



Research Article

Teaming up to Teach Teamwork in an LIS Master's Degree Program

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Abstract

Objective – Collaboration and working in teams are key aspects of all types of librarianship, but library and information studies (LIS) students often perceive teamwork and group work negatively. LIS schools have a responsibility to prepare graduates with the skills and experiences to be successful working in teams in the field. Through a grant from the university office of assessment, the assessment committee at the University of Rhode Island Graduate School of

Library and Information Studies explored their department's programmatic approach to teaching teamwork in the MLIS curriculum.

Methods – This research followed a multi-method design including content analysis of syllabi, secondary analysis of student evaluation of teaching (SET) data, and interviews with alumni. Syllabi were analyzed for all semesters from fall 2010 to spring 2016 ($n = 210$), with 81 syllabi further analyzed for details about their team assignments. Some data was missing from the dataset of SETs purchased from the vendor, resulting in a dataset of 39 courses with SET data available. Interviews were conducted with a convenience sample of alumni about their experiences with teamwork in the LIS program and their view of how well the LIS curriculum prepared them for teamwork in their careers ($n = 22$).

Results – Findings indicate that, although alumni remembered teamwork happening too often, it was required in just over one-third of courses in the sample period (fall 2010 to spring 2016), and teamwork accounted for about one-fifth of assignments in each of these courses. Alumni reported mostly positive experiences with teamwork, reflecting that teamwork assignments are necessary for the MLIS program because teamwork is a critical skill for librarianship. Three themes emerged from the findings: alumni perceived teamwork to be important for librarians and therefore for the MLIS program, despite this perception there is also a perception that the program has teamwork in too many courses, and questions remain about whether faculty perceive teaching teamwork as important and how to teach teamwork skills in the MLIS curriculum.

Conclusions – Librarians need to be able to collaborate internally and externally, but assigning team projects does not guarantee students will develop the teamwork skills they need. An LIS program should be proactive in teaching skills in scheduling, time management, personal accountability, and peer evaluation to prepare students to be effective collaborators in their careers.

Introduction

While not all library and information studies (LIS) courses emphasize teamwork, it is a crucial skill for students to be successful in the field (Evans & Alire, 2013; Henricks & Henricks-Lepp, 2014). Yet, how is teamwork taught and evaluated as a learning objective in a graduate library school program? The assessment committee at the University of Rhode Island Graduate School of Library and Information Studies (URI GSLIS) conducted a review of aggregated mean scores on the 12 learning objectives from the IDEA student evaluation of teaching (SET) instrument, which includes learning how to work with others on a team. The IDEA Student Ratings of Instruction are a

proprietary SET sold by Campus Labs; the instrument measures student self-reported perceptions of their learning on 12 IDEA learning objectives. The university administers the IDEA survey each semester, asking students to self-report their perceived learning for each of the 12 IDEA learning objectives, regardless of whether those objectives are relevant to the course. The assessment committee discovered that the mean score on objective 5, "acquiring skills in working with others as a member of a team," was the lowest of all 12 objectives across all courses for which an IDEA survey was administered, 2010 to 2016. While this is a self-assessment of learning, instructors at URI GSLIS had informally discussed their observation of students' negativity concerning group work,

and the review brought to light the omission of teamwork or collaboration from the department learning outcomes. The committee determined that improving teamwork skills for LIS students should be a department priority.

The terms collaboration, group work, and teamwork are often used interchangeably. The term used in the IDEA objective is “team,” which was the inspiration behind the title of this project. For purposes of this paper, teamwork refers to any assignment in a course that requires two or more students to work together to produce an output, whether this was labeled as group work, teamwork, partner work, or collaboration. There might have been one grade assigned to the group, or students might have been assigned grades individually.

Teamwork assignments in LIS education allow students to assess and build team skills for future use in the workplace (Rafferty, 2013). Working collaboratively in libraries is increasingly necessary as problems become more complex and resources become scarcer (Calvert, 2018; Laddusaw & Wulhelm, 2018; Marcum, 2014). Collaborative projects help library staff develop relationship building skills that can be rewarding professionally. Collaborating within a library can increase communications by breaking down silos, building trust among staff, leveraging skill sets that complement each other, and allowing all involved to contribute to projects and learn from colleagues (Bello et al., 2017; Calvert, 2018; Cole, 2017). Collaboration between libraries and other like-minded institutions can improve the visibility of library services by increasing the use of library resources and attendance at programs (Laddusaw & Wilhelm, 2018), raising public awareness of libraries (Marcum, 2014), and increasing patron learning of information literacy skills (Laddusaw & Wilhelm, 2018; Saines et al., 2019). Based on the importance and benefits of collaboration for libraries, LIS schools have a responsibility to prepare graduates with

the skills and experiences to be successful working collaboratively in the field. Through a grant from the URI office of assessment, the committee designed this study to explore how teamwork was being taught across the curriculum and how alumni perceived their experiences working in teams both in the MLIS program and their careers in order to identify possible interventions to improve the department’s approach to teaching teamwork and collaboration skills to MLIS students. Researchers examined artifacts of teaching (course syllabi and scores on the IDEA teamwork objective) and interviewed alumni about their experiences working in teams during the MLIS program and in their careers. This study raised questions about what the skills of teamwork are, how important teamwork is perceived to be for LIS careers, and how teamwork skills can be taught effectively in an MLIS program. Teamwork is a crucial skillset for LIS students to learn as it is a requirement of most library jobs, but assigning team projects in courses is not enough; students need to be actively taught teamwork skills to prepare them for library jobs in which they will be asked to collaborate with colleagues inside and outside their libraries.

Literature Review

Benefits of Teamwork

Teamwork is commonly utilized in higher education to develop students’ collaboration and teamwork skills (O’Farrell & Bates, 2009; Rafferty, 2013; Snyder, 2009). Teamwork provides students the opportunity for peer-to-peer interactions that support learning and building one’s network (Roy & Williams, 2014). It leverages the strengths of team members and provides opportunities to explore their abilities in a safe educational setting. Collaborative learning is particularly beneficial in professional Master’s degree programs because of the positive aspect of sharing life experiences (Oliveira et al., 2011).

Student Perceptions of Teamwork

Students report that they like teamwork because they can learn from peers and develop ongoing relationships (Roy & Williams, 2014) and that teamwork was effective at generating ideas (McKinney & Cook, 2018). Yet, they often see teamwork as a negative aspect of courses that utilize it (Bernier & Stenstrom, 2016). Students do not enjoy having to depend on their peers who may have different objectives and levels of commitment from them (Bernier & Stenstrom, 2016; Capdeferro & Romero, 2012), they perceive there is an unfair system of reward and punishment for teamwork and that students get away with doing little or nothing (Bernier & Stenstrom, 2016; Capdeferro & Romero, 2012; McKinney & Cook, 2018; Roy & Williams, 2014), they identify problems with logistics (Bernier & Stenstrom, 2016; Capdeferro & Romero, 2012), and they fear being stuck with all the work due to unbalanced workload among a team (Capdeferro & Romero, 2012; McKinney & Cook, 2018; Roy & Williams, 2014). Issues in communicating (O'Farrell & Bates, 2009; Shah & Leeder, 2016) and team dynamics (Calvert, 2018) are also commonly cited challenges. Students also perceived that the lack of instructor input, either guidance at beginning or assistance during a project, contributed negatively to teamwork experiences (Capdeferro & Romero, 2012). Student learning style also can affect how students perceive teamwork; students who had negative perceptions of teamwork tend to prefer working alone (Shah & Leeder, 2016).

Collaborative Learning in LIS Education

Since collaboration is an “essential skill for students to acquire and practise, as many real-world problems require us to work together” (Shah & Leeder, 2016, p. 609), then it is important for LIS schools to teach students how to collaborate (Bernier & Stenstrom, 2016; Roy & Williams, 2014; Shah & Leeder, 2016). Although students' knowledge can increase during the teamwork process, so might their stress level (Kim & Lee, 2014). Communicating remains a

challenge even when students used a variety of electronic or digital resources during the teamwork process to share work (O'Farrell & Bates, 2009). Structures such as a designated team leader, scheduled meetings, and clear and regular communication positively affect the team experience while perceived laziness of members does not (McKinney & Cook, 2018). Interventions such as a video on how to work successfully in small teams and explicit guidelines to enhance teamwork do not substantially lessen the negative attitudes students held about teamwork (Bernier & Stenstrom, 2016). How to teach teamwork in a way that students both learn from and enjoy it remains an area in need of further investigation.

Methods

The URI GSLIS assessment committee conducted an assessment research project, funded by a university grant, to inform pedagogical improvement with regard to teamwork across the entirety of the LIS curriculum, guided by three research questions:

1. What is the average IDEA score on objective 5 in LIS courses that require teamwork, and how does this compare to the overall mean score across all LIS courses?
2. How is teamwork taught in the LIS courses that require it?
3. How effective do students perceive the curriculum to be in preparing them for teamwork in their careers?

This multi-method research included content analysis of syllabi, secondary analysis of SET data, and interviews with alumni.

Content Analysis

The department had 210 syllabi from Fall 2010 to Spring 2016. The sample included courses delivered online, face to face, and in hybrid formats. A graduate assistant (GA) working on the research project analyzed the syllabi to

identify which courses required team assignments. To ensure the most comprehensive dataset, all assignments that required two or more students to work collaboratively to produce a shared output were classified as teamwork for this study. The GA tabulated the number of both required and optional team assignments, the total number of assignments, and the percentage team assignments comprised of the total grade. Syllabi were further coded for assignment type; inclusion of assignment descriptions and rubrics that detailed teamwork expectations, learning outcomes, or best practices/additional resources; and keywords used in teamwork expectations or learning outcomes.

Secondary Analysis

In the 2016-17 academic year, the department, with the support of the university provost's office, purchased scores on the 12 IDEA learning objectives for all LIS courses from fall 2010 to spring 2016 from Campus Labs (n=39). Preliminary analysis focused on mean scores for the objectives across all courses (Mandel, 2017). The secondary analysis dug deeper into the scores for individual courses on objective 5, comparing courses identified in the content analysis as requiring and not requiring teamwork. Some data was missing from the dataset due to courses not having received an IDEA evaluation because they were taught by adjuncts or faculty nearing retirement, had low enrollment, or were taught in summer (URI had not been conducting IDEA evaluations on summer courses). Other data was missing the course code on the Faculty Information Form, so the courses could not be easily identified as LIS courses by Campus Labs.

Interviews

The project PI and GA conducted telephone interviews with a convenience sample of alumni about their experiences with teamwork in the LIS program and their view of how well the LIS

curriculum prepared them for teamwork in their careers. Alumni were asked first about their experiences with teamwork in the MLIS program. They were asked to describe one or two specific assignments they did as part of a group, how the group coordinated the work and brainstormed, what they liked and disliked about group work, whether an instructor ever did anything to make their experience with group work easier or better, positive experiences working in groups and what made these experiences positive, and challenging experiences working in groups as well as strategies to mitigate or overcome those challenges. Alumni were then asked about teamwork experiences in their careers. They were asked to describe their experience with group work in their career, how their group work experiences in the MLIS program influenced their ability to work in groups on the job, what they like and dislike about group work on the job, and what recommendations they had for MLIS instructors to prepare students for professional group work.

Researchers used the department Constant Contact account to recruit alumni who attended the program between fall 2010 and spring 2016 to participate in the interviews. Alumni were not asked about demographic data such as their gender, year of graduation, or the specific breakdown of the formats of the courses they had taken, but during the time they attended the program, 42.6% of program courses were offered in the hybrid format, 43.8% were offered online, and 13.6% were offered face to face. One interviewee stated during the first question that they were not really able to comment on the topic so that interview was not utilized, leaving 22 completed interviews, at which point the researchers were no longer learning anything new about alumni experiences with teamwork in the program and had reached saturation. Both the PI and GA took notes during the interviews and then analyzed their notes thematically. Their analyses were collated to produce one set of emergent themes.

Results

LIS Courses That Require Teamwork

Content analysis revealed that 81 courses in the sample required teamwork (38.6%). Teamwork assignments were most frequently required in courses on management, reference, information science and technology, community relations, school library media, information literacy instruction, and research methods. This represents a mix of required and elective courses. Other courses that required teamwork once in the sample period were collection management, academic libraries, instructional design, children's literature, youth services, social science reference, government publications, archives and preservation, leadership, and internship. Courses in instructional technology and social networking required teamwork twice during the sample period. Optional teamwork assignments were found in courses on collection management, information science and technology, special libraries, and research methods.

The average number of teamwork assignments used in courses that require teamwork is 2.3. (The averages were 0.14 for courses with optional teamwork and 2.5 for all courses with

teamwork assignments). The average number of total assignments per course is 13.4, meaning that required teamwork assignments comprised 19.0% of total assignments, on average (1.8% for courses with optional teamwork and 20.8% for all courses with teamwork assignments).

Assignment types were categorized as written, presentation, peer evaluation, discussion (either live in class or asynchronous via online discussion board), interview, project, or role play. The majority of teamwork assignments were written ($n = 75$; 87.2%), with the next most popular assignments being presentations ($n = 50$; 58.1%) and role play ($n = 21$; 24.4%); see Table 1.

Forty-five syllabi included teamwork expectations or learning outcomes (52.3%), 14 included teamwork best practices or additional resources (16.3%), and 13 included peer evaluation assignments (15.1%). The most frequently mentioned topic in teamwork expectations or learning outcomes was collaboration ($n = 60$), followed by respect ($n = 35$) and functionality ($n = 32$); see Table 2. Best practices and additional resources included quotes, instructors' advice on being a good member of a team, and a chart comparing teams versus groups referenced from a management textbook.

Table 1
Types of Teamwork Assignments Used in LIS Courses^a

Assignment Type	Total Classes Using	% Classes Using
Written	75	87.2
Presentation	50	58.1
Role play	21	24.4
Peer evaluation	13	15.1
Discussion (live or online forums)	10	11.6
Interview	1	1.2
Project	1	1.2

^aSome courses had multiple types of teamwork assignments, so percentages exceed 100%.

Table 2
 Frequency of Topics in Teamwork Expectations or Learning Outcomes^a

Category	<i>n</i>
Collaboration (including networks, partnerships, cooperation)	60
Respect (including appreciate, recognize)	35
Functionality (including evaluation, effectiveness, efficiency, practical)	32
Communication (including synthesizing ideas, openness)	21
Equitable workload	17
Support (including coach, help, support, mentor)	14
Professionalism (including collegiality)	13
Decision-making (including democratic)	9
Role-play	8
Problem solving	5
Trust (including rely on)	4

^aThree terms did not fit any categories: find inspiration, important, and wisdom (which appeared twice).

On average, teamwork comprises 29.3% of the total grade, ranging from 5% to 70%. Most commonly, teamwork comprised 30% of the grade (*n* = 33; 38.4%). Eleven course syllabi did not specify the percentage of the total course grade that teamwork assignments comprised. Teamwork comprised a larger percentage of total course grades than it comprised of the total number of assignments (see Figure 1).

The dataset from Campus Labs included IDEA scores for 39 of the 81 courses identified as requiring teamwork (48.2%). While this is a smaller portion of the courses requiring teamwork than the researchers were hoping to analyze, analysis was still conducted. The aggregated mean IDEA score on objective 5 for these courses is 3.96. This is higher than the aggregated mean IDEA score on objective 5 for all courses in the time period, which was 3.34.

Given the size and nature of the sample (i.e., not random), the statistical significance of this difference could not be tested.

When instructors complete the Faculty Information Form prior to administering the IDEA evaluation, they are asked to rate the 12 IDEA objectives as essential, important, or minor to the course. For the 39 courses in the dataset that required teamwork, 19 instructors selected objective 5 as essential or important (48.7%), and 17 instructors (43.6%) selected objective 5 as minor or no importance. The highest aggregated mean score on objective 5 was for classes in which instructor selected objective 5 as "important" (4.04), with next highest for instructors who selected "minor/no importance" (3.97), followed by instructors who selected "essential" (3.88); see Table 3.

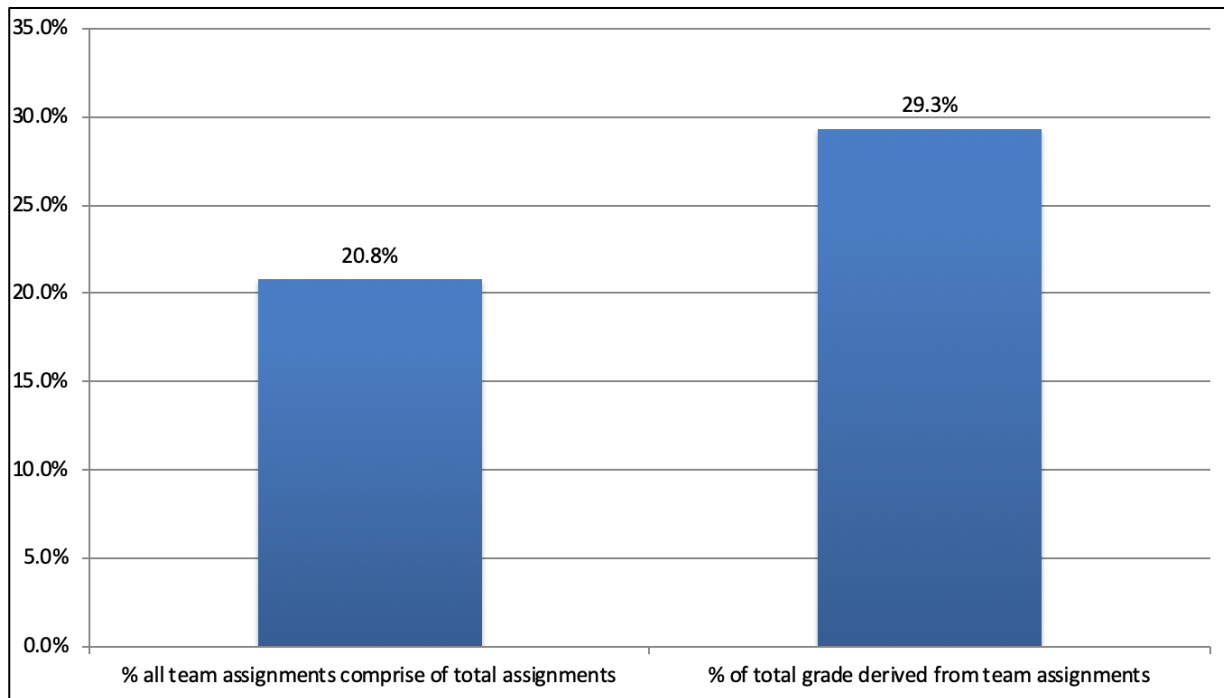


Figure 1
Comparison of the percentage that teamwork comprised of total course assignments to total grade.

Table 3
Aggregated Mean Score for Courses Requiring Teamwork by Instructor-Selected Importance of Objective 5

Aggregated Mean Score	Importance Selected
4.04	Important
3.97	Minor/No Importance
3.88	Essential
3.84	Default-Imp ^a

^aThis category indicates the instructor did not identify the objective as essential, important, or minor (i.e., left the selection blank).

Alumni Perceptions of Teamwork

While the interview questions specified “group” and “group work,” alumni responded using teamwork, group work, collaboration, and other terms interchangeably. A few interviewees shared very bad experiences in courses with team members who did not pull their weight, professors who did not help them make a bad

situation better, or where they felt the professor did not want to hear complaints. Most interviewees reported positive experiences with teamwork in the program, but they also remembered teamwork happening too often, and one reported feeling “Wow, we’re in a group again. We’re always in a group.” The majority of interviewees recalled enjoying the social aspects of working in teams the most:

meeting new people, forming lasting personal and professional relationships, collaborating, sharing ideas and perspectives, and appreciating others' strengths. They enjoyed learning how to work with other people, improving their communication skills, and learning from other students' experiences at other libraries or other library types. Working in a team also afforded greater support when one person was struggling. It also helped in brainstorming ideas and in accomplishing more than the team members could alone. On the job, interviewees reported they enjoy the opportunities they have to collaborate, share ideas and perspectives, motivate, and inspire each other. They perceive that teamwork on the job helps to promote productivity and gain a better understanding of their institution or organization as a whole.

The biggest issue mentioned about teamwork in classes was scheduling, especially for teams of more than three people and when one or more members wanted to meet in person and the others did not want to or could not do that. The second biggest issue is dealing with the student who does not pull their weight or drops off the radar. Interviewees wanted to make sure everyone had equal parts and did their share. When a teammate did not contribute, interviewees indicated they wanted or needed the professor to get involved or suggested that instructors have a process and policy set out in advance to handle those situations. During challenging team dynamics or experiences, they appreciated having a written team contract to clearly state team expectations and provide a process for resolving the issues. In addition, peer evaluations eased the tension when team members were not pulling their own weight and ensured accountability.

Other challenges reported by interviewees included stress from not being able to reach a team member, unclear roles and lack of leadership in a team, assignments that did not lend themselves to teamwork or that did not have a clear relevance for the job, and having to trust other people to do their part of an

assignment. Regarding leadership, one person noted the challenge could be especially high in a program with many introverts who do not want to take on a leadership role. There were also concerns about how to call out people for not doing their share when you do not know them well and may never have met in person (interviewees did not specify whether they were recalling face-to-face, hybrid, or online courses).

Challenges to working in teams on the job include inability or lack of desire to compromise or give up control when one has a particularly vivid idea or vision and frustration when each step needs approval from someone higher up. Interviewees also dislike difficult power dynamics and confrontation when working in groups on the job. One said, "There is discord in groups," so you have to know how to deal with it.

Interviewees concur that using teamwork is an everyday part of work in libraries. They said things like, "Pretty much every library you work at, you're working with a team of people" and "Group work is a huge part of my career. If you are not able to do group work as a librarian, you are not going to be happy, build strong professional connections, or get much done." Only one interviewee said they never work in teams, but they had graduated less than a year prior the interview and had sought committee work to obtain teamwork experience. Interviewees said teamwork assignments are necessary for the MLIS program but that the department should take care to actually teach how to work in teams, use teamwork when appropriate for assignments, and not assign teamwork to decrease instructors' grading responsibilities.

The majority of interviewees believed that teamwork experiences during their MLIS program influenced their ability to work in teams on the job; only five were not sure or did not feel that it directly influenced their real world experiences. Interviewees felt that they were better prepared for real world experiences;

they were able to identify personal strengths and weaknesses, knew when to take the lead and when to step back, and understood warning signs of team conflict; they knew how to listen and communicate respectfully, the importance of laying out expectations, how to use new communication technology, and how to be flexible.

Interviewees reported that the program stressed that being a librarian means constantly sharing and improving on ideas through being an open community. Librarians can always tap into their networks. Student work in the MLIS program helped formed the idea that “we’re all in this together towards a common goal” and librarianship is less competitive than other industries. No matter how annoying teamwork may be in school, interviewees reported that it is necessary because it is part of the job. A few disputed this, but mostly they agreed that, “Good or bad, it’s an extremely valuable learning experience.”

Discussion

Answering the Research Questions

The average IDEA score on objective 5 in LIS courses that require teamwork (RQ1) is higher than the overall mean score on that objective across all LIS courses. However, the difference is less than one point, and the significance cannot be measured given the limitations of the sample size and quality. The average score on this objective is higher for instructors who indicate this objective is important than for instructors who indicate this objective is essential (the highest-level priority). Follow-up research should investigate instructors’ perceptions of the relationship between the teamwork they assign and their selection of important and essential objectives.

In LIS courses that require teamwork (RQ2), teamwork comprises less than three assignments, about 20% of the total class assignments and about 30% of the total class

grade, and it is primarily focused on written and presentation assignments. Only slightly more than half of courses that use teamwork give any sort of expectations or learning outcomes in the syllabus, and less than a quarter include best practices, additional resources, or peer evaluation assignments. It seems that, in this program, teamwork is utilized but not necessarily *taught*. The most commonly mentioned topic in teamwork expectations and learning outcomes is collaboration, which reflects the focus in the literature on the importance of collaboration in libraries. Here too, future research should look at instructor perceptions of teaching teamwork, such as the instructor’s purpose or goal in assigning teamwork.

Over three-quarters of the alumni interviewees reported that teamwork experiences during their MLIS program had a positive influence on their ability to work in teams in their careers (RQ3). While they find compromise, ceding control, and office politics to be frustrating, they reported that what they learned in the MLIS program prepared them to identify their own strengths and weaknesses as a team member, when to step up or step back, and warning signs of impending conflict. They also learned communication and technology skills that made them better able to negotiate teamwork in their careers. Critically, alumni reported that the program helped them see that librarians are constantly collaborating, preparing them for the realities of their day-to-day work.

Perceived Importance of Teamwork for Librarians

Both the literature and our alumni report that being able to work in teams, groups, committees, or other multi-person arrangements is a critical skillset for librarianship. A key aspect of this is collaboration, which is seen as an “essential skill” (Shah & Leeder, 2016, p. 609) that is necessary for library work (Calvert, 2018; Laddusaw & Wulhelm, 2018; Marcum, 2014). Collaboration is the most frequently used term

in teamwork expectations or learning outcomes in the syllabi analyzed for this study, and it is mentioned in the ALA and LLAMA competencies (ALA, 2008; LLAMA, 2016), along with other teamwork skills: emotional intelligence, conflict resolution, and problem solving (LLAMA, 2016).

All but one of the alumni interviewees reported working in teams on the job. They perceive teamwork as an essential component of librarianship and library school as a crucial place to learn how to work with others to achieve a common goal. Alumni perceive that the program should teach self-assessment, conflict management, respectful communication, setting expectations, collaborative technology tools, flexibility, and knowing when to lead or when to go with the flow of the team.

Perception of "Too Much" Teamwork

Even though alumni perceive teamwork as essential to librarianship and a crucial skillset for the MLIS program to teach, they also perceive the program as having teamwork in too many courses. The reality is that teamwork was required in a little over one-third of the courses in the sample set. The program requires 36 credits (i.e., 12 courses), suggesting that most students would experience 3 to 4 courses with teamwork. However, because many of the required courses (management, reference, information science and technology, research methods, and internship) required teamwork, students may have taken even more courses with teamwork than that.

There are three tracks in the program: school library media (SLM); libraries, leadership, and transforming communities (LLTC); and organization of digital media (DM). About 25 to 30% of students are on the SLM track with 5 to 10% of students on the other tracks at any given time. The majority of students are not on a track. Depending on the track, students may have actually taken half or more of their credits in courses that used teamwork:

- SLM track. Students are required to complete management, reference, information science and technology (or research methods as the requirements shifted from one to the other during the sample period), school library media, information literacy instruction, and children's literature.
- LLTC track. Students are required to complete management, reference, information science and technology or research methods, internship, community relations, and leadership, and many students on this track elect to take collection management.
- DM track. Students are required to complete management, reference, information science and technology or research methods, internship, and many students on this track elect to take collection management and information literacy instruction.
- General track. Students are required to take management, reference, information science and technology, and internship, and many elect to take collection management.

For a student attending full time (three courses per semester), this could mean one or two courses requiring teamwork every semester they are in the program. For part-time students, it could be they are assigned teamwork every other semester or more often, and any student could be in two courses requiring teamwork concurrently.

One way the department might tackle this perception of too much teamwork is to tie teamwork to two required courses to ensure all students have to learn the skills at both an introductory and reinforcement level, but then strongly suggest it be avoided in electives. Teamwork could be added to the catalog descriptions of the two courses so students would know which courses require teamwork and arrange their schedules accordingly. The department could review the IDEA objective 5

scores only for the two designated “teamwork” courses to track any changes on this objective over time.

Another approach is to change students’ perceptions of teamwork, so they look forward to, or at least do not dread, teamwork assignments. Improving how teamwork is taught can help with this (see next section), but the department may need to undertake a PR campaign as well. The department could record short videos of students and alumni reflecting on the positive aspects of teamwork in the program and their careers and show these videos at new student orientation and the beginning of courses requiring teamwork. Instructors could also ask students at the beginning of the term to reflect on positive experiences they have had with teamwork in the past and consider what made those positive and how they can work with their teammates to replicate what worked previously.

Implications for LIS Curriculum

There is an issue about the degree to which faculty perceive teaching teamwork as important. Three of the full-time faculty in the program are the investigators on this project, but it gives us pause that, even in classes that require teamwork, faculty do not identify teamwork as an essential learning objective for the course either on the IDEA instrument or their syllabus. Might that be due to the fact they are not explicitly teaching teamwork skills or due to the low percentage teamwork assignments comprise of total course assignments and grades? How can we garner faculty buy-in for a focused effort on teaching teamwork?

Our alumni tell us that teamwork is a critical skill for librarianship and that our students need to be prepared to be effective members of teams when they graduate, and the literature supports this. But how do we teach the soft skills of teamwork? It is clear from this research that we

have considerable room for growth in this area. For example, peer evaluation assignments are considered a teamwork best practice (Capdeferro & Romero, 2012; Roy & Williams, 2014; Xu et al., 2013), but they were used in only about 15% of courses that employed teamwork assignments. None of the syllabi indicated that the courses are actively teaching the specific teamwork skills alumni identify having learned. The required management course did cover the topic of managing teams for one week, but are we truly expecting our students to learn how to communicate, negotiate, and lead in teams without formal training? Also, alumni report the biggest issues of teamwork are scheduling and managing teammates who do not do their fair share of work; yet these topics are rarely covered in teamwork expectations and learning outcomes in course syllabi.

Based on the findings, the investigators in this study are designing a teamwork instructional module that can be utilized in any course in the program. The goal of this module is to make it easy for faculty to teach teamwork without adding the burden of an additional topic to their teaching load and to provide a consistent teamwork language and approach across the MLIS curriculum. The module includes a lesson on teamwork covering definitions and benefits of teamwork, what kind of teammate you are, and strategies for working as part of a team; a quiz faculty can adopt as either a formative or summative assessment; a sample team contract template; and a sample peer evaluation instrument. One of the members of the research team implemented team contracts in spring 2016, and some of the alumni who were interviewed referred to that document as smoothing over a lot of potential areas of conflict among team members. Other faculty have since adopted a team contract and anecdotally report fewer instances of needing to step in to help a team resolve conflict. The module is being piloted, and results will be reported in future publications.

Limitations

This study focused on the perceptions of alumni from one MLIS program so the results cannot necessarily be generalized beyond our own students and alumni. However, the make-up of the student body at most U.S. LIS schools is similar, and it is likely that the learning styles of students in one program mirror the learning styles of students in other programs. There is some question about why our alumni reported such positive experiences with teamwork in their program when the literature indicates one should expect otherwise. It is possible that the gap in time between being a student and working in the professional world could have mitigated feelings of stress and frustration. Also, alumni who volunteered to be interviewed may be more likely to work better in teams, work well with others, and feel comfortable taking on responsibility than the student who goes missing during an assignment or drops out of the program.

Conclusion

Teamwork is prevalent in all aspects of the library field. It is critical for students in LIS programs to develop teamwork skills so they can be successful in their jobs. Librarians need to be able to collaborate internally within their libraries and forge external collaborations beyond their libraries to secure grant funding, develop partnerships, and promote advocacy. Assigning team projects does not guarantee students will develop the teamwork skills they need. LIS schools can follow the lead of the business management field that has specifically researched how to teach teamwork (Rafferty, 2013; Snyder, 2009; Yazici, 2005). Taking an active role in teaching skills in scheduling, time management, personal accountability, and peer evaluation may help overcome the limited way this LIS school is currently teaching teamwork. Other questions still need to be investigated, such as instructors' perceptions of teamwork as an essential learning objective and ways to make teamwork assignments more successful for

students. This assessment project is a first step in the direction of developing a program-wide curriculum that prepares LIS students to be productive and effective members of teams, groups, committees, collaborations, and partnerships in their careers.

References

- American Library Association. (2008). Core competencies. Retrieved from <http://www.ala.org/educationcareers/careers/corecomp/corecompetences>
- Bello, L., Dickerson, M., Hogarth, M., and Sanders, A. (2017). Librarians doing DH: A team and project based approach to digital humanities in the library. *Collaborative Librarianship*, 9(2), 97–103. Retrieved from <https://digitalcommons.du.edu/collaborativelibrarianship/vol9/iss2/6/>
- Bernier, A., & Stenstrom, C. (2016). Moving from chance and “chemistry” to skills: Improving online student learning outcomes in small group collaboration. *Education for Information*, 32, 55–69. <https://doi.org/10.3233/EFI-150960>
- Calvert, K. (2018). Collaborative leadership: Cultivating and environment for success. *Collaborative Librarianship*, 10(2), 79–90. Retrieved from <https://digitalcommons.du.edu/collaborativelibrarianship/vol10/iss2/4/>
- Capdeferro, N., & Romero, M. (2012). Are online learners frustrated with collaborative learning experiences? *The International Review of Research in Open and Distance Learning*, 13(2), 26–44. <https://doi.org/10.19173/irrodl.v13i2.1127>
- Cole, M. (2017). What collaboration means to me: Collaboration as a cocktail. *Collaborative Librarianship*, 9(2), 74–76.

- Retrieved from
<https://digitalcommons.du.edu/collaborativelibrarianship/vol9/iss2/2/>
- Evans, G. E., & Alire, C. A. (2013). *Management basics for information professionals* (3rd ed.). Chicago, IL: Neal-Schuman.
- Henricks, S. A., & Henricks-Lepp, G. M. (2014). Desired characteristics of management and leadership for public library directors as expressed in job advertisements. *Journal of Library Administration*, 54(4), 277–290.
<https://doi.org/10.1080/01930826.2014.924310>
- Kim, J., & Lee, J. (2014). Knowledge construction and information seeking in collaborative learning. *Canadian Journal of Information and Library Science*, 38(1), 1–21.
<https://doi.org/10.1353/jils.2014.0005>
- Laddusaw, S., & Wilhelm, J. (2018). Yours, mine and ours: A study of successful academic & public library collaboration. *Collaborative Librarianship*, 10(1), 30–46.
Retrieved from
<https://digitalcommons.du.edu/collaborativelibrarianship/vol10/iss1/6/>
- Library Leadership and Management Association (LLAMA). (2016). Leadership and management competencies.
<http://www.ala.org/llama/leadership-and-management-competencies>
- Mandel, L. H. (2017). Aggregated IDEA data for LSC courses, fall 2010-spring 2016.
Retrieved from
https://harrington.uri.edu/wp-content/uploads/2018/04/AggregateIDEAdata-Report_revised.pdf
- Marcum, D. (2014). Archives, libraries, museums: Coming back together? *Information & Culture*, 49(1), 74–89.
<https://doi.org/10.7560/IC49105>
- McKinney, P., & Cook, C. (2018). Student conceptions of group work: Visual research into LIS student group work using the draw-and-write technique. *Journal of Education for Library and Information Science*, 59(4), 206–227.
<https://doi.org/10.3138/jelis.59.4.2018-0011>
- O'Farrell, M., & Bates, J. (2009). Student information behaviours during group projects: A study of LIS students in University College Dublin, Ireland. *Aslib Proceedings*, 61(3), 302–315.
<https://doi.org/10.1108/00012530910959835>
- Oliveira, I., Tinoca, L., & Pereira, A. (2011). Online group work patterns: How to promote a successful collaboration. *Computers & Education*, 57, 1348–1357.
<https://doi.org/10.1016/j.compedu.2011.01.017>
- Rafferty, P. D. (2013). Group work experiences: Domestic MBA student experiences and outcomes when working with international students. *Journal of Further and Higher Education*, 37(6), 737–749.
<https://doi.org/10.1080/0309877X.2011.645470>
- Roy, L., & Williams, S. (2014). Reference education: A test bed for collaborative learning. *The Reference Librarian*, 55(4), 368–374.
<https://doi.org/10.1080/02763877.2014.929923>

- Saines, S., Harrington, S., Boehringer, C., Campbell, P., Canter, J., & McGreary, B. (2019). Reimagining the research assignment: Faculty-librarian collaborations that increase student learning. *College and Research Libraries News*, 80(1), 14–17, 41.
<https://doi.org/10.5860/crln.80.1.14>
- Shah, C., & Leeder, C. (2016). Exploring collaborative work among graduate students through the C5 model of collaboration: A diary study. *Journal of Information Science*, 42(5), 609-629.
<https://doi.org/10.1177/0165551515603322>
- Snyder, L. G. (2009). Teaching teams about teamwork: Preparation, practice and performance review. *Business Communication Quarterly*, 72(1), 74-79,
<https://doi.org/10.1177/1080569908330372>
- Xu, J., Du, J., & Fan, X. (2013). Individual and group-level factors for students' emotion management in online collaborative groupwork. *Internet and Higher Education*, 19, 1–9.
<https://doi.org/10.1016/j.iheduc.2013.03.001>
- Yazici, H.J. (2005). A study of collaborative learning style and team learning performance. *Education & Training*, 47(2/3), 216–229.
<https://doi.org/10.1108/00400910510592257>