0	\$0	\$1,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,500
University of Victoria Libraries	\$500	\$0	\$500	\$0	\$500	\$0	\$0	\$0	\$0	\$0	\$1,500
WT Cox Information Services	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$1,500
1science	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$750	\$750	\$1,500
Langdon Manor Books LLC	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0	\$1,350	\$1,350
University of Oregon Libraries	\$0	\$0	\$500	\$0	\$0	\$0	\$500	\$0	\$300	\$0	\$1,300
University of Montana - Mansfield											
Library	\$0	\$0	\$0	\$0	\$300	\$0	\$300	\$0	\$300	\$400	\$1,300
Franklin and Marshall College Libraries	\$500	\$0	\$750	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,250
Historicana	\$0	\$0	\$0	\$0	\$1,250		\$0	\$0	\$0	\$0	\$1,250
Jerry N. Showalter, Bookseller	\$250	\$0	\$0	\$0	\$500		\$0	\$0	\$500	\$0	\$1,250
University of Northern Iowa	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500	\$750	\$1,250
University of North Carolina at	# 500	00	07.40	Φ0	00	Φ0	Φ0	00	00	Φ0	04.040
Greensboro Library Alliance of Library Service Networks	\$500	\$0 \$0	\$749	\$0 \$0	\$0 \$0		\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$1,249
Greenwood Publishing Group	\$1,200	•	\$0								\$1,200
Boreas Fine Art	\$1,200	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0		\$0	\$0 \$0		\$0	\$1,200
The H.W. Wilson Company	\$0 \$0	\$1,100	\$0 \$0	\$0 \$0	\$0 \$0		\$0 \$0	\$0 \$0	\$1,100 \$0	\$0 \$0	\$1,100 \$1,100
Triolet Rare Books	\$0 \$0		\$0 \$0	\$0 \$0	\$0 \$0		\$0 \$0	\$0 \$0	\$1,100	\$0 \$0	\$1,100
Vanderbilt University	\$100	\$0 \$0	\$0 \$0	\$0 \$0	\$1,000		\$0 \$0	\$0 \$0		\$0 \$0	
Abby Schoolman Books	\$100	\$0 \$0	\$0 \$0	\$0 \$0	\$1,000		\$0 \$0	\$0 \$0	\$0 \$500	\$600	\$1,100 \$1,100
G. Davis Rare Books	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0		\$0 \$0	\$500 \$500	\$500	\$600	\$1,100 \$1,100
Michael Laird Rare Books	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0		\$500			\$600	\$1,100 \$1,100
The Book Collector, Inc.	\$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0		\$500 \$0	\$0 \$0	\$500	\$600	\$1,100
Whitmore Rare Books, Inc.	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0		\$0 \$0	\$0 \$0		\$600	
Williamore Nate Books, IIIC.	\$0	\$0	20	\$0	\$0	\$500	\$ 0	\$0	\$0	\$600	\$1,100

(Ranked by Rolling 10-Year Total Amount Given)

	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	10 Yr. Total
Backstage Library Works	\$0	\$0	\$300	\$0	\$500	\$250	\$0	\$0	\$0	\$0	\$1,050
Athena Rare Books	\$1,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000
Jeff Weber Rare Books	\$0	\$0	\$0	\$500	\$0	\$0	\$500	\$0	\$0	\$0	\$1,000
Addison Publications Ltd	\$0	\$0	\$0	\$0	\$1,000	\$0	\$0	\$0	\$0	\$0	\$1,000
Antiquarian Bookseller John Windle	\$0	\$0	\$0	\$500	\$0		\$0	\$0	\$0	\$0	\$1,000
Antiquariat Botanicum	\$0	\$0	\$0	\$0	\$0		\$500	\$0	\$0	\$0	\$1,000
Association of Research Libraries	\$1,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000
Barry Lawrence Ruderman Antique Maps	\$500	\$0	\$0	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000
Barry Scott	\$0	\$500	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000
Bibliographical Society of the University of											
Virginia	\$1,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000
Black Caucus of The American Library											
Association	\$0	\$0	\$0	\$0	\$0	\$1,000	\$0	\$0	\$0	\$0	\$1,000
Bludeau Partners International	\$500	\$0	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000
Bucks County Community College											
Library	\$0	\$0	\$500	\$0	\$500	\$0	\$0	\$0	\$0	\$0	\$1,000
Charles B. Wood, III, Inc. Antiquarian											
Booksellers	\$0	\$0	\$500	\$0	\$500		\$0	\$0	\$0	\$0	\$1,000
Charles Babbage Institute	\$0	\$0	\$0	\$0	\$500	\$0	\$500	\$0	\$0	\$0	\$1,000
College Library Directors' Mentor Program	\$0	\$0	\$0	\$0	\$0		\$500	\$0	\$500	\$0	\$1,000
Cornell University Library	\$1,000	\$0	\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$1,000
Division Leap	\$0	\$0	\$500	\$0	\$0		\$500	\$0	\$0	\$0	\$1,000
Getty Research Institute	\$0	\$0	\$0	\$500	\$0		\$0	\$0	\$0	\$0	\$1,000
Ian Brabner, Bookseller	\$500	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000
James M. Dourgarian, Bookman	\$0	\$0	\$0	\$0	\$0		\$1,000	\$0	\$0	\$0	\$1,000
Jeff Hirsch Books	\$0	\$0	\$0	\$0	\$0	\$500	\$0	\$0	\$500	\$0	\$1,000
John Carroll University	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0	\$1,000	\$1,000
John Waite Rare Books	\$500	\$500	\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$1,000
Johnnycake Books	\$500	\$500	\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$1,000
Kuenzig Books	\$500	\$0	\$500	\$0	\$0		\$0	\$0	\$0	\$0	\$1,000
La Salle University	\$0	\$1,000	\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$1,000
Library Company of Philadelphia	\$0	\$1,000	\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$1,000
Libros Latinos	\$0	\$0	\$0	\$0	\$0		\$500	\$500	\$0	\$0	\$1,000
Linfield College	\$0	\$0	\$0	\$0	\$0		\$500	\$0	\$500	\$0	\$1,000
Little Sages Books	\$0	\$0	\$0	\$0	\$0	\$500	\$500	\$0	\$0	\$0	\$1,000

(Ranked by Rolling 10-Year Total Amount Given)

	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	10 Yr. Total
Lizz Young Bookseller	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500	\$500	\$0	\$1,000
Long Island University - Palmer School of											
Library & Information Science	\$0	\$0	\$0	\$0	\$250	\$750	\$0	\$0	\$0	\$0	\$1,000
Lowry-James Rare Prints & Books	\$0	\$0	\$0	\$0	\$500	\$500	\$0	\$0	\$0	\$0	\$1,000
Marilyn Braiterman Rare Books,											
Antiquarian Bookseller	\$0	\$1,000	\$0	\$0	\$0		\$0	\$0		\$0	\$1,000
Miami University Libraries	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000	\$1,000
Ohio Wesleyan University Libraries	\$500	\$0	\$0	\$0	\$250		\$250	\$0	\$0	\$0	\$1,000
Pacific University	\$0	\$0	\$0	\$0	\$0	\$0	\$500	\$0	\$500	\$0	\$1,000
Robert W. Woodruff Library of the											
Atlanta University Center	\$250	\$0	\$750	\$0	\$0		\$0	\$0	\$0	\$0	\$1,000
Stanford University Libraries	\$1,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000
University of Chicago Library	\$1,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000
University of Louisville Libraries	\$1,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000
University of Puget Sound	\$0	\$0	\$0	\$0	\$0	\$0	\$500	\$0	\$500	\$0	\$1,000
Walkabout Books	\$0	\$0	\$0	\$0	\$0	\$500	\$500	\$0	\$0	\$0	\$1,000
Willamette University Library	\$800	\$0	\$0	\$0	\$200	\$0	\$0	\$0	\$0	\$0	\$1,000
Yale University Library	\$1,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000
Macalester College Library	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$250	\$250	\$1,000
DePaul University Libraries	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500	\$500	\$1,000
Iberoamericana Editorial Vervuert, S.L.U.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500	\$500	\$1,000
DIGITALIA	\$0	\$0	\$0	\$450	\$500	\$0	\$0	\$0	\$0	\$0	\$950
Northeast Document Conservation Center	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$250	\$300	\$400	\$950
Brian Cassidy, Bookseller	\$0	\$500	\$0	\$0	\$0		\$0	\$0	\$400	\$0	\$900
Furman University Library	\$300	\$0	\$300	\$0	\$300	\$0	\$0	\$0	\$0	\$0	\$900
Creighton University - Reinert-Alumni											
Memorial Library	\$500	\$0	\$300	\$0	\$0	\$0	\$0	\$0		\$0	\$800
Estates of Mind	\$0	\$300	\$0	\$0	\$0		\$500	\$0	\$0	\$0	\$800
Juxta Editions	\$0	\$0	\$0	\$0	\$0	\$0	\$800	\$0	\$0	\$0	\$800
MARCIVE	\$0	\$0	\$400	\$0	\$400	\$0	\$0	\$0	\$0	\$0	\$800
Nudelman Rare Books	\$0	\$0	\$0	\$0	\$0	\$0	\$400	\$0	\$400	\$0	\$800
Wesleyan University Libraries (CTW											
Consortium)	\$500	\$0	\$300	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$800
Against the Grain	\$0	\$0	\$0	\$0	\$0	\$0	\$750	\$0	\$0	\$0	\$750

(Ranked by Rolling 10-Year Total Amount Given)

	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	10 Yr. Total
American Council of Learned Societies:											
ACLS Humanities E-Book	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$750	\$0	\$750
Asia Bookroom	\$0	\$0	\$0	\$0	\$0	\$750	\$0	\$0	\$0	\$0	\$750
Bauman Rare Books, Inc.	\$0	\$0	\$0	\$0	\$0	\$750	\$0	\$0	\$0	\$0	\$750
Business Expert Press	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$750	\$750
California Digital Library	\$0	\$0	\$0	\$0	\$0	\$0	\$750	\$0	\$0	\$0	\$750
Clemson University	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$750	\$0	\$750
Edward Elgar Publishing	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$750	\$0	\$750
Eustis Chair	\$0	\$0	\$750	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$750
Facsimile Finder	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$750	\$0	\$0	\$750
JSTOR	\$750	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$750
Leslie Hindman Auctioneers	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$750	\$0	\$750
Orbis Cascade Alliance	\$0	\$0	\$0	\$0	\$0	\$0	\$750		\$0	\$0	\$750
Richmond Public Library Foundation	\$0	\$0	\$0	\$0	\$0	\$0	\$750	\$0	\$0	\$0	\$750
Rittenhouse	\$0	\$0	\$0	\$0	\$0	\$0	\$750		\$0	\$0	\$750
Rockefeller University Press	\$0	\$0	\$0	\$0	\$0	\$0	\$750	\$0	\$0	\$0	\$750
San Jose State University School of Library											
and Information Science	\$0	\$0	\$0	\$0	\$750	\$0	\$0	\$0	\$0	\$0	\$750
The Optical Society	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$750	\$0	\$750
University of California at Riverside											
Libraries, Special Collections & Archives	\$0	\$0	\$0	\$750	\$0	\$0	\$0	\$0		\$0	\$750
World Scientific Publishing Co.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$750	\$0	\$750
Lutheran Theological Seminary at											
Philadelphia	\$0	\$700		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$700
ArchivesSpace	\$0	\$0	\$0	\$0	\$0	\$300	\$0	\$300	\$0	\$0	\$600
Biblioctopus	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$600	\$600
Kenneth Mallory Bookseller	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$600	\$600
QED Appraisal Group	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$600	\$600
William Allison Books	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$600	\$600
Bookandpaperfairs.com	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$300	\$300	\$600
Golden Legend	\$0	\$0	\$0	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$500
Laurence McGilvery	\$0	\$0	\$0	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$500
David M. Lesser Fine Antiquarian Books	\$0	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500
Aleph-Bet Books	\$0	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500
Amherst College Library	\$0	\$0	\$0	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$500
Anthology Rare Books	\$0	\$0	\$0	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$500

(Ranked by Rolling 10-Year Total Amount Given)

	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	10 Yr. Total
ASTM International	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500	\$0	\$500
Back of Beyond Books	\$0	\$0	\$0	\$0	\$0	\$500	\$0	\$0	\$0	\$0	\$500
Bickerstaff's Books, Maps, &c.	\$0	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500
Bookworm and Silverfish	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500
Boston Book Company	\$0	\$0	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500
Bowdoin College Library	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500
Butler Books	\$0	\$0	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500
By the Book, L.C.	\$0	\$0	\$0	\$0	\$500	\$0	\$0	\$0	\$0	\$0	\$500
Carl Blomgren - Fine Books	\$0	\$0	\$0	\$0	\$0	\$0	\$500	\$0	\$0	\$0	\$500
Charles Agvent - Rare Books and											
Autographs	\$0	\$0	\$0	\$0	\$500	\$0	\$0	\$0		\$0	\$500
College of Physicians of Philadelphia	\$0	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500
Colorado College Tutt Library	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500	\$0	\$500
Counting Opinions	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500	\$500
Crescent City Books	\$0	\$0	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500
Cumberland Rare Books	\$0	\$0	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500
Davar Antiquarian Books	\$0	\$0	\$0	\$0	\$0	\$0	\$500	\$0	\$0	\$0	\$500
Derringer Books	\$0	\$0	\$0	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$500
Digital Transitions	\$0	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500
G. Gosen Rare Books & Old Paper	\$0	\$0	\$0	\$0	\$0	\$0	\$500	\$0	\$0	\$0	\$500
Georgia Southern University Library	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500
German Society of Pennsylvania	\$0	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500
Hagley Museum and Library	\$0	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500
Harper's Books	\$0	\$0	\$0	\$0	\$0	\$0	\$500	\$0	\$0	\$0	\$500
Haverford College	\$0	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500
Honey & Wax Booksellers	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500	\$0	\$500
Howard S. Mott Inc.	\$0	\$0	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500
HTC Global Services	\$0	\$0	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500
James Gray Booksellers	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500	\$0	\$0	\$500
James S. Jaffe Rare Books LLC	\$0	\$0	\$0	\$0	\$500	\$0	\$0	\$0	\$0	\$0	\$500
Jeff Maser - Bookseller	\$0	\$0	\$0	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$500
Jeffrey H. Marks Rare Books	\$0	\$0	\$0	\$0	\$500	\$0	\$0	\$0	\$0	\$0	\$500
Jeffrey Mancevice, Inc.	\$0	\$0	\$0	\$0	\$0	\$500	\$0	\$0	\$0	\$0	\$500
John Howell for Books	\$0	\$0	\$0	\$0	\$0	\$0	\$500		\$0	\$0	\$500
Kevin F. Kelly, Bookseller	\$0	\$0	\$0	\$0	\$0	\$500	\$0	\$0	\$0	\$0	\$500
Lighthouse Books	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500	\$0	\$0	\$500
Locus Solus Rare Books	\$0	\$0	\$0	\$0	\$0	\$0	\$500	\$0	\$0	\$0	\$500

(Ranked by Rolling 10-Year Total Amount Given)

	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	10 Yr. Total
1.057/.01	,		•		,		,	,	.	,	
LOEX Clearinghouse for Library Instruction	\$0	\$500	\$0	\$0	\$0	\$0	\$0	\$0		\$0	\$500
Microsoft Research	\$0	\$0	\$0	\$0	\$500	\$0	\$0	\$0	\$0	\$0	\$500
Midway Book Store	\$0	\$0	\$0	\$0	\$500	\$0	\$0	\$0	\$0	\$0	\$500
Nat DesMarais Rare Books	\$0	\$0	\$0	\$0	\$0	\$500	\$0	\$0	\$0	\$0	\$500
Nick Aretakis - Americana	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500	\$0	\$500
Niederer Fine Art Books	\$0	\$0	\$0	\$500	\$0		\$0	\$0	\$0	\$0	\$500
Northeastern University Libraries	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500
Northern State University - Williams											
Library	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500
Old Florida Book Shop	\$0	\$0	\$0	\$0	\$0		\$0	\$500	\$0	\$0	\$500
Oldimprints.com	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$500
Open Edition	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500	\$500
Principia College - Marshall Brooks											
Library	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500
Rosenbach Museum and Library	\$0	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500
St. Lawrence University Libraries	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500
Stuart Bennett	\$0	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500
The Bookpress, Ltd.	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500
University of Virginia Rare Book School	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500	\$0	\$0	\$500
Ursus Books	\$0	\$0	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500
Vassar College Libraries	\$250	\$0	\$0	\$0	\$250	\$0	\$0	\$0	\$0	\$0	\$500
Wartburg College, Vogel Library	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500	\$0	\$500
Pazzo Books	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$400	\$0	\$400
University of Idaho	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$200	\$200	\$400
Beth Lander	\$0	\$0	\$0	\$0	\$0	\$300	\$0	\$0	\$0	\$0	\$300
Denison University Libraries	\$0	\$0	\$100	\$0	\$100	\$0	\$0	\$0	\$100	\$0	\$300
Dickinson College Library	\$300	\$0	\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$300
Earlham College Libraries	\$300	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$300
IGLibraries	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$300	\$0	\$300
Northern Illinois University Libraries	\$100	\$0	\$100	\$0	\$100	\$0	\$0	\$0	\$0	\$0	\$300
Reed College	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$300	\$0	\$300
Zoe Abrams Rare Books	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$300	\$0	\$300
Azavea	\$0	\$250	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$250
Better World Books	\$250	\$0	\$0	\$0	\$0		\$0	\$0	\$0	\$0	\$250
Central Michigan University Libraries	\$250	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$250

(Ranked by Rolling 10-Year Total Amount Given)

	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	10 Yr. Total
Heartwood Books	\$250	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$250
Louisiana Archives and Manuscripts											
Association	\$0	\$0	\$250	\$0	\$0	\$0	\$0	\$0	\$0		\$250
Marshall University Library	\$250	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$250
Moe's Books	\$0	\$0	\$0	\$0	\$0	\$0	\$250	\$0	\$0	\$0	\$250
Schoenberg Institute for Manuscript											
Studies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$250	\$250
TDNet USA	\$0	\$0	\$0	\$0	\$250	\$0	\$0	\$0	\$0		\$250
The Book Broker	\$250	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$250
University Products Inc.	\$0	\$0	\$0	\$0	\$250	\$0	\$0	\$0	\$0		\$250
Air Show	\$0	\$0	\$200	\$0	\$0	\$0	\$0	\$0	\$0		\$200
Aquinas College Library	\$100	\$0	\$100	\$0	\$0		\$0	\$0	\$0	\$0	\$200
ARTstor	\$0	\$200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$200
PraXess Associates	\$200	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$200
Hudson Valley Community College -											
Marvin Library	\$50	\$0	\$50	\$0	\$50	\$0	\$0	\$0	\$0	\$0	\$150
Schenectady County Community											
College	\$150	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$150
Helen Clements	\$0	\$0	\$0	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$100
Illinois State University Library	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100
Loyola University New Orleans	\$0	\$0	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100
Lyrasis	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100
Northeastern Illinois University Libraries	\$0	\$0	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100
PALINET	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$100
Presbyterian Historical Society	\$0	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100
St. Edward's University	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100
University of Hawai'i at Manoa Library	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100
University of Louisiana Lafayette											
Libraries	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$100
University of North Dakota Libraries	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$100
W.B. Mason Company	\$0	\$0	\$0	\$0	\$0	\$100	\$0	\$0	\$0	\$0	\$100
City College of New York Libraries	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50
											-
Fulton Montgomery Community College	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50
Jefferson Community College	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		\$50

(Ranked by Rolling 10-Year Total Amount Given)

Includes in-kind donations and funds given directly to award winners

	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	10 Yr. Total
SUNY - Brockport Library	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50
SUNY - Cortland Library	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50
SUNY - Empire State College Library	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50
SUNY - Fredonia	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50
SUNY - Genesco	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50
SUNY - Genesse Community College	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50
SUNY - Maritime College Library	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50
SUNY - New Paltz Library	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50
SUNY - Oneota Library	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50
SUNY - Orange County Community											
College	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50
SUNY - Oswego Library	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50
SUNY - Plattsburgh - Feinberg Library	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50
SUNY - Purchase College Library	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50
SUNY - The College at Old Westbury											
Library	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50
Other*	\$625	\$50	\$1,374	\$1,000	\$0	\$0	\$500	\$0	\$1,800	\$10,000	\$3,549
TOTAL	\$383,275	\$143,650	\$322,589	\$114,923	\$344,400	\$122,185	\$281,898	\$131,900	\$460,375	\$355,550	\$2,539,195

Companies in **bold** have donated in support of a National Conference.

*Other reflects donations from individual donors (persons, sometimes anonymous, as opposed to corporate or library donors) in support of major programs.

		ACRL SPOS18 Doc 44.1

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Donations by Unit FY18

CJCLS

Sponsored Item	Amount	Donor
AC Dinner	\$1,200	EBSCO
Award	\$750	EBSCO
Total	\$1,950	

CLS

Sponsored Item	Amount	Donor
AC Dinner	\$1,500	EBSCO
AC Dinner	\$1,500	Elsevier
Award	\$1,000	SCELC
Total	\$4,000	

DLS

Sponsored Item	Amount	Donor
AC Lunch	\$4,000	Routledge/Taylor & Francis Group
Award	\$1,200	Routledge/Taylor & Francis Group
Total	\$5,200	

EBSS

Sponsored Item	Amount	Donor
AC Anniversary Dinner	\$2,000	SAGE
AC Anniversary Dinner	\$2,000	APA
Total	\$4,000	

ESS

Sponsored Item	Amount	Donor
AC Program	\$500	Donation
AC Cruise	\$2,500	Amalivre
AC Cruise	\$500	Adam Matthew Digital
AC Cruise	\$1,100	Harrassowitz
AC Cruise	\$1,000	Casalini Libri
AC Cruise	\$500	Brill
AC Cruise	\$500	Iberoamericana
AC Cruise	\$500	Gale – Cengage Learning
AC Cruise	\$500	De Gruyter
AC Cruise	\$500	Erasmus
AC Cruise	\$500	Puvill
AC Cruise	\$500	Brepols
Total	\$8,600	

Donations by Unit FY18

IS

Sponsored Item	Amount	Donor	
Award	\$3,000	EBSCO	
Award	\$3,000	Emerald Publishing	
Total	\$6,000		

PPIRS

Sponsored Item	Amount	Donor
Award	\$1,000	SAGE-CQ Press
Total	\$1,000	

STS

Sponsored Item	Amount	Donor
MW Dinner	\$3,000	IOP Donation
AC Dinner	\$3,000	American Chem Society
AC Events	\$1,500	American Chem Society
AC Events	\$3,000	IEEE
AC Events	\$3,000	Elsevier
AC Events	\$1,500	SPIE
AC Events	\$2,500	Morgan & Claypool
AC Events	\$800	Knovel
AC Events	\$1,000	GOBI Library Solutions
AC Events	\$1,000	AAAS
AC Events	\$500	Taylor & Francis
AC Events	\$500	Clarivate
Total	\$21,300	

ULS

Sponsored Item	Amount	Donor
Award	\$1,000	Library Juice Academy
Total	\$1,000	

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Future of the ALA Midwinter Meeting -- Update



RECOMMEND

1. Future of the ALA Midwinter Meeting -- Update

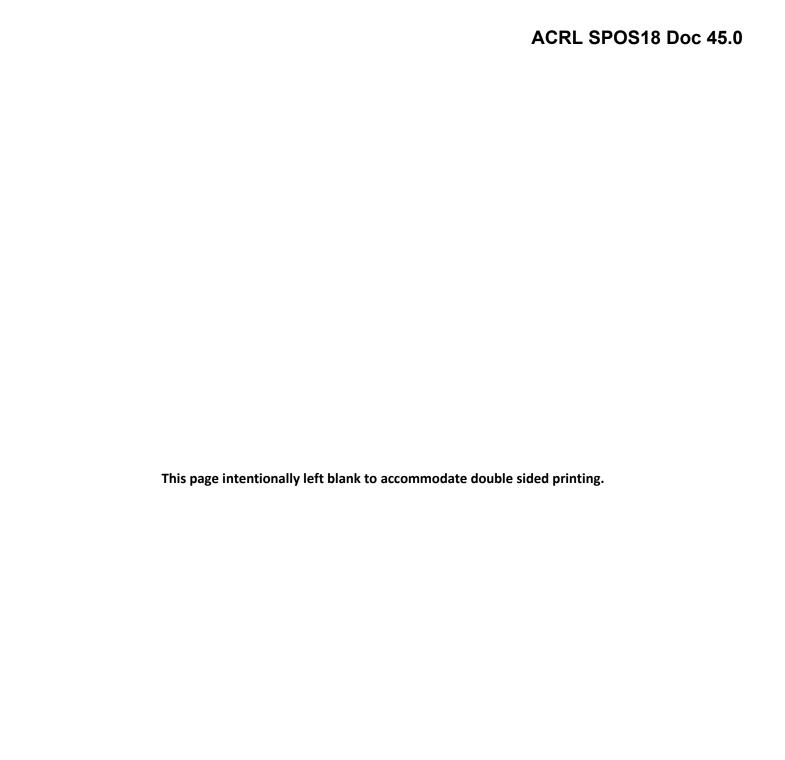


For the past year, the ALA Conference Committee and ALA Conference Services have been engaged in an exploration of alternatives to the present ALA Midwinter Meeting. Following the Committee's meeting at the 2018 ALA Annual Conference, ALA Conference Committee Chair Clara Bohrer posted a public message seeking further input from members and attendees. A broad range of concerns, questions and recommendations were received.

Based on member feedback, as well as the committee and staff discussion, both the ALA Conference Committee and ALA Conference Services have concluded that additional time to analyze options – potentially including work with an external consultant – is necessary. The Committee will continue its work, in collaboration with ALA Conference Services, over the next year. We will continue to communicate with ALA members and attendees.

Many Chilean

Mary Ghikas Executive Director American Library Association



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Update on Steering Committee on Organizational Effectiveness



Add a tag

1. Update on Steering Committee on Organizational Effectiveness

RECOMMEND



Lessa Pelayo-Lozada

ACTIONS **▼**

Round Tables

Posted 27 days ago

REPLY TO DISCUSSION

The Steering Committee on Organizational Effectiveness is committed to developing a forward-looking governance and organizational structure to support a $21^{\rm st}$ Century profession. We are also committed to keeping all ALA members and stakeholders informed of the status of the project and opportunities for input. With that in mind, we are pleased to share the following updates and next steps.

- 1. The Executive Board Task Force selected Tecker International to work with the Steering Committee and Executive Team on a review of ALA's governance, member participation and legal structures and systems. The Tecker group has a long history of work with ALA and its Divisions, particularly in the area of strategic planning.
- 2. Together Tecker International, the Steering Committee, and the Executive Team will work to engage a cross section of leaders to in an exploration of alternative models and reorganization possibilities.
- 3. The Steering Committee will seek input and review from members throughout this process. This will build on the extensive data previously gathered through "Kitchen Table Conversations," discussions with Council at the 2018 Midwinter Meeting and 2018 Annual Conference, and small group discussions with members at the 2018 Annual Conference.
- 4. Some of the next steps include:
 - a. During Fall 2018 the Steering Committee will work with Tecker International on a review of ALA's relationships, structures, and processes as well as the needs of librarianship as a whole.
 - b. In October 2018, a Summit including the Steering Committee and others will be using knowledge-based strategic thinking to develop alternative organizational and governance models.
 - c. Public forums will be held in a variety of settings including the 2019 ALA Midwinter Meeting in Seattle and virtually to discuss, and refine possible models for ALA.

Round Tables

- d. At the 2019 ALA Annual meeting in Washington, D.C., The Steering Committee and Tecker International will present to the ALA Executive Board a report of research and recommendations. Tecker International will aid in the continued review and implementation of recommendations approved by the ALA Executive Board through January 2020.
- 5. Thanks to input and consideration from our engaged membership at and after Annual Conference in New Orleans, we are pleased to present the Steering Committee's charge and finalized list of members.
 - a. Charge: The Steering Committee on Organizational Effectiveness will carry out a comprehensive review and study of ALA's governance, member participation and legal structures and systems, with the goal of proposing changes that will vitalize its success, strength and agility as a 21st century association. The Steering Committee will provide advice and support to the Executive Board on priority improvements. The work of the Steering Committee will focus on membership development and engagement, and on encompassing the diversity of voices that enrich ALA through incorporating the perspectives, interests and contributions of a wide variety of stakeholders and affiliated groups. Its work will be mission driven and embrace the Association's core values. Through input and feedback from across the Association, the Steering Committee will explore alternative models and reorganization possibilities. It will work with the Executive Team and a consultant to formulate and present its findings and recommendations to the Executive Board

b. Steering Committee Members:

Rebekkah Smith Aldrich, Mid-Hudson Library System
Emily Daly, Duke University
Emmanuel Faulkner, Baltimore County Public Schools
Kenny Garcia, California State University, Monterey Bay
Mandi Goodsett, Cleveland State College
Terri Grief, McCracken County High School (retired)
Alexia Hudson-Ward, Oberlin College
Ben Hunter, University of Idaho
Steve Laird, Infogroup
Jack Martin, Providence Public Library
Alanna Aiko Moore, University of California, San Diego
Lucinda Nord, Indiana Library Federation
Vailey Oehlke, Multnomah County Library
Andrew Pace, OCLC

Juan Rivera, A. Phillip Randolph Campus High School Round Tables
Karen Schneider, Sonoma State University
Felton Thomas, Cleveland Public Library
Kerry Ward, ALA/Library Leadership and Management Association
Nora Wiltse, Chicago Public Schools
Steven D. Yates, University of Alabama
Shali Zhang, University of Montana
Lessa Kanani'opua Pelayo-Lozada, Palos Verdes Library District – Chair

c. Executive Team Members:

Jim Neal (ALA Immediate Past President)
Lessa Kanani'opua Pelayo-Lozada (Steering Committee Chair)
Mary Ghikas (ALA Executive Director)
Tecker International

Should you have any questions, please don't hesitate to contact me.

All the best,

Lessa Kanani'opua Pelayo-Lozada ALA Executive Board Member Chair, ALA Steering Committee on Organizational Effectiveness Young Readers Librarian, Palos Verdes Library District, California she/her/hers

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