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portal: Libraries and the Academy, Volume 18, Number 2, April 2018, pp.
331-362 (Article)

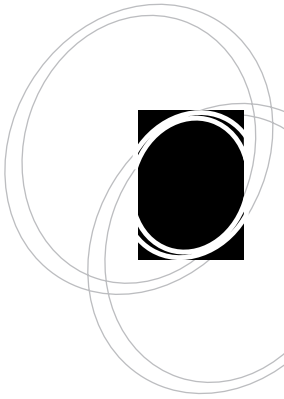
Published by Johns Hopkins University Press

DOI: <https://doi.org/10.1353/pla.2018.0019>



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“I Never Knew I Could Be a Teacher”: A Student-Centered MLIS Fellowship for Future Teacher-Librarians

Rachel W. Gammons, Alexander J. Carroll, and
Lindsay Inge Carpenter

abstract: The Research and Teaching Fellowship (RTF) of the University of Maryland Libraries in College Park is a three-semester teacher training program for students seeking a master’s of library and information science (MLIS) degree. This article provides details of the program’s content, organization, administration, and assessment. It also includes results from a mixed methods and longitudinal study identifying the successful components of RTF and charting the development of teacher efficacy and identity among participants. Findings indicate that a strong sense of community, sustained engagement with teaching, and the integration of evidenced-based practice prepare MLIS students to succeed in a competitive job market. The authors provide a list of best practices in the development of mentorship and training programs, including considerations for librarians and administrators.

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Introduction

The Research and Teaching Fellowship (RTF) of the University of Maryland (UMD) Libraries in College Park is a three-semester experiential teacher training program for students seeking a master’s of library and information science (MLIS) degree. Crafted in collaboration with UMD College of Information Studies

portal: Libraries and the Academy, Vol. 18, No. 2 (2018), pp. 331–362.

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(iSchool) administrators, students complete RTF in tandem with the MLIS degree to obtain sustained, scaffolded, and meaningful library instruction experience. We designed RTF to address needs identified from our own experiences as early-career librarians, in conjunction with conclusions drawn from the literature. Rather than just sharing what we think works about this program, this article provides analyses that test our assumptions of what a successful MLIS professional development program should include. We allowed our students' experiences to guide the discussion by utilizing research methods that prioritize our participants' voices. We thus empowered them to guide the program's development. We enhanced this student-centered approach to program evaluation with an empirical evaluation of the students' growth in teacher efficacy using a rubric based on the Association of College and Research Libraries (ACRL) "Roles and Strengths of Teaching Librarians."¹ The article concludes with reflections on how similar teaching and mentorship programs for emerging LIS professionals might use these findings.

Literature Review

In the last decade, the library literature has examined information literacy instruction and assessment as a means of generating evidence of academic libraries' impact on student success and retention. Research has demonstrated a positive correlation between librarian interventions and student performance in information literacy competencies.² Several studies suggest that this effect becomes more pronounced when a librarian's role extends beyond the traditional one-shot lecture.³

Historically, many information literacy instruction programs have relied on quantitative assessments to prove their value. These measures can be evaluated with relative ease, but when relied upon exclusively, they rarely offer sufficient evidence to determine the impact of information literacy instruction on student learning.⁴ Kathleen Dunn describes the limitations pointedly, noting that quantitative assessment does not measure "the effectiveness of student search skills in real life situations."⁵ In response, information literacy programs have increasingly adopted mixed methods and rubric-based assessments for evaluation.⁶ These methods of evaluation, while more time-consuming than quantitative techniques, provide deeper and richer insights into student learning.

As enrollment in higher education has increased in the last decade, many institutions have experienced difficulties building and developing the staff skills required to offer in-person information literacy instruction at any level, much less instruction that extends beyond one-shot lectures.⁷ Information literacy programs emphasize the importance of active learning and assessing student performance using authentic measures of assessment, in which students are asked to perform real-world tasks that demonstrate meaningful application of essential knowledge and skills. The high demand for information literacy instruction, however, has forced many programs to rely increasingly upon online modules for delivering instructional content. Online modules can reach every student, but they sacrifice synchronous interaction between a student and an instructor, and often rely entirely upon shallow quantitative assessments of student learning.⁸

Over the last decade, the hiring practices and trends within academic libraries have demonstrated a persistent need for librarians skilled in delivering and assessing information literacy instruction. In their analysis of library job advertisements published online



from April 2006 to May 2009, Robert Reeves and Trudi Hahn found most vacancies were in public services positions and that instruction was one of the most-requested areas of experience for entry-level librarians. Taken together, these conclusions suggest that MLIS students looking for entry-level positions within an academic library should consider public services roles that involve

teaching. For many of these positions, however, relevant coursework alone may not provide sufficient experience for a skill as challenging as teaching. Reeves and Hahn put it bluntly, recommending that “practical experience throughout the graduate program . . . should be a part of every student’s portfolio.”⁹ In the decade since Reeves and Hahn began their research, subsequent

studies have corroborated their results, particularly the importance of gaining relevant experience while completing an MLIS degree.¹⁰ Therese Triumph and Penny Beile distilled this point succinctly. They found that while an American Library Association (ALA)-accredited MLIS remains the foundational requirement for the vast majority of professional librarian positions, employers also look for candidates who have demonstrated practical experience in teaching.¹¹

Reviewing MLIS curricula considering these trends presents an obvious and troubling contradiction. Despite the growing need for entry-level librarians with educational training, MLIS programs rarely provide sufficient evidence-based teacher training.¹² Scholarship in the last decade presents several proposals and models for bridging this gap. These include suggestions that target MLIS students directly, such as Dani Brecher and Kevin Klipfel’s suggestion that library school students use elective credits to take education classes outside their MLIS program.¹³ Others have proposed purposeful and intentional integration of vocational development within an LIS program through partnership between library schools and employers.¹⁴

Most proposals for developing skilled teacher-librarians are inspired by the Swiss educator Etienne Wegner’s idea of professional communities of practice, groups of practitioners who interact with one another to learn to do their work better. Such proposals aim to address deficiencies in teaching by targeting librarians struggling in the workplace.¹⁵ Scott Walter suggests that libraries adopt instructional improvement strategies used by other higher education professionals, such as “critical self-reflection, peer coaching and evaluation, and the use of teaching portfolios.”¹⁶ However, the extent to which these improvement programs may be available to practicing librarians varies greatly. The Library Instruction Leadership Academy (LILAC) described by Kimberly

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Davies-Hoffman, Barbara Alvarez, Michelle Costello, and Debby Emerson represents perhaps the most ambitious example of such a program.¹⁷ For librarians lacking the community resources available through LILAC, Diane Lorenzetti and Susan Powelson suggest that formal mentoring programs can aid in the development of skill sets.¹⁸ On the other end of the spectrum, Brecher and Klipfel point out that academic blogs on information literacy offer no-cost professional development for teacher training and present a medium for connecting teacher-librarians at different institutions in online communities of practice.¹⁹ Notably absent from most of these proposals and program descriptions is direct, sustained, practitioner-based engagement with MLIS programs themselves.

Teacher training is not the only component of the MLIS curriculum that has come under scrutiny from practitioners. Scholarship over the last decade has examined the perceived gap in early-career librarians' abilities to conduct and disseminate research.²⁰ In 2005, Cynthia Tysick and Nancy Babb found that fewer than half of ALA-accredited MLIS programs require a research methods course, and fewer than 10 percent of programs require students to complete a thesis or other substantial research-based project.²¹ Recent editorials have questioned the capability of librarians to conduct research and the quality of librarian-produced research. In her 2016 editorial, Elizabeth Blakesley challenges librarians' fitness for producing meaningful scholarship, suggesting that the practitioner workplace and workflow do not facilitate research.²² Despite academic librarians' appointment as faculty at many institutions, Blakesley suggests that the lack of research-based coursework in LIS programs inhibits librarians from producing the data-driven

research that can provide value to the profession.²³

For many early-career librarians, a lack of substantial research training in their MLIS programs leaves them underprepared to pursue careers as faculty librarians.²⁴ In addition to learning their

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regular duties, new library professionals must also develop expertise in research methodologies, academic writing, and scholarly publication to meet the requirements of promotion and tenure.²⁵

Taken together, these trends reveal a considerable gap between the needs of academic libraries and the training MLIS students receive. Academic libraries need librarians who are skilled instructors and who understand how to use pedagogically sound approaches for generating evidence of student learning. However, the core MLIS curriculum fails to adequately prepare graduates to meet these demands, either as teachers or as researchers. Many librarians have advocated for field experiences as an opportunity for working librarians to fill in the gaps of the MLIS curriculum, helping library students to develop their professional identities as evidence-based practitioners and teachers.²⁶ However, given the complexities of academic libraries, as well as the unique context in which librarians typically teach within the academy, a single 16-week field experience or course might not provide MLIS students with enough training to gain familiarity with this context.

Program Overview

RTF creates a community of information literacy instruction practice built around a strong partnership between the University Libraries and the College of Information Studies. RTF is a competitive, paid program. The application and interview processes take place at the end of the fall semester; admitted fellows begin the following spring. Fellows commit to the program for three semesters: the spring semester of their first year in the MLIS program, the fall semester of their second year, and their final spring semester. The fellowship is constructed around a cohort structure in which fellows move through the program in groups of four or five, providing a supportive community of practice to engage in team-based and experiential learning. Fellows work, on average, five hours per week during the academic year. Cohorts overlap during the spring semester, creating a system in which senior fellows provide peer mentorship and training for junior fellows.

Table 1.

Timelines for the Research and Teaching Fellowship (RTF) of the University of Maryland Libraries

	Spring	Summer	Fall	Spring	Summer	Fall	Spring
Cohort 1	RTF101	Optional	RTF102	RTF103			
Cohort 2				RTF101	Optional	RTF102	RTF103

RTF101 focuses on trends in academic librarianship, RTF102 on information literacy instruction, and RTF103 on an independent teaching project.

To prepare MLIS students for careers in public services librarianship, the fellowship centers on teaching, reference, and research skills. These experiences are scaffolded, with the level of responsibility increasing each semester. Throughout the program, fellows look back on their experiences through discussion-board posts, written teaching reflections, and in-person discussions. These activities are complemented by a weekly in-person office hour, which offers fellows time to complete readings, respond to student and faculty e-mails, and meet with RTF directors. Each fellow's office hour must overlap with that of at least one other fellow. The office hour is a staple of the program and contributes to a strong sense of community among the cohorts.

In addition to ongoing responsibilities, each semester focuses on a core area: teaching, research and reference, or professional development. Noncredit online "courses," known colloquially as RTF101, RTF102, and RTF103, accompany the semesters. Fellows are identified as "junior fellows" during their first semester and as "senior fellows" during their second and third semesters.



Semester One (RTF101)

The first semester focuses on the completion of an online learning curriculum, distributed through the learning management system Canvas. This noncredit course introduces fellows to trends in academic librarianship and information literacy through weekly readings and online discussions.²⁷ In addition, fellows complete desk hours at the STEM (science, technology, engineering, and mathematics) Library, office hours, teaching observations, and both co-taught and independent information literacy instruction.

Semester Two (RTF102)

The second semester comes in the fall, when UMD Libraries provides its highest volume of information literacy sessions. The demand for classroom instruction creates a natural opportunity for senior fellows to improve their teaching skills and develop their identity as teachers. Fellows build on the foundational experiences gained in RTF101, learning to navigate the classroom space as independent instructors. During RTF102, fellows carry the bulk of the libraries' instruction for first-year students, working primarily with the first-year Academic Writing Program (ENGL101).

We assign fellows a quota of instruction sessions to carry (averaging 14 to 18), and fellows sign up for a schedule that matches their availability. We empower fellows to take responsibility for their classes: They contact the ENGL101 instructor to confirm, coordinate, and customize the lesson plan for the library instruction session. Although the program provides fellows with a "standardized" teaching outline,²⁸ we encourage them to customize the flow and focus to fit the needs of their students and their individual teaching styles. RTF102 also includes an increased emphasis on reflective practice. In addition to posting weekly written teaching reflections to the RTF102 Canvas course, senior fellows receive two formal teaching observations by RTF directors.²⁹ Each observation includes a post-session conference in which the observer and fellow review the strengths and opportunities from the session. Fellows also have the option to request informal observations from peers or to co-teach additional sessions.

In addition to helping fellows gain confidence as independent instructors, RTF102 features an increased focus on professional development. Throughout the fall semester, RTF directors host workshops focused on preparing students for an academic job search, such as locating and reading job ads, writing a curriculum vitae (CV), or preparing for phone interviews. Fellows continue to refine their reference skills through desk hours at the STEM Library and assume an increased level of responsibility by coleading the library-wide Journal Club. Journal Club leaders select a recently published article and facilitate discussion of its merits using a critical evaluation worksheet.³⁰ Journal Club meetings are open to all library staff and are attended by librarians, public services staff, and administrators, providing fellows with an opportunity to exchange ideas and build relationships with library employees beyond the RTF directors.

Semester Three (RTF103)

The final semester serves as a capstone during which fellows divide their time between conducting library operations (teaching ENGL101, providing reference, and participating in professional development activities) and leading an independent teaching and

assessment initiative called the Teaching as Research Project (TRP). The TRP allows fellows to complete the 120 hours needed to meet the required field study component of their MLIS program and provides them with an opportunity and framework for collaborating with librarians and faculty members to design, implement, and assess an information literacy session or digital learning objects. Subject specialist librarians identify appropriate upper-level undergraduate or graduate courses, and the program directors then match fellows with available courses based on their research interests and desired career path. In addition to providing hands-on experience with upper-level information literacy instruction, the TRP fosters a mentor relationship between fellows and subject librarians and provides a “bridge” for fellows between their roles as students and as professionals.³¹ During the semester, fellows complete a noncredit RTF103 Canvas course, where they provide biweekly updates on their TRPs; upload copies of their teaching outlines, learning outcomes, and assessment plans; and reflect on assigned readings. To encourage fellows to view themselves as responsible researchers, the program also requires them to complete a mock Institutional Review Board application and to prepare a poster to present at UMD’s iSchool Field Study Expo and UMD’s Library Research & Innovative Practice Forum.

In addition to their TRPs, senior fellows provide information literacy support for first-year students. The volume of instruction decreases slightly in the spring, and senior fellows dedicate time to mentoring and training for junior fellows. Senior fellows also participate in peer observations, in which they observe one another teaching a library instruction session and conduct post-session conferences with observers, modeled after the conferences between RTF directors and fellows during RTF102.³² Senior fellows also monitor, moderate, and respond to weekly reflections posted by junior fellows in the online Canvas space for RTF101.

Data Collection

To evaluate the effectiveness of RTF, we conducted a study spanning two cohorts who graduated in spring 2016 and spring 2017. Our research had two directives: (1) to identify successful components of RTF and better understand how these elements contributed to the growth and development of participants; and (2) to chart the development of teacher efficacy and teacher identity among participants. In developing our research framework, we looked to models in education research, such as evaluating preservice teacher training programs and student teaching practicums for aspiring PK–12 educators. Education researchers view the student teaching experience as a critical time in the development of teacher identity.³³ Many of the core components of student teacher programs, such as pedagogy, curriculum development, assessment, and independent reflection, are present in RTF.³⁴ Given the overlap between the needs of PK–12 student teachers and MLIS student teachers, our research design utilizes the assessment methods suggested for such education programs: reviewing students’ teaching reflections,

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administering survey questionnaires, conducting individual interviews, and holding focus groups.³⁵

Over the course of RTF, fellows complete three types of written reflections, which are recorded in Canvas. Weekly reflections measure incremental development from week to week and may include open-ended teaching reflections or structured responses to specific readings or experiences. Fellows write teaching reflections once a week during the instruction season (four to six per semester), allowing them to track the development of their teacher identities through a supportive community of practice. Periodic reflections include end-of-semester self-assessments, in which fellows evaluate their development as teacher-librarians and comment on the RTF program. Relevant portions of these reflections were extracted and anonymized for evaluation.

During their final semester, fellows participate in (1) an in-person focus group and (2) an anonymous exit survey, distributed eight weeks after graduation. Collecting these data near or after their graduation enables fellows to share insights not only into the strengths and limitations of the program but also into the ways in which the fellowship may have influenced or impacted their job search process. Focus group sessions are semi-structured, last between 60 and 75 minutes, and are audio-recorded to enable later review and transcription.

We also sought to measure the impact of RTF on participating librarians and administrators. Again, we turned to education literature, in which the experiences of cooperating teachers and principals are collected via surveys, interviews, and focus groups.³⁶ The most substantial interaction between librarians and fellows takes place during the TRP. At the end of the TRP, mentor librarians participate in a focus group to describe the benefits and challenges of their experience. Librarian focus groups are also semi-structured, last between 60 and 75 minutes, and are audio-recorded.

UMD's Institutional Review Board reviewed the assessment instruments and approved them for use. The investigators reviewed all written and verbal responses for identifying information. Written or verbal responses with potential to harm or disclose the identity of participants were included within the aggregate analysis but excluded from the discussion. Participants included six fellows from the spring 2016 and spring 2017 cohorts, six mentor librarians, and three library administrators. The first cohort (class of 2016) had four MLIS students, all of whom completed the requirements of RTF. The second cohort (class of 2017) also had four MLIS students. Two of the 2017 cohort completed the requirements of RTF and are included in this study. Two others are excluded: one left the program early after being accepted in a PhD program, and another is enrolled part-time and currently on track to graduate with the 2018 cohort.

Data Analysis

Written Reflections and Focus Groups

To identify elements of RTF most impactful to participants, we used a modified grounded theory approach, a research method that involves forming a theory based on the gathered data as opposed to gathering data after forming a theory. We looked to focus group transcripts, end-of-semester reflections, and exit surveys to identify common themes.³⁷



Rather than approaching the study with a specific hypothesis, we allowed organic discoveries within the data to direct our process, thus amplifying the individual experiences of participants and enabling their voices to guide our conversation.

In analyzing our qualitative data, we employed a two-cycle coding process.³⁸ First, using descriptive coding, which summarizes in a word or phrase the central topic of each passage of qualitative data, we individually reviewed the 2016 focus group transcripts and pulled out central themes. Through discussion, we consolidated this list to 10 themes, which were represented across each of our analyses. As a team, we coded the 2017 focus group transcripts, noting any gaps or redundancies within the concepts. This analysis led us to combine two concepts (“researcher identity” and “community of practice”) into one (“reflective community of practice”) (see Appendix A). Second, we expanded our analysis to include written end-of-semester reflections and qualitative responses from the exit survey. Having applied the nine themes to each of our qualitative sources, we collaboratively constructed the following definitions for each theme:

1. Engagement with the profession: Developing an awareness and understanding of the professional librarian community; learning how to participate as members of that community through e-mail lists, professional organizations, social media, conferences, and scholarship; communicating effectively with members of the community by learning the “lingo,” unspoken norms, conduct, and expectations of librarianship; and developing confidence as a member of this professional community.
2. Structure of academic librarianship: Learning the breadth of potential roles and specialties available within academic librarianship; gaining contextual understanding of how academic libraries fit within a broader higher education structure; supplementing theory-based MLIS coursework with real-world experience in academic librarianship; and gaining meaningful, practical experiences within public services.
3. Teacher identity and expertise: Developing skills and efficacy as a teacher-librarian; learning to design student-centered lesson plans, teaching approaches, and assessments; developing a personal teaching style; gaining confidence in the classroom and on the reference desk; and building a foundation of empirical pedagogical knowledge.
4. Reflective community of practice: Learning to effectively communicate and collaborate with a range of professional librarians, and learning to foster and participate in a positive, supportive, and evidence-based learning environment via peer observations, teaching reflections, and engaging with the professional literature.
5. Career counseling and mentorship: Gaining an awareness of the trends, opportunities, and challenges within the academic library job market; learning to leverage skills, knowledge, and experiences to succeed within that market; receiving support from RTF directors, library mentors, and the fellowship cohort during the job search process; and having access to professional wisdom, including reading job ads, résumé reviews, mock interviews, and mock presentations.



6. **Belongingness:** Emotional well-being and connection with members of the cohort, finding a community of like-minded individuals within an MLIS program, and developing a network of current and future professional colleagues and research collaborators.
7. **Feeling valued:** Feeling respected as members of a professional team, receiving compensation commensurate with the expectations of their positions, and being trusted with executing important functions of the library.
8. **Continuity and scaffolding:** Developing professional skills gradually over the course of three semesters, experiencing an increasing level of responsibility and complexity of tasks over time, and having the opportunity to mentor junior fellows.
9. **Structure and expectations:** Struggling to balance priorities of coursework, outside employment, and their responsibilities as fellows in a self-directed program; desiring greater clarity of expectations, deadlines, or benchmarks; and feeling discomfort with the autonomy of a professional-level position.

We employed a similar process for the data collected during focus groups with librarian mentors. However, because the focus groups were the only source of data for this group, we used descriptive coding to analyze the 2016 transcripts and then, during the second cycle, applied elaborative coding, which built on the previous study's codes, to the 2017 transcripts to refine the themes (see Appendix B). After coding each of the documents, we collaboratively constructed definitions for each of the themes:

1. **Value of own expertise:** Underestimating the value of their professional expertise; feeling ill-equipped to help fellows, given the fellows' teaching experience and veneer of confidence; and developing confidence, a greater awareness of expertise, or both through working with the fellows.
2. **Ambiguity of expectations:** Being unsure of what demands could be placed on fellows during the TRP; experiencing anxiety around expectations for mentorship; and expressing gratitude for the structure included in the TRP, such as process-based benchmarks, but also hesitance, unwillingness, or both to be held responsible for those deadlines.
3. **Opportunity to innovate:** Valuing the extra set of hands and fresh set of eyes offered by fellows; leveraging support provided by fellows to revise or create teaching materials, learning objects, assessment tools, or any combination of the three; and collaborating with fellows to reinvigorate or forge new instructional partnerships with faculty.
4. **Mentorship:** Appreciating the opportunity to give back to the profession by investing in aspiring academic librarians, and offering support to fellows during their job search process.
5. **Co-learning:** Learning alongside fellows by collaboratively designing lesson plans and observing one another in the classroom.
6. **Intentionality:** Appreciating the opportunity to reflect on their own teaching processes, using the structure of the fellowship program to facilitate process-oriented thinking, and fostering accountability as teacher-librarians.



Teacher Efficacy and Identity

The second part of our study focuses on the development of teaching efficacy and identity. To measure these criteria, we developed a rubric with descriptions of the expectations for successive levels of competency based on ACRL's "Roles and Strengths of Teaching Librarians" and applied this rubric to fellows' teaching reflections.³⁹ Although fellows record many teaching reflections during their time in RTF, we chose to compare an individual's first recorded reflection with his or her final teaching reflection, based on the assumption that these samples would provide the most direct comparison between a fellow's initial skills, abilities, and attitudes and his or her final levels of proficiency upon graduation from the program.

Of ACRL's seven roles for teaching librarians, we chose to focus on "teacher," which most closely aligns with the objectives of RTF. To begin, we drafted a rubric based on the list of strengths for teachers, including identifying levels of competency (advanced, proficient, developing, or not apparent) for each of the areas. To norm, we independently applied the rubric to a random sample of teaching reflections, then came together as a team to discuss discrepancies. As a result, we made small improvements to several of the levels of competency. Finally, we independently applied the finalized rubric to the first and last teaching reflection from our six participating fellows (see Appendix C). We discussed any discrepancies in the final rankings to the point of consensus.

Results

Fellows: Written Reflections and Focus Groups

Figure 1 shows the frequency of each theme identified from the qualitative assessment data gathered from fellows, including focus groups, exit interviews, and end-of-semester reflections. See Figure 1.

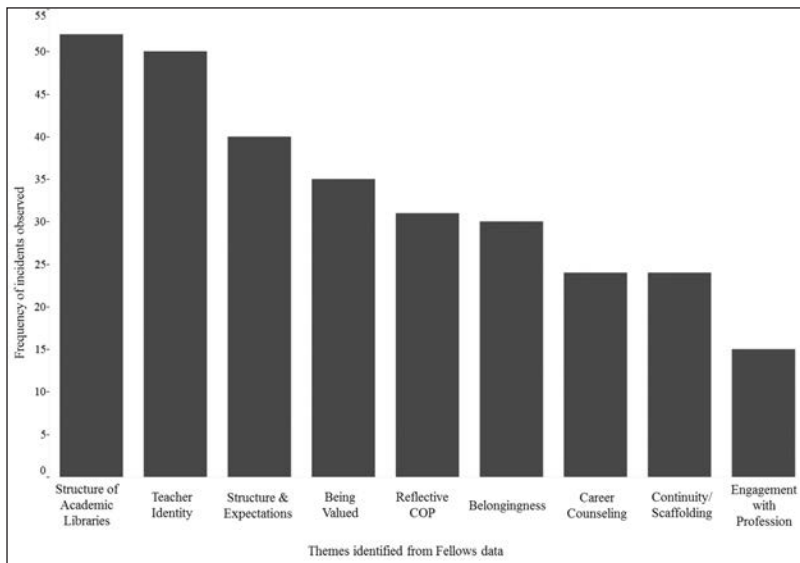


Figure 1. The frequency of each theme identified from the qualitative assessment data gathered from Research and Teaching fellows.



Fellows: Teacher Efficacy and Identity

Table 2 shows results from an analysis of fellows' teaching reflections, which were evaluated using a rubric based on ACRL's "Roles and Strengths of Teaching Librarians" (see Appendix C).

Fellows: Job Placement

Eight weeks after graduation, we sent an exit interview questionnaire on fellows' current employment status. Six graduating fellows and two graduate assistants who had participated in all aspects of RTF but were not enrolled as full members were invited to participate. The response rate was 100 percent, and all respondents indicated that they had either accepted an offer for full-time employment or were currently employed. Five of the respondents classified their place of employment as "postsecondary education," while the other three described their employer as "nonprofit or government."

Librarians: Focus Groups

Figure 2 shows the frequency of each theme identified within the focus group sessions with librarians. See Figure 2.

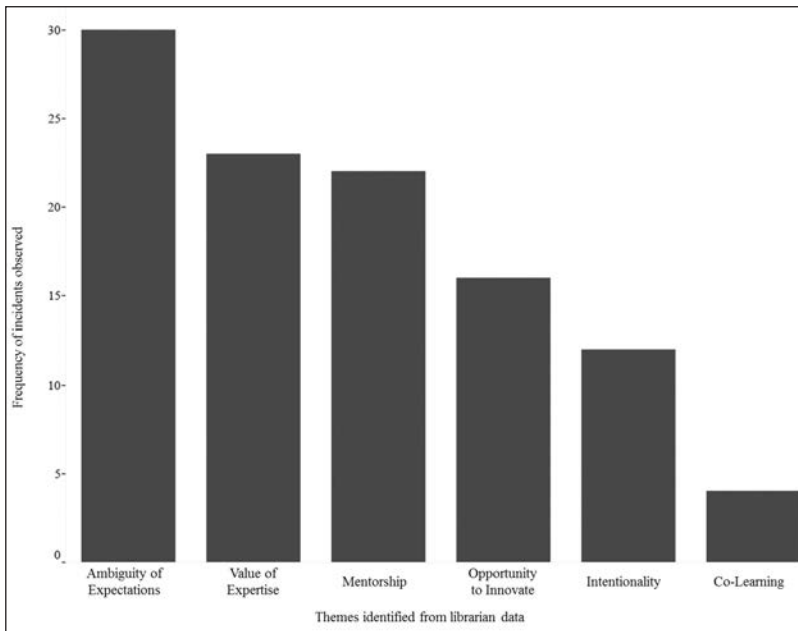


Figure 2. Themes identified from the qualitative assessment data gathered from librarians.



Table 2.
Performance in learning outcomes for Research and Teaching fellows measured by first and final teaching reflections

Learning outcome	First teaching reflection (n = 6)	Final teaching reflection (n = 6)	Difference
1. Analyze the needs of each teaching/learning setting, environment, or group and employ appropriate pedagogical techniques to meet those needs.	2.17	3	0.83
2. Articulate goals and learning outcomes for information literacy instruction.	1.67	2.67	1
3. Select from a repertoire of pedagogies and techniques for diverse learners and learning contexts and experiments with innovative instructional techniques and tools.	1.5	3	1.5
4. Create a positive and interactive learning environment that recognizes the importance of context.	2	2.67	0.67
5. Engage in assessment to ensure that instruction meets the defined learning outcomes.	1.12	1.67	0.55
6. Demonstrate enthusiasm for teaching and learning and a commitment to professional development, lifelong learning, and reflective practice.	2	2.67	0.67



Discussion

Fellows: Written Reflections and Focus Groups

Understanding the “structure of academic libraries” emerged as one of the most common themes, which aligns with the stated goals of the program. In creating the fellowship, one of our goals was to demystify academic librarianship for MLIS students. Participants reported that when they began the Research and Teaching Fellowship, they only had a

Participants reported that when they began the Research and Teaching Fellowship, they only had a rough idea of what academic librarianship entailed and what types of jobs were available in the field.

rough idea of what academic librarianship entailed and what types of jobs were available in the field. Such concepts as service, scholarship, and relationships with other campus entities were also something of a mystery to junior fellows. After completing RTF, fellows felt

much more confident in their understanding of academic librarianship. One commented, “[The fellowship] was the best thing to prepare for working in an academic library.” They pointed specifically to the fact that the fellowship not only focused on developing skills as an instructor but also enabled them to understand the role of teaching within an academic library. The three-semester program allowed fellows to develop and sustain relationships across library units, while also providing a better understanding of the functions of each unit. For example, weekly desk hours at the STEM Library introduced the fellows to access services and circulation, while their participation in the library-wide Journal Club put them into contact with public services librarians, staff, and administrators. By collaborating with library faculty and staff beyond the RTF directors, fellows learned “how many people there are, and how many different things happen in a place like this.” One participant noted, “I thought about academic librarianship as traditional liaison roles, and I learned that there are a lot of other roles as well.” Fellows also gained insights into “how [academic librarians] worked together in a system.”

“Teacher identity and expertise” were also prevalent, which was expected given the substantial time the fellows devote to reading pedagogical theory, gaining practical experience, and critically reflecting on practice. Fellows spoke to the value of combining theory, application, and reflection, noting that, although they had taken courses on information literacy or instruction, “[The courses were] academic, so I had to make a course plan for that and think about assessment, but nothing happened. I never taught the course, it was all hypothetical. [RTF] was all concrete.” In their first semester in the program, the fellows read essays on teacher-librarian identities. We returned to this idea throughout the fellowship, encouraging fellows to think about their own growing teacher identities as they gained experience in the classroom. In their final semester, fellows looked back on their trepidation about teaching when they first began the program. One said, “I did not see myself as a teacher before,” and another admitted, “I kind of thought I’d be bad at teaching.” Unlike a single semester course or field study, the fellowship provides an opportunity for fellows to teach multiple sessions over three semesters, giving



them time to experiment, make changes, and develop an authentic teaching style. One fellow wrote that she “really enjoyed getting to figure out my teaching style—which is still evolving.”

Given the fellowship’s emphasis on critical reflection, we were pleased to see “reflective community of practice” as a frequent theme. Through the Journal Club, online discussion-board posts, teaching reflections, peer observations, and overlapping office hours,

fellows frequently engaged in critical discussions about professional literature, trends in academic librarianship, and classroom experiences. Fellows said that they enjoyed opportunities to “work through theory and practice together” and noted, “It did not [feel] like I was teaching in a vacuum.” Opportunities for co-teaching and peer observation proved especially fruitful. Looking back on the RTF experience, one participant wrote, “Reading each semester’s reflections and observation notes, I can see how much I’ve grown as a teacher.” Another reiterated, “I have been able to observe and learn from other fellows, which has helped me to improve my own instruction delivery and incorporate things I see are useful into my own sessions.”

Participants highly valued the affective dimension of their relationship with other fellows. They expressed an emotional connection to their cohort and reported that it filled in a gap in their graduate experience. This sense of “belongingness” was described by one participant: “I felt lost in the MLIS program because there are so many people, and we are not on campus and we are all working different jobs. So being able to talk with everyone in the fellowship . . . having people with a common interest was really nice and great.” This sense of connection and emotional well-being enabled fellows to feel comfortable raising questions and sharing both challenges and triumphs in the classroom. This connection was particularly helpful in the job search process; one fellow wrote that she benefited from having “a group of other students to commiserate with about the job search process in a noncompetitive, supportive environment.” Several fellows indicated that the feeling of “connection” was the most valuable part of the fellowship, with one writing, “I hope to continue these relationships even after the Fellowship ends.” Another wrote that she loves “the community of fellows and mentor librarians” and urged future fellows to “spend time with your cohort and take the time to chat to the new cohort in your last semester.”

Unlike a single semester course or field study, the fellowship provides an opportunity for fellows to teach multiple sessions over three semesters, giving them time to experiment, make changes, and develop an authentic teaching style.

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Because the fellowship seeks to create competent, confident library professionals, it is important not only that library faculty and staff view fellows as future colleagues but also that fellows are appropriately compensated for their work. Fellows expressed feelings of “being valued” when they received compensation commensurate with their labor. Participants indicated that the financial compensation was a significant factor in their decision to apply for this program, especially for those who needed to supplement their income from part-time jobs or graduate assistantships. Although senior fellows emphasized that the program is “worth doing without getting paid,” the financial component communicated a sense of worth, which would have been absent in an unpaid internship. Fellows also felt valued when they were entrusted with “important” tasks, such as teaching. One fellow noted that she applied for the fellowship in part because she was attracted by the opportunity “to do stuff instead of just watching people do stuff.” Fellows contrasted this with their peers’ experiences in other field studies; one fellow said, “The discussion in our field study course was a lot of people saying, ‘They don’t trust me to do anything,’ and we [fellows] were very much in a position where we got to do stuff . . . There was the comfort of being able to charge ahead with authority.”

Overall, fellows reported that RTF gave them “practical” experience that prepared them to succeed in the job market. Looking back, a senior fellow shared, “RTF provided me with practical experience in instruction and project management that I otherwise would not have gained through the MLS curriculum alone. It was invaluable to my professional success and career path.”

“Structure and expectations,” which refers to frustrations as well as satisfaction with the structure and delivery of the program, was a common theme. Looking back on experiences, fellows called to mind situations that had been challenging or confusing and offered suggestions for improvement. The frequency of this theme dropped substantially from 2016 to 2017, suggesting that the changes made to the program after the first cohort may have streamlined aspects of the program. We initially designed RTF to maximize flexibility and accommodate fellows’ varying interests and schedules. We also hoped this autonomy would better approximate their future challenges in the workforce by giving them experience in prioritizing competing tasks. However, our first cohort found this lack of structure problematic and suggested more rigorous “expectation setting,” especially for the Teaching as Research Project. One 2016 participant asked for additional opportunities for in-person conversations on expectations to supplement online instructions, saying, “There is something about sitting down and talking through it and knowing what to anticipate because . . . [you] just process [online instructions] differently [from] when you sit down and have a conversation.” For 2017, we implemented stronger deadlines, scheduled regular in-person check-ins, and required more online discussion posts to share updates on projects. The second cohort responded well to these changes, noting that they appreciated the deadlines to help prioritize work.

Fellows noted the “continuity and scaffolding” of the program comparatively rarely. When they did reference the purposeful progression, fellows spoke enthusiastically about how the scaffolding improved their competence and confidence, both as instructors and reference librarians. One noted that she “loved the tiered system” of observing, co-teaching, and independent teaching. Others indicated that the sustained engagement with teaching helped them move from uncertainty in their first semester to



self-assuredness in their third, saying that, by that point, teaching felt “fun and refreshing” and that they had hit their stride. They also reported that the ability to work with the same resources and staff members over three semesters helped them build stronger relationships and provide better reference assistance to students.

“Career counseling” ranked among the least-mentioned themes in data gathered from the fellows. This was interesting, given that we speak often and explicitly about opportunities for career counseling, not only in marketing the program but also in ongoing conversations with fellows. However, when students did address “career counseling,” they described it effusively, saying, for example, “Having someone to talk to who had been through it recently made the entire process so much easier, from the big issues like accepting an offer and negotiating my salary to the small details like what to wear for the in-person interviews.” Participants noted that they had not expected to receive this level of career counseling when they applied for the program and reported feeling much more prepared than their peers to go through the academic job search process. Interestingly, when fellows spoke about their job search, they often placed more importance on the emotional support provided by their RTF directors and cohort than on targeted assistance with tasks, such as preparing for phone interviews or writing CVs or cover letters.

“Engagement with the profession,” which includes participation in conferences, learning the vocabulary of librarianship, and developing confidence as a member of the professional community, was also lower than expected. Given that all six of the fellows had presented at conferences before graduating and had engaged with the library literature throughout the fellowship, this low ranking may indicate that fellows viewed themselves primarily as students rather than as professionals. Participants did express, however, that the fellowship made them feel more prepared for their future positions. One fellow wrote, “I also feel much more keyed in to the profession as a whole thanks to our discussions about conferences and ways to get involved in professional organizations, and that has also made me feel less like an impostor in my first real library job.”

Development of Teacher Efficacy and Identity

Our analysis of teaching reflections indicates that sustained engagement with teaching has a significant impact on the participants’ perceived self-efficacy and teacher identity. Fellows demonstrated the most substantive improvement in the ability to “select from a repertoire of pedagogies and techniques . . . and experiment with innovative instructional techniques.” On average, participants advanced from moderately proficient (1.5) in their first reflection to advanced (3) in their last. In their initial posts, participants used such adjectives as “hard,” “challenging,” and “frustrating” and wrote about their “lack of confidence.” One participant spoke about the “voice in the back of [her] head” that “wondered how obvious her lack of experience was [to the course instructor].” These comments appeared consistently across the first teaching reflections, regardless of the participant’s level of teaching experience prior to entering the program.

... sustained engagement with teaching has a significant impact on the participants’ perceived self-efficacy and teacher identity.

Despite the weak levels of confidence expressed in these early posts, all participants conveyed enthusiasm about continuing to teach. One wrote, "I am excited to teach again, to adjust some things and make them more effective." By their final teaching reflection, the fellows exhibited much higher levels of self-awareness, confidence, and engagement not only with the fundamentals of teaching, such as identifying appropriate pedagogies, but also with their ability to cultivate a physically and intellectually enriching classroom environment. The final teaching reflections tended to use positive language, such as "capable," "confident," "enjoy," and "smooth." They showcased a greater variety of activities used within the session, tended to write less about lecturing or speaking to students, and spent more time describing their cultivation of the classroom climate. Although participants continued to reflect on the setbacks experienced within their sessions, they tended to frame these temporary reversals in a more positive light.

Participants exhibited an awareness of the ways in which their teaching experience with first-year students will prepare them for their work as professionals. As one participant reported, "I have seen a lot of good teaching, but I am ready to move beyond just repeating what I know to try new things." Another described how her experience would impact her job search: "I did not realize how much I would miss teaching this week . . . I am excited to continue searching for jobs that include a teaching component."

Similarly, participants demonstrated significant gains in their abilities to "articulate goals and learning outcomes," advancing from a strong beginning level of competency (1.67) in their first reflection to a healthy proficiency (2.67) in their final reflections. Fellows demonstrated this growth by transitioning from vague references of being "prepared" and having a "plan" to final posts in which they articulated discrete, measurable goals that included opportunities for assessment. The final teaching reflections demonstrated a responsiveness and adaptability largely absent from their initial reflections. As one participant described:

I came prepared to ask students where they were in the research process and provide them with relevant resources . . . I knew that I needed to manage my time better, so I streamlined my language . . . This left more time for discussion and questions . . . I repeated this [approach] in a [session] later that week and again, I thought it worked really well.

Although fellows demonstrated improvement in each of the six areas of strength, some gains were more modest than others. The ability to "engage in assessment" particularly challenged participants. Although the data show marginal improvement as fellows advanced from a beginning level of proficiency (1.12) to a strong one (1.67), their descriptions of assessment tended to be anecdotal, rather than specific or intentional, even in their final reflections. Fellows described such activities as "passing out cards at the end for [students] to write any questions and their e-mail" or "checking in with students" to measure comprehension. However, given the challenge one-shot information literacy assessment poses for librarians at every point in their career, scoring at a proficient level in this category represents a remarkable achievement for an MLIS student. Furthermore, the information literacy program for ENGL101 includes a structured, programmatic assessment.⁴⁰ We suspect these teaching reflections may not have included specific descriptions of assessment activities because of this systematic, integrated assessment program.



The final three strengths with slight indicators of improvement were (1) the ability to “analyze the needs of the teaching setting,” (2) to “create a positive and interactive learning environment,” and (3) to “demonstrate enthusiasm for teaching and learning.” Although participants showed improvement in each area, the opportunity for advancement was mitigated by high entry scores ($x \geq 2$) from the initial teaching reflections. We believe that these scores speak to the quality of students who elect to participate in RTF.

Fellows Job Placement

Despite the competitive job market for librarians, 100 percent of our fellows received offers for full-time employment either before or shortly after graduation. In 2016, 80 percent of our fellows received multiple offers. In 2017, 60 percent of our fellows received multiple job offers. They accepted positions at a variety of prestigious institutions, including major research libraries as well as smaller college libraries. Of the three fellows who reported their starting salary, the average salary was \$52,324. This exceeds the national average starting salary for 2015 MLIS graduates of \$48,371, as well as the reported UMD iSchool average of \$49,325.⁴¹ The job placement rates, combined with the salary data, suggest that fellows emerged from RTF as competitive, highly qualified candidates.

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Librarians: Focus Groups

Although subject librarians engage with fellows throughout RTF, the most substantive interaction occurs during the Teaching as Research Project (TRP), in which the librarians serve as mentors to senior fellows. In their focus groups, TRP mentors commented on this experience. Surprisingly, librarians frequently undervalued or downplayed their own expertise. Librarians commented often on perceived power imbalances in their relationships with faculty and the challenges of meeting faculty expectations within a one-shot session. They also questioned their suitability to mentor fellows, whom they perceived to be “confident and capable.” One librarian shared, “[The fellows] were so professional, and it didn’t seem like I needed to teach them anything, they seemed to know a lot. Their ideas were so right on target . . . They just went with it. They didn’t need hand-holding. They knew what to do and how to do it.” Another commented, “They are so knowledgeable and so techy. And they are great teachers, so they didn’t need much supervision at all.”

These feelings of inadequacy tended to coalesce with general ambiguity around the RTF program. Librarians shared uncertainty not only around their own roles and responsibilities as mentors but also about the expectations for the fellows. One librarian commented, “It might have been helpful to have known what was expected [of the fellows] and how much of a demand on their time I could make.” Although we made a concerted effort between 2016 and 2017 to improve the level of communication and clarify expectations for librarians, both the 2016 and 2017 focus groups reported instances of “ambiguity of expectations” to an equal degree. Although we will continue to seek



opportunities to improve the TRP, it should be noted that mentorship relationships, in general, present challenges and often involve feelings of anxiety, uncertainty, or inadequacy for both mentors and mentees.

While some librarians struggled to identify the ways they could support fellows, others used the opportunity to gain a new confidence in their teaching abilities. One reported, "I realized, in bringing someone else in to teach with me, that I actually do things better than I thought I did . . . especially when I saw it on her [final field study] poster, I was like, 'Oh, I do have learning outcomes! And I do stuff based on those!'" This opportunity for reflection was again emphasized in the mentorship relationships with fellows. One librarian commented, "This mentorship reminded me of me being . . . a beginning librarian, so I felt like I wanted to give back to the profession and give the same support to the students. I feel having this support and empowerment [will] decrease the level of stress when they go into the workforce." Another said, "[We] worked throughout the semester with job interviews in mind . . . I would say, 'This is that skill they're going to look for, so let's try to work on this.'"

While librarians were quick to reflect on their role as mentors, statements relating to "co-learning" were comparatively rare. Although librarians did comment on how the TRP offered opportunities to "work together," "collaborate," and "bounce ideas" off one another, they were more likely to frame the experience in terms of the support they could offer their assigned fellow, rather than the opportunity to create something new together. Although we encouraged librarians to work collaboratively with their fellows, framing the relationship as mentorship rather than partnership may have undercut the collaborative intentions for the project. Moving forward, we plan to reconceptualize the TRP to emphasize the opportunities for relationship building, co-learning, and mutual professional development.

"Opportunity to innovate" and "intentionality" were reported often in the focus groups. Although librarians valued the fellows, they would more likely speak of the benefits of having an "extra set of hands" and how that freed up their time to work on other projects. However, it was also clear from responses that the structured process required of the TRP separated it from typical teaching responsibilities. Several librarians appreciated the "accountability" and "weight" that working with a fellow brought to the teaching and planning processes.

Administrators

While librarians spoke to the benefits to their individual praxis, library administrators saw the creation of this new community of practice as a valuable addition to the UMD Libraries at large. In a follow-up survey, one administrator shared, "In my opinion RTF provides as much value to the Libraries as it does to the students in the program. Having an engaged and energized group of library science students actively working in the Libraries has created a bridge between theory and practice that is sometimes lacking in academic libraries." Administrators shared the benefits of RTF in providing service opportunities for librarians. For example, working with a fellow provides early-career librarians the opportunity to serve as a mentor to an aspiring professional, which another administrator noted is a valuable opportunity for pre-tenured librarians. Through



these mentoring relationships, fellows not only introduce seasoned librarians to “new technologies and new ideas” but also provide a morale boost to the community due to their “eagerness to work, learn, and participate,” particularly through the Journal Club and the TRP. In addition to the opportunities for librarians, the fellows perform a substantial service for the libraries. Each year, fellows carry up to 80 percent of the libraries’ general education instruction load and 35 percent of the instruction at large. This enables the libraries to offer a much more substantive instruction program than would otherwise be possible.

The UMD iSchool echoed the positive perceptions of the program. Asked to comment on the perceived benefits of to MLIS students, one administrator shared:

RTF is an invaluable opportunity for our MLIS students, particularly those interested in academic librarianship . . . [which] we market to prospective students as a rigorous but fruitful experience. Because the fellowship is paid, it’s an opportunity we speak about in the same breath as graduate assistantships [and] teaching assistantships.

Conclusions

The UMD Libraries’ Research and Teaching Fellowship has created a strong community of practice within the libraries. In addition to providing opportunities for MLIS students to gain the knowledge and experience needed to succeed in a competitive academic job market, it enables the libraries to offer a robust, expansive, and high-quality instruction program to first-year students. The intentional overlap between coursework and practical experience has strengthened the relationship between the UMD Libraries’ and the iSchool, providing opportunities for increased collaboration, communication, and support. The program also gives back to the profession by training capable, confident, and conscientious future colleagues, who will continue to push the profession forward. Although the benefits of RTF are clear, this study challenged our assumptions about which aspects of the program were the most valuable to participants. Pulling together themes from the literature, focus groups, and written reflections of fellows, librarians, and administrators, we offer a list of best practices for practitioners to consider when designing similar mentorship and training programs:

1. Cultivating a sense of community: Our research underlined the importance of using the cohort model to foster community. The Research and Teaching Fellowship provides fellows with a team of like-minded peers facing the same challenges, such as learning to teach or applying for their first academic job. This sense of camaraderie creates a community that would be difficult to replicate through coursework alone. In the exit survey distributed eight weeks after graduation, fellows identified this sense of belonging as the most critical

The Research and Teaching Fellowship provides fellows with a team of like-minded peers facing the same challenges, such as learning to teach or applying for their first academic job.



element of the fellowship—more important than career counseling, mentorship, or even teaching. Although fellows continually prioritize interpersonal relationships with their cohort, they rely on RTF directors to help build this community. By creating opportunities for casual interactions, such as staggering office hours and holding regular check-in meetings, program directors can promote relationship building within a cohort.

2. Sustained engagement with teaching: RTF provides purposeful engagement with teaching, research, and professional development. As teachers, fellows are empowered to tweak things from session to session and take what they learn in one semester and apply it to the next. This immersive and prolonged experience sets RTF apart from a typical field study or internship. In focus groups, fellows identified sustained engagement as the single largest contributor to making them feel prepared to succeed as academic librarians. This perception was reinforced in the analysis of teaching reflections, which demonstrated substantive growth in teacher identity and efficacy over the course of the program. By extending exposure to teaching beyond a single semester, program directors can offer new and emerging librarians the sustained engagement needed to develop teaching abilities, confidence, and self-efficacy.
3. Holistic exposure to academic librarianship: For academic librarians, the expectations of librarianship, scholarship, and service exist in concert. Our review of the literature indicates that while internships, field studies, or coursework often prepare MLIS students for one or two of these areas, rarely do they effectively

Fellows gain insights into how teaching curriculum-integrated information literacy can spur research projects on student learning and into how participation in institutional or professional service can lead to cross-departmental and interinstitutional research collaborations.

address all three. RTF, however, integrates research, teaching, and professional development within a single program. Fellows gain insights into how teaching curriculum-integrated information literacy can spur research projects on student learning and into how participation in institutional or professional service can lead to cross-departmental and interinstitutional research collaborations. Fellows also learn how an individual librarian's professional interests can influence which library initiatives, service opportunities, or research projects they pursue. Providing a self-directed project that involves partnership with a librarian, such as RTF's Teaching as Research Project, can help prepare MLIS students for the realities of academic librarianship by modeling the process through which librarians leverage a professional project into a work of scholarship.

4. Setting boundaries: Throughout the study, participants consistently expressed a desire for deadlines, clearly defined deliverables, and the accountability of regular communication. For fellows, RTF bridges their experience as students and their future as professionals. Scaffolding the program over three semesters



enables fellows to develop agency, as they transition from a structured environment in RTF101 to more autonomy in RTF103. Instituting flexible benchmarks, such as quotas for the number of sessions to teach per semester, gives fellows the structure they crave, while also pushing them toward greater independence as they learn to build and manage their own teaching schedules. As mentors, librarians unanimously requested the responsibility of adhering to a set schedule and goals. Having a clear understanding of the boundaries and expectations of their mentorship helped to bolster their confidence, which enabled them to better support their fellows. In short, eliminating the anxiety of the unknown allows both fellows and librarians to focus their time and attention on learning.

Future Research

Findings from this study also offer questions for future researchers. While RTF has proved successful at a large research institution, subsequent studies may compare RTF to similar residential training programs or explore the ways in which RTF might be scaled to a library without direct access to a colocated library school. Our findings reiterate that RTF contributed to a sense of belonging among participants. A second area of inquiry may be in exploring how RTF could be modified to support special populations, such as distance education students, who need not only community but also opportunities to gain practical library experience. Finally, there is ample room for a follow-up study measuring changes in the perceived impact of RTF in alumni as compared to recent graduates. Although findings revealed comparatively low instances of “career counseling” and “engagement with the profession,” the fellows’ proximity to the program may have impacted their responses. Reflecting on the program as alumni with professional experience in the field may reveal benefits not identified within the current study.

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Appendix A

Themes Identified from Fellows' Focus Groups, Surveys, and Reflections

Theme	Example quotation
Engagement with the profession	<p>"The most eye-opening experience for me was how active librarians are in the field of research and pedagogy and assessment, and how we are constantly self-assessing and making improvements and expand what we see as a goal and our role within the library field, in general. That was really attractive to me and wouldn't have been something I would have engaged in without the fellowship."</p>
Structure of academic librarianship	<p>"This was an amazing experience and gave me important insight into how an academic library functions, how to address the needs of both the institution and more importantly, the audience it serves."</p>
Teacher identity and expertise	<p>"This semester really showed me that I truly do enjoy being a teacher. Thinking back to fall semester, when I first began teaching on my own, I remember I would have such anxiety before a session began. Now I'm much more confident in my ability to lead a session and generate good discussions. I've learned not to try too hard to be funny, but also to not be extremely serious. I've found being my authentic self when teaching seems to connect with the students the most, not when I'm preplanning jokes I'm going to make."</p>
Reflective community of practice	<p>"The greatest support has been the emphasis on reflective practice. Each week of teaching, I reflect on what went well, what could change, and areas for improvement. Reflective practice includes receiving feedback from regular observations by supervisors and other fellows. Hearing their feedback on my strengths and ways I can improve at once affirms my own reflections and brings to my attention aspects I was unaware of. Looking back on my two years in the fellowship, reading each semester's reflections and observation notes, I can see how much I've grown as a teacher."</p>
Career counseling and mentorship	<p>"I remember when you said your goal was that we would be able to check off all of the boxes in the job description, and I found that to be the case . . . I have teaching experience, reference experience, and have designed instruction."</p>



Appendix B

Themes Identified from Librarian Focus Groups

Theme	Example quotation
Value of own expertise	"They were so professional, and it didn't seem like I needed to teach them anything, they seemed to know a lot. Their ideas were so right on target . . . They just went with it. They didn't need hand-holding. They knew what to do and how to do it."
Ambiguity of expectations	"For [us] it was challenging because [the fellow] was doing so many things... and I didn't know how to help her be successful . . . at everything she is doing."
Opportunity to innovate	"For me, it was beneficial from a learning perspective because I was used to the ACRL Standards, and I had time to read sentence by sentence the Framework and familiarize myself and make sure [the fellow] is doing the right thing."
Mentorship	"This mentorship reminded me of me being at that level as a beginning librarian, so I felt like I wanted to give back to the profession and give the same support to the students, because I feel having this support and empowerment [will] decrease the level of stress when they go into the workforce."
Co-learning	"Having [the fellows] put things in writing and sort of bounce ideas off each other [was very helpful]."
Intentionality	"Taking the time to tell somebody else about my practice and also get feedback from them during the process, and then see it written up for, like, an audience is very helpful, especially to have that other perspective, but also to make it, like, more official instead of just like 'Oh yeah, this is just what I do.'"



Appendix C

Rubric Used to Evaluate the Fellows' Growth in Teacher Efficacy

Roles and strengths of teaching librarians	Advanced (3)	Proficient (2)	Developing (1)	Not apparent (0)
Fellows can analyze the needs of each teaching/learning setting, environment, or group and employ appropriate pedagogical techniques to meet those needs.	Responses demonstrate an awareness of the ways in which classroom dynamics (such as instructor/librarian relationships, point in the semester, awareness of assignment, etc.) impact the learning environment, and include specific strategies as to how these circumstances were addressed within the session, or could be addressed in future sessions.	Responses demonstrate an awareness of the ways in which classroom dynamics impact the learning environment, but may struggle to articulate solutions to those challenges.	Responses demonstrate limited awareness of the ways in which classroom dynamics impact a learning environment. Potential solutions to those challenges are very limited, or not evident.	Responses do not indicate any awareness of the ways in which classroom dynamics impact a learning environment.
Articulates goals and learning outcomes for information literacy instruction.	Responses demonstrate reflective practice by including strengths and	Responses demonstrate reflective practice by including strengths and	Responses demonstrate limited awareness of strengths and weaknesses	Responses do not indicate any awareness of strengths or weaknesses.



<p>weaknesses of a session, or sessions. These evaluations are based on specific learning goals or outcomes.</p>	<p>within a session. Learning goals or outcomes are limited, or not evident.</p>	<p>weaknesses, but these reflections may not be tied to specific learning goals or outcomes.</p>
<p>Selects from a repertoire of pedagogies and techniques for diverse learners and learning contexts and experiments with innovative instructional techniques and tools.</p>	<p>Responses demonstrate limited awareness of different pedagogies or teaching techniques. Responses may hint at ways in which these techniques may be implemented within a session, but will not include the level of specificity of a proficient or advanced teacher. Responses may demonstrate a reticence to experiment with new techniques.</p>	<p>Responses demonstrate some awareness of different pedagogies and /or teaching techniques. Some awareness of how these different tools can be implemented within an instruction session is evident. Responses may include an enthusiasm or willingness to experiment with new techniques, even if these techniques are not currently known.</p>
<p>Creates a positive and interactive learning environment which recognizes the importance of context.</p>	<p>Responses demonstrate no awareness of "tone." Responses are not indicative of the desire to create a positive learning space.</p>	<p>Responses demonstrate some awareness of "tone" and indicate a desire, if not ability, to create a positive and productive learning space.</p>
<p>Creates a positive and interactive learning environment which recognizes the importance of context.</p>	<p>Responses demonstrate limited awareness of "tone" and include minimal, if any, references to creating a positive learning space.</p>	<p>Responses demonstrate some awareness of "tone" and indicate a desire, if not ability, to create a positive and productive learning space.</p>



Roles and strengths of teaching librarians	Advanced (3)	Proficient (2)	Developing (1)	Not apparent (0)
Engages in assessment to ensure that instruction is meeting the defined learning outcomes.	Responses demonstrate a strong understanding of assessment within the teaching/learning process, include a specific technique used to evaluate student learning, and articulate the value of that process.	Responses reflect on the use of assessment within the teaching/learning process and include description of a specific assessment technique to evaluate student learning.	Responses demonstrate awareness of student learning, but observations are anecdotal rather than empirical.	Responses indicate no awareness of assessment techniques.
Demonstrates enthusiasm for teaching and learning and a commitment to professional development, lifelong learning, and reflective practice.	Responses demonstrate an enthusiasm for teaching and confidence in their ability as instructors. Responses demonstrate a commitment to reflective practice and growth as an instructor.	Responses demonstrate an enthusiasm for teaching and a growing confidence in their ability as instructors. Responses indicate an awareness, if not commitment, to reflective practice and growth as an instructor.	Responses demonstrate some enthusiasm for teaching but limited confidence in their ability as instructors. Responses indicate limited, if any, awareness of reflective practice.	Responses demonstrate no enthusiasm for teaching or confidence in ability as an instructor.

Rubric adapted from Association of College and Research Libraries (ACRL), Standards and Proficiencies for Instruction Librarians and Coordinators Revision Task Force, "Roles and Strengths of Teaching Librarians," 2017, <http://www.ala.org/acrl/standards/teachinglibrarians>.



Notes

1. Association of College and Research Libraries (ACRL), Standards and Proficiencies for Instruction Librarians and Coordinators Revision Task Force, "Roles and Strengths of Teaching Librarians," 2017, <http://www.ala.org/acrl/standards/teachinglibrarians>.
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