

Major Assessment Findings and Curricular Improvements – 2008-2013
School of Library and Information Science
The Catholic University of America

This report summarizes major assessment findings and curricular improvements within the School of Library and Information Science (SLIS) between 2008 and 2013. It addresses our two Master's programs: Master of Science in Library and Information Science (MSLIS) and Master of Science in Information Technology (MS-IT). This report has two appendices: Appendix A provides course data, and Appendix B provides progression and graduation data.

Master of Science in Library and Information Science

Assessment Measures

From 2008-2013, SLIS used the following measures to assess student learning outcomes and related aspect of our curriculum:

1. Grade distributions and course evaluations for the four, core courses (551, 553, 555 and 557)
2. Practicum supervisor ratings of student performance in SLIS practicum courses (i.e., LSC 695A and LSC 695B)
3. Pass rates and analysis of student performance on the comprehensive examination
4. Data analysis of graduation rates
5. Exit surveys of recent graduates
6. Key outcomes assessments from selected courses

Assessment Findings

1. Grade distributions and course evaluations for the four, core courses

The School of Library and Information Science analyzed course grade, evaluation, and enrollment data in the four core courses for a five-year period (Fall 2008 through Summer 2013).

The course distribution data for the four core courses, 551, 553, 555 and 557 is provided in Appendix A. As the data show, the grading distributions are consistent across locations, LSC representing the on-campus section and CLSC representing the off-campus location, and in general, the final grade is consistent regardless of the number of students in the course at any one time.

Core Courses

551	Organization of Information
553	Information Sources and Services
555	Information Systems in Libraries and Information Centers
557	Libraries and Information in Society

The grades demonstrate the extent to which SLIS candidates demonstrate mastery of the course objectives which are derived from the SLIS program objectives

551: Organization of Information

This course introduces students to the basic principles of organizing and representing information for facilitating access based on users' information needs. The course will address how recorded knowledge can be organized and structured, and ways of providing access to the intellectual works. Topics include defining

information; describing and indexing intellectual works; current approaches, standards, tools, and systems in use for information organization; and relationship of information organization to information access

In Fall 2009, the course evaluations showed a noticeable dip. This was reviewed with the instructor, and we determined that it was not an issue with the course itself but we identified issues with how the course was delivered. Subsequently, her teaching evaluations showed improvement.

Table I: 551 Course Evaluations Fall, 2008-Summer, 2013

Year/Semester	Enrollment		Performance		Evaluation	
	On-campus	Off-campus	On-campus	Off-campus	On-campus	Off-campus
2008 Fall	42	7	3.79	4.00	8.5	8.3
2009 Spring	26	n/a	3.86	n/a	7.7	n/a
2009 Summer	10	n/a	3.80	n/a	7.3	n/a
2009 Fall	20	19	3.99	3.98	5.2	6.7
2010 Spring	25	n/a	3.93	n/a	8.0	n/a
2010 Summer	n/a	9	n/a	4.00	n/a	8.4
2010 Fall	46	n/a	3.97	n/a	7.6	n/a
2011 Spring	22	10	3.79	4.00	7.9	9.0
2011 Summer	10	n/a	3.84	n/a	8.4	n/a
2011 Fall	47	n/a	3.94	n/a	n/a	n/a
2012 Spring	14	n/a	3.69	n/a	7.5	n/a
2012 Summer	n/a	8	n/a	4.00	n/a	7.6
2012 Fall	42	n/a	3.82	n/a	7.7	n/a
2013 Spring*	21	n/a	3.86	n/a	6.3	n/a
2013 Summer*	n/a	16	n/a	3.88	n/a	n/a
Mean	27	12	3.86	3.98	7.5	8

Notes:

Performance measured on a 4.00 scale where 4 = A and 0 = F

Evaluation measured on a 10 point scale where 1 = lowest and 10 = highest

*Spring was using a new evaluation form where instructor and course ratings were based on a 7-point scale

553: Information Sources and Services

A solid introduction to the fundamental terminology, concepts, and practices of library public services as well as the skills to deliver them effectively to a variety of information users and within a variety of settings. Special emphasis on the philosophy of reference service, appropriate communications skills for use in instructional settings and reference interviews, standard evaluative criteria for determining fitness of sources to meet information needs, proficient retrieval of information from print and electronic reference sources, policies and procedures for the provision of reference service, and the role of reference and information service departments within an organization.

In Fall 2010, the course evaluations showed a noticeable dip. We determined that this was due to an issue with the adjunct instructor. After consultation, this instructor was not rehired.

Table II: 553 Course Evaluations Fall, 2008-Summer, 2013

Year/Semester	Enrollment		Performance		Evaluation	
	On-campus	Off-campus	On-campus	Off-campus	On-campus	Off-campus
2008 Fall	40	n/a	3.84	n/a	8.6	n/a
2009 Spring	20	19	3.99	3.93	7.5	9.2
2009 Summer	n/a	8	n/a	3.83	n/a	8.7
2009 Fall	24	8	3.78	n/a	8.3	n/a
2010 Spring	24	17	3.87	3.93	8.9	7.9
2010 Summer	16	n/a	3.83	n/a	9.0	n/a
2010 Fall	47	n/a	3.90	n/a	5.4	n/a
2011 Spring	27	n/a	3.77	n/a	7.9	n/a
2011 Summer	n/a	16	n/a	3.98	n/a	8.8
2011 Fall	33	n/a	3.92	n/a	8.0	n/a
2012 Spring	30	n/a	3.70	n/a	8.7	n/a
2012 Summer	7	n/a	3.71	n/a	8.5	n/a
2012 Fall	16	8	n/a	3.86	8.6	9.1
2013 Spring*	35	n/a	3.95	n/a	6.6	n/a
2013 Summer*	21	n/a	3.72	n/a	4.7	n/a
Mean	26	13	3.83	3.91	7.7	8.7

Notes:

Performance measured on a 4.00 scale where 4 = A and 0 = F

Evaluation measured on a 10 point scale where 1 = lowest and 10 = highest

*Spring was using a new evaluation form where instructor and course ratings were based on a 7-point scale

555: Information Systems in Libraries and Information Centers

Introduces students to the evolving role of information systems in the storage and retrieval of information. Students explore how information technology in libraries, archives and information centers, and on the World Wide Web facilitates interaction with information. This course is designed to: Introduce students to applicable theory, principles, and standards; explore the capabilities and functions of several classes of information systems, including established technology like integrated library systems (ILS) and databases as well as evolving social and collaborative environments; introduce essential technology elements (hardware, software, networking, etc.); introduce practical information technology skills used by information professionals, such as working with databases and creating and publishing web pages; and promote critical thinking, problem solving and collaborative teamwork abilities for working with information technology.

Of the four required courses, this is the most technology intensive, and students often find it challenging. The average grade is slightly lower than the other courses, and it varies more. During summer 2012 and summer 2013, the grades were noticeably lower. After consultation with the instructor, we mutually agreed that this was not a good fit for his skills, and he has not taught the course since then.

The course tends to receive lower course evaluations than the other courses. We attribute this partially to the more challenging nature of the course. Other findings provide additional information into the course, and are discussed in the Curricular Improvements section.

Table III: 555 Course Evaluations Fall, 2008-Summer, 2013

Year/Semester	Enrollment		Performance		Evaluation	
	On-campus	Off-campus	On-campus	Off-campus	On-campus	Off-campus
2008 Fall	42	n/a	3.53	n/a	6.3	n/a
2009 Spring	26	n/a	3.85	n/a	6.3	n/a
2009 Summer	n/a	13	n/a	3.77	n/a	6.9
2009 Fall	23	22	3.80	3.87	8.6	8.5
2010 Spring	27	n/a	3.87	n/a	7.8	n/a
2010 Summer	16	n/a	3.91	n/a	8.1	n/a
2010 Fall	40	25	3.81	3.95	7.5	7.2
2011 Spring	30	n/a	3.89	n/a	8.4	n/a
2011 Summer	19	n/a	3.85	n/a	n/a	n/a
2011 Fall	39	n/a	3.81	n/a	8.2	n/a
2012 Spring	20	n/a	3.91	n/a	8.6	n/a
2012 Summer	5	n/a	2.88	n/a	8.3	n/a
2012 Fall	35	n/a	3.74	n/a	7.9	n/a
2013 Spring*	26	n/a	3.93	n/a	5.7	n/a
2013 Summer*	7	n/a	1.49	n/a	5.0	n/a
Mean	25	20	3.59	3.86	7.4	7.5

Notes:

Performance measured on a 4.00 scale where 4 = A and 0 = F

Evaluation measured on a 10 point scale where 1 = lowest and 10 = highest

*Spring was using a new evaluation form where instructor and course ratings were based on a 7-point scale

557: Libraries and Information in Society

Introduction to the nature of information, the role of libraries, and the profession of librarianship in contemporary society. Incorporates historical developments, current trends, and the outlook for the future. Emphasizes the values, principles, legal, and ethical responsibilities of the profession and builds a foundation for each student's ongoing professional development and leadership.

There was a drop in course evaluations Summer 2012. This was the first time the instructor taught the course online. It is common for course evaluations to drop the first time an instructor teaches a course online because of the change in format. The rating scale changed for the Summer 2013, so we cannot make a direct comparison, but the course evaluations appear to show improvement. Overall that instructor has continued to improve and in fact received a teaching award, so we are confident that this did not continue to be an issue.

Table IV: 557 Course Evaluations Fall, 2008-Summer, 2013

Year/Semester	Enrollment		Performance		Evaluation	
	On-campus	Off-campus	On-campus	Off-campus	On-campus	Off-campus
2008 Fall	23	2	3.91	4.00	8.8	n/a
2009 Spring	25	n/a	3.81	n/a	7.3	n/a
2009 Summer	27	n/a	3.73	n/a	7.2	n/a
2009 Fall	26	24	3.66	3.84	7.4	8.7

2010 Spring	24	9	3.89	3.90	8.8	9.4
2010 Summer	23	n/a	3.94	n/a	9.1	n/a
2010 Fall	24	17	3.71	3.85	n/a	9.3
2011 Spring	31	n/a	3.93	n/a	9.1	n/a
2011 Summer	9	n/a	3.93	n/a	n/a	n/a
2011 Fall	25	n/a	3.88	n/a	9.4	n/a
2012 Spring	35	n/a	3.91	n/a	8.5	n/a
2012 Summer	23	n/a	3.86	n/a	7.1	n/a
2012 Fall	28	n/a	3.91	n/a	8.8	n/a
2013 Spring*	15	7	3.71	3.76	5.9	n/a
2013 Summer*	12	n/a	3.93	n/a	n/a	7.0
Mean	23	12	3.85	3.87	8.1	8.6

Notes:

Performance measured on a 4.00 scale where 4 = A and 0 = F

Evaluation measured on a 10 point scale where 1 = lowest and 10 = highest

*Spring was using a new evaluation form where instructor and course ratings were based on a 7-point scale

2. Practicum supervisor ratings of student performance in SLIS practicum courses (i.e., 695A and LSC 695B)

695A: Practicum

Students in 695A: Practicum directly apply their knowledge and skills attained in course work in the SLIS program in a professional working environment under the direction, guidance and support of a professional librarian. They demonstrate ability to apply the concepts and theories associated with library science while articulating their understanding and personal assessment of their ideas and projects in a reflective journal. As the culminating requirement of the practicum coursework, candidates demonstrate mastery of all of the program objectives through an observation of their participation in a library project or presentation observed by the practicum coordinator for 695A. The practicum covers the entirety of theoretical and practical knowledge expected and described in the master’s degree program objectives for SLIS.

This course is graded pass/fail. The pass rate data provides information on the success of practicum and how well it is achieving its stated goals (Appendix A). Between 2008 to 2013, 95% of the students enrolled in 695A successfully completed the practicum with a passing grade on a pass/fail grading system. During this time, 3% of the students enrolled in 695A withdrew from the course, and 2% received an incomplete. The data provide evidence that the practicum experience is extremely successful and provides an experience that is positive for the majority of participants. The course is consistently rated quite high. It provides a valuable integrative experience that is important toward achieving SLIS’s stated goals and program objectives.

Table V: 695A Course Evaluations Fall, 2008-Summer, 2013

Year/Semester	Enrollment	Pass	Incomplete	Withdraw	Evaluation
2008 Fall	8	8	0	0	9.7
2010 Summer	5	5	0	1	n/a
2010 Fall	5	5	0	0	8.7
2011 Summer	8	8	1	1	10
2011 Fall	6	6	0	0	7.6
2012 Summer	9	9	0	0	n/a
2012 Fall	2	2	0	0	8.0
2013 Spring*	6	6	0	0	6.8

2013 Summer*	9	9	0	0	n/a
Mean	6	6	0	0	8.5

Notes:

Evaluation measured on a 10 point scale where 1 = lowest and 10 = highest

*Spring was using a new evaluation form where instructor and course ratings were based on a 7-point scale

695B: School Library Media Practicum

Students in 695B demonstrate direct, working evidence of their knowledge and skills of the field of library and information science in the K-12 school environment. They demonstrate ability to apply the concepts and theories associated with school library media centers while articulating their understanding and personal assessment of their ideas, project and lesson plans in a reflective journal. As the culminating requirement of the school library media specialist coursework, candidates demonstrate mastery of all of the program objectives. The practicum covers the entirety of theoretical knowledge and practical knowledge expected and delineated in the master's degree program objectives.

The Library and Information Science program has four core courses required of all students as part of the MLIS degree program (551, 553, 555, 557) with eight required courses for the School Library Media Specialist Certification as part of the MLIS. Of the eight courses for the School Library Media Specialist Certification, 695B is one of two courses considered to have the greatest specific relevance to the certification.

Between 2008-2013, all students enrolled in 695B successfully completed the practicum with a passing grade on a pass/fail grading system. Since 2008, 100% of the candidates for the school library media specialist certification have passed the practicum course, 695B: School Library Media Practicum. The connection of the 695B course objectives to the SLIS program objectives, as aligned with the American Association of School Librarians (AASL) standards, indicate the students who have completed the program do so having mastered the content areas of the four standards as required by AASL for successful professional practice. The candidates' success in completing 695B successfully and the high numbers of individuals successfully achieving specialist certification is another element of SLIS's outcomes assessment plan to demonstrate its achievement of its stated learning outcomes and preparing students for successful practice.

Table VI: 695A Course Evaluations Fall, 2008-Summer, 2013

Year/Semester	Enrollment	Pass	Evaluation
2008 Fall	1	1	10
2010 Summer	5	5	n/a
2010 Fall	6	6	6.8
2011 Fall	1	1	6.0
2012 Summer	1	n/a	n/a
2012 Fall	1	1	9.0
2013 Spring*	3	3	6.0
2013 Summer*	1	1	n/a
Mean	2	2	7.6

Notes:

Evaluation measured on a 10 point scale where 1 = lowest and 10 = highest

*Spring was using a new evaluation form where instructor and course ratings were based on a 7-point scale

3. Pass rates and analysis of student performance on the comprehensive examination

Comprehensive Examinations

Students in the Library and Information Science (LIS) program at the Catholic University of America (CUA), take the comprehensive examination in their last semester of coursework. There are no directly applicable professional licensure exams related to the MLIS. The comprehensive examination is a written examination that requires students to demonstrate mastery of the content knowledge required for professional practice in the field of library and information science. The comprehensive examination questions are developed based on the SLIS program objectives, which are derived from the American Library Association's standards for accreditation for programs offering the Master's of science in library and information science (MLIS).

The SLIS curriculum requires students to take a comprehensive examination that serves as a capstone event. The examination is held online in fall, spring and summer semesters, over a 48-hour period. The examination is entirely a written examination; there are two questions provided, from which a student selects one to answer. Prior to Fall 2012, the examination was held on the CUA campus over two days. The examination consisted of five questions each day, from which a student selected two to answer. Examination questions are devised by a faculty committee and edited and finalized by the entire SLIS faculty.

The pass/fail rate of the SLIS comprehensive exam provides the faculty with an effective means of evaluating the overall effectiveness of the program's ability to achieve the desired student outcomes and meet its program objectives. This exam results provide valuable feedback on how well the students are able to articulate the core concepts of this program.

Prior to 2010-2011, the comprehensive exam pass rate was typically around 95%. Starting 2010-11 we observed that it dropped to approximately 85%. We have investigated this issue and taken steps to address it. In 2012, we introduced a new format. This has not yet had the desired effect of returning comps pass rates, and is actively being addressed, with an in-depth review to be conducted in 2014. This is discussed in the Curricular Improvements section.

Each semester, after all essays have been graded, the faculty reflects on the strengths, weaknesses and considers adjustments to the exam. This results in a list of notes and decisions on changes. These are discussed in the Curricular Improvements section.

Table VII: Comprehensive Exam Pass Results

Year/Semester	Total	Pass	Failed	Pass Rate
2008 Summer	19	18	1	94.74
2008 Fall	37	34	3	91.89
2009 Spring	28	28	0	100.00
2009 Summer	27	25	2	92.59
2009 Fall	28	27	1	96.43
2010 Spring	33	30	3	90.91
2010 Summer	34	31	3	91.18
2010 Fall	30	25	5	83.33
2011 Spring	35	30	5	85.71
2011 Summer	33	29	4	87.88
2011 Fall	28	21	7	75.00
2012 Spring	35	32	3	91.43
2012 Summer	27	24	3	88.89

2012 Fall	43	35	8	81.40
2013 Spring*	30	26	4	86.67
2013 Summer*	27	22	5	81.48
Mean	30	27	4	88.72

Comprehensive Examination Rubric

The comprehensive examination rubric is another mechanism for analyzing student learning outcomes, and measuring the extent to which SLIS has achieved its program objectives through student mastery of the concepts embodied in the program objectives.

Students are graded on a three-point scale: 3 Exceeds Expectations; 2 Meets Expectations; 1 Fails to Meet Expectations. The comprehensive examination rubric identifies areas of strength and weakness in student performance on the comprehensive examination to help the SLIS curriculum committee to make changes within the curriculum to enhance student learning in any areas identified as being weaker on the aggregate scores on the rubric. The rubric for grading the comprehensive examination answers measures student performance in six areas, listed in the table below. The table shows that, overall, students are demonstrating adequate mastery of all rubric traits.

Table VIII. Mean Comprehensive Exam Grades by Rubric Trait

Area	Spring 2013	Summer 2013
Demonstrated understanding of relevant information, principles and concepts.	2.09	2.23
Demonstrated ability to apply relevant theories, principles and concepts appropriately in response to the question.	2.25	2.13
Demonstrated ability to analyze, synthesize, and evaluate relevant principles in response to the question	2.15	2.18
Ability to locate and retrieve relevant, appropriate, and authoritative information	2.31	2.17
Ability to analyze and synthesize the information found	2.27	2.27
Ability to communicate clearly and effectively in writing, with use of graphical elements if appropriate	2.20	2.23
Total Traits	13.04	12.69

Analysis by each rubric trait looks at the number of essays that did not meet expectations for each trait. Although there is variability across semester, this suggests that the two traits that essays fall short on the most are “ability to apply relevant theories, ...” and “ability to analyze, synthesize, ...”

Table IX. Percent of all essays not meeting expectations, by rubric trait.

Semester	Demonstrated understanding of relevant information, principles and concepts	Demonstrated ability to apply relevant theories, principles and concepts appropriately in response to the question	Demonstrated ability to analyze, synthesize, and evaluate relevant principles in response to the question	Ability to locate and retrieve relevant, appropriate, and authoritative information	Ability to analyze and synthesize the information found	Ability to communicate clearly and effectively in writing, with use of graphical elements if appropriate
2013 Summer	13.5%	19.2%	19.2%	7.7%	11.5%	9.6%
2013 Spring	16.1%	12.5%	17.9%	8.9%	7.1%	12.5%
2012 Fall	13.8%	15.0%	13.8%	16.3%	17.5%	16.3%

4. Data analysis of graduation rates

Evidence of the program’s success in achieving our objectives and fostering a learning environment that results in successful student learning outcomes is also achieved evaluating the number of students who successfully achieve all of the degree requirements and graduate.

Table X: Combined Fall & Spring Cohort Enrollments and Degree Completion 2009 – 2013

Fall & Spring Cohort	Enrollment	Total Graduates	% Graduated
2008-2009	81	69	85% (5 years)
2009-2010	99	80	81% (4 years)
2010-2011	91	64	70% (3 years)
2011-2012	70	21	30% (2 years)
2012-2013	80	TBD	

The average SLIS student takes longer to achieve the degree because the majority of SLIS students are studying part-time. Therefore, SLIS evaluates its graduation success after three to five years for SLIS students as data show that approximately 83% of students have graduated by the end of their fourth year of study. Students may enroll in the program during the fall, spring, and semesters. Occasionally, students request a leave of absence for a semester, which makes tracking student attrition rates difficult, as many return after a taking a semester off. As a result, SLIS relies on graduation data instead of progression data in assessing our success.

5. Exit surveys of recent students

LIS conducts an annual survey of recent graduates that have matriculated in the prior academic calendar year. SLIS uses its program objectives and six competency areas as a baseline for developing the questions for the surveys. Surveys results found that the SLIS curriculum was perceived very positively, and recent scores had improved in all aspects compared to the survey results in 2011. According to the results of the latest exit survey, more than four-fifths of the respondents “agree” that SLIS’ core courses gave them a solid foundation in library and information science; and their overall education at SLIS was good. Two-thirds of

the respondents “agree” that their Master of Science in Library and Information Science (MLIS) degree prepared them well for their first professional job.

The SLIS student exit survey was heavily revised during to the 2009-2010 academic year. The 2009 survey indicated that respondents considered the program and faculty to be of very high quality. In addition, 50% of respondents rated the program as extremely successful at meeting their expectations, and another 41% rated the program as somewhat successful.

Table XI: Graduate Perceptions of Competency Preparedness by Area

Area	Very Well or Adequately Prepared 2013	Very Well or Adequately Prepared 2012	Very Well / Adequately Prepared 2011	Very Well / Adequately Prepared 2010
a. Professional Identity	100%	95.4%	98.1%	100%
b. Management of information organizations and services	100%	93.2%	92.3%	93.9%
c. Information Resources	97.1%	100%	94.2%	100%
d. User Services	100%	97.8%	96.1%	100%
e. Information Organization	100%	93.1%	92.3%	93.9%
f. Information Technology	91.6%	88.6%	92.3%	91%

Table XII: Graduate Perceptions of Program and Faculty Quality

Area	Strongly Agree / Agree 2013	Strongly Agree / Agree 2012	Strongly Agree / Agree 2011	Strongly Agree / Agree 2010
a. Instruction in the four core courses provided a solid foundation.	85.7%	70.5%	66.7%	67.6%
b. The SLIS special programs, workshops, and colloquia added to the quality of my educational experience.	67.7%	52.3%	58.0%	61.8%
c. The quality of instruction was above average.	71.4%	75.0%	49.1%	67.7%
d. Full-time faculty members had a good knowledge of their subject areas.	97.2%	95.5%	92.1%	94.0%
e. Adjunct faculty members had a good knowledge of their subject areas.	91.4%	90.9%	86.3%	82.3%
f. Overall, the SLIS program was a very good one.	85.3%	81.8%	78.0%	84.8%
g. My MSLS prepared me well for my first professional job.	63.6%	68.2%	52.1%	60.0%

6. Key outcomes assessments from selected courses

In Fall 2012, as part of our ongoing efforts to develop direct and indirect measures of program outcomes, SLIS adopted an outcomes assessment plan that collects data from key assessments in selected courses, aligned with our program objectives. The plan used a 2-year cycle. Here we present preliminary analysis of data from the first year of the plan. For each selected course, instructors identified one or more key assignments and developed rubrics aligned with the course objectives. During 2012-2013, we collected data from two of the four core courses: LSC 555 Information System in Libraries and Information Centers and

LSC 557 Libraries and Information in Society. Students performed well across all attributes and sections, meeting or exceeding expectations with a few exceptions. In those instances instructors reflected on the shortcomings and noted what changes they would make.

LSC 555 - The key assignment for LSC 551 was the final project. Instructors created a common rubric with seven attributes. A three point rating scale was used (1=does not meet expectations; 2=meets expectations; 3=exceeds expectations).

Table XIII: Key Assessments from LSC 555, Fall 2012-Spring 2013

Section	Content/integration of course concepts	Research	Critical analysis (includes prototype, if part of project)	Technology skills	Written Presentation	Oral Presentation	Individual Contribution	Sum
Fall 2012	2.84	2.84	2.53	3.00	3.00	2.68	2.53	19.42
Fall 2012	3.00	2.81	3.00	2.50	3.00	2.81	2.94	20.06
Spring 2013	2.75	3.00	3.00	3.00	3.00	3.00	2.88	20.63
Spring 2013	3.00	2.67	2.50	2.50	2.67	3.00	2.94	19.28

LSC 557 - For the key assessment, instructors used a term research paper, with a common rubric with eight attributes. A three point rating scale was used (1=does not meet expectations; 2=meets expectations; 3=exceeds expectations).

Table XIV: Key Assessments from LSC 557, Fall 2012-Spring 2013

Section	Demonstrates an understanding of the philosophical principles and the legal and ethical responsibilities of the field.	All elements of the topic are addressed; the information is technically sound; Information is based on sound research; coherence of information presented.	Course content is interpreted correctly; Articulates the economic, political, cultural, and social importance of the information on profession.	Well-organized and easy to follow argument; Paper should have a logical structure & flow should focus on developing key ideas	Clarity of sentences and paragraphs; no grammatical, punctuation or spelling errors; Organization and coherence of ideas	Identify and synthesize relevant literature for topic by citing to sources.	Synthesis of ideas, culminating in future research, or finalizing with a clear position.	Sources should be cited using APA guidelines.	Total
Fall 2012	2.86	2.71	2.57	2.21	2.29	2.21	2.14	2.07	19.29

Fall 2012	2.71	2.64	2.50	2.07	2.36	2.29	1.93	2.29	18.86
Spring 2013	2.47	2.13	2.40	2.27	2.60	2.13	2.00	2.27	18.27
Spring 2013	2.57	2.57	2.86	2.71	2.86	2.29	2.29	2.57	20.71

Curricular Improvements

Curriculum Review and Plan

The SLIS curriculum is reviewed systematically to ensure its quality and responsiveness to changes in the SLIS field and society in general. The review is performed on a multi-year cycle. Through this process the School continually reviews the entirety of the SLIS curriculum, identifies needed improvements and develops measures to address the needed improvements.

In fall 2008, four subcommittees of the Curriculum Committee reviewed the four core (500-level) courses for their objectives, content and use of technologies. The objective was to offer core courses that cover appropriate topics and latest development, make strategic use of technologies, and have valid outcomes measures to help the School assess student learning. In addition, the subcommittees identified sample outcomes measures for each core course.

In spring 2009, the School adopted a course chair system to ensure regular and efficient review of all core courses. A full-time faculty member was designated as the course chair for each core to ensure consistency in course content, objectives, course delivery, and evaluation, regardless of format or course location.

In 2010-2011, the faculty conducted a review of 25 mid-level (600-level) courses. Major recommendations include adding technology requirements and aligning goals for student learning with SLIS Competencies and Program Objectives. The reviews resulted in the deletion of two outdated courses, changes to several course titles to more fully reflect course coverage, and clearer statements in course syllabi on how technologies were used to enhance teaching and learning. The faculty then started a review of 11 advanced-level (700-level) courses in 2013.

Regularization and adoption of new courses

To ensure systematic development of the curriculum the faculty approved procedures and process for regularizing special topic courses and adopting new courses in fall 2011. Four special topic courses (Electronic Records Management, Marketing Libraries and Information Services, User Interface Design and Evaluation, and Public Program, Outreach, and Exhibitions in Archives, Libraries, and Museums) were reviewed and approved to be regularized based on this procedure.

New curricular initiatives

We have undertaken a number of new curricular initiatives over the past five years, including:

- Launched Online and Weekend Learning (OWL) initiative, with two courses of study fully available via OWL: Generalist and School Library Media
- Launched Cultural Heritage Information Management concentration
- Launched Visions of Italy: Culture in Twenty-First Century Rome
- Launched Accelerated Bachelor-to-Master “4+1” program
- Introduced new one-week institute: Digital Collections in Libraries, Archives, and Museums
- Established an Advanced Certificate in Library Leadership and Management

Course Renumbering

In fall 2009, we implemented a new course numbering system to show coherent relationship of course content and sequential relationship. The development of this system was reported in our previous 5-year assessment.

Comprehensive Examination

As noted above, prior to 2010-2011, the comprehensive exam pass rate was typically around 95%. Starting 2010-11 we observed that it dropped to approximately 85%. After research and deliberation, the faculty modified the format of the comprehensive examination in Fall 2012.

The examination originally had involved writing multiple essays in class and entailed a focus on memorization on the part of the student. The current format is a take home exam and entails writing a single research paper. The new exam format was adopted to provide better evidence of student learning of the SLIS professional competencies, knowledge of the literature, analytical ability, and the ability to synthesize knowledge or ideas from various sources. It was also intended to reduce student anxiety. Since then we have engaged in extensive and ongoing evaluation and refinement. Each semester, after all essays have been graded, the faculty reflects on strengths and weaknesses of the essays and the questions, and identifies refinements for the next cycle. Through this process we identified common weaknesses with research, and with synthesis and analysis. This led to additional emphasis on the importance of writing skills, and steps to communicate their importance to students. The School has taken steps to communicate to faculty (especially adjuncts) the importance of identifying students with weak writing skills and referring them to the School and the University Writing Center. Throughout, the faculty has engaged in ongoing reflection and clarification for students about expectations for the essays.

The faculty also modified the rubric to reflect new expectations of paper quality. The faculty uses this rubric to collect assessment data while grading papers. The comprehensive examination rubric is another mechanism for analyzing student learning outcomes, and measuring the extent to which SLIS has achieved its program objectives through student mastery of the concepts embodied in the program objectives.

These changes have not yet had the desired effect of increasing comps pass rates, and this is actively being addressed, with an in-depth review to be conducted in 2014.

Technological Assessment of Curriculum and Changes

SLIS is committed to systematically developing technology competencies in students. To ensure that SLIS continues to be responsive to technological changes, technology is integrated into the curriculum review and revision process as a specific step. SLIS surveyed recent graduates in a student exit survey about their perceptions of the curriculum's coverage of technology concepts and skills. In reviewing core technology course, LSC 555: Information Systems in Libraries and Information Centers, SLIS plans to pay particular attention to its coverage of current technologies and how it relates to and supports other courses in the curriculum.

From 2009-2011 SLIS surveyed incoming students with a technology questionnaire to identify students' technology strengths and areas that need improvement. Input from students enabled SLIS to develop technology support resources for students. For example, Blackboard handouts were developed to improve students' ability to use this learning management system at CUA. Free technology workshops are also offered to prepare students for success in the program. Workshop topics included General Computing, SLIS Computing Environment, Taking a Blended Class, The eSLIS Synchronous Online learning Environment, ALADIN, Cardinal Students Email, Internet, and Webpage Design.

Student exit survey responses indicate the Technology competency has remained fairly constant. Annual surveys from 2010-2013 reflect that 88-92% of respondents feel the program “very well” or “adequately” prepared them in the Technology area.

Table XV: Graduate Perceptions of Competency Preparedness by Area

Area	Very Well / Adequately Prepared 2013	Very Well / Adequately Prepared 2012	Very Well / Adequately Prepared 2011	Very Well / Adequately Prepared 2010
f. Information Technology	91.6%	88.6%	92.3%	91%

Professional Identity/Management

The SLIS faculty conduct an analysis of the comprehensive examination data yearly, which includes an analysis of the questions students answered and an analysis of the areas where student demonstration of mastery of some aspects of the six program objectives was marginal. The 2009-2010 comprehensive exam analysis identified the top two competency area where students’ answers were marginal included Professional identity/management. The findings from the comprehensive examination analysis supported the faculty’s initiatives to continuously improve student achievement through the curriculum by enhancing opportunities to develop a deeper understanding of professional identity and management within the SLIS curriculum. Changes in curriculum in response to comprehensive examination analysis included two actions:

The SLIS faculty revised several courses of study for the degree to provide a program of study that now recommends that the management course (LSC 607) in recommended for several courses of study. By highlighting the importance of this course, the faculty hoped more students will develop a better understanding of management.

The 2010-2011 comprehensive exam analysis found that one of the two competency areas where students had difficulties were Professional Identity. Around 20% of students demonstrate below expectations in all traits except written communication skills in the Professional Identity area. The findings from the comprehensive examination analysis support the faculty’s initiatives to continuously improve student achievement through the curriculum by enhancing opportunities to develop a deeper understanding of Professional Identity within the SLIS curriculum.

Student exit survey responses demonstrate improvement in graduate perceptions of competency preparedness in Professional Identity and Management of information organizations and services.

Table XVI: Graduate Perceptions of Competency Preparedness by Area

Area	Very Well / Adequately Prepared 2013	Very Well / Adequately Prepared 2012	Very Well / Adequately Prepared 2011	Very Well / Adequately Prepared 2010
a. Professional Identity	100%	95.4%	98.1%	100%
b. Management of information organizations and services	100%	93.2%	92.3%	93.9%

Results of Curricular Improvements

Between 2010 and 2013, student exit survey responses demonstrate improvement (by at least 5 percentage points) in graduate perceptions of the program in three areas: the four core courses, special programs/colloquia, and adjunct faculty knowledge. Four measures remained stable, with small overall

improvements: Quality of instruction, full time faculty knowledge, overall perceptions of the program and how well prepared students felt. We continue to explore ways to help students feel more prepared. Over the past two years, for example, the School has collaborated with the Alumni Board and with student organizations to offer mentoring sessions and resume workshops.

Table XVII. Graduate Perceptions of Program and Faculty Quality

Area	Strongly Agree / Agree 2013	Strongly Agree / Agree 2012	Strongly Agree / Agree 2011	Strongly Agree / Agree 2010
h. Instruction in the four core courses provided a solid foundation.	85.7%	70.5%	66.7%	67.6%
i. The SLIS special programs, workshops, and colloquia added to the quality of my educational experience.	67.7%	52.3%	58.0%	61.8%
j. The quality of instruction was above average.	71.4%	75.0%	49.1%	67.7%
k. Full-time faculty members had a good knowledge of their subject areas.	97.2%	95.5%	92.1%	94.0%
l. Adjunct faculty members had a good knowledge of their subject areas.	91.4%	90.9%	86.3%	82.3%
m. Overall, the SLIS program was a very good one.	85.3%	81.8%	78.0%	84.8%
n. My MSLS prepared me well for my first professional job.	63.6%	68.2%	52.1%	60.0%

**Master of Science in Information Technology
with a Concentration in Health Information Technology**

In Fall 2010, we launched a Master of Science in Information Technology with a concentration in health information technology (HIT). This is based on a cohort-model, with students following a defined course sequence. It was initially supported with two Department of Labor (DoL) grants to provide tuition support to students. Between Fall 2010 and Summer 2013, three cohorts completed the program.

Assessment Measures

This report uses the following measures to assess student learning outcomes in this program:

1. Course data - Grade distributions and course evaluations for all courses
2. Milestone data - Pass rates and analysis of student performance on the capstone
3. Graduation rates
4. Exit survey

Assessment Findings

1. Course data - Grade distributions and course evaluations for all courses

Student performance, as measured by final grades, was strong overall. Course evaluations varied. In some cases this was due to instructors first time teaching or teaching new courses. In other cases we determined that the course was not a good fit for the curriculum and replaced it with a different course, as discussed below in the Curricular Improvements section.

Table XVIII: HIT Course Evaluations Fall, 2010-Summer, 2013

Course Code	Year/Semester	Enrollment	Performance	Evaluation
HIT 571	Spring 2011	18	3.82	7.1
HIT 571	Summer 2011	10	4.00	5.0
HIT 573	Fall 2010	18	3.48	9.3
HIT 573	Spring 2011	11	3.46	8.9
HIT 573	Fall 2012	36	3.57	8.5
HIT 577	Spring 2013	33	3.73	6.6
HIT 673	Fall 2011	17	3.62	9.3
HIT 673	Spring 2012	15	3.41	8.1
HIT 673	Spring 2013	33	3.55	5.9
HIT 675	Fall 2011	19	3.81	10
HIT 675	Spring 2012	18	3.88	9.2
HIT 677	Summer 2013	30	3.53	5.4
HIT 771	Spring 2011	18	3.75	9.4
HIT 771	Summer 2011	10	3.84	9.8
HIT 771	Summer 2013	31	3.77	6.0
HIT 772	Summer 2011	18	3.69	8.5
HIT 772	Fall 2011	15	3.79	8.1
HIT 775	Spring 2012	17	3.87	7.8
HIT 775	Summer 2012	18	3.95	7.2
HIT 778	Summer 2012	16	3.76	6.5
HIT 778	Fall 2012	13	3.76	7.7
HIT 870	Summer 2011	17	3.71	8.5
HIT 870	Fall 2011	14	3.65	7.1
HIT 871	Fall 2010	18	3.89	9.6
HIT 871	Spring 2011	11	3.83	9.0
HIT 871	Fall 2012	36	3.78	9.4
HIT 873	Spring 2012	20	3.82	n/a

HIT 873	Summer 2012	15	3.71	8.3
Mean		19	3.73	8.0

Notes:

Performance measured on a 4.00 scale where 4 = A and 0 = F

Evaluation measured on a 10 point scale where 1 = lowest and 10 = highest

2. Milestone data - Pass rates and analysis of student performance on the capstone

Students in HIT 829: Capstone directly apply their knowledge and skills attained in course work in the HIT program in a healthcare environment under the direction, guidance and support of a healthcare professional. They demonstrate ability to apply the concepts and theories associated with health information technology while articulating their understanding and personal assessment of their ideas and projects in a reflective journal. As the culminating requirement of the practicum coursework, candidates demonstrate mastery of all of the program objectives through a final project delivered to their client and a report describing what the student has learned to their Practicum Coordinator. The practicum covers the entirety of theoretical and practical knowledge expected and described in the master’s degree program objectives for HIT.

Students complete their Capstone at the end of their coursework in the HIT program.

During 2012, course evaluations raised concerns about the quality of guidance students were receiving from the capstone coordinator. We subsequently hired a new coordinator.

Table XIX: HIT Capstone Evaluations Fall, 2010-Summer, 2013

Course Code	Year/Semester	Enrollment	Performance	Evaluation
HIT 878	Summer 2012	17	14 pass; 3 inc	n/a
HIT 878	Fall 2012	11	10 pass; 1 inc	7.86
HIT 878	Spring 2013	4	4 pass	6.00

3. Graduation rates

Evidence of the program’s success in achieving our objectives and fostering a learning environment that results in successful student learning outcomes is also achieved evaluating the number of students who successfully achieve all of the degree requirements and graduate. Due to the program only being introduced in 2010, we have a limited amount of data on the program’s graduates.

Table XX: Combined Fall & Spring Cohort Enrollments and Degree Completion 2010 – 2013

Fall & Spring Cohort	Enrollment	Total Graduates	% Graduated
2010-2011	31	27	87% (3 years)
2011-2012	8	TBD	
2012-2013	31	TBD	

4. Exit survey

Students completing during 2012 were surveyed, with N=12 (summer) and N=9 (fall) completed responses. Student opinions were divergent between the two periods, but overall the program was not perceived strongly. The quantitative results and student evaluations suggested a number of areas for improvement. The curricular changes made in response are addressed in the following section.

Table XXI: Graduate Perceptions of the HIT Program (percentage indicating Agree or Strongly Agree).

Question	Summer 2012	Fall 2012
The curriculum prepared me for the success in the HIT field	39%	22%
The Capstone research process provided valuable field experience	62%	44%
Overall, the MSIT-HIT program was a very good one	82%	33%
If I were to start my master's education over, I would apply to MSIT-HIT again	60%	22%
My MSIT-HIT prepared me well for my first professional job	40%	22%

Curricular Improvements

As a new program, the curriculum has undergone a number of changes that reflect its ongoing development, as well as specific responses to student outcomes and surveys. We have additionally gathered information from an HIT Experts Forum (June 2012) and two instructor surveys (2012 and 2013).

For the Fall 2012 cohort, we made the following changes:

- Revised HIT 573 Information Systems in Health Care and HIT 871 Health Informatics from upper-level courses to be the introductory courses in the sequence because they provide a better foundation.
- Removed HIT 571 Information Organization
- Added HIT 577 E-Health

During Spring 2013, we reviewed the curriculum again and added two courses:

- HIT 679 Enterprise Architecture
- HIT 773 Systems Analysis and Design

Faculty recruitment

Student and instructor feedback reinforced the importance of hiring a faculty with expertise in the HIT area. In Spring 2012, we conducted an unsuccessful search for an HIT instructor. In December 2012, the faculty requested to reopen the search, but the Provost did not approve the request. At this time two of the current full-time faculty have taught in the HIT program (Drs. Kules and Syn), with the other courses being taught by adjunct faculty with expertise in the specific course areas. The lack of full-time faculty expertise has hindered our ability to develop and evolve the curriculum.