Methods and Outcomes of Student Engagement in Systematic Program Planning

Elizabeth Lieutenant, Quality Information Partners, e.lieutenant@me.com

Abstract
Systematic planning is a program management technique designed to facilitate continuous improvements to educational programs through evidence-based decision-making. Constituent engagement is an essential component of systematic planning, but little is known about how higher education programs engage students in program planning, assessment, and decision-making processes. To better understand how responsive higher education programs are to student engagement, this study examines the methods and outcomes of student engagement in systematic program planning in Library and Information Science (LIS) programs. A hybrid, problem-driven content analysis of 15 comprehensive accreditation self-study documents found that LIS programs used a variety of student engagement methods – quantitative and qualitative, formative and summative, systematic and ad-hoc – to engage students in systematic program planning. However, these methods did not necessarily result in substantive programmatic outcomes. The results of this study will be useful to higher education faculty, staff, and administrators who are interested in designing more inclusive and responsive systematic planning processes through authentic and meaningful student engagement methods.

Introduction

Higher education faculty (academic), staff (service staff), and administrators (managers) aim to provide students with a quality education. In support of this goal, higher education accreditation organizations have incorporated outcomes-based evaluation methods, such as systematic planning, into standards for institutional and programmatic accreditation. Systematic planning is a cyclical outcomes-based planning, assessment, and decision-making process that supports broad-based programmatic changes and improvements through engagement with internal and external constituents: students, faculty, staff, alumni, employers, and other interested parties. While students are an essential constituency group, they are often not as authentically or meaningfully engaged in systematic planning as they could be. While most higher education institutions and programs provide students with opportunities to provide feedback on their educational experiences, students are rarely able to directly change educational programs and practices. To better understand how responsive higher education programs are to student engagement, this study examines the methods and outcomes of student engagement in systematic program planning in Library and Information Science (LIS) programs seeking accreditation by the American Library Association (ALA).

The ALA accreditation program is recognized by the Council for Higher Education Accreditation (CHEA) as the programmatic accreditor for LIS degree programs in the United States (U.S.) and Canada (CHEA, 2018). The ALA only accredits master's degree programs and does not accredit undergraduate (bachelors and associates), doctoral, or certificate programs (ALA, 2006). As of Spring 2018, there were 65 ALA-accredited master's degree programs offered at 61 higher education institutions located in 33 U.S. states (including Washington, DC and Puerto Rico) and 5

Canadian provinces (Price, 2018). The ALA (2018) publishes a directory with summary information on all ALA-accredited degree programs, including: institution names and location; degree programs, areas of concentration, and distance education options; program, admissions, and financial aid contact information; and accreditation status and review dates, follow-up reporting details, and links to student achievement information.

All ALA-accredited degree programs require completion of a 4-year bachelor's degree as a requirement of program entry (ALA, 2006). Most ALA-accredited programs are 36-39 credit hours of study (Association for Library and Information Science Education [ALISE], 2017) and may be completed in one year of full-time study, although most students typically take at least 2 years to obtain their degree. As of Fall 2016, 15,674 students were enrolled in an ALA-accredited degree program; of these, 38.7% were enrolled full-time, and 61.3% were enrolled part-time (ALISE, 2017). The majority of enrolled students were female (80.1% of total enrollment) and white (73% of total enrollment, where students' race or ethnicity is known) (ALISE, 2017). Approximately one-third of enrolled students were 25-29 years-of-age (31% of total enrollment, where students' age is known), followed by 20-24 (19%), 30-34 (17%), and 35-39 (12%) (ALISE, 2017).

Problem Statement

Students and faculty have recently advocated for LIS programs to engage students more authentically and meaningfully (e.g. Crissinger, 2015; Cunha, 2016; Dali & Caidi, 2016; Hackney, 2015; Helregel, 2014; Stephens, 2011; Zingarelli-Sweet, 2014). As an essential constituent group, LIS students can provide valuable feedback to inform strategic decision-making and support continuous program improvements. However, minimal research has been published on LIS students' perceptions of their LIS master's degree programs (Cherry, Freund, & Duff, 2013, p. 175), and little is known about how LIS programs incorporate student perspectives and needs into their decision-making processes. Programs have an obligation to engage their constituents, including students, in systematic planning, but constituent engagement methods are rarely prescribed or standardized across institutions, nor are their data aggregated across programs.

Due to the internal, individualized nature of systematic planning, no published studies articulate how LIS students are engaged in systematic planning and few address how student assessments of their educational experiences have changed educational programs and practices. To address this gap, this study examines how LIS programs engage students in systematic planning. A hybrid, problem-driven content analysis of 15 comprehensive accreditation self-study documents investigated the methods used to engage students, the systematic nature of these methods, the tangible outcomes of these methods, and the relationships between methods and outcomes. The results of this study will aid higher education programs in developing more inclusive and responsive systematic planning processes that will help improve educational programs and practices.

Research Questions

This study addresses the following research questions:

1. How do LIS programs engage students in programmatic planning, assessment, and decision-making?

2. How do LIS programs change in response to student engagement?
3. What relationships exist between student engagement methods and program changes?

Background

Systematic planning is a higher education program management technique used in the United States. Systematic planning facilitates continuous improvements to educational programs and their processes, resources, and outcomes through evidence-based decision-making at the macro- and micro-levels. Each stage of the systematic planning process – planning, implementation, assessment, and decision-making – inform and influence the next to support continuous program improvements. Systematic planning is constituent-driven, grounded in engagement and communication, and supported by evidence, documentation, and data. It shares many of the principles and methods used in program evaluation, outcomes assessment, and other continuous improvement processes.

Systematic Program Planning in LIS Education

Systematic planning has been a central component of LIS education in the United States and Canada since the adoption and implementation of the ALA's 1992 Standards for accreditation of master's programs in library and information studies (henceforth Standards). Increased emphasis and attention on systematic planning have coincided with revisions to the Standards in 2008 and 2015, which strengthened and refined the criteria used to judge LIS programs seeking initial or continued accreditation (Committee on Accreditation, 2007; Stansbury, 2015). The 2008 Standards' included a detailed definition of systematic planning to ensure LIS programs adopt a systematic planning approach across all major standards areas:

> *Systematic planning is an ongoing, active, broad-based approach to (a) continuous review and revision of a program's vision, mission, goals, objectives, and learning outcomes; (b) assessment of attainment of goals, objectives, and learning outcomes; (c) realignment and redesign of core activities in response to the results of assessment; and (d) communication of planning policies and processes, assessment activities, and results of assessment to program constituents. Effective broad-based, systematic planning requires engagement of the program's constituents and thorough and open documentation of those activities that constitute planning.* (ALA, 2008, p. 4).

The 2015 Standards revision further emphasized systematic planning by redefining Standard I from Mission, Goals, and Objectives to Systematic Planning. Furthermore, each of the five major standards areas incorporated and codified specific systematic planning sub-standards:

I. Systematic Planning
II. Curriculum
III. Faculty
IV. Students
V. Administration, Finances, and Resources

While the ALA accreditation program clearly expects LIS programs to engage in systematic planning, the Standards and the Accreditation Process, Policies, and Procedures (AP3) manual (ALA, 2015a) do not prescribe any specific constituent engagement methods. Instead, programs are to determine how, when, and who they engage in their systematic planning processes within the context of their individual mission and organizational culture. Therefore, minimal research and resources exist on how LIS programs engage their constituents in systematic planning. Systematic planning documentation often serves as evidence to substantiate accreditation reports, but since this documentation relates to internal organizational operations, it is not readily available for comparative assessments of LIS programs, processes, or outcomes.

Literature Review

LIS student engagement must be situated within a broader context of systematic program planning to ensure engagement informs and influences programmatic planning, assessment, and decision-making processes. However, few published studies on LIS education explicitly reference systematic planning. LIS education scholars have more often focused on one component of systematic planning, such as student learning outcomes assessment (e.g. Applegate, 2006; Carey & Gregory, 2003; Harhai & Krueger, 2015), or an individual program's systematic planning processes, often at the curricular level (e.g. Chow, Shaw, Gwynn, Martensen, & Howard, 2011; Curran, Bajjaly, Feehan, & O'Neill, 1998; Shannon, 2008).

Student Engagement Methods

Several student engagement methods are based on specific data collection techniques and instruments, such as surveys, course evaluations, focus groups, and interviews. Applegate's (2006) content analysis of 15 self-studies found that most LIS programs used at least one student engagement method in their outcomes assessment processes. Nine programs used student course evaluations and current student surveys, respectively; programs also used exit surveys, forums (including meetings, digital communication tools, and vaguely defined forms of student "feedback" or "input") and focus groups.

In alignment with Applegate's (2006) findings, surveys are the most common student engagement method in LIS education research. Researchers rarely survey currently enrolled LIS students in a broad-based, systematic fashion, although some ad-hoc attempts exist (e.g. Heim & Moen, 1989; Berry, 1999; Cherry et al., 2013). Instead, student surveys have more often focused on specific curricular-related topics, such as Chow et al.'s (2011) survey of current master's students. Other surveys have focused on student perceptions of specific course experiences or topics (Aharony & Raban, 2008; Becnel, Moeller, & Pope, 2016; Fleischmann, Robbins, & Wallace, 2009). Surveys have also focused on LIS student experiences in school library media programs (Hanson-Baldauf & Hassell, 2009; Shannon, 2008) and online and blended learning courses (Montague & Pluzhenskaia, 2007; Oguz, Chu, & Chow, 2015; Yukawa, 2010). Additionally, surveys have provided rich insights into the experiences of minority (Kim & Sin, 2006, 2008) and culturally and linguistically diverse (Caidi & Dali, 2015; Dali & Caidi, 2016) LIS students.

LIS education researchers have also used course evaluations, focus groups, and interviews. Mitchell (2013) coupled weekly feedback with an end-of-semester course

evaluation instrument to assess the impact of specific course elements on LIS student learning and professional identity formation. Researchers have also used course evaluations to understand LIS student experiences in individual courses (Evans, Dresang, Campana, & Feldman, 2013; Schilling, 2009) and across multiple courses (Kingma & Keefe, 2006). Focus groups have solicited LIS student perceptions of their academic unit's organization culture (Cooke, Sweeney, & Noble, 2016), online degree program (Frey, Alman, Barron, & Steffens, 2004), online courses (Burnett, Bonnici, Miksa, & Kim, 2007), and blended learning experiences (Dow, 2008). Conant (1980) conducted individual, semi-structured interviews with 218 LIS students at 15 different programs as part of an eight-year study. More recently, interviews have assessed student perceptions of an experimental learning project (Wolske, Rhinesmith, & Kumar, 2014) and compared the experiences of LIS students with and without a previous graduate degree (Dow, 2011). Except for Cooke et al. (2016) and Noble, Austin, Sweeney, McKeever, and Sullivan (2014), LIS education researchers have rarely reported using other student engagement methods, such as governance representation and meetings.

Outcomes of LIS Student Engagement

LIS students have successfully motivated changes to program curricula and culture, particularly to advance diversity and inclusion. Cooke et al. (2016) and Noble et al. (2014) described how LIS student engagement in meetings resulted in several changes to program governance, curriculum, and faculty, Saunders (2016) reported how student engagement prompted changes to LIS program curricula, new student orientation, and faculty training requirements, and Chu (2009) credited student organization leaders for the creation of two required LIS core courses on technology and cultural diversity, respectively. Oxley (2013), Jardine (2016), and Lieutenant and Inge (2016) have discussed their leadership of a student-led curriculum development project; this project served as a model for faculty members Cooke and Jacobs (2018) to lead a comprehensive diversity audit at their own LIS program.

LIS student engagement has also motivated programmatic changes in other areas. Shannon's (2008) LIS program capitalized on student survey results by developing a new course, revising another course, and identifying nine action items to consider as part of the program's ongoing systematic planning processes – it is unclear whether these action items were implemented. Schilling (2009) used student course evaluation results to redesign the format and interactivity of an online course, Frey et al.'s (2004) student focus groups motivated several changes to student-faculty communication and online pedagogy, and Fleischmann et al. (2009) used student survey results to iteratively assess and revise a series of in-class case studies. LIS students have also promoting student engagement by leading or participating in the design and dissemination of survey instruments (Creel & Pollicino, 2012; Davis, Juengling, Laurent, Pye, & Williamson, 2014; Harhai & Krueger, 2015).

Conclusion

Student engagement methods gather valuable data on students' perceptions, needs, and experiences, but systematic planning requires more than just collecting and analyzing data. Systematic planning obligates LIS programs to use these types of data in their ongoing planning, assessment, and decision-making processes. Many research studies suggest that the findings from their student engagement activities could improve LIS education, but it is unclear whether this often occurs in practice.

Methodology

A hybrid, problem-driven content analysis of 15 comprehensive accreditation self-study documents blended quantitative and qualitative techniques (Krippendorff, 2013) to examine the student engagement methods used and program changes made, at least in part, based on student engagement. The ALA's comprehensive accreditation review process requires LIS programs to produce a self-study document. Self-studies include information that "describes the program; how it meets the ALA Standards for Accreditation; analyzes its strengths, weaknesses, and challenges; and sets forth the program's plans and goals for future development and continued compliance with the Standards" (ALA, 2015a, p. 8). While each self-study shares this common purpose, each program's unique institutional context influences the content of each document. Self-studies record and substantiate through evidence, documentation, and data a program's systematic planning activities throughout the length of the program's comprehensive review term; thus, this study assumes the self-studies reported accurate information.

Data Collection and Sampling Procedure

15 self-studies from programs with comprehensive reviews between fall 2011 and spring 2014 were located through the ALA's "Sample Self-Studies" web page and a review of each program's website [Table 1]. Each of the 15 self-studies was reviewed for any references to the term "student;" for this study, "student" refers to master's students enrolled in an ALA-accredited degree program. All text, tables, and figures that contained data related to this study's research questions were collected for further analysis. Information not collected for analysis include: vague references to student engagement (e.g. "feedback" or "input"); references to "constituents" or "stakeholders" that did not specifically define students as members of these groups; planned for, but not yet implemented, programmatic activities or changes; and student participation in institutional governance bodies and the program's comprehensive ALA accreditation review process.

Institution	**Comprehensive Review Term**
University of Alberta	Spring 2013
University of California, Los Angeles	Fall 2011
Florida State University	Fall 2012
University of Illinois at Urbana-Champaign	Fall 2011
Indiana University	Spring 2012
University of Maryland	Spring 2013
University of North Carolina at Chapel Hill	Spring 2014
University of North Texas	Spring 2013
University of Oklahoma	Spring 2014
University of Ottawa	Fall 2013
University of Pittsburgh	Spring 2013
Rutgers, the State University of New Jersey	Fall 2011
San Jose State University	Spring 2014
Valdosta State University	Fall 2013
University of Washington	Fall 2013

Table 1: Self-study documents

Coding Scheme Development

The coding scheme included a set of coding directions, coding inclusion/exclusion criteria, top-level categories, and a set of codes; each code included a definition and 1-3 examples. Nested codes facilitated multi-level analyses of governance representation and survey data. The initial scheme was deductively derived from a related study on LIS student engagement in program assessment and evaluation (Lieutenant, 2015) and the Standards (2008, 2015b). The initial scheme was inductively revised through constant comparison, a review of Applegate (2006) and AP3's "Examples of evidence" list (ALA, 2015a, pp. 49–52), and discussions with a second coder prior to pilot testing. This revised scheme was used in pilot-testing and finalized after testing inter-rater reliability. The final coding scheme included 29 codes: 21 student engagement method codes and eight programmatic changes codes. All codes were mutually exclusive except for certain governance codes, which were flexible to accommodate the variety of approaches used to delegate programmatic decision-making.

Data Coding and Analysis Procedure

An examination of each self-study's sampling unit identified evidence of student engagement methods used and program changes made, at least in part, based on student engagement. These data were segmented into units and coded using the final coding scheme. Each self-study's coding units were then grouped, analyzed, and collapsed into analysis units. This analytical approach illustrated the latent relationships between distinct coding units, ensured the manifest content included in each sampling unit was included in the analysis units, and supported differentiation between multiple uses of the same method, referred to as "cases" in this study. The analysis units were then collected, enumerated, and analyzed to produce this study's results. Where present, frequency and consistency data were collected and inductively analyzed for each method. A second, more focused round of qualitative analysis was completed to identify themes associated with the purpose of each method and outcomes of each change.

Inter-coder Reliability

The author and a second coder reviewed and discussed the preliminary coding scheme prior to pilot testing. The second coder coded and analyzed a stratified sample of coding units (75 of 130 or 57.7%; M = 15, SD: 1.58) from five self-studies to identify any areas of disagreement with the author's analysis. Formative reviews and discussions between the author and second coder resolved any discrepancies in results. Inter-rater reliability coefficient Scott's π was calculated using the online Reliability Calculator for two coders (ReCal2) and resulted in 0.651 agreement (Freelon, 2010). The preliminary scheme was revised to enhance reliability, with attention paid to the subset of codes with greatest disagreements. The author and second coder mutually reviewed and agreed to all revisions prior to the author conducting a second round of full coding with the final coding scheme, the results of which are reported in this paper. Preliminary results from pilot-testing were reported in Lieutenant and Kules (2016).

Findings

Student Engagement Methods

LIS programs used a variety of student engagement methods, with some methods more commonly used than others [Figure 1]. Programs reported 21 different methods and 248 specific cases of student engagement, with each program

reporting six to 16 methods (M: 10.7, SD: 2.67), and six to 33 cases (M: 16.5; SD: 7.45).

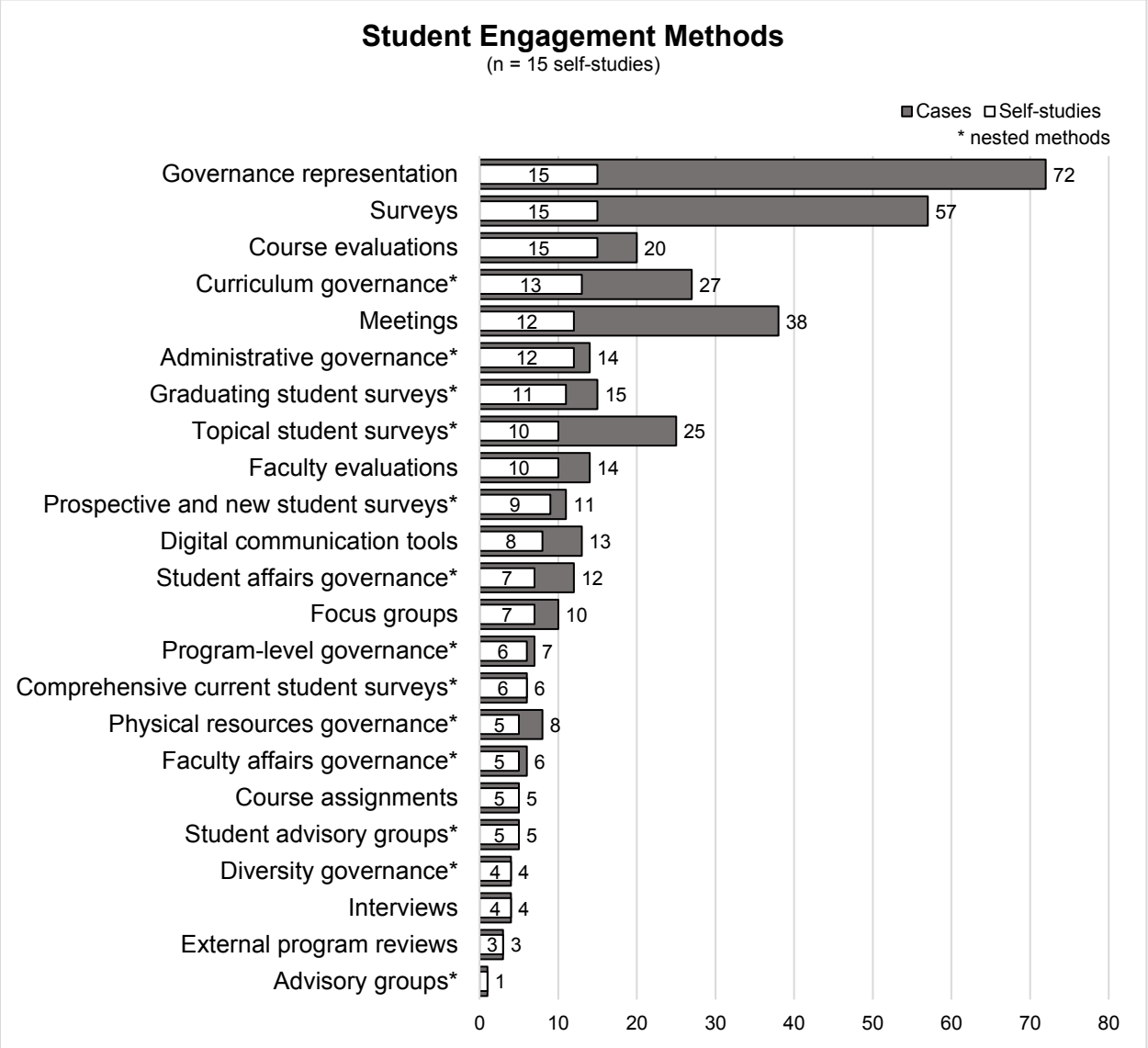

Figure 1: Methods used to engage students

All programs included student representatives in program governance, most commonly curriculum and administrative governance, but students were not equally represented in all aspects of program governance. 13 curriculum governance bodies exercised broad oversight over program curricula; the remaining 14 addressed program specializations, curriculum revision processes, summative assessments, specific curricular topics, and information technology competence. Most administrative governance bodies exercised general oversight across all aspects of the program; in two cases, administrative governance only addressed strategic planning.

Student representation was less common in student affairs, program-level, physical resources, or faculty affairs governance. Most student affairs governance bodies addressed admissions; some addressed financial support, recruitment and retention, post-graduation placement, honors and awards, communication, and/or the overall

student experience. Program-level governance bodies reviewed, developed, and/or assessed the program's mission, goals, objectives, and program-level student learning outcomes. Physical resources governance bodies addressed physical facilities, technology resources, and/or satellite/off-campus locations. Half of the faculty affairs governance bodies addressed faculty roles and responsibilities, tenure and promotion review, pedagogy, and/or teaching assignments; the other half conducted faculty searches. Programs did not commonly use student advisory boards, diversity governance bodies, or advisory groups, which depresses student representation in these governance bodies. Student advisory groups provided feedback and input on their program and served as liaisons between the program's decision-makers and general student body. Some also supported their program's systematic planning processes by appointing student representatives to other governance bodies, running surveys, or organizing student town hall meetings. Diversity governance bodies addressed improving diversity in the program, its curriculum, and its faculty and student bodies. The advisory group functioned similarly to student advisory groups but included representatives from other constituent groups, including faculty, alumni, and regional employers.

Programs commonly used graduating, topical, and prospective and new student surveys but not comprehensive current student surveys. Graduating student surveys, typically disseminated to students annually or once at any point from program exit through one-year post-graduation, gathered summative data on students' educational experiences, as well as placement, salary, and employment data. Topical student surveys, primarily used as one-time activities, were either disseminated to all currently enrolled students or select students. In 10 cases, these surveys solicited student feedback and input on their program's curriculum. Topical student surveys also addressed physical resources and services, internships and co-ops, student orientation, diversity, strategic and financial priorities, academic and administrative policies, and experiences at an alternate campus. Prospective and new student surveys, disseminated to students at any point from admission through the end of their first enrolled term, solicited students' interests and goals, motivations for enrollment or non-matriculation, baseline self-assessments, and/or perceptions of recruitment, application, admissions, and/or orientation. Comprehensive current student surveys, typically disseminated to currently enrolled students annually or once, addressed all aspects of the program.

In addition to governance representation and surveys, programs commonly used course evaluations, meetings, faculty evaluations, and digital communication tools. Course evaluations solicited course-level feedback and input from students. All programs used required end-of-term course evaluations to indirectly measure student learning outcomes, curricular quality, and instructor effectiveness. Programs also used mid-term formative course evaluations, workshop evaluations, qualitative evaluations, and weekly evaluations. Faculty evaluations solicited student feedback and input on individual faculty and administrator performance. Half of these evaluations solicited feedback on prospective faculty candidates; programs also solicited student feedback through regularly-scheduled academic unit administrator performance reviews, teaching award nominations, and promotion and tenure cases. Meetings, including forums, town halls, retreats, and planning sessions, either addressed any aspect of the program or focused on specific topics. Specific topics addressed include curriculum, strategic planning (including mission, goals,

objectives, and learning outcomes articulation), academic and library facilities, organizational culture and inclusion, a proposed academic unit merger, course schedules, and extra-curricular programming. Most standing meetings occurred once per term or year; ad-hoc meetings occurred one to three times. Digital communication tools, including online discussion forums, email, or other digital platforms and software, actively or passively solicited student feedback and input on library and information technology resources and services, course experiences and offerings, mission, goals, and objectives statements, or reasons for program withdrawal.

Programs did not commonly use focus groups, course assignments, interviews, or external program reviews. Focus groups, typically scheduled as a one-time activity with one to three sessions, primarily solicited student feedback on specific aspects of their program, including physical facilities and technology resources, career preparation, recruitment, community building and extra-curricular engagement, and mission, goals, and objectives statements. Course assignments solicited student perceptions, feedback, and input on different aspects of the program. In three cases, end-of-term course assignments solicited student perceptions of their program's ability to prepare the students for their fieldwork, internship, or co-op experience. One assignment solicited student comments on their program's draft mission, goals, and objectives statements; another assignment had students develop a proposal to redesign and improve their program's website. Biannual exit interviews solicited summative feedback from graduating students; one program conducted student interviews to inform the development of the program's documented systematic planning process and its associated goals and objectives. Two external program reviews solicited student feedback as part of a cyclically-scheduled institutional program review process. One program review, conducted by an external consultancy group, solicited student feedback on their academic unit's online/distance degree program option.

Program Changes

Student engagement methods resulted in specific programmatic changes across almost all program areas, with certain program areas more amenable to change than others [Figure 2]. Programs reported 168 total changes, with each program reporting zero to 24 changes (M: 11.2, SD: 6.71).

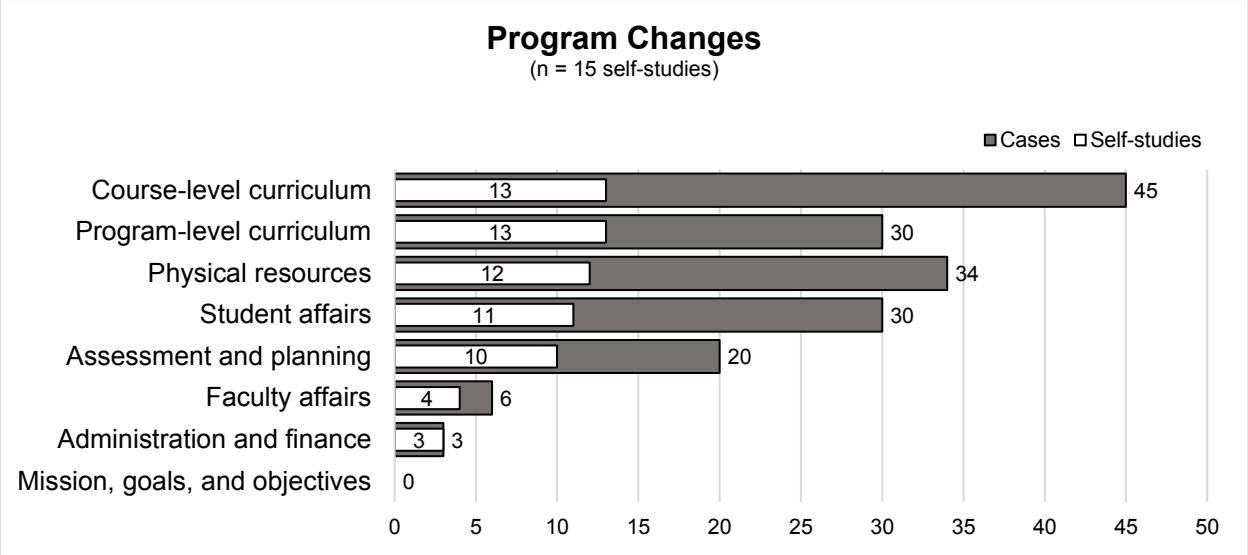

Figure 2: Program changes made based on student engagement

Curricular changes at the course-level or program-level accounted for roughly half of all cases. Course-level curriculum changes addressed both required and elective courses, including course content, assignments, and requirement/elective status, followed by final assessments, prerequisites, specific course schedules, and field study management. Additionally, programs created 11 new courses based on student engagement. Program-level curriculum changes addressed course sequencing, progression, and numbering, as well as course plans and schedules, certifications and specializations, curricular topics and content, extracurricular programs, and adopted citation style.

Changes to physical resources addressed online and in-person degree and course offerings, delivery, and technology, space use and facilities access, library and information technology resources and services, and facilities equipment. Most student affairs changes addressed academic advising information or staff, followed by online information and communication methods, and career services staff. Programs also changed recruitment activities, admission applications, and employment services. Assessment and planning changes addressed curriculum development, physical resources, course scheduling, diversity education and community building, advising, faculty hiring, and university-wide planning. Programs also changed governance structures, course evaluations, surveys, summative assessment criteria, and the types of student engagement methods used.

Programs changes rarely addressed faculty affairs or administration and finance. Most faculty affairs changes addressed instructor interaction and content delivery in online courses, followed by student/faculty communication and research groups. Conference travel funding, field study compensation, and staffing levels were the only program administration and finance changes. No programs reported changing programmatic vision, mission, goals, objectives, or student learning outcomes statements based on student engagement.

Relationships Between Methods and Changes

A Pearson correlation coefficient test assessed the relationship between the number of student engagement methods used and specific changes implemented based on

student engagement. Although a positive correlation was present (R: 0.2486), the relationship between student engagement methods and programmatic changes was weak [Figure 3].

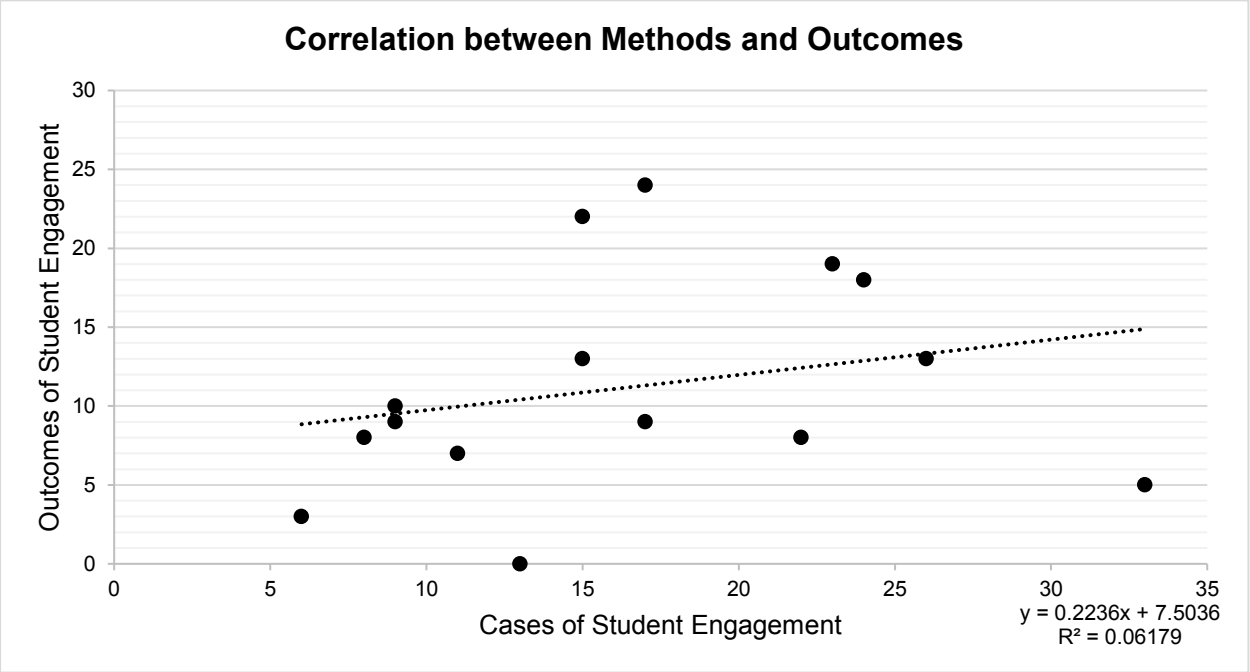

Figure 3: Correlation between student engagement methods used and program changes made based on student engagement

Student engagement methods had varying outcomes [Figure 4], measured as the mean number of specific programmatic changes associated with specific cases of student engagement. Course evaluations had the strongest general outcomes, with 20 course evaluations related to 33 specific changes. Of the four survey types, comprehensive current student surveys had the strongest overall outcomes, followed by graduating, topical, and prospective and new student surveys. One-third of program governance bodies reported outcomes, with student advisory groups demonstrating the strongest outcomes of all governance types. Faculty evaluations, course assignments, and the six remaining governance types did not result in programmatic changes.

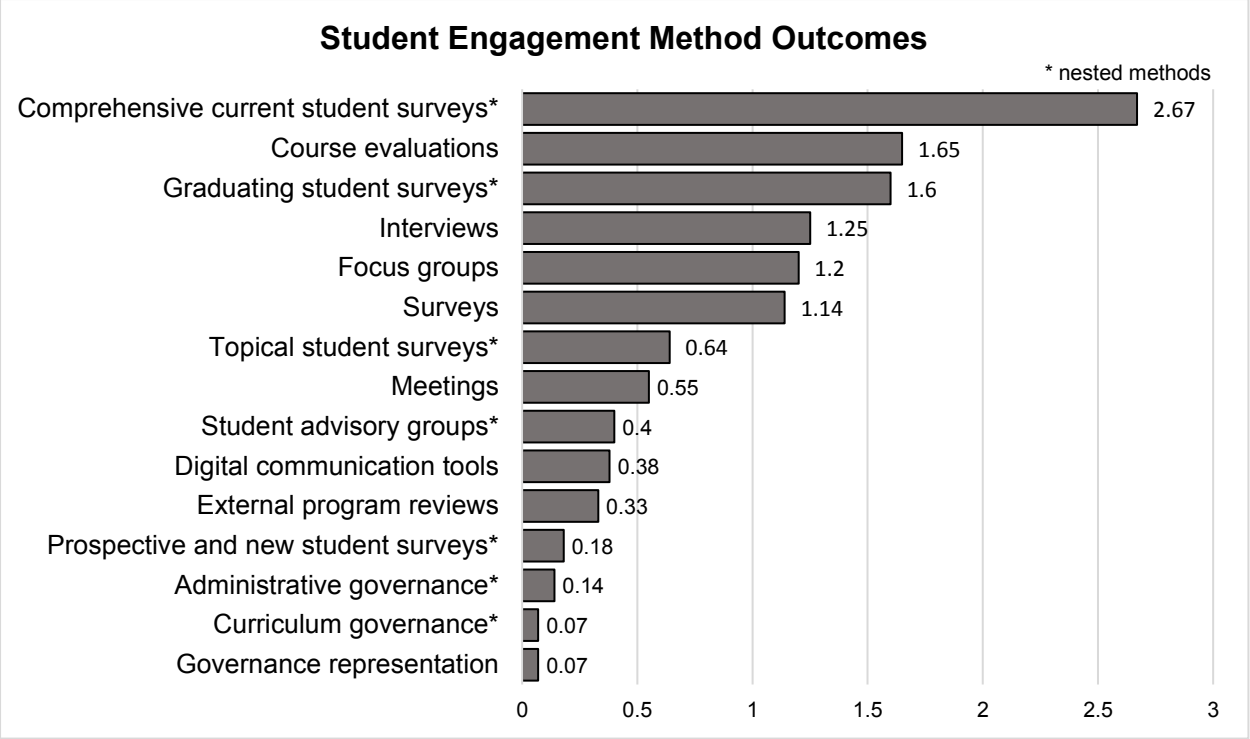

Figure 4: Outcomes of student engagement methods

Limitations

This study is the first to examine LIS student engagement in systematic program planning. The ALA accreditation program encourages but does not require programs to publicly publish their accreditation documentation (ALA, 2015a), which limited this study's sample pool. Furthermore, the self-studies included in this study may have reported a representative sample of student engagement methods and outcomes, instead of publishing an exhaustive inventory. Finally, this study focused on select ALA-accredited LIS programs in the United States and Canada, which limits the ability to generalize these results.

Discussion

Programs reported using a variety of student engagements methods– quantitative and qualitative, formative and summative, systematic and ad-hoc – but these methods did not consistently result in fruitful or substantive programs outcomes.

Student Engagement Methods

LIS programs reported using a variety of student engagement methods with varying frequency and consistency. Using a variety of methods enables programs to gather feedback and input to inform strategic short- and long-term decision-making (Banta & Palomba, 2015). Programs used quantitative and summative methods more commonly than qualitative and formative methods. Wider adoption of qualitative methods, such as meetings, focus group, and interviews, and formative methods, such as comprehensive current student surveys and mid-term course evaluations, can provide rich insight into current students' perceptions and enable changes that will directly benefit currently enrolled students (Kealey, 2010). Programs did not consistently use student engagement methods in a systematic manner. For example, three programs reported using surveys to engage students throughout their time in the program; of these, one adopted a frequent and consistent survey dissemination

schedule, targeting students annually at entry, midpoint, and exit to gather baseline, formative, and summative feedback. This systematic collection of formative and summative data enables the program to rapidly capitalize on opportunities to improve student learning and program quality.

Some programs reported student leadership in systematic planning processes, including student-run surveys, student-led meetings, and student-elected representation in program governance. Relatedly, programs did not commonly use student advisory boards, but this form of student leadership in governance had the strongest outcomes. Similar examples of student leadership in planning and assessment activities were also present in the literature (e.g. Banta & Palomba, 2015; Creel & Pollicino, 2012; Davis et al., 2014; Hackney, 2015; Zingarelli-Sweet, 2014). These approach to student engagement serve dual purposes: Programs benefit from in-depth student engagement in systematic planning and students learn and apply the administrative, analytical, and communication skills they need as future information professionals. Broader adoption of these types of student engagement practices can support mutually beneficial outcomes for students and their programs (Lieutenant, 2018).

Program Changes

Results suggest that programs are more likely to implement certain types of changes based on student engagement. There may be legitimate extenuating circumstances and challenges that limit certain types of programmatic changes; for example, funding cuts or limited institutional resources can hinder changes to program administration and finance. It is unclear whether the limited number of changes made to faculty affairs, administration and finance, and mission, goals, and objectives stem from external institution-wide restraints or internal resistance from within the academic unit.

Programs implemented a mean 11.2 changes based on student engagement, but some of these changes were relatively minor. For example, in reporting changes implemented based on student engagement, one program highlighted installing new bulletin boards in their common area, while another program characterized their year-long course renumbering process as a “bold step.” While these programs and their students may consider new bulletin boards and course numbers beneficial, student engagement in systematic planning should lead to more robust and meaningful outcomes. Reports of minor changes may be indicative of issues of deeper concerns, such as superficial systematic planning activities, stagnant decision-making processes, or unengaged constituencies.

Relationships Between Methods and Changes

Constituent engagement should support “broad-based, continuous program planning, development, and improvement” (ALA, 1992), but it is unclear how responsive programs are to their student constituents. Less commonly used methods, including comprehensive current student surveys, interviews, and focus groups, demonstrated strong outcomes. Broader adoption of these less commonly used methods could result in more fruitful student engagement outcomes. Interestingly, course evaluations also demonstrated strong outcomes, even though students question the effectiveness of this engagement method (Spencer & Schmelkin, 2002; Wachtel, 1998).

Programs commonly included student representation in program governance, but this student engagement method demonstrated generally weak outcomes. This may be due to several factors. Only a few students can participate in program governance and student representation was sometimes limited to governance bodies with relatively minor responsibilities. Furthermore, governance bodies that engage in consensus-based decision-making may not directly attribute specific outcomes to their student representatives. A shared governance approach with representation from key constituency groups, including students, may support more democratic decision-making processes and improved outcomes (Heaney, 2010; Menon, 2003).

Future Research

While most programs reported implementing changes based on student engagement, some of these changes were relatively minor in scope. Similarly, LIS education scholars rarely discussed how their research findings resulted in changes to their own programs and practices. Additional research is necessary to determine the extent to which LIS programs are using student engagement to inform program decision-making and implement changes. Future research could also explore how higher education programs in other disciplines engage students in systematic planning, how programs engage other constituency groups, and how responsive programs are to other constituency groups.

Conclusion

Student-centered education requires the inclusion of student voices, perspectives, and needs in educational planning, assessment, and decision-making processes. As opposed to gathering the most convenient or quantifiable data points, student engagement methods should provide actionable information that motivates changes and improvements to educational programs and practices. Programs can use this study's findings to adapt their systematic planning processes to be more inclusive of and responsive to their students. Higher education programs must be prepared to adapt and evolve to meet the needs of current and future students. To do so, students must be deeply and meaningfully engaged in systematic program planning and support the development and improvement of their own educational programs.

References

Aharony, N., & Raban, D. R. (2008). Economics of information goods: An interdisciplinary subject for Israeli LIS and MBA curricula. *Library & Information Science Research, 30*(2), 102–107. http://dx.doi.org/10.1016/j.lisr.2007.07.005

American Library Association. (1992). *Standards for accreditation of master's programs in library and information studies*. Retrieved from http://www.ala.org/educationcareers/accreditedprograms/standards/standards

American Library Association. (2006). *Accreditation frequently asked questions*. Retrieved from http://www.ala.org/educationcareers/accreditedprograms/faq.

American Library Association. (2008). *Standards for accreditation of master's programs in library and information studies*. Retrieved from http://www.ala.org/educationcareers/sites/ala.org.educationcareers/files/content/standards/standards_2008.pdf

American Library Association. (2015a). *Accreditation process, policies, and procedures manual* (4th ed.). Retrieved from http://www.ala.org/educationcareers/accreditedprograms/standards/AP3

American Library Association. (2015b). *Standards for accreditation of master's programs in library and information studies*. Retrieved from http://www.ala.org/educationcareers/sites/ala.org.educationcareers/files/content/standards/Standards_2015_adopted_02-02-15.pdf

American Library Association. (2018). *Directory of ALA-accredited and candidate programs in library and information studies*. Retrieved from http://www.ala.org/educationcareers/accreditedprograms/directory.

American Library Association. (n.d.). Sample self-studies. Retrieved from http://www.ala.org/educationcareers/accreditedprograms/resourcesforprogramadministrators/onlinepp

Applegate, R. (2006). Student learning outcomes assessment and LIS program presentations. *Journal of Education for Library and Information Science, 47*(4), 324–336. http://dx.doi.org/10.2307/40323824

Association for Library and Information Science Education. (2017). *ALISE statistical report 2017* [Data set]. Retrieved from https://www.alise.org/statistical-reports-2.

Banta, T. W. & Palomba, C. A. (2015). *Assessment essentials: Planning, implementing, and improving assessment in higher education* (2nd ed.). San Francisco, CA: Jossey Bass.

Becnel, K., Moeller, R. A., & Pope, J. C. (2016). Powerful partnerships: The worth of embedding masters level library science students in undergraduate classes. *Journal of Education for Library and Information Science, 57*(1), 31–42. Retrieved from https://utpjournals.press/toc/jelis/57/1

Berry, J. (1999). Students sound off about their schools. *Library Journal, 124*(18), 46–48.

Burnett, K., Bonnici, L. J., Miksa, S. D., & Kim, J. (2007). Frequency, intensity, and topicality in online learning: An exploration of the interaction dimensions that contribute to student satisfaction in online learning. *Journal of Education for Library and Information Science, 48*(1), 21–35. Retrieved from http://www.jstor.org/stable/40324318

Caidi, N., & Dali, K. (2015). Can we talk? Perceptions of diversity issues by students with diverse backgrounds, and a rumination on personal roads to systemic change. *New Library World, 116*(11/12), 748–780. http://dx.doi.org/10.1108/nlw-08-2015-0056

Carey, J. O., & Gregory, V. L. (2003). Toward improving student learning: Policy issues and design structures in course-level outcomes assessment. *Assessment &*

Evaluation in Higher Education, 28(3), 215–227. http://dx.doi.org/10.1080/0260293032000059586

Cherry, J. M., Freund, L., & Duff, W. M. (2013). Students' perceptions of information programs in Canada. *Journal of Education for Library and Information Science, 54*(3), 174–190. Retrieved from http://www.jstor.org/stable/43686947

Chow, A. S., Shaw, T. L., Gwynn, D., Martensen, D., & Howard, M. (2011). Changing times and requirements: Implications for LIS education. *LIBRES: Library and Information Science Research Electronic Journal, 21*(1), 1–23. Retrieved from https://www.libres-ejournal.info/1038/

Chu, C. M. (2009). Working from within: Critical service learning as core learning in the MLIS curriculum. In L. Roy, K. Jensen, & A. H. Meyers (Eds.), *Service learning: Linking library education and practice* (pp. 105–123). Chicago, IL: American Library Association.

Committee on Accreditation. (2007). *Updating the 1992 Standards for Accreditation of Master's Programs in Library and Information Studies*. Retrieved from http://www.ala.org/aboutala/sites/ala.org.aboutala/files/content/governance/council/council_documents/2007_2008_council_docus/accreditationstandard47_47.1.pdf

Conant, R. W. (1980). *The Conant report: A study of the education of librarians*. Cambridge, MA: MIT Press.

Cooke, N. A., & Jacobs, J. A. (2018). Diversity and cultural competence in the LIS classroom: A curriculum audit. *Urban Library Journal, 24*(1), 1–19. Retrieved from https://academicworks.cuny.edu/ulj/vol24/iss1/2

Cooke, N. A., Sweeney, M. E., & Noble, S. U. (2016). Social justice as topic and tool: An attempt to transform an LIS curriculum and culture. *The Library Quarterly, 86*(1) 107–124. http://dx.doi.org/10.1086/684147

Council for Higher Education Accreditation. (2018). *2018-2019 directory of CHEA-recognized organizations*. Retrieved from https://www.chea.org/2018-2019-directory-chea-recognized-organizations-pdf.

Creel, S. L., & Pollicino, E. B. (2012). Practitioners' & LIS students' perceptions on preparedness in the New York metropolitan area. *Education for Information, 29*(1), 53–69. http://dx.doi.org/10.3233/efi-2010-0911

Crissinger, S. (2015, Jan 23). Students taking back the conversation: The 2015 LIS Symposium on Education [Blog post]. Retrieved from http://acrlog.org/2015/01/23/students-taking-back-the-conversation-the-2015-lis-symposium-on-education/

Cunha, N. (2016, May 5). DERAIL sparks conversation. *The Simmons Voice, 96*(23). Retrieved from https://simmonsvoice.com/2016/05/05/derail-sparks-conversation/

Curran, C., Bajjaly, S., Feehan, P., & O'Neill, A. L. (1998). Using focus groups to gather information for LIS curriculum review. *Journal of Education for Library and Information Science, 39*(3), 175–182. http://dx.doi.org/10.2307/40324153

Dali, K., & Caidi, N. (2016). A two-way street: Building the recruitment narrative in LIS programs. *New Library World, 117*(7/8), 499–539. http://dx.doi.org/10.1108/NLW-03-2016-0020

Davis, C. E., Juengling, L. B., Laurent, R. D., Pye, N., & Williamson, J. (2014). Student chapters: Meeting expectations and providing high quality experiences. *Journal of Education for Library and Information Science, 55*(1), 69–82. Retrieved from http://www.jstor.org/stable/43686968

Dow, E. H. (2011). LIS learning culture: Identifying disaffected students. *Journal of Education for Library and Information Science, 52*(1), 32–40. Retrieved from http://www.jstor.org/stable/25764652

Dow, M. (2008). Implications of social presence for online learning: A case study of MLS students. *Journal of Education for Library and Information Science, 49*(4), 231–242. Retrieved from http://www.jstor.org/stable/40323753

Evans, A., Dresang, E., Campana, K., & Feldman, E. (2013). Research in action: Taking classroom learning to the field. *Journal of Education for Library and Information Science, 54*(3), 244–252. Retrieved from http://www.jstor.org/stable/43686952

Fleischmann, K. R., Robbins, R. W., & Wallace, W. A. (2009). Designing educational cases for intercultural information ethics: The importance of diversity, perspectives, values, and pluralism. *Journal of Education for Library and Information Science, 50*(1), 4–14. Retrieved from http://www.jstor.org/stable/40732558

Freelon, D. (2010). ReCal: Intercoder reliability calculation as a web service. *International Journal of Internet Science, 5*(1), 20–33. Retrieved from http://www.ijis.net/ijis5_1/ijis5_1_index.html

Frey, B. A., Alman, S. W., Barron, D., & Steffens, A. (2004). Student satisfaction with the online MLIS program at the University of Pittsburgh. *Journal of Education for Library and Information Science, 45*(2), 82–97. http://dx.doi.org/10.2307/40323896

Hackney, S. (2015, Oct 12). SILSSA and the School of Information [Blog post]. Retrieved from http://pala.prattsi.org/silssa-and-the-school-of-information/

Hanson-Baldauf, D., & Hassell, S. H. (2009). The information and communication technology competencies of students enrolled in school library media certification programs. *Library & Information Science Research, 31*(1), 3–11. http://dx.doi.org/10.1016/j.lisr.2008.03.003

Harhai, M., & Krueger, J. (2015). Developing competency-based assessment for library professionals. *Pennsylvania Libraries: Research & Practice, 3*(1), 14–28. http://dx.doi.org/10.5195/palrap.2015.81

Heaney, T. (2010). Democracy, shared governance, and the university. *New Directions for Adult and Continuing Education, 2010*(128), 69-79. http://dx.doi.org/10.1002/ace.392

Heim, K. M., & Moen, W. E. (1989). *Occupational entry: Library and information science student's attitudes, demographics, and aspirations survey*. Chicago, IL: American Library Association.

Helregel, N. (2014, Dec 11). Administrative transparency & LIS education [Blog post]. Retrieved from https://hacklibraryschool.com/2014/12/11/administrative-transparency-lis-education/

Jardine, F. (2016). The role of students in diversity and inclusion in library and information science. In P. T. Jaeger & J. C. Bertot (Series Eds.), *Advances in Librarianship: Vol. 41. Perspectives on libraries as institutions of human rights and social justice* (U. Gorham, N. G. Taylor, & P. T. Jaeger, Eds., pp. 399–416). http://dx.doi.org/10.1108/s0065-283020160000041016

Kealey, E. (2010). Assessment and evaluation in social work education: Formative and summative approaches. *Journal of Teaching in Social Work, 30*(1), 64–74. http://dx.doi.org/10.1080/08841230903479557

Kim, K., & Sin, S. J. (2006). Recruiting and retaining students of color in LIS programs: Perspectives of library and information professionals. *Journal of Education for Library and Information Science, 47*(2), 81–95. http://dx.doi.org/10.2307/40324324

Kim, K., & Sin, S. J. (2008). Increasing ethnic diversity in LIS: Strategies suggested by librarians of color. *The Library Quarterly, 78*(2), 153–177. http://dx.doi.org/10.1086/528887

Kingma, B., & Keefe, S. (2006). An analysis of the virtual classroom: Does size matter? Do residencies make a difference? Should you hire that instructional designer? *Journal of Education for Library and Information Science, 47*(2), 127–143. http://dx.doi.org/10.2307/40324327

Krippendorff, K. (2013). *Content analysis: An introduction to its methodology*. (3rd ed.). Thousand Oaks, CA: Sage Publications.

Lieutenant, E. (2015, January). *Whose education is it anyway? Student engagement in LIS program assessment and evaluation*. Poster session presented at the meeting of the Association for Library and Information Science Education, Boston, MA. http://dx.doi.org/10.13140/RG.2.1.2354.5684

Lieutenant, E. (2018). Student engagement for student learning: Preparing inclusive and impactful change agents through high-impact student engagement practices. In P. T. Jaeger (Series Eds.), *Advances in Librarianship: Vol. 44a. Re-envisioning the MLS: Perspectives on the future of library and information science education* (J.

Percell, L. C. Sarin, P. T. Jaeger, & J. C. Bertot, Eds., pp. 119–138). http://dx.doi.org/10.1108/S0065-28302018000044A012

Lieutenant, E., & Inge, L. (2016, March). *Student leaders, student-teachers: Embedding diversity into LIS education through iDiversity's curriculum development project*. Presentation at the Diversity, Equity, Race, Accessibility, and Identity in LIS Forum, Boston, MA. http://dx.doi.org/10.13140/RG.2.1.3641.7682

Lieutenant, E., & Kules, B. (2016). Analysis of LIS student engagement in systematic program planning: Preliminary results. In X. Lin & M. Khoo (Eds.), *iConference 2016 Proceedings* (pp. 1–7). http://dx.doi.org/10.9776/16228

Menon, M. E. (2003). Student involvement in university governance: A need for negotiated educational aims? *Tertiary Education and Management, 9*(3), 233–246. http://dx.doi.org/10.1080/13583883.2003.9967106

Mitchell, E. (2013). Reflective course construction: An analysis of student feedback and its role in curricular design. *Education for Information, 30*(3–4), 149–166. http://dx.doi.org/10.3233/efi-130942

Montague, R., & Pluzhenskaia, M. (2007). Web-Based information science education (WISE): Collaboration to explore and expand quality in LIS online education. *Journal of Education for Library and Information Science, 48*(1), 36–51. Retrieved from http://www.jstor.org/stable/40324319

Noble, S. U., Austin, J., Sweeney, M. E., McKeever, L., & Sullivan, E. (2014). Changing course: Collaborative reflections of teaching/taking "Race, Gender, and Sexuality in the Information Professions." *Journal of Education for Library and Information Science, 55*(3), 212–222. Retrieved from http://www.jstor.org/stable/43686984

Oguz, F., Chu, C. M., & Chow, A. S. (2015). Studying online: Student motivations and experiences in ALA-accredited LIS programs. *Journal of Education for Library and Information Science, 56*(3), 213–231. Retrieved from https://utpjournals.press/toc/jelis/56/3

Oxley, R. (2013). iDiversity and LIS education: Student-based groups promoting cultural competence as a vision for the profession. *The Library Quarterly, 83*(3), 236–242. http://dx.doi.org/10.1086/670698

Price, K. (Ed.). (2018). Accreditation at a glance. *Prism: The Office for Accreditation Newsletter, 26*(1). Retrieved from http://www.ala.org/aboutala/offices/accreditation/prp/prism/prism_current.

Saunders, L. (2016, Jan 27). How today's library science students are working to fight oppression [Blog post]. Retrieved from http://slis.simmons.edu/blogs/unbound/2016/01/27/fighting-oppression-as-an-lis-student/

Schilling, K. (2009). The impact of multimedia course enhancements on student learning outcomes. *Journal of Education for Library and Information Science, 50*(4), 214–225. Retrieved from http://www.jstor.org/stable/40732584

Scott, W. A. (1955). Reliability of content analysis: The case of nominal scale coding. *Public Opinion Quarterly, 19*(3), 321–325. http://dx.doi.org/10.1086/266577

Shannon, D. M. (2008). School library media preparation program review: Perspectives of two stakeholder groups. *Journal of Education for Library and Information Science, 49*(1), 23–42. Retrieved from http://www.jstor.org/stable/40323785

Spencer, K. J., & Schmelkin, L. P. (2002). Student perspectives on teaching and its evaluation. *Assessment & Evaluation in Higher Education, 27*(5), 397-409. http://dx.doi.org/10.1080/0260293022000009285

Stansbury, M. (2015). From the COA chair: Perspective. *Prism: The Office for Accreditation newsletter, 23*(1), 8-9. Retrieved from http://www.ala.org/aboutala/offices/accreditation/prp/prism/prismarchive/prismarchive

Stephens, M. (2011). The transparent library school. *Library Journal, 136*(9), 46. Retrieved from https://lj.libraryjournal.com/2011/05/opinion/michael-stephens/the-transparent-library-school-office-hours/

Wachtel, H. K. (1998). Student evaluation of college teaching effectiveness: A brief review. *Assessment and Evaluation in Higher Education, 23*(2), 191–211. http://dx.doi.org/10.1080/0260293980230207

Wolske, M., Rhinesmith, C., & Kumar, B. (2014). Community informatics studio: Designing experiential learning to support teaching, research, and practice. *Journal of Education for Library and Information Science, 52*(2), 166–177. Retrieved from http://www.jstor.org/stable/43686978

Yukawa, J. (2010). Communities of practice for blended learning: Toward an integrated model for LIS education. *Journal of Education for Library and Information Science, 51*(2), 54–75. Retrieved from http://www.jstor.org/stable/20720485

Zingarelli-Sweet, A. S. (2014, March 13). You, too, can be a change agent [Blog post]. Retrieved from https://hacklibraryschool.com/2014/03/13/you-too-can-be-a-change-agent/