



Positioning Library and Information Science Graduate Programs for 21st Century Practice

Forum Report

November 2017, Columbia, SC

Compiled and edited by: Ashley E. Sands, Sandra Toro, Teri DeVoe, and Sarah Fuller (Institute of Museum and Library Services), with Christine Wolff-Eisenberg (Ithaka S+R)

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Institute of Museum and Library Services
955 L'Enfant Plaza North, SW
Suite 4000
Washington, DC 20024

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Table of Contents

Introduction.....	1
Panels & Discussion	3
Session I: Diversity in the Library Profession.....	3
Defining metrics and gathering data.....	4
Building professional networks through cohorts	4
Outreach to paraprofessionals.....	5
Improving cultural sensitivity, inclusion, and equity.....	6
Session II: 21st Century Skills, Expertise, and Competencies.....	8
Leadership and management abilities	8
Community competencies	9
Hands-on educational experiences	10
Recruiting and retaining highly-skilled LIS graduates	11
Session III: Alternative Models and Barriers to LIS Graduate Education.....	12
Barriers to formal education.....	12
Development of core and specialized curriculum	13
Cross-departmental and cross-institutional collaboration.....	14
Session IV: Going Forward.....	15
Communicating the value of an LIS education	15
The identity of an LIS education	15
Building relationships between practitioners and educators.....	16
Increasing diversity and retention of LIS students and practitioners.....	17
Infrastructures and sustainability	17
Overarching Themes.....	19
Recruiting Students	19
Re-branding for community-based librarianship	19
Going to where the diversity is.....	19
Considering radical changes to the MLIS.....	20
Educating Students	21
Balancing theory and practice.....	21
Teaching and assessing interpersonal skills.....	22
Faculty practical expertise.....	22
Recruiting, Hiring, and Retaining LIS Professionals.....	23
Practitioner recruitment.....	23
Practitioner retention.....	23
Conclusion	25
Appendix I: Agenda.....	27
Appendix II: List of Participants	28
Appendix III: Guiding Questions	29
Appendix IV: Figures	31
Figure 1	31
Figure 2.....	31
Figure 3.....	32
Appendix V: Appendix V: Master’s and Doctoral-level LB21 Awards (2015-2017)	33

Introduction

On Tuesday, November 7, 2017, the Institute of Museum and Library Services (IMLS) convened experts to explore how to strengthen the formal education component of the Laura Bush 21st Century Librarian program (LB21) grant program to best support library and information science (LIS) programs to meet the needs of students and libraries while increasing diversity within the library and archives professions. This report highlights the issues discussed, summarizes the overarching themes, and encourages future grant proposals to address field-wide concerns.

LB21 focuses on recruiting and educating the next generation of librarians and developing a diverse workforce.¹ The program encourages applicants to consider how to strengthen the profession through pre-professional programs, master's-level and doctoral-level education, continuing education, and faculty early career development awards.

In recent years, fewer LB21 grant applications have focused on the formal education component (master's-level or doctoral-level education), the majority focusing instead on continuing education programs. This increase in proposals related to continuing education for library and archives practitioners signaled that LIS programs may fail to train all graduates in necessary skills and competencies.

In addition to administering grants, IMLS is tasked with data collection, research and development, and engaging other entities to assess the information services needs of the public and the policies needed to meet such needs effectively. In this capacity, IMLS staff found it essential to convene educators and practitioners to better understand the scope of disjoint between formal LIS education and the needs of the field.

IMLS staff organized and facilitated the meeting in collaboration with a steering committee of expert educators and practitioners.² Representatives from American Library Association (ALA)-accredited library graduate school programs,³ library school administrators, library association leadership, and a range of other stakeholders and thought leaders attended. Library school administrators were gathered to ensure the important issues in the field, as well as proposed steps toward addressing these issues, were heard by those who are often able to initiate change in their educational institutions. The agenda and the attendee list are available in appendices I and II.

¹ Museum and Library Services Act, 20 U.S.C. 72 § (2010).

² The event steering committee included R. David Lankes, University of South Carolina; Eileen Abels, Simmons College; David Ferriero, National Archives; Miguel Figueroa, American Library Association (ALA) Center for the Future of Libraries; Susan Hildreth, University of Washington; Vailey Oehlke, Multnomah County Library; and Siobhan Reardon, Free Library of Philadelphia.

³ A representative from each of the 52 ALA-accredited library schools were invited, and forty-one US LIS programs were represented. IMLS outreach to all ALA-accredited programs was intentional and aimed at ensuring the perspectives of library schools, large and small, could be heard throughout the day. While also served by IMLS, school library media education programs were considered outside the scope of this meeting.

A series of guiding questions prompted focused discussion (see the full list in Appendix III). In summary:

- Where are the knowledge gaps between formal library and information science education graduates and the needs of hiring managers in libraries and archives?
- What kinds of curricular changes are necessary in master's and PhD programs to keep up with the changing needs of practitioners into the future?
- How can we identify, develop, and refine strategies to recruit, train, and retain diverse professionals?

IMLS staff developed the day's panels using multiple information sources, including advice from the steering committee and the findings from a study funded by IMLS (Simmons College, [RE-65-14-0032-14](#)). "Envisioning our Information Future and How to Educate for it"⁴ provides a helpful framework for understanding national LIS education. The authors ask, "What will we teach?" "Who will we teach?" "Who will teach?" and "How will we teach?" In accordance with the framework, four sessions with invited panelists were developed:

1. Diversity in the library profession
2. 21st century skills, expertise, and competencies
3. Alternative models and barriers to LIS education
4. Going forward

The first session addressed *who* we will teach, the second *what* we will teach, the third focused on *how* we will teach, and the fourth session brought each of these questions together while also reflecting back on the educators in the room and across the country in consideration of *who* will teach. In each session, three to five panelists were each given five to seven minutes to speak to the session topic and provide framing for the broader discussion. The majority of each session was dedicated to discussion between and among all attendees.

This report highlights the issues discussed in each session and summarizes the overarching themes from across sessions. Key terms are intentionally not defined and the answers to posed questions are intentionally not answered in this report to enable applicants to explore and characterize these topics for the field and in grant applications to IMLS.

⁴ Abels, E. G., Howarth, L. C., & Smith, L. C. (2017). *Envisioning our information future and how to educate for it*. Boston, MA; Toronto, ON; Champaign, IL: The #InfoFuture Project.

Panels & Discussion

SESSION I: DIVERSITY IN THE LIBRARY PROFESSION

PANELISTS

Sonia Alcantara-Antoine, Newport News Public Library, Virginia Beach, VA

Loida Garcia-Febo, Information New Wave, Queens, NY

Mark Puente, Association of Research Libraries, Washington, DC

Tina Rollins, Hampton University, Hampton, VA

MODERATOR

Dr. Sandra Annette Toro, IMLS

Dr. Sandra Toro, Senior Program Officer at IMLS, discussed the idea of diversity within the context of grant-making. She explained IMLS is not prescriptive about how applicants should interpret diversity. Applicants have described diversity in terms of race, ethnicity, geographical area, socioeconomic status, disciplinary background, gender, abilities, and other areas. While the grant-making process allows for a definition of diversity that is intentionally broad, much of the conversation in this session focused on racial and ethnic diversity, because, as Toro said, “When it

comes to race and ethnicity, the field is not diverse.”

Toro pointed out that IMLS has supported diversification of the field through Laura Bush 21st Century Librarian Program (LB21) scholarships, fellowships, internships, curriculum development, and professional development since its inception in 2003. She shared a chart from the American Library Association (ALA) Diversity Council (see Figure 1 in Appendix IV) visualizing the race and ethnicity of credentialed librarians over recent decades, acknowledging the lack of diversity and noting the overwhelming majority of credentialed librarians are White women. Toro noted very small increases in the “Other” category among Latinx, Native Americans, African Americans, and people who identify as Asian, Pacific Islander, and Hawaiian. She discussed similar trends regarding library and archives assistants and paraprofessionals (see Figure 2 in Appendix IV). Diversifying the profession remains an IMLS priority.

Five years ago, an evaluation of the LB21 Program completed by ICF International highlighted that diversity among librarians was not keeping pace with changes in the U.S. population.⁵ Toro read from the evaluation: “It is also important to prepare all librarians for work in a multicultural society, particularly because the recruitment and education of diverse individuals to serve the communities they represent takes time, both to enter the ranks and later assume leadership positions” (p.4). Toro said that even five years after the evaluation, IMLS still hears from librarians and archivists that

5ICF Incorporated, L.L.C. (2013). *Laura Bush 21st Century Grant Program Evaluation (Grant Years 2003-2009)*. Fairfax, VA.

diversity is lacking, although more recent data is now needed. Toro asked a variety of probing questions on how we can recruit, train, retain, and promote a diverse workforce (see Appendix III).

Defining metrics and gathering data

A recurring topic was the need for more data characterizing trends in libraries and archives. Tina Rollins (Hampton University, [RE-98-17-0099-17](#)) pointed to ALA demographics data showing the profession remains disproportionately White. Based on 2010 census data projected to 2016,⁶ about 23% of the United States population self-identified as minority. In comparison, the 2017 ALA Demographic Study Report⁷ revealed only 12.9% of survey respondents self-identified as minorities. Additionally, a November 1998 *American Libraries* article discussed racial and ethnic diversity among librarians and revealed 13.22% of academic librarians and 13.45% of public librarians self-identified as minorities.⁸ Overall, the data demonstrate that over the lifetime of the LB21 program, there has been no positive change, and perhaps even a decrease in the diversity of master's-level librarians across the country.

Mark Puente pointed to the work of the Association of Research Libraries (ARL) as having made great strides in diversifying the field, though he admits ARL represents a relatively small number of libraries (approximately 125 libraries). The attendees talked about the need for gathering current data, specifically that about the success of cohort and residency programs as well as programs funded by IMLS. Overall, the urgency for more data, in particular regarding workforce diversity, was clear.

Building professional networks through cohorts

One technique to diversify the profession is diversity scholarship programs that encourage and enable diverse potential students to gain formal education. The importance of diversity scholarship programs were discussed in detail. Much of the conversation centered around the benefits of cohort- or group-based scholarships that can build vast networks of support.

Sonia Alcantara-Antoine emphasized the impact that the ALA Spectrum Scholarship Program,⁹ which actively recruits and provides scholarships to racially and ethnically diverse librarians, had on her career. She stated, "It gave me a sense of the infinite possibilities of the career paths that were available to me within librarianship. ... I saw myself in others and it let me know that I was not alone in a profession that quite honestly really did not look like me."

⁶United States Census Bureau. U.S. Census Bureau QuickFacts: United States (Vintage 2016 Population Estimates Program). Retrieved May 18, 2018, from <https://www.census.gov/quickfacts/fact/table/US/PST045217>

⁷Rosa, K., & Henke, K. (2017). *2017 ALA Demographic Study*. Chicago, IL: American Library Association Office for Research and Statistics.

⁸Lynch, M. J. (2007). *Racial and ethnic diversity among librarians: a status report*. American Library Association, Office for Research & Statistics.

⁹American Library Association's Office for Diversity, Literacy & Outreach Services. ALA Spectrum Scholarship Program. Retrieved from <http://www.ala.org/advocacy/spectrum>

Dr. David Eichmann from the University of Iowa questioned how diversity scholarship-based programs can shift representational diversity given the relatively small number of scholarships that are possible on a national scale. Eichmann noted the scholarship programs discussed could not “change those bar graphs (presented earlier). Those bar graphs are in the 60,000-individual range and 60 Spectrum Scholars per year does not create a statistical shift of that population.”

However, Dr. Amelia Gibson from the University of North Carolina at Chapel Hill responded by stressing the importance of cohort models for both the individuals within *and* outside of the cohort. She stated, “I am going to reemphasize the importance of the cohort model because being alone is lonely” and she suggested that we should focus on “building up some critical mass, and understanding those cohorts have an effect beyond just the people that are being funded.” She explained that while she was not a scholarship recipient, the consistent presence of people of color in the field through the scholarship programs made a positive impression on her. Alcantara-Antoine reiterated Gibson’s point in appreciation by noting that “Because of Spectrum and other programs like that, there are other people of color who are attracted to the profession.” Puente highlighted the success of the Spectrum and Knowledge River programs,¹⁰ encouraging others to harness the best parts of these programs in current and future initiatives.

The consensus was that funds for diversity scholarship programs remain crucial to diversifying the profession because they create and sustain supportive professional networks. For example, Lorri Mon, Florida State University, discussed the Project ATHENA program (Florida State University, [LG-01-02-0069-02](#), [RE-02-03-0048-03](#)) and how adding diverse students “reverberated” over time, further encouraging diverse individuals to enter the profession. Instead of thinking of scholarship programs as impacting a small number of individuals, attendees were encouraged to consider how cohort-based support systems help to develop a critical mass in the recruitment and retention of minorities nationally.

Challenge: Measure the full effect of cohort-based diversity scholarship programs, which can impact not only program participants but the LIS field widely.

Outreach to paraprofessionals

A number of attendees discussed the importance of proactively recruiting LIS students, librarians, and library staff from diverse backgrounds for LIS educations and careers. Rollins shared that she regularly encourages admissions directors to speak to the library paraprofessionals working at her university and other HBCUs (Historically Black Colleges and Universities). She explained that she also works with career centers on her campus because “You have to go to where minorities are.” Although generally

¹⁰ The University of Arizona, School of Information. Knowledge River. Retrieved from <https://ischool.arizona.edu/knowledge-river-0>

not as diverse as the communities they serve, library and archives assistants and paraprofessionals are on the whole more diverse than master's degree-holding library and archives staff. While not collected using the same methods, datasets from the American Library Association¹¹ (see Figure 1 and Figure 2 in Appendix IV) suggest that library and archives assistants are more than twice as likely as credentialed librarians to identify as a race or ethnicity other than White.

Loida Garcia-Febo described an inclusive internship initiative through the Public Library Association ([RE-00-17-0129-17](#)) that introduces high school juniors and seniors from diverse backgrounds to librarianship. This summer-long program also includes a mentoring component to help engage participants in multiple facets of the life of library professionals, and the ultimate goal is to inspire them toward future careers in the field.

Vailey Oehlke from the Multnomah County Library agreed paraprofessionals are an asset for the talent pipeline for careers within the profession and added, "I think that it is really important that people, especially White people who are in positions of authority and power and influence, make some courageous and bold decisions around who they hire." Intentional outreach to library and archives paraprofessionals is one way to diversify the profession.

Challenge: Shift the responsibility of diversifying the profession from applicants to recruiters by engaging in active and more deliberate recruitment of LIS students with diverse backgrounds and perspectives.

Improving cultural sensitivity, inclusion, and equity

Puente encouraged attendees to consider what has kept the national racial and ethnic diversity rate static over the years. One idea that emerged is that while diversity scholarship and recruitment programs are important, if workplaces are not equitable and inclusive, then a diverse workforce will not be retained. For example, Rollins discussed problems with inclusion that she and other people of color have experienced in LIS institutions. She shared that she and others have had concerns with the "... work environment, issues concerning cultural sensitivity, feeling that they were the only Black person or person of color within their organization...." Rollins explained the discomfort of being the only person of color in an institution, always facing barriers and stereotypes, being forced to be the voice of diversity or being "diversified out." It is difficult for people of color to work in institutions where staff do not have the interpersonal skills necessary to communicate and relate with people of different cultures.

11 American Library Association, Office for Diversity, Literacy, and Outreach Services. (2012). *Diversity Counts 2009-2010 Update*. Chicago, IL.

Attendees highlighted a number of specific resources for increasing cultural responsiveness and sensitivity to address retention, including the ALA's Equity, Diversity, and Inclusion Speakers Bureau,¹² which connects organizations with speakers on these issues; Project Implicit from Harvard University,¹³ which provides tools, consulting services, lectures, and workshops on implicit bias, diversity, inclusion, and leadership; and the Racial Equity Institute,¹⁴ which offers resources to help organizations deal with issues of racial inclusion and diversity. ALA and others have continued to develop innovative programs. For example, Loida Garcia-Febo referenced the piloting of the Truth, Racial Healing & Transformation Great Stories Club.¹⁵

Challenge: Increase equity and inclusion within LIS professions by creating workplaces in which staff with diverse backgrounds and perspectives can succeed while addressing areas for improvement proactively.

12 American Library Association, Diversity, Literacy, and Outreach Services. EDI Speakers Bureau: Find library experts on Equity, Diversity, and Inclusion. Retrieved from <http://edispeakers.ala.org/>

13 Project Implicit. Retrieved from <https://www.projectimplicit.net/index.html>

14 The Racial Equity Institute. Retrieved from <https://www.racialequityinstitute.org/>

15 Ostman, S. (2017). *Libraries invited to apply for Truth, Racial Healing & Transformation Great Stories Club pilot program for underserved youth*. Chicago, IL: American Libraries Association, Public Programs Office.

SESSION II: 21ST CENTURY SKILLS, EXPERTISE, AND COMPETENCIES

PANELISTS

Dr. Jane Greenberg, Drexel University, Philadelphia, PA

Dr. Carole Palmer, University of Washington, Seattle, WA

Dr. Julie Todaro, Austin Community College, Austin, TX

Kelvin Watson, Broward County Libraries, Fort Lauderdale, FL

MODERATOR

Dr. Ashley E. Sands, IMLS

The nature of librarianship is transforming and expanding as libraries increasingly take on social, civic, and technological roles. This session focused on how to better align the knowledge, skills, abilities, competencies, expertise, and other ways of knowing taught in formal LIS education programs with the evolving needs of LIS institutions across the country.

Dr. Ashley Sands, Senior Program Officer at IMLS, explained that IMLS staff continue to hear practitioners complain that university curricula fail to equip graduates with the

knowledge and skills necessary for rapidly expanding services. One oft-cited reason is a lack of communication between LIS practitioners and faculty.

Sands emphasized the constant changing nature of the profession and how necessary skill sets will only continue to adapt over time. She asked attendees, "How can we ensure that our graduate schools keep up with the changing needs of practitioners now and into the future?" The perceived problem of a divide between theory and practice is not new, and given that library services have never and will never remain stagnant, the problem will persist until structural curricular changes are made across the country.

Leadership and management abilities

Multiple attendees spoke of the importance of leadership and management skills not only for individuals in supervisory or leadership positions but for those at all career levels. Kelvin Watson argued that leadership and management abilities are useful for all functions and environments by stating, "even if you are not a supervisor I expect everybody to be a leader." Dr. Julie Todaro noted the importance of not just understanding how to supervise but also "how to be supervised," indicating that skills are necessary to be a team member, and not just a team leader. Watson described leadership and management skills as including "...tolerance for chaos, flexibility, being ready for the unknown, especially in public libraries because every day is an unknown and... not the perfect situation."

Watson and Todaro both alluded to LIS education programs not preparing graduates with, as Todaro explained, the “knowledge of a managed world.” Julie Walker, State Librarian of Georgia, confirmed that her state does not have enough strong up-and-coming leaders to replace those retiring from leadership positions. Dr. Ling Hwey Jeng from Texas Woman’s University noted that the university’s online LIS degree tries to foster self-management skills in students. One way they do so is by putting the onus on the students to connect proactively with their communities for their mandatory practicum placements. Practitioners in attendance agreed that how to lead, and how to be led, are not skill sets regularly gained through LIS programs and yet are critical to successful institutions.

Challenge: Explore how to include leadership and management training effectively into formal education programs.

Community competencies

While leadership, supervisory, and related skill sets are most focused on how library and archives professionals work with one another, attendees also described a variety of outward-facing, community-focused competencies crucial to the LIS profession. Todaro recently performed an analysis of library job postings and explained, “If you look at the top 10 words in job ads, the word ‘engagement’ is huge... and that is not an easy thing... attracting attention, establishing relationships, cooperating, sustaining....” In addition to engagement, Todaro stressed the importance of being able to deal with change, in particular handling change in the populations being served. She went on to explain that the importance of these competencies is not limited to public libraries and instead is shared across the profession – whether “community” engagement is defined by relationships with faculty, students, the public, or whatever community a library serves.

Referencing a 2015 report by Deanna Marcum,¹⁶ Sands noted how library work has arguably shifted from being collection-centric to user-centric and asked how this turn has impacted the LIS profession and training. A number of panelists clarified that users have always been the focus, but the *approach* has changed. For example, Dr. Carole Palmer explained initiatives focused on working with data are actually user-centered efforts. She said, “even teaching in data curation and open data initiatives, it really always starts with the community and the community-driven needs.” Dr. Jane Greenberg highlighted the need for data science skills, such as data mining and analytics, to better inform our understanding of users and to improve library services and operations. Drexel University is addressing this need through the 2017 IMLS grant LEADS-4-NDP (RE-70-17-0094-17), teaching doctoral students both data science skills and engaging in the hands-on application of these new skills.

¹⁶ Marcum, D. (2015). *Educating the Research Librarian: Are We Falling Short?* New York: Ithaka S+R.

Watson agreed that users have always been at the center of the LIS profession. However, he noted that while problem-solving and critical thinking skills that facilitate a deeper understanding of the user are taught, LIS professionals often struggle with the application of these competencies in their jobs. Caroline Haythornthwaite, Syracuse University, noted the need for professionals who have a broad view, are confident in their ability to explore new areas, understand different ways of knowing and different cultures, and are able to engage with different community members. Later in the day, Kate Marek from Dominican University explained that in her analysis, the “disposition” or temperament of a library professional was a highly rated and critical skill. In addition, being able to work with rapid and ongoing change was seen as essential. Attendees all agreed that professional librarianship at any institution is a community- and user-centric field, and that LIS students should graduate with relevant skills and abilities.

Hands-on educational experiences

Panelists highlighted the value of incorporating hands-on experiences into the LIS curriculum. A couple of attendees noted that practical field experiences should be required components of all LIS graduate educations. Todaro agreed, but referenced a broad definition of field experience, one that connects theory with practice, and could include “service learning, mentorship, shadowing...” Greenberg agreed and explained that while her master’s program was relatively high in theory, she never felt the disconnect to practice because she had “worked her way through library school.”

Palmer described how the field opportunities she provides for her students through a 2016 IMLS grant (University of Washington, [RE-40-16-0015-16](#)) benefit not only those students but also the field sites, which range from public libraries to government and other civic agencies. She explained the reciprocal benefits for the libraries and the civic agencies, explaining that each has different strengths that complement one another, “...these agencies are great at opening up the data, making it available on platforms, but not at making it usable to the public. And that is where our [library] expertise really comes in and they get the value out of our students.”

While everyone agreed on the benefits of field experiences, Palmer and Todaro described challenges with incorporating these experiences into LIS student education. Palmer noted that while partnerships developed with outside organizations and agencies to establish and run field placements are incredibly valuable, it is very time consuming and expensive to develop relationships. Further, she articulated specific challenges she faces in incorporating hands-on experiences into the curriculum for students enrolled in online LIS programs of study. In response, Todaro suggested developing relationships between LIS programs and organizations for placements could be outsourced to local individuals or institutions. This could reduce the time commitment on faculty to secure field sites while ensuring geographically-distributed students gain hands-on experiences near where they live.

Challenge: Consider who is best positioned to develop relationships between LIS programs and external institutions for hands-on field experiences and what the most effective and impactful formats of those field experiences might look like.

Recruiting and retaining highly-skilled LIS graduates

The right students need to be recruited into LIS programs. Todaro explained that LIS as a field needs a national marketing campaign to attract students with the community-based, technical, or leadership and collaborative skills necessary for the LIS workforce. Sonia Alcantara-Antoine agreed and noted that not only potential students, but even LIS program graduates, continue to have outmoded ideas of public librarianship. Alcantara-Antoine confirmed the importance of cultural sensitivity and awareness and explained, "It is important to me that the people that I hire have understanding of the challenges that are facing my particular community. They need to have compassion for the people that they are going to work with." In addition to recruiting the right students for contemporary library careers, graduate programs can do better to support graduating students with career counseling to help them put their best foot forward in job interviews and entering the professional workforce.

Additionally, Palmer and Greenberg both discussed how highly technically-skilled graduates may choose to pursue careers in the corporate sector, which usually offers higher pay. Palmer noted the challenge of retaining students who participate in technical field experiences and gain the associated skill sets, explaining that "as we educate our students and try as best we can to get them state-of-the-art technical education," we risk losing these highly skilled students to higher paying jobs in the private sector. However, Greenberg and Palmer both noted that there is power in MLIS-trained students working throughout industry and other non-traditional LIS careers.

Challenge: Develop marketing and communication strategies to recruit and retain highly skilled graduates in public and non-profit LIS institutions.

SESSION III: ALTERNATIVE MODELS AND BARRIERS TO LIS GRADUATE EDUCATION

PANELISTS

Dr. Jon Gant, North Carolina Central University, Durham, NC

Dr. Gary Shaffer, University of Southern California, Los Angeles, CA

Mary Soucie, North Dakota State Library, Bismarck, ND

MODERATOR

Sarah Fuller, IMLS

While earlier sessions addressed the “who” and the “what” of the future of LIS education, Sarah Fuller, Senior Program Officer at IMLS, framed this session as addressing the “how”¹⁷ – that is, *how* students pursue additional credentialing and the challenges they face in doing so.

For some aspiring students, the realities of library position pay scales can make it difficult to justify the costs of a formal

master’s-level education; many mid-career professionals with families, full-time jobs, or other responsibilities may be unable to pursue additional credentialing for career advancement through traditional structures. Additional barriers include geographic considerations, particularly in states or regions without accredited LIS programs (see Figure 3 in Appendix IV).

Barriers to formal education

Potential LIS students are limited by the geographic dispersion of LIS programs across the country. Online and distance learning formats have helped many LIS programs reach a wider set of potential students who cannot or prefer not to attend classes in person. However, there are a number of challenges that these programs face *because* of their alternative format.

Cost is a major barrier to formal education. Dr. Gary Shaffer shared that sometimes applicants accepted into his program at the University of Southern California do not end up enrolling because they cannot afford tuition. He observed, “maybe they go to a different program, but I suspect many find a different career.”

Mary Soucie applauded online programs for reaching students who are limited by the locale of LIS programs offered but emphasized the limitations of when courses are held. She explained that online, synchronous learning may still be difficult for many: “if you’re a parent or working in a small library or working two jobs, those synchronous programs are tough because you can’t guarantee you’ll be able to get online” at certain days and times. Asynchronous online learning environments may benefit learners striving for work-life balance. Beyond difficulties balancing schedules, reliable bandwidth still plagues portions of the United States and can impact learning during synchronous online courses. Soucie cited North Dakota as an example: “you

17 Abels, E. G., Howarth, L. C., & Smith, L. C. (2017). *Envisioning our information future and how to educate for it*. Boston, MA; Toronto, ON; Champaign, IL: The #InfoFuture Project.

may not be able to guarantee you can get online because we still have places in rural North Dakota that are basically dial-up, and so it is a very different world. So while online is awesome, there are still challenges your students are facing.”

Dr. Jon Gant also highlighted challenges to ensuring students enrolled in online programs receive educational experiences on par with their on-campus peers. Technological and institutional infrastructures for online programs need to be developed to ensure online learners can be engaged as actively as classroom students. For example, online learners are often left out of opportunities for research assistant and teaching assistant positions, many of which could offer essential partial or full tuition remission. Gant prompted attendees to consider online students as research and teaching assistants and encouraged universities to make these opportunities available so online learners receive more opportunities.

Challenge: Continue to expand access to LIS programs through new technologies and provide additional flexibility for students with current technologies.

Development of core and specialized curriculum

Attendees also discussed the challenges and opportunities associated with developing and maintaining both core and specialized curricula within LIS programs to meet standards for information education and current market demands. Attendees seemed in agreement that a core set of knowledge should be gained from an LIS education, though not on what that core includes. Gant described core LIS knowledge as not particularly distinct from skill sets important in many academic domains, “there’s a set of core classes, probably five or six or so, that we teach, that easily could serve any student on campus to really enhance their skills around information literacy, the data issues, leadership in this digital space, and so forth.”

Dr. Suliman Hawamdeh from the University of North Texas noted the importance of retaining a core program while expanding opportunities for students by asking attendees, “...with the emerging trends and knowledge management, data science, and analytics, and so on... how do we keep those programs grounded in information science?” Attendees discussed how to offer not only discrete, core curricula, but also specialized career-focused courses specific to LIS students.

Specialized LIS programs have also begun to appear. Shaffer noted that the management-focused program at his institution arose because of the dearth of library professionals with management experience (a gap noted in the previous panel session).

Speakers often noted the importance of reaching out to faculty experts across campus, or even across institutions. Dr. Ling Hwey Jeng of Texas Woman’s University emphasized the importance of ensuring that courses within LIS programs meet the unique needs of each student, while also noting that individualized degree programs

for every student are not possible. Jeng encourages students to consider courses in other graduate programs.

Cross-departmental and cross-institutional collaboration

Attendees emphasized the importance of cross-departmental and cross-institutional collaborations that enable LIS graduates to acquire more specialized coursework beyond the core LIS curriculum. Taking other courses enables learning opportunities beyond the expertise of LIS faculty. Developing relationships between departments on campus enhances not only the educational opportunities for LIS students, but can also open LIS courses to a broad, diverse range of students.

Hawamdeh shared that concentrations in cyber security and linguistics at his university are only possible because of courses outside of the LIS program. He noted these varied concentrations have been successful largely because of their ability to tap into the expertise of faculty from other institutions and departments. He encouraged others to work with faculty across campus to give students more choices in their course specializations. Gant spoke of joint degrees at North Carolina Central University in library and information science and business administration, public administration, law, and education that are enabled by similar partnerships. Many other LIS programs are developing relationships with departments across their campus, which enables students from LIS, and from other departments, to pursue both more diverse and more specialized degrees.

Gant further considered cross-institutional partnerships and asked the participants, "Are there partnerships we can form with other universities to help market and share some of those more specialized programs, as well?" Jane Greenberg noted, "we can't do everything for all of our doctoral students" and shared how her recent IMLS award (Drexel University, [RE-70-17-0094-17](#)) seeks to train doctoral students from programs across the country in data science. While the attendees acknowledged competition between LIS schools, many stressed the necessity of collaborating across institutions to enable specialized educations.

Challenge: Collaborate with other departments and institutions to expand course options, and ultimately career paths, available to LIS students.

SESSION IV: GOING FORWARD

PANELISTS

Susan Hildreth, University of Washington, Seattle, WA

Dr. R. David Lankes, University of South Carolina, Columbia, SC

Vailey Oehlke, Multnomah County Library, Portland, OR

MODERATOR

Teri DeVoe, IMLS

Teri DeVoe, Senior Program Officer at IMLS, moderated the final session, which focused on action items for both IMLS staff and the library and archives fields based on the day's discussions. The panel featured three of the meeting's steering committee members, who helped distill major themes.

Communicating the value of an LIS education

In reflecting on the earlier sessions, attendees discussed why old perceptions of librarianship endure and encouraged the field to work on communicating the evolving role of libraries and LIS education.

As surfaced in the second session of the day, library services are generally user-centered and not collections-centered. Despite this, Susan Hildreth noted, "we in the LIS field are fighting, in a way, that traditional view of librarians and librarianship." She and others continue to have many job applicants who explain their desire to work in a library because "I love to read and I just want to be with books," as opposed to wanting to serve communities. Vailey Oehlke described the staff at her library that stand out as models for the field. She described individuals that embody serving their community and being curious, open to change, and always willing to learn. However, it is not clear whether, or how, these important skills and abilities can be taught in master's degree programs.

Multiple speakers stressed the need to dispel stereotypes of librarians and library services while marketing the current, dynamic nature of the profession. Dr. David Lankes noted, "there is a really good narrative about how libraries have reinvented themselves" for today's challenges, and we need to add that focus on community-engagement to the narrative.

Challenge: Effectively communicate the value of LIS programs and professional careers. Continue to develop curricula to reflect the evolving role of librarians and library staff.

The identity of an LIS education

Lankes took the identity question a step further, asking "How far out of the box is IMLS willing to fund?" He wondered if IMLS is willing to consider something other than the master's degree as the access point to the profession. Given the barriers to earning an LIS education across the country, perhaps alternative certification pathways need to be considered.

Different credentialing can benefit potential students as well as current members of the workforce. Lankes alluded to the potential use of competency-based education

models so that existing practitioners gain faster access to credentialing and therefore promotion opportunities. Oehlke explained that she supports a more affordable bachelor's degree. While a master's degree may be important for certain LIS specializations, many LIS career paths may not require that degree level.

However, identity and credentialing are difficult conversations for those who have invested time, money, and effort in obtaining MLIS degrees. Jane Greenberg asked her colleagues, "how do we... take a step forward to explore this without feeling threatened?" Lankes encouraged further thought on alternative credentialing while retaining the teaching of LIS ethics, values, and principles.

Building relationships between practitioners and educators

Oehlke emphasized the importance of strong relationships between public libraries and LIS programs in exposing LIS students to their local communities and careers in public librarianship. Hildreth, from a uniquely situated position as a practitioner within an LIS school, encouraged similar short-term residencies that would allow adjuncts to more fully participate in the life of LIS programs. Echoing earlier conversations, Hildreth noted that her position enables her a "deeper level of involvement" in department discussions and decision-making than is usually afforded adjunct faculty. Oehlke encouraged LIS schools to work with her to embed faculty in her public library.

Greenberg stated that faculty, themselves, may need continuing education. Her department has funds for some faculty to dedicate themselves to full-time research and for others to receive professional training and experiences. She believes continuing education for faculty can help address the persistent rift between theory and practice. Attendees were interested in the potential shown in pilot programs that embed practitioners in LIS schools and LIS faculty in libraries. Jeng and Lankes noted that while practical experiences for faculty are important, tenure and promotion considerations must also adapt for full-time faculty to better reflect the importance of taking time for practical experiences to enhance their teaching and research.

Mary Soucie thanked IMLS for bringing together both LIS educators and practitioners for the day's discussions, and asked how these programs and organizations can find common ground to develop more sustainable, wide-reaching solutions. She stated, "In the state library world, we say, if you've seen one state library, you've seen one state library. And being in this room, I'm getting the sense if you have seen one LIS program, you've seen one LIS program. ... But where are the similarities? Where can we build on those?" Attendees generally agreed on a nation-wide lack of communication between practitioners and educators, but strides between individual institutions and existing LIS programs also show pockets of promising relationship-building.

Challenge: Develop and adapt communication venues and opportunities for practitioners and educators to share information with one another.

Increasing diversity and retention of LIS students and practitioners

The speakers underscored the importance of earlier discussions on diversity, including not only diversifying the pool of potential LIS students but also retaining a diverse profession.

Oehlke highlighted the need for systemic solutions around pipeline and retention issues and encouraged using an “equity lens” and intentionality in hiring and promotion decisions. Referencing the first panel, she also noted that recruiters need to go where diverse populations already are. It is important to consider early – perhaps as early as middle school and high school – how to expose students to the value of careers in LIS.

A number of panelists and attendees discussed systemic issues that hurt retention of a diverse workforce, emphasizing that issues of inclusion and organizational culture are critical for improving systems that have historically disadvantaged marginalized groups. Mark Puente suggested that library faculty and practitioners must, “have conversations about privilege and organizational climate... about microaggressions and the accumulation of pain, and of disadvantage that creates for people from underrepresented groups and other marginalized groups.” Without these conversations and related actions, the field cannot move forward to a more diverse and inclusive workforce.

Jeng also spoke to retention, explaining that existing library staff may need to “change their perspectives” to ensure a safe working environment. Oehlke was straightforward in acknowledging that her institution is largely White and largely female and that since they are, “part of the problem, so we need to be part of the solution.” Attendees agreed that there is a lot of work to be done by those who are not marginalized to ensure systemic changes to institutions’ workforce cultures.

Challenge: Look for ways to identify and dismantle systemic barriers to diversifying the pool of LIS students and retaining LIS practitioners and faculty.

Infrastructures and sustainability

Attendees discussed the importance of developing sustainable infrastructures and funding models to ensure grant and other short-term funding investments continue beyond initial funding. Lankes noted that while IMLS sustainability is often discussed in terms of tools and services, like the National Digital Platform,¹⁸ the day’s discussion unearthed sustainability in terms of scholarship programs, cohorts, and networking: “So even if we look at scholarship programs, that at one time didn’t just have a one-time impact, how do we continue and amplify that? ... How can we stitch together an idea of a platform around diversity and curriculum development?” He encouraged everyone to share sustainability best practices between and across institutions. The

18 Owens, T., Sands, A. E., Reynolds, E., Neal, J., & Mayeaux, S. (2017). *NDP at Three: The First Three Years of IMLS Investments to Enhance the National Digital Platform for Libraries*. Washington, D.C.: Institute of Museum and Library Services.

suggestion of a “platform” for LIS needs beyond tools resonated with Hildreth. She encouraged attendees to find partnerships and consider co-funding opportunities to sustain IMLS investments beyond their award period.

Lankes also noted the importance of not only developing new projects like shared tools and services, but also performing strong research around the issues brought up throughout the day. In order to couple practice with theory, researchers and practitioners must work together. He explained that while many LIS faculty are focused on teaching, others are focused on research, and the promotion and tenure incentives are often different for teaching faculty than for research faculty. However, the incentives need to match the demand, so that all faculty will work together to meet the long-term needs of the LIS community.

Overarching Themes

Several themes emerged that transcended the four discrete panels. While the focus of the day was on the education and training of library professionals, discussion also covered the recruitment of library students and the placement and retention of library and archives professionals.

RECRUITING STUDENTS

As the American public has become increasingly diverse, the LIS student body has failed to follow this trend. Attendees addressed the long-term challenge of diversifying the overall LIS student population and the number of working professionals by discussing: re-branding the profession, active and targeted recruitment of diverse communities, and radical changes to the format of an LIS education.

Re-branding for community-based librarianship

As librarianship has shifted to focus more on community-services rather than collections-development, the library 'brand' has nonetheless remained static in popular culture. The antiquated images of a librarian shushing patrons or a cataloger working alone all day in a corner cubicle are now exceptions to the rule. LIS educators and practitioners need to fight stereotypes of librarianship that may prevent potential students from considering careers in the LIS field.

Librarians and archivists need national efforts to develop and elevate the brand of librarianship to promote LIS career paths. Libraries need staff who are more community-focused and who reflect the communities' diversity. Some attendees suggested that introductions to the profession of librarianship should begin as early as middle and high school.

The IMLS LB21 program supports efforts to attract youth to the field of librarianship through the "pre-professional" funding category.

Going to where the diversity is

Better branding is also necessary to recruit new voices. It can be difficult for individuals who are not part of the racial or ethnic majority to envision themselves in master's programs and in the LIS field because of the overwhelming lack of diversity in the population of practitioners and students.

Throughout the day, attendees suggested that recruitment efforts 'go to where the diversity is.' MLIS programs can reach undergraduate students at, for example, Historically Black Colleges and Universities (HBCUs) and Hispanic-Serving Institutions (HSIs). LIS programs can recruit paraprofessionals working in local public

libraries, special libraries, or even their own colleges or universities. In addition to general re-branding of the 21st century profession, focused outreach is necessary to ensure a diverse workforce.

In addition to strategic recruitment, many attendees highlighted the importance of scholarships to recruit and support a more diverse student body. Scholarship students derive great value from accessing networks, cohorts, and mentorship programs. Attendees explained that scholarships and cohort-development benefit more than the individuals receiving the assistance; the influx of diverse practitioners supports the recruitment and retention of more diversity within the profession over time.

The IMLS LB21 Master's-level and Doctoral-level funding categories can fund creative approaches to developing a diverse workforce through scholarships and cohort-building models.

Considering radical changes to the MLIS

While the field's lack of diversity in race and ethnicity is stark, there are also other forms of diversity that are not well represented in LIS. For example, the field lacks representative diversity by socioeconomic status and geographic distribution (especially in the lack of credentialed librarians in rural areas of the country). Several barriers make it difficult to obtain a master's degree -- including the expense of tuition, geographic distances, unreliable bandwidth, and work and life responsibilities.

Economic barriers, including the cost of tuition relative to future income pay scales, are huge obstacles to many who might otherwise pursue beginning a career or obtaining additional credentialing in librarianship. Attendees called for programmatic models to reduce tuition to facilitate broader enrollment. For example, North Dakota and South Dakota have developed reciprocity with in-state tuition for students living in either state. Cohort programs can also be developed to support the success of working students, and in particular those working in rural settings. Connecting students, even at large geographic distances, can provide the necessary support to retain students with challenging jobs or other constraints. Synchronous online courses may be a barrier for students who need asynchronous course options to allow for work and family obligations as well as overcoming unreliable Internet connections.

Beyond considerations of addressing individual barriers to education, and given the costliness and time commitment of earning a master's degree, attendees also discussed alternative models of credentialing. While some in the profession consider it a radical thought, a few participants wondered whether the master's degree should remain the gateway degree to the profession. In addition, developing professional doctorates could encourage practitioners to pursue formal education beyond the master's degree. Doctoral programs could not only further individuals' education, but all members of the LIS department may gain from the experience and expertise of practitioner-students. Obtaining degrees that provide comprehensive preparation for

the challenges of daily practice benefit individual practitioners and the LIS field as a whole.

The IMLS LB21 program can fund the exploration and piloting of alternative models for how students are recruited and taught to enable those with fiscal, familial, and other responsibilities and constraints to gain formal credentialing.

EDUCATING STUDENTS

LIS education is critical to preparing future professionals to effectively serve diverse communities across the nation. However, a gap is evident between the formal education students receive and the skills and expertise they need. Attendees throughout the day discussed the importance of teaching both theory and practice in formal education programs; the difficulties in teaching and assessing interpersonal skill sets in a formal classroom setting; and the challenges faculty may face in teaching skills they themselves were never formally taught.

Balancing theory and practice

Attendees noted that LIS educators need to prepare students for both their first jobs and their entire careers. The balance between theory and practice is clear here in that practice can help students gain experience necessary for their first jobs, while theory can prepare professionals to adapt to changes throughout their careers. Critical thinking skills and other fundamentals, in addition to learning specific technologies, approaches, and practices, are essential to an LIS education. In addition, speakers encouraged hands-on experiences as well as opportunities for coursework outside of LIS departments for students to gain expertise relevant to LIS but not necessarily taught by the faculty of a single department. By balancing theory and practice, graduates can be prepared for challenges they will encounter throughout their career.

Conversations also addressed which educational components should be core requirements for an LIS education versus which should be considered specialized to a particular career trajectory. While the parameters of a core LIS education were not tackled during this meeting, attendees agreed on the importance of including specialized, as well as general, LIS coursework. Speakers focused on the importance of all students entering the workforce with leadership skills and the ability to supervise and be supervised. Attendees also talked about the necessary sensitivities and awareness that enable students to thoughtfully engage with one another and the public.

The IMLS LB21 program can support exploring, piloting, enhancing, and scaling new approaches to teaching, whether in the classroom, through practical experiences, or with hybrid learning models.

Teaching and assessing interpersonal skills

Attendees stressed the importance of library professionals' interpersonal skills. These skills include being: community-focused; able to interact with diverse populations when serving users and collaborating with other staff; able to supervise and be supervised; quickly adaptable to change; and curious and willing to learn.

These skill sets, however, are complicated to teach and measure. Considerations were given to different pedagogical and assessment models, including how skills can be taught within a single course; whether they can be integrated and evaluated throughout multiple courses; and whether or how they can be practiced and evaluated through hands-on experiences.

LIS faculty can engage existing education literature and faculty to better measure LIS student progress in achieving interpersonal skills. While practitioners describe interpersonal skill sets as essential to working in LIS, faculty are not always sure how to integrate those skills into formal education. Overall, LIS departments were encouraged to develop relationships with other departments to increase the range of courses available for LIS students and to increase outreach to other students.

Teaching is an important skill for LIS faculty, and the IMLS LB21 program can fund investigations into the best ways to teach the skills needed in the field, including conversations with experts far beyond LIS.

Faculty practical expertise

Most LIS degree programs include faculty with distinct job titles denoting tenure track (permanent) or adjunct (temporary) status. Often, there are differences in the experience and expertise of full-time faculty, who may focus on theory, compared with adjunct faculty who focus only on practice.

It is difficult for faculty to teach skill sets they have not acquired, whether through formal education or practical experience. In addition to sharing expertise and courses between departments within a university, attendees called for full-time faculty to be allowed time for practical experiences and their own professional development. Universities need to prioritize faculty understandings of practice, so promotion and tenure cases can benefit from, and not be hurt by, engagement in practical field experience and continued education.

While LIS curricula can be enhanced through the lens of experience, the perspectives of adjuncts and other practitioners are often missing from curricular decision-making. In addition to encouraging research faculty to gain hands-on experience, LIS programs can enable further participation of adjunct faculty in the governance of the department. For example, usually adjunct faculty are not able to participate in faculty meetings and curricular change initiatives. Attendees encouraged LIS programs to enhance the roles adjunct faculty and other practitioners can play in LIS faculty

decisions. Seeking adjunct faculty input on LIS curriculum development provides one example of enhancing ongoing conversations between LIS faculty and practitioners.

The IMLS LB21 program can fund the research of non-tenured, full-time LIS faculty through the Early Career Development funding category.

RECRUITING, HIRING, AND RETAINING LIS PROFESSIONALS

The diversity of the LIS profession does not reflect the diversity of the American public. Attendees discussed the importance of not only focusing on increasing the diversity of students, but also increasing the recruitment of diverse students into practice and ensuring they work in safe, equitable professional environments. Attendees also encouraged further research to gather and analyze new statistics on the diversity of the profession.

Practitioner recruitment

Librarians, particularly those who are White, struggle with recruiting diverse staff. The aforementioned issues with recruiting a diverse body of LIS students limit candidates with different backgrounds and perspectives. However, library recruiters can proactively seek out candidates from diverse backgrounds. Attendees repeatedly discussed the importance of being *intentional* and *proactive* in recruiting a diverse pool of candidates.

Stereotypical views of librarianship can often hinder not only recruitment of LIS students but also the hiring of LIS graduates into the workforce. Recent MLIS graduates often enter job interviews at public libraries discussing their love of reading rather than passion for serving library communities.

The IMLS LB21 program can support innovative recruitment methods and ways of preparing students for entering the LIS workforce.

Practitioner retention

It is not sufficient to recruit a diverse staff; retaining staff with diverse backgrounds is critical for the LIS profession. To do so, institutions employing LIS graduates must create organizational cultures that respect and value diversity, inclusion, and equity. Unfortunately, a number of institutional cultural issues, including microaggressive behaviors, privilege, and oppression prevent libraries from retaining staff from diverse backgrounds.

Students may enter the profession without being able to relate to and communicate with colleagues from other cultures or ethnic and racial backgrounds. Continuing education programs can be created and prioritized to ensure existing staff are best resourced to create and sustain healthy work environments. For example, attendees

discussed the importance of library budgeting for continuing education. Training funds can be used for degreed librarians and support staff; for technical training or honing community engagement techniques; and for creating supportive and inclusive work environments.

Students and staff in the majority can benefit from a deeper understanding of how to relate to people from other cultures and backgrounds. Not only will enhanced sensitivity and awareness serve to create safe workspaces and retain diverse workforces, but competency development will enable librarians to better serve diverse users. Attendees stressed that workplace cultures and lack of retention of diverse staff are critical problems in LIS and professionals in power have much work to do to remedy systemic problems. The LIS field as a whole must continue discussing these issues and making changes to professional cultures to ensure retention of a diverse workforce.

The IMLS LB21 program can support intentional and proactive efforts at continuing education programs that create more equitable working environments in libraries and archives.

Conclusion

For 15 years, the Laura Bush 21st Century Librarian (LB21) Program has committed to supporting library and information science programs to meet the needs of students and libraries and to increase diversity within the library profession. As David Lankes explained, the reason the LB21 Program has been so successful for 15 years is that it has been “strategic in its application of limited funds.” The convening described in this report provided an opportunity for LIS educators, practitioners, experts, stakeholders, and thought leaders to discuss how IMLS can best strategize accomplishing these objectives through grant-making.

Panelists and attendees discussed long-standing and emerging issues across the full workforce life cycle and explored potential opportunities for stakeholders to work together to address these field-wide challenges. Attendees also encouraged ongoing conversations between those who hire LIS graduates and the educators who prepare students for the workforce. Stronger and more thoughtful communication strategies must be developed, initiated, and implemented to ensure LIS faculty and LIS professionals understand one another’s work, priorities, and needs now and into the future.

IMLS grant programs will continue to address the gap between practitioner needs and formal education programs while developing a diverse workforce of librarians to better meet the changing learning and information needs of the American public. IMLS wants to not only fund programs that address the immediate needs of the field, but also programs that proactively prepare the LIS workforce with the skills, knowledge, and expertise necessary for LIS professionals to remain at the forefront of 21st century user needs. Indeed, Jon Gant encouraged IMLS staff, faculty, and practitioners to be alert in recognizing the “the next plateau we’ve got to reach.”

In the past, IMLS has funded important projects to propel the field forward. Lankes noted that IMLS funding for digitization projects was essential and, while that particular funding emphasis would not last forever, the surge of funds enabled infrastructures, best practices, and workforces to be built. Carole Palmer noted that the funding for research data management is what prepared and enabled LIS professionals to be at the forefront of data management needs as research funders began mandating data management plans in 2013.

Lankes asked the room, “What’s the next phase that pulls the profession forward?” Hildreth explained that she sees “IMLS funding as venture capital for our field.” Jane Greenberg advocated that if we don’t identify future needs and begin preparing for them early, then outside entities will drive our conversations. Suliman Hawamdeh wants to see IMLS take some risks by funding “crazy ideas” that might transform the

profession. These suggestions from the meeting attendees are not aimed at the others in the room -- they are aimed at every person who touches the planning, execution, and evaluation of LIS education in America.

Have you identified ways to bridge the gaps in LIS education and practice? Do you know a strategy to make a lasting impact in diversifying the student body and profession? Do you foresee the skill set or expertise LIS professionals must have mastered ten years from now? This report serves as a beginning of a conversation and everyone is encouraged to continue addressing field-wide problems. IMLS encourages grant proposals building on the ideas and opportunities outlined in this report with potential to improve the way the LIS field recruits and educates students, and recruits, hires, and retains librarians and archivists. IMLS wants to hear from practitioners and faculty members working together toward innovative solutions for the field.

Appendix I: Agenda

IMLS Focus Positioning Library and Information Science Graduate Programs for 21st Century Practice

November 7, 2017

8:30 AM - 9:00 AM: Breakfast

9:00 AM - 9:10 AM: Welcome from South Carolina Hosts and IMLS

Dr. R. David Lankes, University of South Carolina

9:10 AM - 9:30 AM: Framing of IMLS, LB21, and Today

Robin Dale, IMLS

9:30 AM - 10:45 AM: Diversifying the Field of Professionals

Moderator: Dr. Sandra Toro, IMLS

- Sonia Alcantara-Antoine, Newport News Public Library
- Loida Garcia-Febo, Information New Wave
- Mark Puente, Association of Research Libraries
- Tina Rollins, Hampton University

10:45 AM - 11:05 AM: Break

11:05 AM - 12:20 PM: Skills, Expertise, and Competencies

Moderator: Dr. Ashley Sands, IMLS

- Dr. Jane Greenberg, Drexel University
- Dr. Carole Palmer, University of Washington
- Dr. Julie Todaro, Austin Community College
- Kelvin Watson, Broward County Libraries

12:20 PM - 1:20 PM: Lunch / LIS Student and Faculty Poster Session

1:20 PM - 2:35 PM: Alternative Models and Barriers to LIS Graduate Education

Moderator: Sarah Fuller, IMLS

- Dr. Jon Gant, North Carolina Central University
- Dr. Gary Shaffer, University of Southern California
- Mary Soucie, North Dakota State Library

2:35 PM - 2:55 PM: Break

2:55 PM - 3:55 PM: Going Forward

Moderator: Teri DeVoe, IMLS

- Susan Hildreth, University of Washington
- Dr. R. David Lankes, University of South Carolina
- Vailey Oehlke, Multnomah County Library

3:55 PM - 4:05 PM: LB21 Funding Opportunities

4:05 PM - 4:15 PM: Closing Remarks

Robin Dale, IMLS

#LB21focus

Appendix II: List of Participants

Dan Albertson, University at Buffalo,
The State University of New York

Kendra Albright, Kent State University

Sonia Alcantara-Antoine, Newport News
Public Library

Jason Alston, Coastal Carolina University

Christine Angel, St. John's University

Carol Barry, Louisiana State University

Joan Beaudoin, Wayne State University

Kimberly Black, Chicago State University

Jenny Bossaller, University of Missouri

Roberta Brody, Queens College

Youngok Choi, Catholic University of America

Anthony Cocciolo, Pratt Institute

Michael Corbo, University of South Carolina

Chris Cunningham, University of Southern
Mississippi

Nicholas Cutforth, University of Denver

Robin Dale, IMLS

Lawrence Dennis, Florida State University

Teri DeVoe, IMLS

Kaye Dotson, East Carolina University

David Eichmann, University of Iowa

James Elmborg, University of Alabama

Sarah Fuller, IMLS

Jon Gant, North Carolina Central University

Loida Garcia-Febo, Information New Wave

Amelia Gibson, University of North Carolina
at Chapel Hill

Jane Greenberg, Drexel University

Suliman Hawamdeh, University of
North Texas

Caroline Haythornthwaite, Syracuse University

Aloysius Helminck, University of Hawaii

Susan Hildreth, University of Washington

Sandra Hirsh, San Jose State University

Jeffrey Huber, University of Kentucky

Ling Hwey Jeng, Texas Woman's University

Valerie Karno, University of Rhode Island

Diane Kelly, University of Tennessee

R. David Lankes, University of South Carolina

Xia Lin, Drexel University

Denise Lyons, South Carolina State Library

Gary Marchionini, University of North Carolina at
Chapel Hill

Kate Marek, Dominican University

Laura McKenzie, IMLS

Lorri Mon, Florida State University

Linda Most, Valdosta State University

James Neal, IMLS

Jinfang Niu, University of South Florida

Lisa O'Connor, University of North Carolina,
Greensboro

Vailey Oehlke, Multnomah County Library

Carole Palmer, University of Washington

Mark A. Puente, Association of Research Libraries

Allen Rinear, University of Illinois at
Urbana-Champaign

Tina Rollins, Hampton University

Ashley E. Sands, IMLS

Laura Saunders, Simmons College

Gary Shaffer, University of Southern California

Mary Soucie, North Dakota State Library

Joette Stefl-Mabry, University at Albany,
State University of New York

Mega Subramaniam, University of Maryland

Tess Tobin, REFORMA

Julie Todaro, Austin Community College

Sandra Toro, IMLS

Julie Walker, Georgia Public Library Service

Thomas Walker, Long Island University

Kelvin Watson, Broward County Libraries

Sandra Webb, IMLS

Kelvin White, University of Oklahoma

Christine Wolff-Eisenberg, Ithaca S+R

Dietmar Wolfram, University of
Wisconsin-Milwaukee

Elizabeth Yakel, University of Michigan

Appendix III: Guiding Questions

Positioning Library and Information Science Graduate Programs for 21st Century Practice

November 7, 2017

Mission

The purpose of this convening is to explore how the formal education component of the IMLS *Laura Bush 21st Century Librarian (LB21) grant program* can best support library and information science (LIS) programs to meet the needs of students and libraries, and to increase diversity within the library profession.

Guiding Questions

- How can the Master's and Doctoral component of the LB21 grant program best support LIS programs to meet the needs of students and libraries, and to increase diversity within the library profession?
- If money were no object, how would you adapt your curriculum, educational model, or recruitment and retention practices to support student and library needs?
- What do the other attendees need to know about your institution's limitations, short-term needs, and long-term goals?
- What action items do degree program leadership, library hiring managers, and IMLS staff need to take based on our discussions at this convening?

Diversifying the Field of Professionals

The LB21 grant program develops a diverse workforce of librarians as per 20 U.S.C. § 9165 (2010). A *2013 evaluation* of the LB21 program from 2003-2009, conducted by ICF International, noted that: diversity is an area of interest for the library field since, “[d]iversity among librarians is not keeping pace with changes in the U.S. population” (p.2); and “It is important to prepare all librarians for work in a multicultural society, particularly because the recruitment and education of diverse individuals to serve the communities they represent takes time, both to enter the ranks and later assume leadership positions” (p.4). Almost five years later, the LIS field continues to struggle with a lack of diversity to the detriment of students, schools, libraries, and the general public. If the strategy of providing scholarships to individuals has not impacted the overall diversity of the field or helped the national retention problem:

- How can we identify, develop, and refine strategies to recruit, train, and retain diverse professionals?
- How can the field and library schools create an environment that is more supportive of diversity and more attractive to diverse candidates?
- How can we ensure a more diverse leadership in terms of faculty/researchers and library administrators/practitioners?
- How do we develop competencies related to cultural sensitivity and awareness in our students, staff, and researchers?
- How can the field come together to build on what we've learned in terms of recruitment and retention?

Skills, Expertise, and Competencies

As libraries increasingly serve social, civic, and technological functions, the nature of librarianship has expanded. Academic libraries often need experts in research methods or data science, public libraries increasingly need staff with a wide range of community development and engagement skills, and all libraries are seeing the need for expertise in fundraising, project management, software development, as well as leadership, supervisory, and management experience. As the jobs that library leaders are trying to fill have an expanding list of necessary skillsets and expertise:

- Where are the knowledge gaps between formal LIS education graduates and the needs of hiring managers in libraries and archives?
- What kinds of curricular changes are necessary in MLIS and LIS PhD programs to keep up with the changing needs of practitioners into the future?
- How are LIS programs addressing both what students expect to learn and what the field needs students to learn?
- What is the baseline skillset or level of expertise that a graduate should have upon finishing library school? How is that determined?
- Rather than building discrete competencies, how can we prepare LIS program graduates with an ability to flexibly adapt to changing needs?
- How necessary are hands-on training programs in LIS schools? What is the best format for that kind of learning (internships, advanced classroom projects, etc.)?

Alternative Models and Barriers to LIS Graduate Education

There are a number of barriers for students considering pursuing a library degree and for library staff who are considering pursuing additional credentialing. For some aspiring students, the realities of library position pay scales can make it difficult to justify the costs of a formal MLIS education; many mid-career professionals with families, full-time jobs, or other constraints can find time as a barrier to pursuing additional credentialing for career advancement. Additional barriers may result from geographic considerations, particularly in states or regions without accredited LIS programs. Schools also face significant challenges as LIS programs must demonstrate their value to attract, retain, and place students. Currently, LIS programs are not only competing with each other in student recruitment, but are also competing with other types of schools and credentials as LIS employers may hire employees with alternative credentials from outside the LIS field.

- How can new program formats, virtual and distance education, and other alternative degree and credentialing models address diversifying the profession?
- What alternative credentialing models are being created and what challenges/opportunities are they attempting to address?
- How do potential students get access to credentialed knowledge and how do employers measure or value these various formats?
- How do we know students are receiving what they need to be successful and how does the field increase communication between the schools, researchers, and practitioners?

Appendix IV: Figures

Figure 1

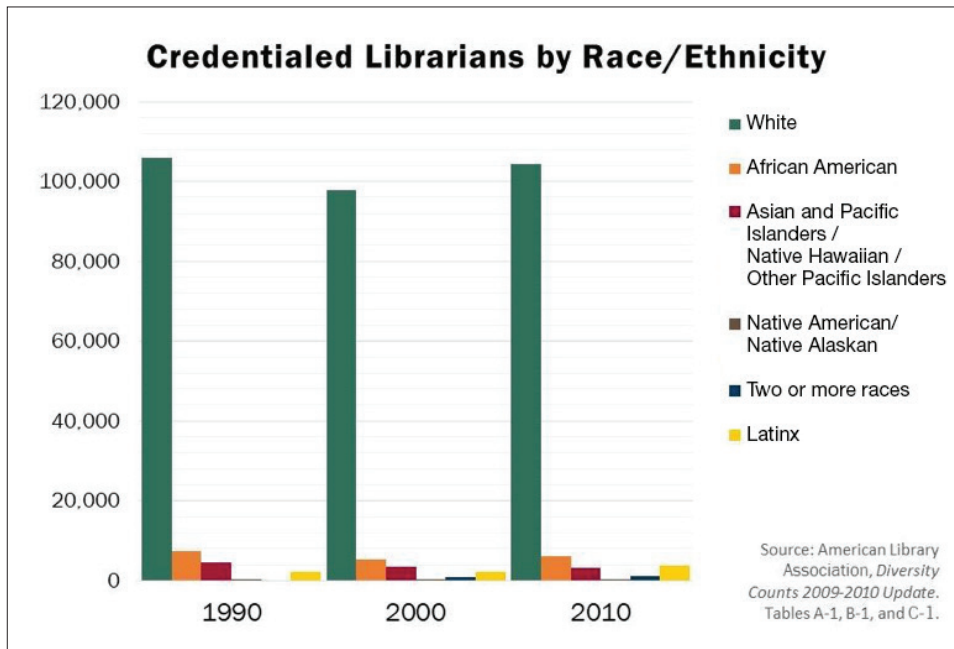


Figure 2

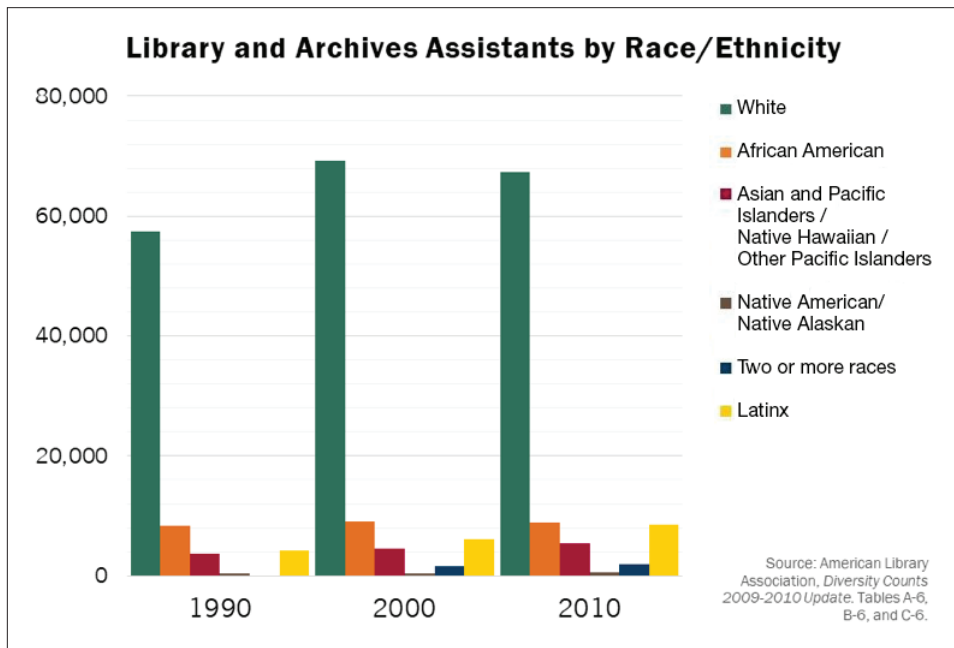
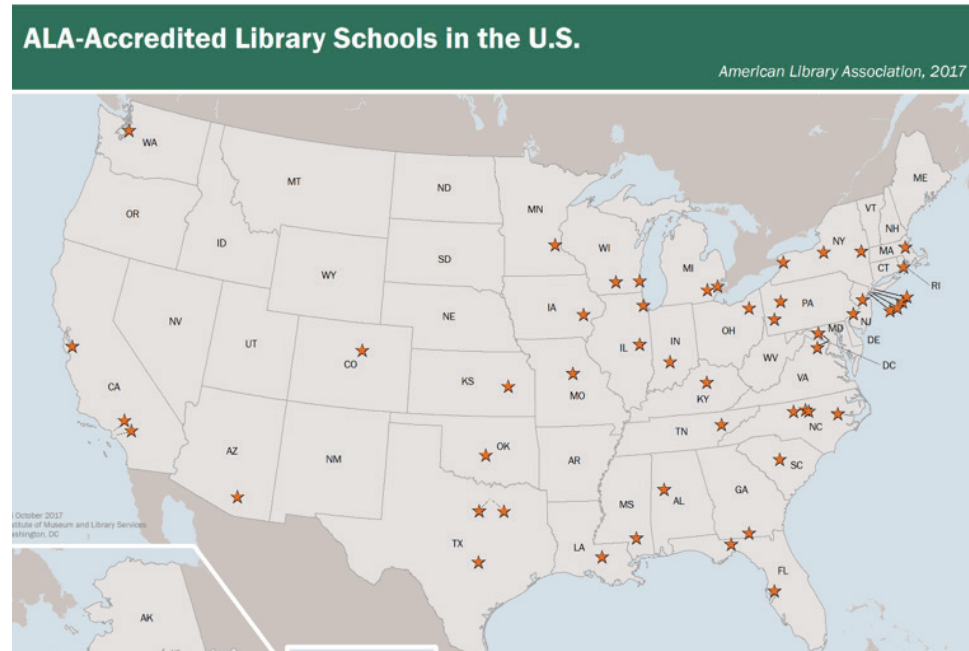


Figure 3



Appendix V: Master's and Doctoral-level LB21 Awards (2015-2017)

Laura Bush 21st Century Librarian Program A Selection of Recent Awards Focusing on Recruitment and Training at the Master's and Doctoral Level and Developing a Diverse Workforce

2017

Hampton University

Log Number: [RE-98-17-0099-17](#)

Fiscal Year: 2017

Award: \$99,980.00

Hampton University will host a national forum to discuss recruitment and retention of minority library professionals in the Library and Information Science field. The forum will convene 30-40 librarians who are leaders and experts in library science, diversity, and leadership to address the continued issues of recruitment of minorities to the field. Through the forum and additional virtual meetings, participants will generate strategies for addressing issues in minority librarianship, including improving outreach efforts of libraries to recruit a more diverse workforce and improving the experiences of minorities currently in the field.

Regents of the University of Michigan

Log Number: [RE-95-17-0104-17](#)

Fiscal Year: 2017

Award: \$399,009.00

The University of Michigan will conduct a three-year project to develop a new library-as-research-lab model in LIS education and professional development. The library will be the site of three research labs and School of Information faculty and librarians will co-create the research and learning environments for 30 master's students and six librarians. The three research labs will be: Library Assessment in Student Learning, Library Assessment for Research and Scholarship, and Designing Thinking for Services. The project will help to build research skills and professional capabilities in the academic library workforce, and foster and enhance mentoring capabilities in the profession. Ultimately, LIS educators, LIS students, and academic librarians who are seeking alternative practical experience programs will be beneficiaries of the proposed project because they will be able to replicate and adapt the research lab model.

Wisconsin Library Services

Log Number: [RE-85-17-0127-17](#)

Fiscal Year: 2017

Award: \$227,077.00

Wisconsin Library Services, in partnership with the University of Wisconsin-Madison's School of Library and Information Studies and the University of Wisconsin-Milwaukee's School of Information Studies, will implement a program to provide library school students with practical experience in digital stewardship through summer fieldwork positions. By placing students in small and under-resourced memory institutions across Wisconsin, the project will also increase the capacity of small libraries and cultural heritage organizations to curate their digital collections. Over two years, 16 students and 10-16 host institutions will receive training and mentoring in digital stewardship and will work together to manage, preserve, and provide access to materials digitized from analog formats, as well as born-digital items.

WGBH Educational Foundation

Log Number: [RE-85-17-0092-17](#)

Fiscal Year: 2017

Award: \$229,772.00

WGBH Educational Foundation (WGBH) will host a Public Broadcasting Preservation Fellowship for 10 students enrolled in library and information science (LIS) graduate programs to pursue digital preservation projects at public broadcasting organizations around the country, gaining hands-on experience in audiovisual preservation. WGBH will work with five partner universities: University of North Carolina at Chapel Hill, University of Missouri, University of Oklahoma, San Jose State University, and Clayton State University. Each university will be paired with a local public media station to serve as a fellowship host. Fellowship placements will address the need for

digitization of at-risk public media materials and increase audiovisual preservation education capacity in LIS graduate programs across the country.

Drexel University

Log Number: [RE-70-17-0094-17](#)

Fiscal Year: 2017

Award: \$313,269.00

Drexel University will develop the Library Education And Data Science (LEADS) program, a transformative doctoral training initiative grounded in library science foundations and integrating a new data science focus. The program will provide stipends for 18 library school doctoral students across the country. These LEADS Fellows will complete an online preparatory curriculum, an intensive 3-day data science boot camp at Drexel University, and a ten-week data science internship with a LEADS project partner in which the students will complete data science activities in a real-world library setting while conducting original research. The program will result in a cohort of future faculty members who can bring data science knowledge and skills into library graduate schools across the country. The chief outcome of the program will be a proven template for educating library data scientists, while also readying this first cohort to serve as educators and leaders in libraries and archives.

Association of Research Libraries

Log Number: [RE-85-17-0037-17](#)

Fiscal Year: 2017

Award: \$518,507.00

The Association of Research Libraries (ARL) will implement the ARL Fellowship for Digital and Inclusive Excellence, a national diversity recruitment and development program. The program will provide one-year paid internships in libraries and archives to 30 undergraduate and graduate students from historically underrepresented racial and ethnic minority groups. The project will also provide numerous continuing education opportunities for the fellows to explore careers in libraries and archives, as well as training in diversity, equity, and social justice topics. Students will receive mentorship opportunities and leadership development in addition to their one-year internship positions, paving the way for successful careers for the individual fellows and a more diverse workforce for the library and archives fields.

University of Texas At Austin

Log Number: [RE-96-17-0018-17](#)

Fiscal Year: 2017

Award: \$488,501.00

The University of Texas at Austin's School of Information, and its partners, the Library and Information Science Program at the University of Hawai'i at Manoa (UH-Manoa) and the School of Information (iSchool) at San Jose State University (SJSU), will conduct a two-pronged project to help more U.S. veterans to become librarians. The three-year project includes 1) scholarships for 12 veterans to attend LIS masters programs; and 2) research exploring how military veterans choose careers in librarianship and information studies. The research features surveys for veterans who are librarians and admissions staff/faculty at LIS programs and interviews with admitted students. Based on the research findings, the partners will develop guidelines for recruiting veterans; a tool to assess local LIS program efforts aimed at recruiting veterans; and a directory of potential partner organizations that serve veterans. The project will illustrate how veterans successfully navigate the college admission process and which strategies are most effective for recruiting military veterans into LIS graduate programs.

Syracuse University

Log Number: [RE-98-17-0032-17](#)

Fiscal Year: 2017

Award: \$92,477.00

Syracuse University School of Information Studies and the University of Washington Information School will hold a National Forum on design thinking and methods in master's level library education. The Forum will address: identifying gaps in existing MLIS curricula; exploring approaches for incorporating design thinking in master's level library education, and offering actionable recommendations for this incorporation. The project will consist of three phases: 1) a field scan of design topics in MLIS curricula; 2) a meeting of educators, library employers, and design professionals; and 3) production of sample syllabi.

2016

University of Kentucky

Log Number: [RE-32-16-0140-16](#)

Fiscal Year: 2016

Award: \$49,844.00

Through an IMLS planning grant, the University of Kentucky will conceptualize a research data services model for academic libraries based on a patron needs assessment. The project team will conduct a multi-method study to investigate the current status of research data services, needs of potential patrons, and perceptions and opinions of heterogeneous stakeholders, such as librarians, administrators, and scholars. The expected outcomes include: a list of potential data services feasible in operating libraries, situations in which patrons need research data services, resources needed to offer data services, knowledge and skills needed by data services librarians, curricula suggestions for data-related LIS programs, and others. In particular, a conceptual data services model will be produced, which will identify types of data services, associated resources necessary for services, service platforms, knowledge and skills needed by librarians, and corresponding librarian education plans. In addition, this project will yield guidelines for data services librarian training and suggest curricula for library science programs.

Association of Research Libraries

Log Number: [RE-20-16-0005-16](#)

Fiscal Year: 2016

Award: \$299,518.00

The professional workforce of librarians and archivists does not reflect society's diversity. With this three-year award, the Association of Research Libraries and the Society of American Archivists extends the successful ARL/SAA Mosaic Program, recruiting and supporting nine students from historically underrepresented groups. Mosaic's robust design provides participants with financial support for graduate-level archival education or special collections librarianship, emphasizing the development of digital curation and management skills. It also includes a paid internship in a partner ARL archive, a mentoring relationship, cohort building, leadership development, and career placement assistance.

University of Tennessee

Log Number: [RE-20-16-0036-16](#)

Fiscal Year: 2016

Award: \$811,501.00

Information professionals are expected to test users' experience (UX) online to create user-friendly environments for a diverse range of users, but few LIS programs prepare their graduate students for this work. Experience Assessment: Building User Experience and Assessment Capabilities in Libraries and Information Centers is a two-year master's level degree project that will bring together an interdisciplinary team and robust facilities at the University of Tennessee (UT) to create 12 leaders in user experience and assessment and develop an open access curriculum to continue creating these professionals. Students will complete hands-on, mentored research experiences at UT UX laboratories, UT Libraries, Oak Ridge National Laboratory, U.S. Geological Survey, Information International Associates, and the Tombras Group.

Regents of the University of California, Los Angeles

Log Number: [RE-20-16-0110-16](#)

Fiscal Year: 2016

Award: \$163,050.00

The archival field, including educators, fails to reflect the changing demographic composition of the nation. More diversity of faculty would encourage recruitment of diverse students into professional education and nurture relevant training, pedagogy and applied research. In 2011, the multi-university Archival Education and Research Initiative (AERI) implemented the Emerging Archival Scholars Program (EASP) supporting recruitment of minority undergraduate and master's students into doctoral programs. This project would continue and expand EASP for three additional years. Competitive EASP scholarships encourage students to consider careers as archival educators. The project will provide mentorship for applying to doctoral programs, networking opportunities with students and faculty from different programs, exposure to state-of-the-art research and pedagogical innovations, and a stipended nine-month faculty-supervised pre-doctoral research opportunity.

University of Tennessee

Log Number: [RE-22-16-0038-16](#)

Fiscal Year: 2016

Award: \$40,121.00

In the last decade libraries have struggled to keep up with the growing popularity of mobile technologies. With Project MISSILE (Mobile Information Skills and Solutions in Library Education), a planning grant to the University of Tennessee, Dr. Devendra Potnis, with Dr. Ed Cortez and Dr. Suzie Allard, will put together interdisciplinary graduate coursework for LIS students to serve as mobile technology consultants for libraries. They will develop a new course titled "Mobile Application Development"; create new modules for two existing courses; and form an advisory board of experts in mobile applications and related technologies.

University of Washington

Log Number: [RE-40-16-0015-16](#)

Fiscal Year: 2016

Award: \$690,858.00

The University of Washington will develop an educational program to prepare both new students and practicing professionals to: curate collections of open data of value to local communities, build infrastructure and preservation environments needed to sustain open data collections, and collaborate with open data providers on advocacy and outreach activities. Project collaborators include the Seattle Public Library, Washington State Historical Society, Washington State Department of Transportation, and the Washington State Office of Technology. The project will benefit over 100 LIS students, through new course creation and practical field experience, and approximately 60 professionals, through webinars and open educational resources. The summative evaluation of the project will also include a study of broader workforce needs for public open data expertise.

University of Pittsburgh

Log Number: [RE-31-16-0079-16](#)

Fiscal Year: 2016

Award: \$109,399.00

This two-year research project at the University of Pittsburgh will explore youth data literacy in the context of youth services at the Carnegie Library of Pittsburgh. The goal is to build an understanding of the data literacy competencies needed by youth services librarians to support data literacy programming. The project will prepare the ground for future work to develop a new Library and Information Science curriculum and professional development opportunities to promote data literate, STEM-oriented youth librarians who can capably design, implement, and manage data literacy library programming for youth at the public library. Outcomes include a needs assessment of training requirement; a conceptual model of youth data literacy; and a prototype for a curricular model for the education of data literate youth librarians.

2015

University of Wisconsin System

Log Number: [RE-06-15-0079-15](#)

Fiscal Year: 2015

Award: \$435,896.00

The University of Wisconsin-Madison School of Library and Information Studies will create meaningful collaboration between tribal cultural professionals and Library and Information Studies (LIS) students through an integrated effort that 1) deepens continuing education opportunities for tribal librarians, archivists, and museum curators through multi-day institutes designed to facilitate collaboration through a common hands-on project that showcases participating tribal communities and their cultural institutions, and 2) improves LIS student service-learning partnerships with American Indian communities.

University of Oklahoma

Log Number: [RE-51-15-0065-15](#)

Fiscal Year: 2015

Award: \$49,346.00

Oklahoma University will assess the need for an accelerated master's in library information sciences degree focused on 21st Century Public Library Leadership and design the program with the goal of delivering it to the target audience of rural public librarians. The School of Library and Information Science's experience shows that an essential step in successful training grant implementation is analysis of the stakeholders' needs prior

to program design. The planning period is needed to: consult with other IMLS grant recipients who have successfully surveyed needs of rural public librarians in their states; identify and contact public stakeholders in Arkansas and Oklahoma, inside and outside libraries; identify and invite potential public library program students; and engage with various stakeholders.

Regents of the University of Michigan

Log Number: [RE-01-15-0086-15](#)

Fiscal Year: 2015

Award: \$444,462.00

The University of Michigan School of Information (UMSI) will host an intensive and immersive 12 week summer research experience for master's students in library and information science (LIS) and archival and records management (ARM) education programs. UMSI faculty, with its partners -- the University of Michigan (UM) Libraries, Bentley Historical Library, UM School of Education Teaching and Learning Exploratory, and the Inter-university Consortium for Social and Political Research (ICPSR) -- will offer a range of research opportunities that will better prepare Master's students for research careers by increasing their competitiveness for doctoral programs and augmenting their research skills to make them better evidence-based practitioners.

University of North Texas

Log Number: [RE-01-15-0087-15](#)

Fiscal Year: 2015

Award: \$499,991.00

The University of North Texas, in partnership with the Brigham Young University-Hawaii, will support a three-year master's in library and information science degree program to continue to increase the number of degreed library professionals for the geographically dispersed US Affiliated Pacific Islands. The IMLS LEAP-II project will educate twelve more indigenous librarians and information stewards with skills in curation and preservation of digital projects and collections with an emphasis on digital content management. Students will receive tuition, travel support, a computer, and association dues and will complete enhanced enrichment activities including professional development programs, library and museum tours, individual mentors, and specialized workshops on advanced digital technologies and information literacy.

Emporia State University

Log Number: [RE-04-15-0041-15](#)

Fiscal Year: 2015

Award: \$496,277.00

The Emporia State University School of Library and Information Management is collaborating with other ESU leadership departments including the Department of Physical Sciences, The Teachers College, and Information Technology to broaden library and information science education through formal integration of Science, Technology, Engineering, and Mathematics (STEM) into the Master of Library Science curriculum. The project involves co-teaching between school librarians and classroom science teachers. ESU will create a new certificate, the Information, Technology, and Scientific Literacy Certificate; new interdisciplinary curriculum; and new learning opportunities for a total of 50 undergraduate and graduate college students.