

Portfolio Impact Essays Assessment Report February 2022

General Introduction

A portfolio with a satisfactory grade is a graduation requirement for all students entering the MS in Information and Library Science program, as of Summer/Fall 2012. The study planner and portfolio serves as a tool for planning the student’s program of study and, upon completion of the program, demonstrates the meeting of program learning objectives as well as the student’s educational and professional goals. The portfolio is intended to focus on the student’s knowledge of the Library and Information Science (LIS) field and on professional competencies developed in both required and elective courses. Students can use their program portfolio as a springboard for producing a professional portfolio, a tool that is common in the job application process.

MS in LIS students submitted a total of 225 student portfolios between Fall 2017 and Fall 2021. In January 2022, the impact essays from these portfolios were analyzed for student mentions of particular LIS courses, technologies, topics of interest, stated career paths, career goal changes, conferences attended, associations, leadership roles, and professional experiences. In addition, a writing engagement score was coded.

Note that in 2017, there was a restructuring of the LIS program, with a substantive change in the core course load from five required courses (505, 506, 518, 571, and 581) to three required courses (507, 508, and 575). When relevant, the impact of these changes is noted in the report.

Table 1: Courses Mentioned Most by Impact Essays

Course	Impact Essay Mentions (% <i>n</i>)
<i>Required for students who entered before Summer 2017</i>	
505 Introduction to Library and Information Studies	13% (n=29)
506 Introduction to Information Technology	12% (n=28)
518 Reference Sources and Services	33% (n=75)
571 Information Organization	17% (n=38)
581 Management of Library & Information Agencies	16% (n=37)
<i>Required for students who entered Summer 2017 or after</i>	
507 Information Life Cycle	30% (n=67)
508 Information Users and Uses	34% (n=76)
575 Introduction to Research Methods	34% (n=76)
<i>Elective</i>	
503 Information and Librarian Professions	4% (n=10)
503 Diverse Users	5% (n=11)

503 Scholarly Communication	13% (n=29)
503 Archival Description	8% (n=18)
503 Web Development	8% (n=18)
509 Introduction to Archives Management	13% (n=30)
513 Records Management	12% (n=26)
514 Conceptualizing and Representing Information	6% (n=14)
523 User Education	12% (n=27)
526 Practicum	12% (n=28)
534 Resources and Services for Children	22% (n=49)
535 Resources and Services for Young Adults	17% (n=39)
536 Multicultural and Special Population Materials for Children and Young Adults	12% (n=26)
560 Emerging Technologies	10% (n=22)
563 Digital Libraries	16% (n=37)
566 Information Search	18% (n=40)
569 Database Systems	8% (n=19)
587 Collection Development	31% (n=70)
588 Music Librarianship I	5% (n=12)

There were a total of 1055 student mentions across all 58 LIS courses mentioned, yielding a mean of 18 mentions per course.

Table 1 displays the raw number of impact essays that mentioned each of 27 courses which received at least 10 student mentions, and the percentage of all of the essays that mentioned these courses. The totals here represent the sum of all student mentions for each course. Note that even if one student had mentioned a course more than once, the course is only considered to have been mentioned once by this student.

There are two groups of core courses. Depending on when the student began the MS, they would have been required to take five core courses (505, 506, 518, 571, and 581 if they entered before Summer 2017) or three core courses (507, 508, and 575 if they entered Summer 2017 or after). For the latter cohort, 518, 571, and 581 would serve as electives and were often mentioned as such. However, 505 and 506 were no longer offered after the change in program design. Also note that in addition to the expected discrepancy between required and elective courses, different courses are offered more or less frequently than others, which is a limitation to comparing the frequency of course mentions.

Of all courses mentioned by students, some stand out as having the most mentions. Core courses, as a group, are perhaps to be expected to have the greatest number of mentions, since each student in the LIS program will have gone through these courses by the time they submit their portfolio. The total number of impact essay mentions for all core courses (505, 506, 507, 508, 518, 571, 575, and 581) was 426 for a mean of 1.9 mentions of a core course per impact essay. From Fall 2017 through the Fall 2021, LIS 518 (33%), LIS 508 (34%), and LIS 575 (34%) were most frequently mentioned.

Out of a total of 50 electives that were mentioned across the 225 impact essays, 19 were mentioned at least 10 times, as shown in Table 1. The elective with the most mentions is LIS 587 (31%), which significantly has more mentions than some of the required courses. Other electives mentioned frequently are LIS 534 (22%), LIS 566 (18%), LIS 535 (17%), and LIS 563 (16%).

Table 2: Electives mentioned between 5 and 9 times by Impact Essays

Course	Impact Essay Mentions (% ,n)
503 Diversity, Equity, and Inclusion in Libraries	3% (n=6)
503 History and Role of Libraries as Social Actors	2% (n=5)
503 International Libraries	3% (n=6)
503 XML and Metadata	2% (n=5)
503 Computer Programming for Libraries	3% (n=6)
524 School Media Center Field Experience	2% (n=5)
531 Marketing of Information Services	2% (n=5)
538 Pedagogy for School Librarians	3% (n=6)
567 Government Information	4% (n=9)
586 Health Sciences Librarianship	3% (n=7)

It is important to point out that 31 electives, or 53% of all courses mentioned in the impact essays are not represented in Table 1 because they had fewer than 10 mentions. This speaks to the diversity of course offerings and eclectic interests of LIS students. To feature some of these courses, Table 2 displays 10 courses that were mentioned by impact essays between 5 and 9 times. These courses may have been offered only one or two times, but nonetheless had an impact on students who took them.

Table 3: Technologies Mentioned Most by Students

Technology	Impact Essay Mentions (category represented)	Impact Essay Mentions (total technologies count)
LIS-specific tools & databases	40% (n=90)	151
Multimedia presentation, communication, and social media tools	16% (n=36)	55
General web design, programming languages, data analysis and search tools	28% (n=62)	116
Technology from any category	55% (n=124)	332

A total of 124 (55%) of all impact essays mentioned learning a variety of new technologies throughout the course of the program. Table 3 illustrates the total number of technologies mentioned by students in each of three technology categories listed in the table. Some students mentioned technologies from only one category, while others mentioned technologies from all three categories. In the coding phase, the number of technologies a student mentioned in their

essay was represented by a tally enumerating all of the technologies mentioned. These mentions were then allocated into the three technology categories seen here.

The numbers provided in the table denote sums of student mentions in the respective technology category. While some students did not mention any of the technologies grouped under a given category, other students mentioned technology from a given category multiple times. A mention of one technology in one category does not preclude mentions of other technologies in the same or different categories. Only 10 essays (4%) mentioned at least one technology from all three categories.

Overall, 151 student mentions were made of LIS-specific technologies, which encompass the following: ALEPH, Alma, ArchivesSpace, Ask-a-librarian, Boolean, BSCAN, CONTENTdm, Controlled Vocabulary, Dewey, Digitization tools, Discovery systems, Document Delivery, DSpace, Dublin Core, Endnote, ExLibris, Films On Demand, FRBR, Google Scholar, Greenstone, ILLiad, Journal Citation Reports, Kanopy, LCSH, Libguides, MARC(21), metadata fields, non-specific digital repositories, nonspecific ILS, non-specific library databases, OCLC, OCLC Connexion, OER, Omeka, OPACs, PsycInfo, PubMed, RDA, reference chat, Sage, ScanPro 3000, Science Direct, Smart Learning Spaces, Ulrich's Web, Virtual Reference System, and Zotero.

There were 55 total student mentions of multimedia presentation, communication, and social media tools, which category encompasses the following: Adobe Photoshop, Camtasia, Canva, edX MOOC, Facebook, Google Drive, Google Meet, MS PowerPoint, MS Word, non-specific presentation tools, non-specific social media, non-specific virtual meeting tools, Piktochart, Pinterest, Prezi, Snapchat, Timeline JS, Wiki and Zoom.

There were 116 total student mentions of general web design, programming languages, data analysis and search tools, which category includes: CSS, data visualization, FileZilla, GeoJSON, HTML, Islandora, JavaScript, JSON, MS Access, Python, non-specific coding or programming languages, non-specific web design, NVivo, SQL, Tableau, TEI, WordPress, and XML.

While the LIS Department Mission Statement specifies a “focus on the intersection of people, information and technology,” the LIS program goals do not make explicit mention of technology as such.¹ Technology implicitly factors into all four of the department’s goals, however, so the appearance of the technologies identified in essays could point to any of the program’s goals. That said, it might be argued that technologies in the LIS-Specific category align with goals 1 and 2 more strongly, whereas the technologies listed under “Multimedia presentation, communication, and social media tools” and “General web design, programming languages, data analysis and search tools” more readily translate to goal 3 applications, since they apply to communication more generally.

¹ University at Buffalo, Department of Library and Information Studies Mission and Goals (revised 1/29/2021). <http://ed.buffalo.edu/information/about/mission.html>

Table 4: Topics of Interest Mentioned Most by Students

Topic of Interest	Impact Essay Mentions (%, n)
Literacy, Instruction, Programming/Outreach, Lifelong Learning	66% (n=149)
Reference	52% (n=117)
Children and Youth Services	42% (n=94)
Diversity, Equity, and Inclusion	36% (n=80)
Access Issues (OER, Open Access, Censorship)	25% (n=79)
Cataloging, Metadata, Information Systems	29% (n=66)
Archives, Preservation, Records Management	28% (n=64)
Acquisitions/Collections, Needs Assessment	25% (n=56)
Management, Marketing, Budget	19% (n=43)
Activism, Advocacy	18% (n=40)
Subject Librarianship	16% (n=37)
Research, Data analysis	14% (n=31)
Museums and/or public history	11% (n=25)
Emerging Technologies	9% (n=21)
Resource Sharing / ILL	3% (n=7)
International / Global Libraries	3% (n=7)
General Assessment Practices	3% (n=7)

Table 4 depicts topics of interest mentioned at least 20 times in the impact essays. Essays usually mentioned more than one topic of interest, and all mentioned interests were counted. A topic was counted as a topic of interest if a student mentioned it as an area of LIS that they were particularly interested in throughout the course of their studies and / or planned on staying engaged with moving forward, whether or not it is directly related to their current career path. Seventeen of these topics of interest were identified, and all are included in this table. The topic of interest most mentioned is “Literacy, Instruction, Programming/Outreach, Lifelong Learning” and 149 essays (66% of all essays) made mention of it. Following this by number of mentions is “Reference” with 117 essays (52%) making mention of it. The least represented topics of interest were “Resource Sharing / ILL,” “International / Global Libraries,” and “General Assessment Practices” with 7 mentions each. Notably, “Diversity, Equity, and Inclusion” is a topic of interest not represented on the previous version of this report, but is now a top interest, represented in 80 essays, or 36% of all essays submitted.

While these topics of interest may not speak to the meeting of program goals per se, they may be a valuable source of information if they are viewed as topics that students have identified as significant as a result of their time in the program, or leave the program wanting to know more about. Perhaps the strong interest in “Literacy, Instruction, Programming/Outreach, Lifelong

Learning” is a result of the LIS program, or perhaps UB’s LIS program attracts students that identify an interest in this topic.

Table 5: Stated Career Paths Mentioned Most by Students

Stated Career Path	Impact Essay Mentions (%, n)
Public Librarian	54% (n=122)
Academic or Special Librarian	33% (n=74)
Archives and Preservation	14% (n=32)
Reference	13% (n=30)
Museums or Public History	7% (n=16)
Cataloging, Metadata, Information Systems	6% (n=14)
Scholar / Researcher	6% (n=13)

Table 5 describes the seven career paths (of 14) mentioned by at least 10 impact essays. Career paths were not mutually exclusive; an essay could be coded as mentioning more than one career path, but could not be coded as mentioning a single career path twice.

Of all coded career paths, the “Public Librarian” career path was the most strongly represented, receiving a mention in each of 122 essays, or in 54% of all essays. Following this, “Academic or Special Librarian” received a mention in each of 74 essays, or in 33% of all essays. Career Paths with the fewest mentions and not displayed in Table 5 were “Health Sciences Librarian” (4%, n=9), “Corporate Librarian” (3%, n=7), “School Librarian”² (3%, n=7), “Law Librarian” (2%, n=5), “Government Librarian” (2%, n=4), “Music Librarian” (2%, n=4), and “Military Base Librarian” (0%, n=1).

Many students mentioned changing career goals over the course of their studies. For the whole body of students for this period, we found that 81 students (36% of the total) expressed a change in their career goals during their studies. These changes include a change of interest from one type of library to another (from academic to public, for example), or a significant change of direction from one type of librarianship to another, even within the same library (from cataloging to children’s services, for example). If a change in career goals was noted, only the career goal at the time of writing the essay was included as the “Stated Career Path.”

Career goals themselves have little to do with the goals of the LIS program; neither the LIS Department mission nor the LIS Department goals prescribe any career path beyond graduation.

² Students in the MS in School Librarianship program do not complete this portfolio, so mention of school librarianship in this context would likely refer to career considerations or a change in focus from school librarianship to the more general MS in Information and Library Science program, or to school librarianship in a private school or state other than New York.

Conferences

The “conferences” category describes the number of students that mentioned in their essay attending at least one conference during their time as a student in the LIS Department. Overall, only 14 students (6%) made mention of attending a conference. It appears that students either rarely attended conferences, or did not care to mention attended conferences in their essays. If attending professional conferences is considered to be one of the “behaviors associated with the roles and responsibilities of information and library professionals,” then there is opportunity to encourage students to attend conferences, in accordance with goal 4.³

Associations

The “associations” category describes the number of essays in which students mentioned professional associations. A total of 34 students (15%) mentioned at least one association. Of these, 22, or 65%, mentioned only one association, and 12, or 35%, mentioned two or more associations. Twenty-three associations were mentioned altogether, and the American Library Association was the most commonly represented association in student essays, having been mentioned 13 times. Similar to conferences, membership in an association might testify to participation in goal 4 of the program, but is not explicitly named in the department’s mission or goals. The relatively low proportion of students mentioning a professional association provides an opportunity for the department to encourage this in future.

Leadership

The “leadership” category describes the number of essays in which students mentioned a leadership role. A total of 22 students (10%), mentioned at least one leadership experience. Goal 3 of the department explicitly discusses leadership: “Graduates demonstrate professional competences, including leadership.”⁴ We believe that goal 3 allows for an interpretation wherein the students who did not mention leadership experiences still met goal 3 objectives through “critical and analytical thinking, research, communication, collaboration, reflective practice, and ethical adherence.”⁵ This finding suggests that students could be encouraged to more explicitly refer to all aspects of goal 3 in their essays.

Service to the Profession

Altogether, 55 students (24%) mentioned at least one conference, association, or leadership experience in their essays. This number is useful in understanding how many students mentioned service to the profession in some form, as represented by grouping together the Conferences, Associations, or Leadership categories as a whole.

³ LIS Mission and Goals, <http://ed.buffalo.edu/information/about/mission.html>

⁴ Ibid.

⁵ Ibid.

Table 6: Professional Experiences Mentioned Most by Students

Professional Experience	Impact Essay Mentions(% , n)
Public Library	44% (n=100)
Academic Libraries	24% (n=53)
Children and Youth Services	16% (n=35)
Reference	12% (n= 27)
Museum, Public History, Park Service, or Arts Center	9% (n=20)
Special Libraries / Special Collections	8% (n=19)
Archive Projects	7% (n=15)
Cataloging, Metadata, Information Systems	5% (n=11)
School Library	4% (n=10)

Table 6 describes the number and percentage of students who mentioned one of 17 professional experiences in their essays. The nine categories with at least 10 mentions are included in the table. In the coding phase, 17 discrete professional experience categories were identified, and a given student may have expressed having professional experience in more than one area.

A total of 100 students (44%) mentioned having professional experience in a public library, followed by 53 students, or 24%, who mentioned having professional experience in an academic library. Professional experiences with fewer than 10 mentions include Law Library (3%, n=6), Research Project (2%, n=5), Grant Writing (2%, n=4), and Health Sciences Library (1%, n=3).

Table 7: Professional Experiences by Semester of Portfolio Submission

Semester of Portfolio Submission	Total Impact Essays	Impact Essay Mentions (% , n)
Fall 2017	21	86% (n=18)
Spring 2018	29	86% (n=25)
Summer 2018	4	75% (n=3)
Fall 2018	25	80% (n=20)
Spring 2019	33	73% (n=24)
Summer 2019	1	100% (n=1)
Fall 2019	15	80% (n=12)
Spring 2020	21	95% (n=20)
Fall 2020*	17	59% (n=10)
Spring 2021	33	73% (n=24)
Fall 2021	28	71% (n=20)
Total Fall 2017-Fall 2021	225	79% (n=177)

*A possible impact of Covid-19 is the reduction in mentions of professional experiences seen especially in those students who submitted portfolios in Fall 2020.

In all, 79% (n=177) of students mentioned having some form of professional experience during the course of their studies. Table 7 shows how these mentions are divided up amongst students who wrote their essays in each semester. The lowest numbers of professional experiences can be seen among the students who wrote their essays in Fall 2020 (59%), with lower percentages also present in Spring 2021 (73%) and Fall 2021 (71%). Although the essays were not coded for mentions of Covid-19 impacts, there is an observable reduction in professional experiences mentioned in essays that were completed in Fall 2020 and beyond. Despite the probable impact of Covid-19, a majority of students were still able to have professional experiences during their time in the program.

Goals 3 and 4 recommend students graduate with professional experience already under their belts, and, despite library closures and other impacts to libraries due to Covid-19, a majority of students spoke of such an experience in their essays in every semester from Fall 2017 to Fall 2021.

Average Writing Engagement Score

The “Average Writing Engagement Score” is a measurement of how engaged a student was in the writing of their essay. This was not a formal grade, but rather a subjective assessment of perceived interest, motivation, or engagement with which students composed their essays. Essays could be scored 1 (low engagement), 2 (satisfactory engagement), or 3 (high engagement). The mean score for all students was 2.6.

While engagement in writing an essay may not be a value explicitly mentioned by the department mission or goals, an artifact of engaged writing testifies to a student’s ability to communicate, which is mentioned in goal 3. According to this analysis, the trend of the student body is to produce an essay that in its presentation testifies to their ability to communicate, with 64% (n=145) scoring “high engagement,” and 1% (n=3), scoring “low engagement.”

Summary

Here is a summary of main points that emerge from the data:

- There is a total of 58 courses mentioned, and no courses were mentioned in more than 34% of impact essays.
- 53% of these mentioned courses were mentioned in 9 or fewer impact essays.
- 55% of students mentioned learning about at least one new technology, with most of the mentioned technologies in the “LIS-specific tools and databases” category.
- The topic of interest most mentioned was “Literacy, Instruction, Programming/Outreach, Lifelong Learning” (66%, n=149), followed by “Reference” (52%, n=117).
- Notably, “Diversity, Equity, and Inclusion” (36%, n=80) is a topic of interest not represented on the previous version of this report, but is now the fourth most mentioned.
- Of all coded career paths, the “Public Librarian” career path was the most strongly represented (54%, n=122), followed by “Academic or Special Librarian” (33%, n=74).
- Only 24% (n=55) of students mentioned service to the profession in the form of

- conference attendance, mention of a library association, and/or leadership role.
- The most frequently mentioned professional experience was in a public library (44%, n=100), with the next most frequent being in an academic library (24%, n=53).
 - There was a reduction in mentions of professional experiences in Fall 2020, which is a possible impact of Covid-19.
 - Most students (99%, n=222) scored either “satisfactory engagement” or “high engagement” on their writing engagement score.