2019 Self-Study of the M.S. Information Science

COLLEGE OF EMERGENCY PREPAREDNESS, HOMELAND SECURITY AND CYBERSECURITY

UNIVERSITY AT ALBANY, STATE UNIVERSITY OF NEW YORK

University at Albany, State University of New York
Dr. Havidán Rodríguez, President
Dr. Carol Kim, Provost

College of Emergency Preparedness Homeland Security and Cybersecurity
Dr Robert P. Griffin, Jr., Dean

Master of Science in Information Science: The 36-credit MSIS program, accredited by the American Library Association, prepares students for careers in organizations where the generation, management, use, and security of information is the primary facet of operations. We offer five concentrations and one specialist track. The IS program has experienced significant changes since the last accreditation review in 2010, as a result of the relocation to a newly created college. Our program strives to offer a curriculum that reflects the evolving nature of information in an increasingly digital world, where reliability, security, and safety of information is paramount.

This self-study follows the 2015 Standards for Accreditation of Master's Programs in Library and Information Studies adopted by the Council of the American Library Association (the Council), February 2, 2015 (revision of standard element V.3 adopted by the Council, January 28, 2019 by request of the Committee on Accreditation).

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Standard I: Systematic Planning

Introduction

Although the word "volatility" was an accurate word to depict the 2016–18 years for the University at Albany's M.S. in Information Science (IS) program, as was shared in our 2018 Narrative Report, we are pleased to announce that we are now in the enviable position of being a thriving program within the innovative, progressive, interdisciplinary College of Emergency Preparedness, Homeland Security and Cybersecurity (CEHC). Although the reaction to this news from some library and information science colleagues has been confusion and even concern for the future of our program, we wish to open our ALA Program Presentation with the following:

We have full confidence that this courageous decision, initiated by Dr. Robert P. Griffin, the founding dean of CEHC, will forever transform, invigorate, innovate, and challenge the traditional boundaries of library and information studies together with the field's associated and ancillary disciplines.

To be candid, when the idea was first proposed to the faculty by the University administration, early in the fall of 2017, we too questioned the rationale for such a move. The story of our transformation from confusion to confidence along with a growing sense of professional pride will be presented in the following sections.

The Creation of the College of Emergency Preparedness, Homeland Security and Cybersecurity

In 2015, New York Governor Andrew Cuomo, with modest funding for a new building, and no support for faculty or resources, charged the University at Albany to create the College of Emergency Preparedness, Homeland Security and Cybersecurity (CEHC). Governor Cuomo envisioned this to be the first truly interdisciplinary stand-alone college in the nation dedicated to topics in three critical fields: emergency preparedness, homeland security, and cybersecurity. Immediately faculty and staff across a wide variety of academic disciplines and partnering institutions went to work to design and develop a rigorous and robust curriculum shaped and informed by representative stakeholders across the nation. In 2015 the New York State Education Department approved a bachelor's degree program in Emergency Preparedness, Homeland Security and Cybersecurity at the University at Albany, for the start of the 2016-2017 academic year

A New Dean for CEHC and a Respect for Information

"The straight line, a respectable optical illusion which ruins many a man."
— Victor Hugo, Les Misérables

The first permanent Dean of the College of Emergency Preparedness, Homeland Security and Cybersecurity (CEHC), Dr. Robert P. Griffin, came to Albany in July 2017, and immediately recognized the integration of information science as fundamental to the successful growth of CEHC. He also envisioned expanding CEHC's prospering undergraduate program vertically to include a master's and Ph.D. program to increase career options for students by preparing them for careers in academia, government,

education, and industry. Soon after his arrival on campus he lobbied the university administration to integrate the Department of Information Science within the new college, bolstered by his belief that graduates of CEHC must respect information as a powerful and pervasive force in the operation and functioning of a society.

Senior Administrative Leadership Changes Since 2010

The University at Albany has experienced top level fluidity in leadership since our last ALA self-study having had four presidents and six provosts since 2010 (Table I.1a below).

Table I.1a: Leadership changes at the University at Albany, SUNY

Name	**Title**	**Service Dates**
George M. Philip	Interim President President	November 2007 – June 2009 June 2009 – December 2012
Sue Phillips	Interim Provost Provost	January 2008 – December 2008 December 2008 – September 2014
Robert J. Jones	President	January 2013 – September 2016
Timothy Mulcahy	Interim Provost	September 2014 – December 2014
James R. Stellar	Provost Interim President	February 2015 – September 2016 September 2017 – January 2019 September 2016 – September 2017
Darryl Wheeler	Interim Provost	September 2016 – August 2017
Havidan Rodriguez	**President**	**September 2017 - Present**
Elga Wulfert	Interim Provost	January 2019 – July 2019
Carol Kim	**Provost**	**August 2019 -**

Leadership and Name Changes Surrounding Library and Information Studies

In addition to administrative changes at the upper echelons of the university, there have been a variety of school or college/department level administrative changes with regard to the IS program.

Table I.1b: College/Department administrative changes since the last accreditation

Administrator Title/Name	**School/College Name**	**Department Name**	**Dates**
Dean Peter Bloniarz	College of Computing & Information	Information Studies	2005–2013
Dean Sue Faerman	College of Computing & Information	Information Studies	2013–2015
Dean Kim Boyer	College of Engineering & Applied Sciences	Information Science	2015–2017
Dean Robert P. Griffin	College of Emergency Preparedness, Homeland Security and Cybersecurity		2018–present

As we reflect upon the above changes, it is a reminder that since transitioning from the autonomous School of Information Science & Policy in 2005, we have faced a number of challenges. We are pleased to report that such experiences are now in the past, and we have found the transition to being part of CEHC a synergistic, mutually beneficial, and comfortable fit.

A New President: A New Organizational Home

President, Havidán Rodríguez, the twentieth President of the University at Albany, took office in September 2017. Once he was apprised of the department's precarious predicament President Rodríguez immediately consulted with key stakeholders and within weeks then-Provost James Stellar announced the decision to move the Department of Information Science to the new CEHC.

Dr. Rodríguez, a respected social scientist and ethnographer, has studied the socio-economic impacts of disasters and the economic well-being of minority populations. He recognizes the critical interplay of people, information, and technology, and the social, ethical, and technological dynamics of an evolving information society. President Rodríguez supported Dean Griffin's vision to capitalize on the skills, competencies, and expertise of the Department of Information Science's faculty and acknowledged the pressing need to grow information professionals and leaders who are able to design, implement, and assess user-centered solutions to society's challenging information needs.

Respect for Transparency and Shared Governance

Dean Griffin, aware of the governance policies of the University at Albany Senate and respectful of the *Faculty Bylaws* (Faculty Senate, 2003) which outline the rights and responsibilities of faculty as they pertain to the development of the educational program of the University, quickly engaged in formal consultation with the Faculty Senate in September, 2017 as per Article I. Section 2.2.2 – Rights and Responsibilities of the Faculty:

2.2.2. The Faculty shall be informed and given opportunity to discuss at the earliest possible stages in their formulation, and shall review and provide formal consultation on, prior to adoption, all proposals regarding:

(a) Creation, renaming, major re-organization, or dissolution of academic units and programs

(b) Goals and formal plans directing the future of the University (p. 3).[1]

After participating in formal consultation with the Senate, Dean Griffin met with the Information Science faculty and shared his bold and courageous vision of our role as information professionals to help shape a forward-looking interdisciplinary college designed to promote the operational application of information, knowledge, and cutting-edge research initiatives to address the challenges of the twenty-first century. Dean Griffin expressed his belief that the fields of information science are integral to the foundation of

[1] Faculty Senate. Faculty Bylaws of the University at Albany State University of New York. Retrieved from Albany, New York: 2003

homeland security and emergency management, particularly as it pertains to *connecting dots*, applied data analytics, and intelligence analysis (see 9/11 Commission Report).[2]

The quote from Victor Hugo earlier (p. 5) perhaps best explains ours and our colleagues' myopic understanding of the field of information science – we too were thinking in a linear fashion which prevented us from appreciating the bigger picture. It was a liberating and professionally validating experience to listen as Dean Griffin highlighted the cross-disciplinary info-centric collaborations he views as essential to address critical issues in emergency preparedness, homeland security and cybersecurity. Now, only two years since that first conversation with Dean Griffin, we can state with confidence that we are motivated, energized, and, yes, proud to call CEHC our academic home thanks to the leadership of our progressive, forward-looking dean.

It is worth noting that Bruner[3] describes three qualities that make a good dean:

Readiness: from accumulated leadership experience;

Temperament: including high self-confidence, resilience to failure, humility, and a bias for action; and

Purpose: an eagerness to serve the diverse stakeholders of a school; and a belief that the students who graduate will help to make the world a better place.

Dean Griffin exemplifies all three qualities.

Dean Robert P. Griffin

Dr. Griffin comes to CEHC after a long career in homeland security at the Federal and local levels of government. In the Federal Government, Dr. Griffin served as the Under Secretary (Acting) for Science and Technology at the U.S. Department of Homeland Security (DHS), the Deputy Under-Secretary for Science and Technology, and the Director of the Science and Technology Directorate's First Responders Group. He understands that similar to security threats themselves, the work required to protect and safeguard the nation is constantly changing and cuts across numerous information-related disciplines. Dean Griffin's vision is to expand, embrace, and explore the wider world of information science as a central synthesizing discipline to study and address the risks, challenges, and opportunities of an ever-changing inter-connective world.

The Opportunity to Expand and Challenge the Boundaries of Information Science

Beginning in the fall of 2017 and continuing through the spring of 2019 discussions concerning strategic and tactical options for the IS program continue with CEHC faculty, the Dean, Provost, students, community constituents, and organizational and corporate stakeholders in order to determine how best to position the program and create a clear

[2] Kean, T. H., & Lee H. Hamilton, L. H. (2004). 9/11 Commission Report: Final Report of the National Commission on Terrorist Attacks Upon the United States (ISBN 0-16-072304-3).
[3] Buner, R. F. (2017). The 3 qualities that make a good dean. The Chronicle of Higher Education(January 15). Retrieved from https://www.chronicle.com/article/The-3-Qualities-That-Make-a/238883.

identity and focus that respects the indispensable and complementary role information science plays as both a theoretical and applied science.

There is a strong growing demand from every organization for advanced expertise across and within the information domain. Employers seek to fill professional positions in information services, systems, management, training, data analysis, and consulting in businesses, non-profits, education and government agencies (see Appendix A). At the same time, libraries continue to evolve, providing valued services in communities, on campuses, and in the workplace. Libraries assume a variety of roles (both traditional and atypical) in emergency and disaster planning, preparedness, response and recovery efforts.[4]

When a disaster or crisis strikes, communication to the public and news media outlets is imperative to reduce rumors and misinformation. Public libraries have assumed new roles and responsibilities—especially during crises situations. The department's new academic home provides faculty and an increasing variety of interdisciplinary stakeholders (including students K-12 and beyond) to explore innovative ways in which emergency and crisis information can be distributed and used by information professionals to best serve their communities as receivers and transmitters of relevant and reliable information. Recently Majumdar[5] revealed that K-12 education's greatest threat to cybersecurity 'lies in its untrained staff and students who inadvertently click on links they aren't supposed to and share information that puts entire districts at the highest risk of an attack" (p.1). At CEHC, we are committed to growing an information literate society. We are in the process of

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[4] Cindy Pierard, Jason Shoup, S. K. C., Mark Emmons, Teresa Y. Neely, & Frances C. Wilkinson. (2016). Building back better libraries: Improving planning amidst disasters: Emerald Group Publishing Limited.

Featherstone, R. M., Lyon, B. J., & Ruffin, A. B. (2008). Library roles in disaster response: an oral history project by the National Library of Medicine. Journal of the Medical Library Association, 96(4), 343-350. Retrieved from http://libproxy.albany.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=rzh&AN=105566211&site=eds-live&scope=site.

Ifijeh, G., Idiegbeyan-ose, J., Segun-Adeniran, C., & Ilogho, J. (2016). Disaster management in digital libraries: issues and strategies in developing countries. International Journal of Risk and Contingency Management, 5(1), 1-14. Retrieved from http://libproxy.albany.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=inh&AN=16151316&site=eds-live&scope=site DOI: 10.4018/IJRCM.2016010101. DOI: 10.4018/IJRCM.2016010101.

Kaaland, C., & Lokey, W. M. Emergency preparedness and disaster recovery in school libraries: Creating a safe haven: Santa Barbara, California : Libraries Unlimited, an imprint of ABC-CLIO, LLC, 2015.

Levine, E. (2017, 2017/03//). iSchools, Disaster Prep, and Privacy at ICADL 2016.

Soehner, C., Godfrey, I., & Bigler, G. S. (2017). Crisis communication in libraries: opportunity for new roles in public relations. Journal of Academic Librarianship, 43(3), 268-273. Retrieved from http://libproxy.albany.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=inh&AN=17183630&site=eds-live&scope=site DOI: 10.1016/j.acalib.2017.03.003. DOI: 10.1016/j.acalib.2017.03.003.

[5] Majumdar, B. (2019). "A lack of proper training is the biggest threat to K-12 cybersecurity." Multibriefs. Retrieved May 20, 2019.

redesigning and creating curriculum at the undergraduate and graduate levels to grow information professionals who will be able to educate others within and across organizations and communities to design, implement, and assess reliable and responsive information systems and services.

A New Educational Model: Library and Information Studies, Living Classrooms & Addressing Information Silos

CEHC's IS program is the hub of an innovative ecosystem that embraces a new model of living classrooms created to foster the creation and testing of theory and practice within operational and instructional spaces. The Information Science program at UAlbany, is a thriving and expanding program within an info-centric, student-focused, performance-based environment designed to provide students, faculty, staff, practitioners, and stakeholders with opportunities to foster engaged learning and interdisciplinary discovery. Unlike many library and information science programs that stand apart or alone competing for scarce resources with other academic units within the institution, CEHC's IS program is breaking new ground by expanding the boundaries of information science to benefit and safeguard society. Towards that goal, we extend an invitation through this self-study to other ALA accredited programs to join us in exploring cross-disciplinary knowledge creation and knowledge sharing. This is, in fact, the collaborative model upon which CEHC is builds upon, see Figure 1a. CEHC is interested in expanding its partnerships to include other academic institutions with programs in emergency preparedness, homeland security and cybersecurity, as well as agencies, companies and organizations working in related areas.

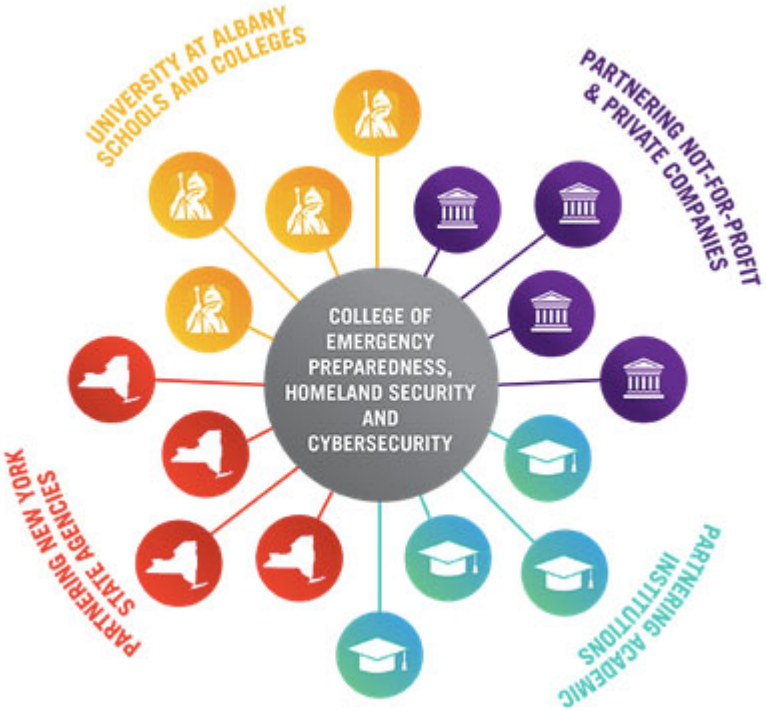

Figure 1a: CEHC Collaborative Model

I.1 Systematic Planning Process

The program's mission and goals, both administrative and educational, are pursued, and its program objectives achieved, through implementation of an ongoing, broad-based, systematic planning process that involves the constituencies that the program seeks to serve.

The College's interdisciplinary programs are designed in partnership with faculty, researchers, professionals, and practitioners across a wide variety of disciplines and scholarship as is appropriate for each track. Collaborative curriculum planning enables the IS program to prepare students who understand the practical importance of theory and can recognize and evaluate how theory works in real-world practice. Our programs, in keeping with traditional library and information science programs, teach students how information is created, organized, represented, stored, distributed, accessed, retrieved, managed and protected in a wide variety of traditional and emergent media formats. Our new placement within CEHC provides opportunities and challenges for faculty, students, and stakeholders to rethink issues related to information policy, information access, use, and equity, through the lens of cybersecurity, emergency preparedness, and information security. Such issues are of critical importance to formal and informal communities, libraries, schools, archives, government, and businesses—private and public—profit and nonprofit.

I.1.1 Continuous review and revision of the program's vision, mission, goals, objectives, and student learning outcomes;

The Library and Information Science, Informatics, and School Library programs are now securely housed within the collaborative interdisciplinary academic culture that defines CEHC. This major organizational change, based upon the wisdom and vision of President Rodríguez and Dean Griffin, has provided the IS program with fertile ground to transcend the traditional boundaries of conventional iSchool models.

Table I.1.1a below represents the College's organizational support structure for graduate program.

Table I.1.1a: CEHC Organizational Support Structure

Program	Degree	Graduate Director	Program Director	Admissions Coordinator	Administrative Manager	Vice Dean
Information Science	Ph.D.	Kevin Williams	Kevin Williams	Tiffany Williams-Hart	Lisa Giovannangelo	Jennifer Goodall
Information Science School Library	M.S.	Tiffany Williams-Hart	Joette Stefl-Mabry	Tiffany Williams-Hart	Shannon Mersand (Asst. Director)	Jennifer Goodall
Information Science	M.S.	Tiffany Williams-Hart	Philip Eppard	Tiffany Williams-Hart	Lisa Giovannangelo	Jennifer Goodall

Emergency Preparedness, Homeland Security, and Cybersecurity	C.G.S	Tiffany Williams-Hart	Jim Steiner	Jim Steiner	Lisa Giovannangelo	Jennifer Goodall
Library and Information Science	C.A.S.	Tiffany Williams-Hart	Philip Eppard	Tiffany Williams-Hart	Lisa Giovannangelo	Jennifer Goodall

CEHC Undergraduate Programs

Informatics, Cybersecurity, and Emergency Preparedness & Homeland Security represent the three undergraduate programs, Figure 1b.

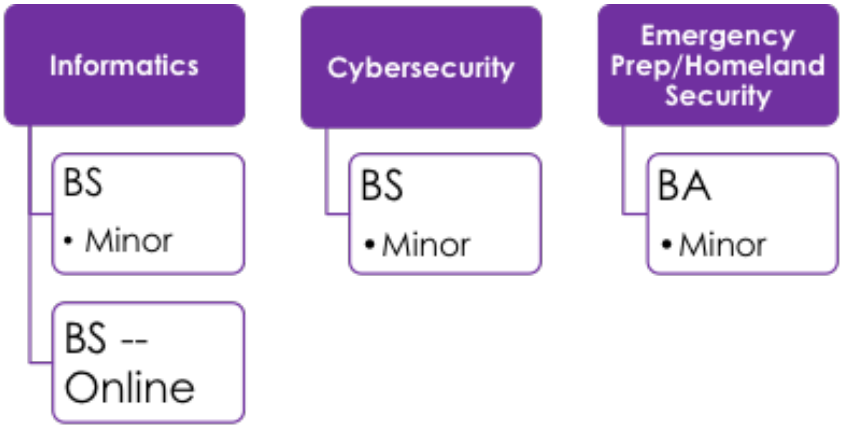

Figure 1b: CEHC Undergraduate Programs

CEHC Graduate Programs

As of October 2018, there are five tracks within the Information Science program: Information Management & Technology, Archives & Record Management, Library & Information Services, Data Analytics, and Intelligence Analysis. The School Library (ISSL) program is part of the IS program, but is treated separately due to its 100% online curriculum. CEHC also offers the Information Science Ph.D. [Figure 1c].

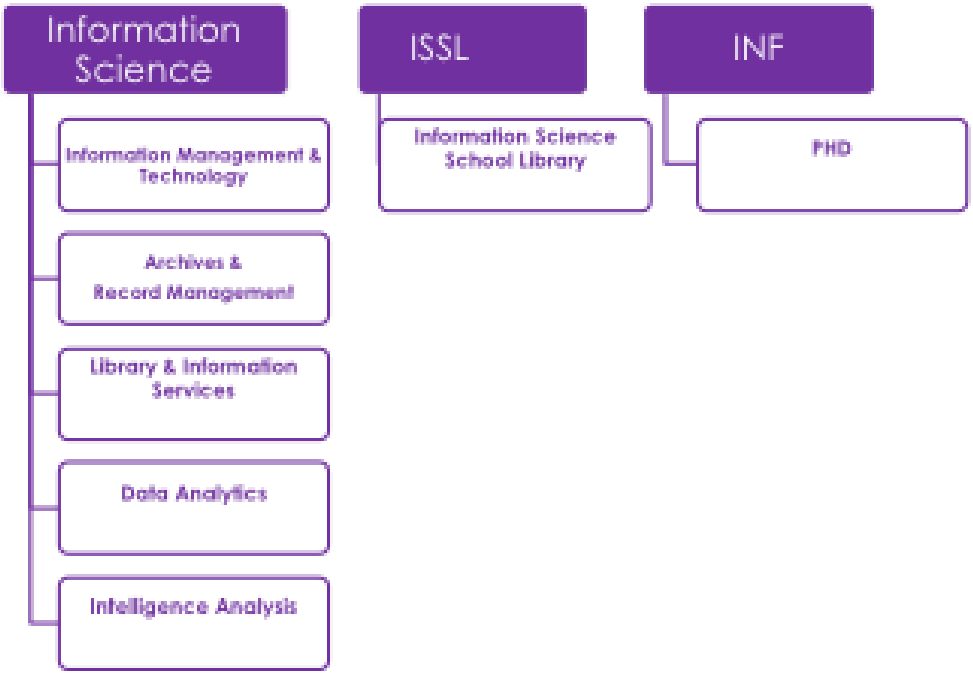

Figure 1c: CEHC Graduate Programs

CEHC Organizational Structure and Faculty/Staff Committees

At present CEHC has ten standing committees and faculty and staff serve on at least one or more of the committees:

CEHC Faculty/Staff Committees

- Undergraduate Committee
- Graduate Committee
- Grievance Committee
- Policy Review Committee
- Faculty Development Committee
- Assessment & Evaluation Committee

Typically, committee membership is voluntary with faculty/staff free to serve on committees where their expertise and experience can best be utilized. In the case of untenured faculty however, the consensus of CEHC is that junior faculty should not serve on labor intensive committees, e.g., the Faculty Development (Tenure & Promotion) or the Policy Review Committee. The composition of a committee may be modified based upon the issue that the committee is tasked to consider or resolve, and outside stakeholders are often included if additional expertise and/or experience is needed. Ad hoc committees are formed as the need arises.

The chair of each committee provides updates during regularly scheduled weekly faculty/staff meetings. Dean Griffin, committed to transparency and shared governance throughout all levels of the College, also provides weekly updates regarding university and

SUNY-wide budget and policy recommendations. As CEHC is continuously evolving, Dean Griffin provides updates concerning new collaborative opportunities for faculty and staff to consider. Active participation and open communication are encouraged, and challenges and risks are discussed openly and respectfully. Individuals who wish to speak privately to the Dean can do so whenever we wish.

Each committee is chaired by a faculty or staff member. As the first public college of its kind in the nation student enrollment has far surpassed initial projections. As an example of the range of issues a committee may address, during the 2018-19 academic year the Policy Review Committee drafted, and the faculty voted to adopt, the following policies:

- Policy 2019-1 CEHC Instruction Quality Assurance Policy
- Policy 2019-2 CEHC Religious Observance Policy
- Policy 2016-7.2 CEHC Promotion and Tenure Policy

A list of the 2018-2019 CEHC Committees can be found in Appendix O.

Weekly Meetings

Although meetings are referred to as faculty meetings, the name is a misnomer because all staff who are a part of CEHC are invited to attend the weekly meetings. Dean Griffin chairs the meeting, together with a faculty chairperson, elected by faculty/staff at the beginning of the year. Regularly scheduled meetings have helped CEHC to create a culture of trust and inclusiveness. Weekly updates by committee chairs provide an opportunity for people on other committees to provide their insight and suggestions. Knowledge sharing across disciplines and areas of study has helped to minimize information silos typically inherent in most organizations.

Twice Semesterly Retreats

Two retreats each semester provide opportunities for faculty and staff to work together on projects in a shared learning space. For example, on January 22, 2019, CEHC faculty participated in an interactive professional development workshop to ensure that faculty use a common vocabulary when it comes to educational assessment and evaluation. Faculty learned to create learning goals, articulate learning objectives and to design multiple formative assessments to provide measurable and observable evidence of student learning. Faculty used their own syllabi and identified learning goals and learning objectives aligned to multiple forms of formative assessments to strengthen their instruction and help encourage students to self-regulate (Table I.1.1b).

Table I.1.1b: Spring 2019: Faculty Professional Development Workshop

Workshop Outcomes
Learning Goal: Faculty will learn how to create learning goals, learning objectives, and formative assessments
Learning Objectives:

1. Faculty will be able to define the learning goal(s), learning objectives, assessments, and learning outcomes for a topic
2. Faculty will be able to distinguish learning goals and learning objectives from instructional activities or assignments in their syllabi
3. Faculty will be able to translate broad standards into learning goals and specific learning objectives for a topic.
4. Faculty will be able to create measurable and observable learning objectives for a topic
5. Faculty will design learning objectives targeting the three learning domains: affective, cognitive, and psychomotor for a topic
6. Faculty will design corresponding formative assessments to determine student's level of mastery of specific learning objectives
7. Faculty will be able to distinguish the purpose of formative and summative assessment for their topic.

Faculty designed curriculum (defined as a set of learning goals), articulated specific learning objectives, and designed multiple formative assessments aligned to learning objectives to provide tangible evidence of what students have or haven't learned. A handout explaining the process and definitions of the key concepts is available in Appendix C. By articulating what faculty expect students will be able to know, do, and/or feel, and identifying the criterion of performance (how students will be assessed/judged/graded) and sharing this information with students, students are encouraged to take control of their learning. Just a cursory examination of faculty designed rubrics and checklists developed over the past few years (see Appendix B.2) illustrates how powerful this model has been in helping faculty to strengthen instruction (and student learning). Faculty design instruction and assessments with intention (Johnson, 1977) to help students master the learning objectives and to encourage faculty to reflect upon the quality of their instruction.

While this sounds deceptively easy, it is difficult and requires a commitment on the part of faculty to self-reflect and self-assess. Information science faculty have engaged in this meta-assessment process since 2011[6] and will agree that although the process at first is arduous it has helped them to identify what it is they hope students will be able to know, feel, and/or do. It is often difficult for educators to describe what it is they expect students to learn as a result of each class, lesson and/or module. Additionally, faculty (K-12 through higher education) often struggle to identify the criterion of acceptable performance for each

[6] Stefl-Mabry, J. and W. E. J. Doane (2012). "Student Learning Outcomes & Assessment Review (SLO&AR): Aligning learning outcomes with assessment practices," University at Albany, State University of New York.

Stefl-Mabry, J., et al. (2012). "Retrospective Reflection: Insight into preservice school librarians' competencies and skill development as revealed through field notes." School Library Research 15.

Stefl-Mabry, J., & Doane, W. E. J. (2014, Thursday, April 3 – Monday, April 7). Teaching to assess: Lessons learned when faculty and preservice educators learn to assess and assess to learn. Paper presented at the American Educational Research Association Annual Meeting, Philadelphia, PA.

Stefl-Mabry, J. (2018). "Documenting evidence of practice: The power of formative assessment." Knowledge Quest **46**(3): 50-57.

learning objective they list. It is not enough to say: "Students will learn about a variety of information seeking models". Faculty must describe methods/instruments (formative assessments) by which they will document tangible/observable evidence that students have learned about information search models. This requires careful thought. Faculty must ask themselves "Why am I teaching this?" "What do I expect students will learn as a result of this lesson/activity/discussion?" "Is this a core educational value? Is it something that has value beyond just this one lesson?" "How will I document evidence of student learning?" "What evidence will I collect to document that students have learned **it**?" Equally important faculty must gather, interpret, and use assessment information to improve their current or subsequent instruction.

I.1.2 Assessment of attainment of program goals, program objectives, and student learning outcomes;

Systematic assessment is integral to the culture of UAlbany's IS program. The SLO&AR process has helped Information Science faculty to develop assessment literacy. Over the years, faculty have refined assessments to reinforce students' conceptual understanding helping learners to visualize solutions, describe problems, and promote collaborative learning, problem solving, social construction, and communication.

Faculty view class assessment as one of the most powerful methods to improve student learning[7] and their own instructional practice[8]. All full-time faculty members complete a Student Learning Objectives and Assessment Review (SLO&AR) at the end of each semester for each course they teach. Data provided from the SLO&ARs is aggregated and quantitatively and qualitatively analyzed. A formal narrative, with course and programmatic recommendations is shared biannually with all faculty. Faculty review the report, provide feedback, and come to a consensus on course actions or programmatic changes. In the current era of heightened accountability, it is important that faculty, students, and stakeholders to understand what is expected, can describe the criterion of acceptable performance, and detail how students/workers/information professionals will be evaluated.

Feedback is collected each semester from students via course evaluations and from mentors who host graduate students during fieldwork and internships. Practitioners, content-area specialists, and other stakeholders across a broad range of disciplines and subject areas work with us to ensure that the curriculum for each of our programs incorporates the professional standards of the various information professions; is relevant, accurate, and of practical value; and often benefits the hosting agency/institution. Faculty work with intern mentors over the course of the semester conducting site visits (virtual and/or face-to-face), telephone and Skype interviews, and exit interviews. Such interactions ensure that what is

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[7] McMillan, J. H. (2013). Why we need research on classroom assessment. Research on Classroom Assessment. J. H. McMillan. Los Angeles, CA, SAGE**:** 3-16.

McMillan, J. H., Ed. (2013). Handbook of Research on Classroom Assessment. Los Angeles, CA, SAGE. 9781412995870 Sage handbook of research on classroom assessment. Ed. by James H. McMillan.

[8] McMillan, J. H. (2010). The practical implications of educational aims and contexts for formative assessment. Handbook of formative assessment. H. L. Andrade and G. J. Cizek, Routledge**:** 41-58.

being taught in the classroom is aligned to the professional norms and cultural reality of the field and profession. Mentors often provide students and faculty with opportunities to learn how to navigate successfully as information professionals in the context of the real-world.

UAlbany's location in the capital city of New York affords faculty and students the unique opportunity to work with many governmental agencies in the Capital District. Information Science graduate students often work directly with colleagues and staff from the New York State Library, the New York State Museum, the New York State Archives (a unit of the Office of Cultural Education within the New York State Education Department, the New York State Education Department and other government and corporate entities. Such collaborative partnerships provide faculty and students the opportunity to work on real-world problems related to information access, use, privacy, security, and equity.

I.1.3 Improvements to the program based on analysis of assessment data;

The SLO&AR process has changed what, why, and how faculty teach. By incorporating largely non-putative formative assessments early in the semester faculty are able to provide just-in-time instructional support to students who may be struggling to master basic introductory concepts. Gathering, analyzing, and sharing assessment information with students in a timely fashion allows faculty to provide additional instructional support when students need it and encourages students to self-regulate. Sometimes instructional interventions might be required to help individual students, and other times faculty might make minor (or major) adjustments to course content. Faculty view teaching as a dynamic interactive process that involves learning with and from students.

Information gathered from mentor interviews and surveys is analyzed and shared with faculty during curriculum planning meetings and, if needed, programmatic and instructional adjustments are made. Our goal is to ensure that our programs prepare the next generation of information professionals yes, for traditional library and information science careers and professions, and also to develop ethically responsible leaders who are willing to embrace change, identify opportunities, tackle challenges, and weigh risks associated with issues related to today's technologies and try to anticipate tomorrow's risks and benefits as well.

The faculty, with resource commitments from the Dean, are committed to expanding, extending, and challenging the traditional boundaries of library and information studies in terms of research scholarship, teaching excellence, and experiential service to fulfill UAlbany's Strategic Plan priorities:

1. Student Success
2. Research Excellence
3. Diversity & Inclusion
4. Internationalization
5. Engagement & Service (The Strategic Plan for the University at Albany, 2018-2023).[9]

[9] Albany, U. a. (2018-2023). Authoring Our Success: The Strategic Plan for the University at Albany. In U. a. Albany (Ed.).

Rapidly rising enrollment numbers throughout our graduate programs—in the past two years—along with the high demand for our graduates by employers in educational settings, libraries, schools, museums, governmental agencies, and industry are a testament to the faculty's commitment to providing students with high quality academic programs.

The chart below illustrates how, with institutional support and leadership, one of our graduate programs, the Information Science School Library (ISSL) program more than quadrupled enrollment in the past two years. And this enrollment growth continues as the number of students currently registered in ISSL is over 100.

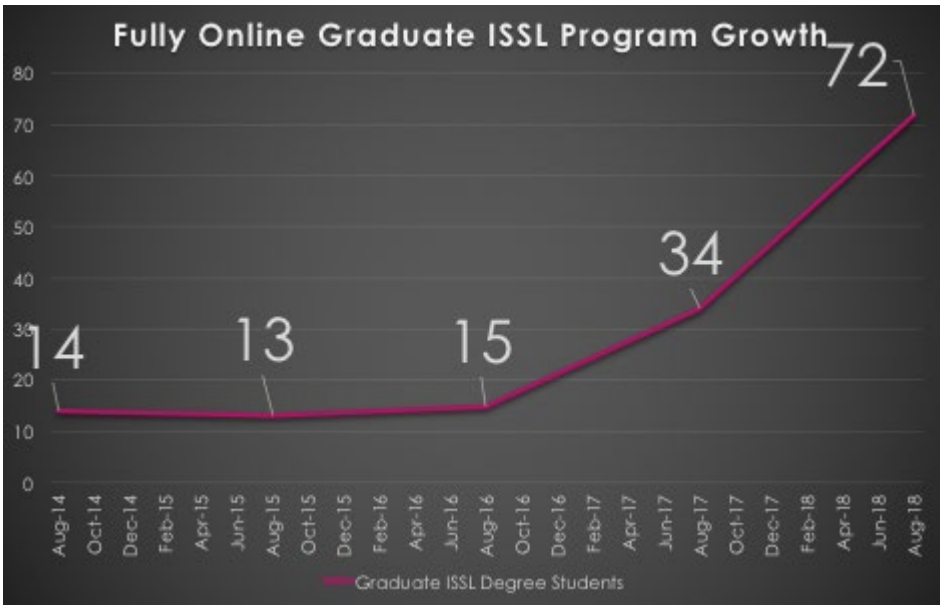

Figure 1d: ISSL Enrollment Growth, 2014-2018

We are pleased to report that 99% of ISSL graduates pass the New York State teaching certification exams on their first attempt and 100% of our graduates are hired as fulltime school librarians during, or shortly after they graduate—often being offered multiple employment opportunities. In 2014 the New York State Education Department (NYSED) adapted the edTPA, the Educational Teacher Performance Assessment, as a certification requirement for all teacher training programs. This mandate required major modifications to each of the core courses in the school library program. The School Library Specialist edTPA requires that pre-service school librarians design, implement, and assess three to five lessons and document K-12 students' academic performance using multiple evidence-based measures.

Our enrollment in the other tracks has also begun to rebound with the influx of support from CEHC. The table below illustrates the enrollment trends from 2011 to 2018.

Table I.1.3ab: MS IS Enrollment Trends by Concentration, 2011-2018

# and %* of students	Fall 2011	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017	Fall 2018	Total
Library and Info. Services	75 (34.09%)	71 (36.59%)	66 (42.03%)	48 (40%)	43 (38.05%)	27 (27.55%)	23 (22.12%)	26 (22.41%)	379 (33.78%)
School Library Media	55 (25%)	33 (17.01%)	20 (12.74%)	14 (11.67%)	16 (14.16%)	19 (19.39%)	36 (34.62%)	51 (43.96%)	244 (21.75%)
Archives & Records Mgt	38 (17.27%)	40 (20.61%)	26 (16.56%)	18 (15%)	18 (15.93%)	20 (20.41%)	23 (22.12%)	22 (18.97%)	205 (18.27%)
Information Syst. & Tech.	26 (11.81%)	25 (12.89%)	27 (17.2%)	29 (24.17%)	25 (22.12%)	18 (18.37%)	13 (12.5%)	13 (11.21%)	176 (15.69%)
Information Mgt. & Policy	7 (3.18%)	11 (5.67%)	8 (5.09%)	3 (2.5%)	2 (1.77%)	2 (2.04%)	2 (1.92%)	1 (0.86%)	36 (3.21%)
Certificate of Advanced Standing	2 (0.9%)	3 (1.55%)	1 (0.64%)	3 (2.5%)	1 (0.88%)	1 (1.02%)	1 (1.96%)	1 (0.86%)	13 (1.16%)
Non-degree	17 (7.72%)	11 (5.67%)	9 (5.73%)	5 (4.17%)	8 (7.08%)	11 (11.22%)	6 (5.77%)	2 (1.72%)	69 (6.15%)
Total	**220**	**194**	**157**	**120**	**113**	**98**	**104**	**116**	**1122**

The importance of providing credible, reliable information is vital to the safety, security, and stability of our country and the world. We are in the process of working with a broad range of information stakeholders (traditional and nontraditional) to explore ways to grow a new generation of information professionals who will have careers in fields that did not exist ten years ago: UX designer (user experience designer), social media manager, SEO (search engine optimization) specialist, vlogger, data scientist, digital media specialist, drone operator, etc. Many of the skills and competencies related to these and emerging information science dependent careers are also critical for 21st century librarians, who as information professionals, are taught in our programs to view themselves as "first responders" whose primary responsibility is to provide reliable information to users.

I.1.4 Communication of planning policies and processes to program constituents. The program has a written mission statement and a written strategic or long-range plan that provides vision and direction for its future, identifies needs and resources for its mission and goals, and is supported by the university administration. The program's goals and objectives are constituent with the values of the parent institution and the culture and mission of the program and foster quality education.

Under Dean Griffin's leadership, and in collaboration with our colleagues in CEHC, over the past two years we have re-conceptualized and revamped each of the IS program concentrations as outlined in the Curriculum Section. Along with the revisions is a commitment to performance-based outcomes for students *and* faculty. Towards that goal, assessment and evaluation has been integrated within all aspects of the IS program. This helps to ensure that learning goals are aligned to observable, measurable, and realistically attainable learning objectives.

The IS-IA curriculum was developed with reference to standards provided by the Defense Intelligence Agency in the guidelines for Intelligence Community Centers of Academic

Excellence.[10] In addition, an Intelligence professional with 15 years of experience reviewed the curricula of nine comparable programs and reviewed discussions held by the International Association for Intelligence Education in 2017 on teaching Intelligence Analysis. Two other Intelligence professionals with 9 and 31 years of service respectively also reviewed the curriculum.

Intelligence Analysis Programs used for comparative analysis

Mercyhurst	MS Applied Intelligence
The Citadel, The Military College of South Carolina	MA Intelligence and Security Studies
Georgetown	MPS Applied intelligence
American Military University	MA Intelligence Analysis
American Public University	MA Intelligence Analysis
The University of Texas at El Paso	MS Intelligence & National Security Studies
Daniel Morgan Graduate School of National Security	MA Intelligence
Northeastern University	MS Strategic Intelligence & Analysis

The IS-DA curriculum was developed to reflect the current state of the art in a rapidly changing area, and one that critically depends on theories, techniques, and other expertise from multiple disciplines. In addition, the IS-DA curriculum is especially tailored to fit within the larger context and goals of the IS program, as well as CEHC. To fulfill this our curriculum draws elements from Information Science, Computer Science, Data Science, Mathematics and Statistics, and research methods typically associated with the Social Sciences. The curriculum was created by several members of the CEHC faculty with expertise in Information Science, Machine Learning, Homeland Security, Cybersecurity, Computer Science, as well as extensive expertise in curriculum development and management, educational pedagogy, and program governance.

In order to create a foundation of database and data analytics concepts and techniques to provide graduating students with an advanced conceptual and practitioner's level knowledge of data analysis and construction of predictive models we drew from a variety of sources for elements of our curriculum. These included the ongoing efforts to represent an up-to-date Computer Science Curriculum elements such as database, data mining, machine learning, and proficiency in developing and using software (e.g. https://www.cc2020.net/), similarly we drew data gathering, cleaning, handling, storage, analysis, and visualization concepts from Data Science, and the relevant statistical background, concepts, and techniques from Mathematics and Statistics.

While many programs in NY, and across the Northeast, and in the U.S. have programs that touch on some aspect of data analytics (e.g. data science, computer science, statistics) fewer

[10] https://www.grants.gov/web/grants/view-opportunity.html?oppId=291655

have a focus similar to ours, where the data analytics is squarely integrated with the Information Science and within the context of CEHC. Here are the ones we have found are most relevant:

Data Analytics Programs for comparative analysis

Drexel University	MS in Data Science
Fordham University	MS in Data Analytics
Illinois Institute of Technology (IIT)	MS in Data Science
Northwestern University	MS in Analytics
New York University (NYU)	MS in Data Science
University of Michigan	MS in Data Science
University of Virginia	MS in Data Science

At the present time we are working to align the undergraduate programs with the master's program to provide students with a seamless pathway to graduate programs or careers. To accomplish this, we have created undergraduate and graduate committees composed with faculty, students and professional stakeholders representing informatics, cybersecurity and emergency preparedness.

The IS program relies upon a global network of organizational and institutional partners, mentors, and alumni, to ensure that the program's mission and learning goals are authentic, relevant, and meaningful. The employment of contingent faculty who are leaders within their respective professions and/or professional organizations, allows students and faculty to benefit from the wisdom of their practice, experience, and fellowship. Although the faculty, as scholars, are regularly engaged in exploring new frontiers within their respective fields and/or disciplines, it is the experience of our contingent faculty who we rely upon to provide us with the understanding of the day-to-day practices and professional organizational norms.

Since the fall of 2017, CEHC has been working together to ensure that students in the master's degree program receive a rigorous and robust high-quality education. Planning, evaluation, and systematic assessment and programmatic evaluation are carried out within the context of and in conjunction with broader planning activities in the State University of New York (SUNY) system, the University at Albany, and amongst CEHC stakeholders. This section will consider the SUNY system-wide mission statement and strategic plan, the University at Albany's mission statement and strategic plan, CEHC's mission statement, and the former Department of Information Science's mission statement, goals, and learning objectives.

The State University of New York (SUNY)

SUNY is the nation's largest comprehensive system of higher education and includes 64 institutions, including research universities, academic medical centers, liberal arts colleges, community colleges, agricultural and technical institutes, and a growing online learning network. SUNY's system-wide strategic plan acknowledges that in a knowledge economy,

institutions of higher education must be pivotal in generating growth and revitalizing communities

SUNY's Mission Statement

To provide to the people of New York educational services of the highest quality, with the broadest possible access, fully representative of all segments of the population in a complete range of academic, professional and vocational postsecondary programs including such additional activities in pursuit of these objectives as are necessary or customary. These services and activities shall be offered through a geographically distributed comprehensive system of diverse campuses which shall have differentiated and designated missions designed to provide a comprehensive program of higher education, to meet the needs of both traditional and non-traditional students and to address local, regional and state needs and goals (https://www.suny.edu/about/mission/).

SUNY's imperatives, as represented on the SUNY seal: "To Learn, To Search, To Serve" evoke the centrality of education, the spirit of inquiry, and the full participation in civic life that is expected from students, faculty, throughout all of SUNY (The State University of New York, 2010, p. 4). SUNY's system-wide strategic plan is committed to Six Big Ideas:

1. SUNY and the Entrepreneurial Century
2. SUNY and the Seamless Education Pipeline
3. SUNY and a healthier New York
4. SUNY and an Energy-Smart New York
5. SUNY and the Vibrant Community
6. SUNY and the World

The University at Albany

The University at Albany is a comprehensive, Carnegie R1 public research institution that serves the distinctive needs of more than 17,300 students at the graduate and undergraduate levels. The student body and faculty represent more than one hundred nations, providing a rich variety of perspectives and life experiences that enrich the learning experiences for students and faculty. There are over 120 undergraduate majors and minors and the Master of Science in Information Science (MSIS) is one of more than 125 graduate programs. Over the past ten years the University at Albany has built considerable momentum to increase its capacity for scholarship, strengthen its Research I designation, ensure access to academic excellence for all students, and better align its efforts across operational units with the mission of the university.

The University at Albany is in the midst of its largest academic expansion in fifty years. During the tenure of President Robert J. Jones (2013-2016), two new colleges were launched: The College of Engineering and Applied Sciences (CEAS) and CEHC. In addition, in the fall of 2015 the University at Albany and Albany Law School (a private institution) created a mutually beneficial affiliation program.

The University at Albany's Mission Statement

The University at Albany is an engine of opportunity. Fueled by our unique mix of academic excellence, internationally recognized research, and world-class faculty, we relentlessly pursue possibilities, create connections, and open opportunities—locally and globally—with a single-minded purpose: To empower our students, faculty, and campus communities to author their own success. This is the University at Albany.

The University at Albany's Vision Statement

To be the nation's leading diverse public research university—providing the leaders, the knowledge, and the innovations to create a better world.

The values of the University at Albany are:

- **Access**: To enable individuals to pursue learning, research, and service regardless of economic, societal, or physical factors.
- **Integrity**: To be committed to—and expect from all—honesty, transparency, and accountability.
- **Inclusive Excellence:** To value diversity of all forms, academic freedom, and the rights, dignity, and perspectives of all individuals.
- **Common Good:** To work collectively and collaboratively to benefit our communities—and create a sustainable way of life on earth.

Mission Statement of CEHC

To make a difference by providing high quality academic programs, blending an interdisciplinary and entrepreneurial spirit, fostering enthusiasm for learning and teaching, promoting operational application of knowledge, and leading cutting-edge research initiatives that bring together people, technology, and knowledge to address the challenges of the 21st century.

Mission Statement of Information Science

To educate, challenge, and inspire library, archival, and information professionals to be leaders in an information-driven and interconnected society. The collection, organization, retrieval, preservation, management, and dissemination of information resources enrich cultures within society and promote equity, diversity, accountability, intellectual development and social justice.

The mission statement for the IS program aligns seamlessly with the mission statements of SUNY, the University at Albany, CEHC, and the Strategic Plan of the University at Albany (Albany, 2018-2023). The Strategic Plan of the University at Albany rests on the following five priorities:

1. Student success
2. Research excellence
3. Diversity and inclusion
4. Internationalization, and

5. Engagement and service.[11]

Learning Goals of the Information Science Program

The goals of the IS program are aligned to the American Library Association's knowledge and competencies statements and are revisited bi-annually as part of the department's *Student Learning Outcomes & Assessment Review.*

1. Students will demonstrate a sense of professional identity by applying the concepts and principles of library and information sciences and related disciplines
2. Students will know the history of the information professions and understand the changing roles of information professionals in a global environment.
3. Students will create, select, acquire, organize, manage, preserve, retrieve, evaluate, and disseminate information using relevant theories and practices.
4. Students will assess the information needs of diverse and underserved populations and provide resources and instruction to meet those needs.
5. Students will recognize the crucial role of users in the design and implementation of information systems.
6. Students will be able to formulate, interpret, and implement information policy, and promote ethical standards in the production, management, and use of information.
7. Students will understand the importance of information access issues, including privacy, equity, intellectual property, and intellectual freedom.
8. Students will be able to conduct and apply research to develop, maintain, and assess information services and systems.
9. Students will be able to implement and use appropriate technologies in the delivery of information content and services.
10. Students will apply management principles to the creation, administration, and promotion of information organizations and systems.
11. Students will understand information environments and be able to build collaborative relationships to strengthen information services and literacy.

To determine whether programmatic goals are being met, the program has developed a systematic evaluation process that allows us to document evidence of students' mastery of the program's learning goals in academic coursework, field experiences, internships, as well as in their careers, as newly minted and seasoned information professionals. This iterative process ensures that students in the master's degree program are immersed in academic and professional experiences designed to challenge, inspire and motivate students to become critical thinkers, compassionate listeners and innovative problem solvers.
The IS program communicates about planning policies and processes to program constituents in various ways. The Master's Student handbook, posted on the college website, provides information about its history, mission statement, and program goals among many other policies.[12] We review the policies and statements with students during the student orientations. During such discussions on revisions for the program goals, mission statements, and faculty bylaws in faculty meetings, student representatives are present and deliver the faculty discussions to students.

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[11] Albany, U. a. (2018-2023).
[12] https://www.albany.edu/sites/default/files/2019-05/Fall%202017%20Handbook%20PDF-able%20version.pdf

The program identified eleven learning goals to be incorporated into the curriculum and faculty's research and service responsibilities. How courses are mapped with the program goals is presented in the Curriculum section of this document, Standard II.
The eleven program goals collectively address the eight essential elements in this standard.

I.2 Student Learning Outcomes

Clearly defined student learning outcomes are a critical part of the program's goals. These outcomes describe what students are expected to know and be able to do by the time of graduation. They enable a faculty to arrive at a common understanding of the expectations for student learning and to achieve consistency across the curriculum. Student learning outcomes reflect the entirety of the learning experience to which students have been exposed. Student learning outcomes address:

A Culture of Assessment to Improve Student Learning

The information science faculty have continued to systematically ensure that the university's ALA-accredited academic program is aligned to our program's vision, mission, and goals. Reflective practice shaped and informed by systematic assessment is deeply engrained within the culture of the IS program. Assessment information is systematically gathered, analyzed, interpreted, and used to improve course instruction and curriculum to ensure that students master the learning goals faculty articulate in their syllabi.

In 2011 the Department of Information Science developed and adopted a systematic and comprehensive process to align program goals, learning goals, learning objectives, and student learning outcomes with evidence-based measures of assessment. The original framework: *Student Learning Outcomes & Assessment Review* (SLO&AR), was developed by Joette Stefl-Mabry and William E. J. Doane, with input from the Department's Curriculum Committee[13].

SLO&AR is both a summative and formative assessment measure that ensures students that the department's program goals are being met; helps to avoid course and content redundancy; and affords the faculty an opportunity to share pedagogical strategies and assessment measures with each other. Over the years the SLO&AR instrument has been revised based on input from faculty and in the summer of 2017, an online user-friendly version was launched to facilitate data collection and analysis: https://goo.gl/forms/kAILgfXReRIAJTMb2.

At the end of each semester, faculty complete an online SLO&AR review for each course they teach. Every two years, during the summer, the full departmental results are analyzed, and an aggregated report is compiled and presented to the faculty for review and comment in the fall. The faculty discuss the findings and make suggestions and recommendations for programmatic, curriculum, instructional, or assessment modifications (see Appendices B.1, B.2, and D for the SLO&AR reports and iterations). If needed, revisions are made to the report and/or the SLO&AR assessment tool and the faculty vote on action steps based on the findings generated in the report. This process has helped faculty to determine what

[13] J. Stefl-Mabry & Doane, (2012).

learning goals are worthy of instruction and how to articulate clear measurable and observable performance expectations for themselves and for their students.

In addition, faculty are encouraged to list the broad learning goal and associated measurable and observable student learning objectives associated with learning goal each week in their course modules or syllabi. This provides students and faculty with a clear understanding of the criterion of performance for each student learning goal, learning objective, and learning outcome. Thus faculty:

- Define learning goals, learning objectives, learning outcomes in their instructional (module/unit/course, etc.).
- Identify the learning domains targeted by the learning objectives (cognitive, psychomotor, or affective) in their instructional plans (module/unit/course).
- Create learning goals aligned to local, state, national and/or professional standards in their instructional plans (module/unit/course).
- Develop learning objectives at a level of specificity appropriate to course lessons and modules/units.
- Design learning evaluation tools (assignments, projects, presentations, etc.) that target specified learning objectives.
- Integrate formative assessments regularly within class/course instruction to determine each student's level of mastery of the specified learning objectives.
- Gather and interpret formative assessment data to determine the effectiveness of the faculty instruction.
- Gather and interpret assessment data to determine the effectiveness of a module/unit/course.
- Recognize that, while necessary, a summative assessment is to help the faculty assign a grade (rank or judge students) however summative assessments (graded tests/exams/etc.,) are not used to make "instructional improvement decisions."[14]

SLO&AR involves a reflective process designed to encourage faculty to think about what works, what doesn't, and propose changes to course content and instruction to improve the learning experience for students and the teaching practice of faculty. This process has helped faculty to understand that learning goals need to be broken down into specific, measurable and observable learning objectives to be of practical value at the classroom level. It also enables faculty to identify core capabilities. A core capability is a proficiency that contributes to concurrent and subsequent learning and/or has powerful application to the world outside the learning environment.

[14] Popham, W. J. (2014). The right test for the wrong reason. Phi Delta Kappan, 96(1), 46–52. https://doi.org/10.1177/0031721714547862

The SLO&AR Model

The SLO&AR logic model[15] attends to three core products of the educational mission: intentions to act, evidence of effect, and justification for the educational intervention itself. The SLO&AR logic model is presented below in Figure 1e.

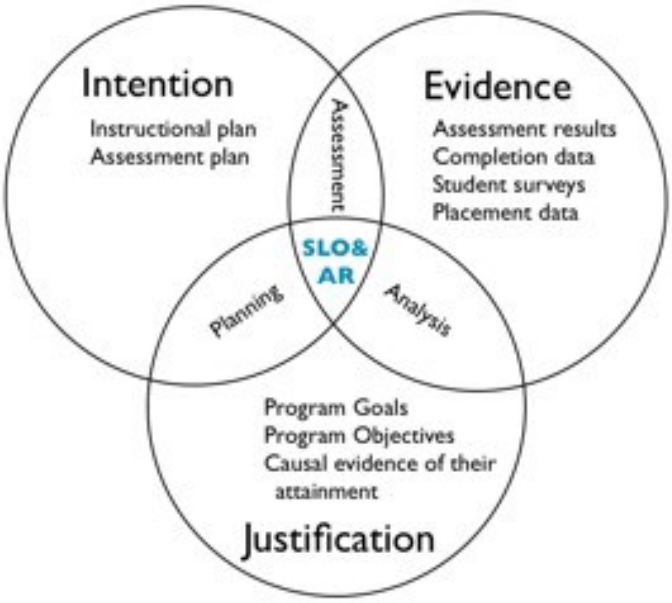

Figure 1e: The SLO&AR Model

SLO&AR is an evaluation of assessment practices that align *program goals* and course specific *student learning objectives* with *assessments* that provide documentation of students' level of academic attainment (See Appendix B.2 for iterations of the SLO&AR collection instrument). The SLO&AR (meta-) process helps faculty to articulate clear, causal connections between their actions and targeted student learning objectives in the form of a SLO&AR—*Student Learning Outcomes & Assessment Review*.

Thus, SLO&AR has helped faculty to:

- Clearly articulate the specific attitudes, skills and knowledge (learning objectives- also referred to as learning outcomes) they expect students to attain by the end of a course
- Design assessments that determine the extent to which the student learning objectives (described above) have been attained
- Plan instructional activities to help students master the learning objectives
- Share assessment information (feedback) with students to help students master the learning objectives

[15] Doane, W. E. J. (2012). Student Learning Outcomes & Assessment Review (SLO&AR) logic model.

Stefl-Mabry, (2012).

- Use assessment information to improve their instructional practice
- Use assessment information through the SLO&AR reports to evaluate the effect of the course specifically and the Department of Information Science program goals more generally.

Further explanation of the SLO&AR logic model can be found in Stefl-Mabry & Doane (2014).

Evidence of improvement to the program based on SLO&AR Findings

Evidence of how the results of SLO&AR process have led to program improvement is apparent in the findings of each of the SLO&AR reports (see Appendix D for SLO&AR Reports for 2011, 2012, 2013-15). Highlights of some of the findings that led to program improvements are presented below, for full findings please refer to the SLO&AR reports in the Appendix.

SLO&AR Report 2011

Finding 1: Faculty identified student behaviors that impeded learning and claimed responsibility in creating learning environments to support student learning.

Several faculty noted that students often came to class without reading the assigned readings or completing assignments. Instructors acknowledged that unless assignments were aligned directly to the readings students often did not do the readings. This seemingly benign finding led faculty to question why they were assigning readings in the first place and what they expected students to learn or be able to do as a result of completing the readings. Now faculty select readings with intention and purpose and aligned to assignments (assessments) that are meaningful and relevant to students as information professionals.

Finding 2: Faculty use a variety of assessment measures

The sharing of different types of assessment measures among the faculty prompted other faculty to consider adopting new assessment instruments to document students' mastery of student learning objectives. This has led to more project-based and team-based learning mirroring the work environment that many of our graduate students will work in or are presently working in.

Finding 3: Faculty find group and teamwork enhance student learning, but that group work can also be problematic.

Although faculty recognized the benefits of having students work collaboratively, they also noted that students often experience problems related to sharing the work load and managing their time effectively. This has led faculty to incorporate self and peer evaluations as part of course assignments to hold groups accountable. It also has encouraged faculty to incorporate more team building exercises within course work early on in the semester to promote more trust and cooperation amongst group members.

SLO&AR Report 2012

Finding 1: Department of Information Studies (our name at the time) faculty have made a commitment to systematic assessment and evaluation.

Although there was a bit of learning curve in helping faculty to align their course objectives to the learning goal and developing assessment measures that would document evidence that students had mastered the learning objective, by the second year 80% of the full-time faculty had completed SLO&AR reports for the fall and spring semesters. This was an important and encouraging finding.

Finding 2: Department of Information Studies Program Goals are addressed in faculty SLO&ARs.

The SLO&AR review revealed that all of the departmental program goals had been addressed in the 2012-13 SLO&AR report. This indicates that the program goals are relevant and reflective of best practices.

Finding 3: The majority of faculty's student learning objectives (learning outcomes) focus primarily on students' attainment of the cognitive learning domain: knowledge.

Another strength of the SLO&AR review is that the summary report reveals whether learning objectives fall within the cognitive (knowledge), psychomotor (skill), or affective (attitudes/beliefs) learning domain. In 2012-13 the vast majority of the learning objectives focused on the cognitive learning domain. While it is understandable that most academic work required to successfully complete a graduate course would target the cognitive learning domain, seeing this result made some faculty begin to think about ways to incorporate learning objectives that would also target the psychomotor and affective learning domain. A critical component of SLO&AR is not just listing the learning objective but being able to determine students' level of attainment for that learning objective as well. The SLO&AR reviews have encouraged faculty to think more deeply about the core values they wish to impart to students.

SLO&AR Report 2013-15

The 2013-15 SLO&AR report was unique in that it captured data from 26 courses as it combined two years of data which provided a much richer data set. Faculty were also more forth-coming in describing what they were doing in their classes and how they were determining students' mastery of the learning objectives.

Finding 1: Faculty emphasize higher forms of cognitive processing

2013-15 SLO&AR data revealed that faculty were emphasizing learning objectives to promote students' cognitive processing through the intentional design of instructional activities that encourage students to create and put parts together in a new way. Over 76% of the learning objectives highlighted in the faculty SLO&ARs (20 out of 26 courses) incorporate critical thinking components either explicitly by describing critical thinking requirements of various instructional or assessment activities or implicitly by describing an assignment or assessment that encourages and fosters the development of critical thinking abilities.

The evidence for this can be "heard" in the faculty's descriptions of the learning objectives:

"Students will be able to identify the issues and challenges the field faces today from a professional and technological perspective."

"Students are encouraged to investigate theoretical backgrounds and how the professionals deal with those problems in what context…students suggest recommended actions based on their findings of research…"

"*Students will play the role of a consultant hired to make improvements in the environment they have observed…the group makes an overall determination of how well they feel this [information environment] is serving its clients/customers/users. The criteria for making this assessment must be created and defended."*

Finding 2: Faculty integrate theory and practice in assessments
2013-15 SLO&AR data reveals faculty's commitment to provide students with hands-on-learning experiences to help students develop problem-solving skills essential to become effective information professionals. Highlights of such learning experiences include:

"Hands-on practice of processing an archival collection: this entails (1) creating a processing plan, (2) physically arranging the materials in a collection, (3) creating a finding aid for the collection, (4) creating a MARC record, creating an EAD record, (5) creating a web presentation of the collection, and (7) writing an assessment paper."

"Analyzing the existing organizational structure and practices (digital collections, news information, books, produce for a grocery store, etc.) based on various factors such as consistency, standards, clientele, and information behavior modes."

Finding 3: Faculty are using multiple assessments systematically throughout the semester to improve student academic performance:
As faculty became more accustomed to completing their SLO&ARs, they began using multiple assessments throughout the semester to help students master the learning objectives.

"The fact that the students took their first quiz early, only three weeks into the semester, was of great help to me and the students...It is a sure way for me to assess their progress in the course during the first three weeks of the semester and adjust my teaching accordingly."

"I found that smaller and more frequent assignments are more useful than larger and less frequent assignments."

I.2.1. The essential character of the field of Library and Information Studies

Table I.2.1a Curriculum Map of ALA Standards and IS program Goals

Standard	Program Goals	Core/Track/Elective Courses
1.2.1	1,2,10	601, 602, 670
1.2.2	6,7	601, 614, 676
1.2.3	3	602, 614, 670, 675, 673, 668
1.2.4	8	602, 608, 675, 673, 676, 677
1.2.5	11	601, 614, 677
1.2.6	4,7,11	601, 602, 614, 578
1.2.7	2,9	601, 523, 677, 675, 673, 677
1.2.8	4,5	601, 602, 614, 571, 578, 675, 673, 670, 666, 677, 668

Our program goals of 1, 2, and 10 reflect the essential character of the field of Library and Information Studies. This aspect is delivered by core courses and track core courses (see *Table II.1.a Program Goals and Matching General Core courses with Assessment Measures,* in II Curriculum section). For example, in *IST 601: Information Environment* the required course readings include papers and presentations published by information science professionals, which helps students to identify the current trends and best practices in the field. . *IST 670: Teaching Fundamentals for School Libraries* provides clinical placements for students in three school settings: elementary, middle school, and high school to provide students with the opportunity to experience the role of a school librarian in diverse school environments. The importance of evidence of practice is stressed for all library and information studies professionals, and our program prepares information professionals to provide credible evidence of their effect–whether programmatically or individually.

I.2.2. The philosophy, principles, and ethics of the field

Students are introduced to the philosophy, theories, principles, and ethics associated with a wide range of fields, careers, and associated information science disciplines and professions through coursework and immersion in practice during their respective (and often multiple) internship/clinical experiences. We honor Ranganathan's Five Laws of Library Science[16] and true to the spirit of his Fifth law: "The library is a growing organism" each of our programs continues to evolve based upon the needs of constituents and stakeholders, professional and organizational standards, and institutional policies. Close professional relationships with practitioners, governmental agencies, industry, and educational institutions allow us to design research-based curriculum and integrate clinical experiences that benefit students, practitioners, researchers, and the profession.

As an example, the ISSL program, recognizing that school librarians need to provide causal evidence of their practice, prepares students who can teach information literacy and are fluent in assessment literacy. ISSL graduates know how to align information literacy instruction to students' and teachers' instructional needs and collect evidence of how their

[16] Ranganathan, S. R. (1931). The five laws of library science. Madras, London, The Madras Library Association; E. Goldston.

instructional practice influences student learning. They are able to document tangible evidence of what students learn and share this information with various district stakeholders. Recently, after observing several of our students in their internships (student teaching), administrators from a local high needs large urban school district contacted CEHC and asked if we would provide professional development assessment workshops for their school librarians focused on the design and use of formative assessments. In October 2019 we will be providing formative assessment workshops for all district school librarians. This experience has also opened the door for a new CEHC partnership and we are currently working with this district (and several others throughout the state) to establish a K-12 career and profession pipeline, beginning in elementary school to provide students with authentic STEM learning experiences related to information science, emergency preparedness, homeland security, and cybersecurity careers and professions. The goal is to introduce early students to the various fields and professions associated with CEHC and work with K-12 educators on developing curriculum to prepare students to enter careers or pursue academic study in CEHC fields when they graduate from high school. School librarians and a wide range of community partners will be instrumental to the success of this project which currently is in its planning stage.

Specific course learning objectives align with program goals 6 and 7. Students come to appreciate the underlying philosophy, theories and principles of the various information fields and are able to apply research-based theory in daily tasks. For example in *IST 614: Administration of Information Agencies* a case study approach is used and students discuss the importance of ethical standards of information and information policies in leadership roles at all levels of information agencies; in *IST 660: Archival Representation* a practicing professionals are invited to participate either as panelists or individually to discuss professional ethics, access, and use of information contained in archives; in *IST 601: The Information Environment* students critically examine the code of ethics as viewed by professional associations such as ALA, ACRL, and IFLA. Faculty keep abreast of policy changes and maintain the relevance of the curriculum by staying current on research findings.

I.2.3. Appropriate principles of specialization identified in applicable policy statements and documents of relevant professional organizations.

In our program, there are six distinct tracks: Archives & Records Management, Data Analytics, Information Management & Technology, Intelligence Analysis, Library & Information Services, and School Library Media. Curriculum for each track aligns to the standards and recommendations for each specialized professional body. For example, the Archives and Records Administration track's curriculum is aligned to the policies and recommendations of Society of American Archivists (SAA)[17]. The Information Management and Technology track adheres to the educational guidelines established by the American Society for Information Science and Technology (ASIS&T).[18] Our EHC-focused tracks, Data Analytics and Intelligence Analysis, align to the Position Statement on Information Ethics in Library Information Science (LIS) Education, released by the

[17] https://www2.archivists.org/prof-education/graduate/gpas
[18] http://www.asis.org/Board/educational_guidelines.html

Association for Library and Information Science Education (ALISE).[19] The ISSL program integrates local, state, and national standards from the New York State Education Department (NYSED), the International Society for Technology in Education (ISTE), the American Association of School Librarians' (AASL) National School Library Standards, and the Graduate Teacher Accreditation Council (GTEAC).

I.2.4. The importance of research to the advancement of the field's knowledge base.

Program goal 8 specifies the importance of student research. The ability of conducting research is important not only for academic researchers but also for practitioners in developing and accessing measurable and observable evidence of the effect of information services and systems on end users. *IST 608: Research Methods* is a program core course which every student in this program is required to take. In addition, many core and elective courses seamlessly integrate research components within assignments and assessment measures, to ensure that students have multiple experiences to document, and demonstrate credible evidence of how what they do, or what they provide in terms of information services and systems influences, or has an effect upon the user or organization.

IST 673: School Libraries: Theory, Practice & Assessment is applicable for school librarians and educators who wish to learn how to document credible and reliable evidence of their practice and obtain fluency in information literacy and assessment literacy. Students complete a practicum which is a performance-based assessment, consisting of 5-8 lessons, collaboratively developed with the student's mentor, based on current research in library and information science and cognitive science, aligned to local, state and national standards, is customized to meet the learning needs of a diverse student body. The lessons are implemented within the PreK-12 learning environment and assessed through a series of formative assessment instruments designed by the graduate student to determine what K-12 students actually learned and to determine the effectiveness of the instruction the graduate students provided. The results of graduate students' practicums are shared with stakeholders in the Prek-12 building (school librarians, teachers, administrators, and other community stakeholders). This provides tangible and credible evidence of the effect school librarians have on student learning. Thus, UAlbany ISSL graduates are able to document evidence of their effect on student learning, this is something that the field of school librarianship has been struggling with for decades.

I.2.5. The symbiotic relationship of library and information studies with other fields

Information is handled by many different professions and through different stages of services and programs. It is important to build collaborative relationships with other fields and professions to strengthen information services and literacy that Library and Information professionals provide. Program goal 11 emphasizes this aspect. The following courses address Program goal 11:

IST 560 Information and Public Policy focuses on the analysis and evaluation of public policies affecting the production, dissemination, and access to information at the national

[19] https://www.alise.org/index.php?option=com_content&view=article&id=51

and international levels, in order to better understand their rationale, effectiveness, and appropriateness with regard to their intended role across all facets of society. Concepts of intellectual freedom, the public's right to be informed, freedom of information and privacy legislation, policies on dissemination of information in non-print formats, open government, national security classification, privatizing of government information, and issues of equity are addressed to provide an overall scope of how law, policy, and information intersect.

IST 656 Archives and Manuscripts demonstrates for students the connection between archival administration and the related fields of librarianship, records management, and history. Students learn about the historical development of archives and how that history is related to library practices, public records administration, the research interests of historians, and the role of public historians in the use and interpretation of historical records.

IST 675 Curriculum and Supportive Resources: This course, grounded in evidence-based theory and practice, introduces students to information literacy curriculum by teaching preservice and/or in-service educators how to design, assess and evaluate information literacy curriculum and resources for elementary, middle and high school students. Students must apply knowledge of how to select and modify curricula, assessments, information resources, and adaptive and assistive technologies to meet the individualized needs of students with disabilities and other special learning needs. Principles of instructional design (including universal design), cognitive learning styles, and research-based strategies for educational assessment and evaluation are scaffolded into a series of performance-based assignments that culminate in an information literacy learning segment, customized to address the diverse learning needs of PreK-12 students and aligned to local, state and national standards. The learning segment is co-planned with the graduate student's mentor and implemented in the student's field placement. The lesson is systematically assessed through a series of formative assessments designed by the student to document the effect of the lesson(s) on the academic performance of PreK-12 students as well as the instructional effectiveness of the graduate student. Graduate students learn how to integrate research-based instructional strategies that are responsive to the characteristics and learning needs of all students.

Other examples can be found in additional courses in the Archives and Records Administration track, which address the connections between information studies and public and nonprofit administration, the work of historical researchers, and corporate and government accountability. The new tracks in Data Analytics and Intelligence Analysis emphasize obvious linkages between the safety and reliability of information, technologies of computer and data science, and how information and knowledge may spur actions that can protect our society’s welfare.

I.2.6. The role of library and information services in a diverse society, including the role of serving the needs of underserved groups

Understanding that library and information services need to meet the diverse demands from all social constituents is an important element of the profession. Library and information professionals should play a critical role in providing information services and systems for diverse groups of a society, including underserved users and marginalized social groups. Our program goals of 4, 7, and 11 specifically address these roles of professionals.

In the course of *IST 660: Archival Representation*, students discuss and research the postmodern philosophical influence to the archival profession, which emphasizes the social roles of archivists to document the history of those have been historically marginalized by the written documents. In *IST 565: Human Information Behavior*, students study the information seeking behavior of populations in various contexts, including underserved and marginalized communities. Our Public Libraries course, *IST 618*, focuses on the current issues, practices, and trends when providing equitable access to information in public library organizations.

IST 578: Literature for Young Adults provides an introductory survey of literature for young adults (ages 12-18), with an emphasis on current authors. Includes a discussion of the characteristics, needs, and reading interests of young adults using the diversity that exists in the classroom and community which may include young adults of different genders and sexual orientations, different cultures and backgrounds and young adults from homes where English is not the primary language.

IST 675 Curriculum and Supportive Resources applies knowledge of how to select and modify curricula, assessments, information resources, and adaptive and assistive technologies to meet the individualized needs of students with disabilities and other special learning needs. Principles of instructional design (including universal design), cognitive learning styles, and research-based strategies for educational assessment and evaluation are scaffolded into a series of performance-based assignments that culminate in an information literacy learning segment, customized to address the diverse learning needs of PreK-12 students and aligned to local, state and national standards.

I.2.7. The role of library and information services in a rapidly changing technological society

Technological advancement is a blessing for information users, but also it is a challenge for information professionals. The program had previously required students to take technology courses for 6 credits, however in the revised 36-credit iteration–though not required–the addition of courses focusing on emerging information technology have been integrated into the general curriculum. Courses cover up-to-date technologies and standards, such as digital libraries and archiving, RDA and metadata standards, as well as other recent developments of web sciences, data and information analysis, and drone technologies. *IST 529: Text Analysis* teaches students how to integrate natural language processing, classification

schemes, and computer science to develop content analysis approaches related to security of information and intelligence gathering.

The faculty's cutting-edge research is often introduced and used during teaching. Faculty research findings are regularly used to shape and inform programmatic changes. For example:

IST 608: Research Methods is core course instructing students on the methodologies and varying statistical analyses used in the information professions. Students evaluate the design and results of published research that uses quantitative and qualitative methods, descriptive statistics, and strengths and weaknesses of these processes. Faculty incorporate their own experiences with research and publishing, and provide guidance on the fundamental process of applying for research funding. Ultimately the students build a mock grant proposal that draws on the knowledge they have gained throughout the semester.

IST 677: Creating Innovators: The Maker Movement is a course designed for PreK-12 educators, school library media specialists, teacher librarians, classroom teachers, STEM educators, tech integrationists, educational technology teachers, public, special and academic librarians. Explores evidence-based strategies that support building models, prototypes, inventions and innovations to encourage creative problem solving and team collaboration across a range of subject matters, abilities and ages. Applications of learning theory and assessment strategies to create interdisciplinary inquiry-based maker experiences to meet the needs of users from a variety of backgrounds including English Language Learners, exceptional children and adult learners, while promoting a safe and supportive environment for exploration and learning.

Additionally, the *IST 666 Current Problems in Information Studies* course is a portal to allow our faculty the opportunity to introduce new course topics that reflect the ever-changing field of information science. IST 666 course topics may be repeated, and eventually incorporated into the rotating course schedule if in high demand based on student enrollment.

1.2.8. The needs of the constituencies the program seeks to serve

Program goal 5 acknowledges the importance of recognizing the crucial roles of users in the design and implementation of information services and systems.

Use and user studies are taught in various courses, such as *IST 618 Public Libraries*, *IST 606 Collection Development and Management*, *IST 565: Human Information behavior* and *IST 610: Visual Resources Management*. These courses specifically include assignments to assess user communities, and gather data that will influence how organizations build and implement their services and systems to fulfill the needs of their diverse constituents.

1ST 670: Teaching Fundamentals for School Libraries, introduces students to the professional roles and responsibilities of today's 21st century certified school librarian by having students shadow school librarians in three educational settings (elementary, middle and high school). Emphasizes the interdisciplinary teaching role of school librarians and

highlights strategies for working collaboratively within the school environment and the importance of documenting evidence of practice. Utilizes research-based strategies to introduce students to information literacy curriculum and educational assessment literacy. Introduces students to school based and community-based resources to enhance information literacy instruction for diverse student populations. Identifies school librarian responsibilities and requirements in working with students with disabilities and other special learning needs.

IST 673: School Libraries: Theory, Practice & Assessment: this is the capstone course for the school library program. The course is applicable for school librarians and educators who wish to learn how to document evidence of their practice and obtain fluency in information literacy and assessment literacy. Students complete a practicum which is a performance based assessment, consisting of 5-8 lessons, collaboratively developed with the student's mentor, based on current research in library and information science and cognitive science, aligned to local, state and national standards, customized to meet the learning needs of a specific student body, implemented within the PreK-12 learning environment, and assessed through a series of formative assessment instruments designed by the graduate student. Graduate students demonstrate that they have consulted and collaborated with specialists in the PreK-12 environment to identify appropriate resources, technology (including assistive technology) and instruction to meet the individualized needs of students with disabilities and other special learning needs. The design of the curriculum unit must demonstrate knowledge of the PreK-12 students' cultural backgrounds, individual needs, talents and personal interests. The lessons exhibit knowledge of individual students' cognitive style, prior learning, and apply knowledge of criteria and procedures for evaluating, selecting, creating and adjusting instructional materials to meet the learning needs of all students. Formative assessment information is gathered, interpreted and used to shape current and subsequent instruction to determine whether the PreK-12 students have mastered the specified learning objectives. Assessment information is also used to help graduate students modify their instruction to help all PreK-12 students master the learning objectives. A final report documents of evidence of the graduate student's practice, summarizes the results and provides a self-reflective assessment describing pedagogical and instructional strategies to improve his/her practice.

The IS program values the consistency across the curriculum and tracks. In order to make sure that program goals and student learning outcomes are consistently addressed, core courses are mainly taught by full-time faculty members.

I.3. Program goals and objectives incorporate the value of teaching and service to the field.

UAlbany's ALA-accredited MSIS encompasses the ISSL program, an online program that leads to initial teaching certification as a library media specialist or to professional certification if candidates are initially certified. As per New York State Education Department's guidelines ISSL students are eligible to be hired as full-time school librarians with either a 12-credit Supplemental Certificate (for those with teacher certification) or an 18-credit Internship Certificate (for those without teacher certification) as they work toward

completing their ISSL Master's degree. Additionally, all ISSL graduates are immediately eligible for licensure as public librarians upon graduation. This program aligns to the National School Library Standards[20].

The ISSL program requires a total of 100 hours of field experience for certification as a School Library Media Specialist in New York State. The number of hours to be completed are integrated within the curriculum of the following courses as follows:

- IST 670* – 50 hours of field experience
- IST 675 – 25-50 hours of field experience
- IST 673 – 25-50 hours of field experience

One half of the 100 hours must be completed in a high needs school and the other half must be completed in a low needs school. In addition, 50 hours must be completed in an elementary school and 50 hours in a middle school or high school.

IST 670 is mandatory for students who are not certified teachers. Students who are not required to take IST 670 will complete 50 hours of field experience in IST 675 and 50 hours in IST 673.

The ISSL program also requires 100 hours of field experience and two internship placements (two 40-day sessions, for a total of 80 days or at least 400 hours).[21]

The other five tracks require a 3 credit, 150-hour internship placement (IST 678, formerly IST 668), which can be repeated. The objective of the internship is to provide MSIS students with an opportunity to observe and apply principles learned in graduate study in contemporary information environments, help in the development of career opportunities, and provide the intern with hands-on experience in specific work assignments.

I.4 Within the context of these Standards each program is judged on the extent to which it attains its objectives. In accord with the mission of the program, clearly defined, publicly stated, and regularly reviewed program goals and objectives form the essential frame of reference for meaningful external and internal evaluation.

The IS program has a stated mission and set of program goals and objectives that are publicly available and incorporated into course syllabi as appropriate. Through various means, e.g. internship evaluations, the SLO&AR reports, surveys of current students, graduates, and internship mentors, we have data for reviewing how well we meet our program goals.

[20] https://standards.aasl.org/framework/
[21] https://www.albany.edu/graduatebulletin/information_science_school_library_ms_degree.php

1.4.1 The evaluation of program goals and objectives involves those served: students, faculty, employers, alumni, and other constituents.

As mentioned above, we regular receive and evaluate input from students, faculty, and alumni. We rely on our internship site mentors to serve as representatives of the professional community in providing input about the program and the educational attainments of our students.

I.5 The program has explicit, documented evidence of its ongoing decision-making processes and the data to substantiate the evaluation of the program's success in achieving its mission, goals and objectives.

Data collected from surveys, internship evaluations, student research and independent studies, faculty activity reports, and the SLO&AR reports provide rich materials for evaluating the program's success in meeting its mission, goals and objectives.

I.6 The program demonstrates how the results of the evaluation are systematically used to improve the program and to plan for the future.

Now within the more robust structure and support of our new home, we can make better use of the data accumulated as we fine tune our programs with an eye toward the future. Curricular and programmatic changes, for example, which are reviewed by the Graduate Committee, are presented to the faculty with a justification based on evidence from the various data sources mentioned.

Standard II: Curriculum

Introduction

Ever since our first meeting with Dean Griffin on October 20th, 2017 when he shared his vision that IS program would be integral to the new College's mission, we have been working with our CEHC colleagues to identify overlapping areas of research and teaching. A new organizational home together with the College's status as an iSchool has provided us with unique opportunities to expand the boundaries of information science and redefine the roles and capabilities of information professionals. An example of this is the addition of two new tracks to the MSIS program: Intelligence Analysis and Data Analytics. (For details, please see below - Section II). Consequently, enrollments in the IS program have ticked upwards. Additionally, growing interest by undergraduate seniors to enroll in the 4 + 1 program, in which they can take up to 12 graduate credits that will count toward both their undergraduate and graduate degrees, is yet another sign that growth in enrollments will continue.

The following narrative with respect to Standard II will briefly describe the three programs that were under the Department of Information Science (iSci) in the College of Engineering and Applied Sciences (CEAS) between Fall 2016 and Fall 2017. These programs are: (1) the Ph.D. in Information Science, (2) B.S. in Informatics, and (3) Master of Science in Information Science (IS). The bulk of the narrative, and its focus, will be on the ALA-accredited Master of Science in Information Science (MSIS) program. Since our last ALA accreditation self-study and presentation in the fall 2010 and now, the IS program has resided in three different colleges. Each college, including CEHC, have or have had, other undergraduate and graduate programs. This narrative will only address the programs that have had a significant overlap in terms of student body, courses, and faculty with the MSIS program.

Ph.D. in Information Science Program

The Ph.D. program in Information Science is an interdisciplinary program with affiliated faculty representing many different colleges and schools across the University at Albany. The interdisciplinary Ph.D. program offers a diverse range of faculty expertise and specialization areas. The curriculum focuses on multidisciplinary aspects and problems in the information science field, emphasizing research, teaching, and the application of theory to practice. Through their research, the program's faculty and students attempt to address current and future issues, including the effect of information technology and policies on end users specifically and society more generally. Students may choose six primary and secondary specializations. Currently the Ph.D. program has 36 doctoral students and approximately 50 full-time and affiliated faculty[22]

Bachelor of Science (B.S.) in Informatics Program

The B.S. in Informatics program is an undergraduate program that provides students a unique opportunity to study the applications of information science & technology across disciplines. This provides students with a solid foundation for information-related careers in

[22] An archived list of affiliated faculty can be found here: https://web.archive.org/web/20181218080116/https://www.albany.edu/cehc/inf-phd-faculty.php. The current website page for affiliated faculty will be under production in the 2019-2020 academic year.

all sectors of society. The B.S. in Informatics degree is a combined major and minor[23], requiring 54 credits. A total of 33 credits are required core courses focusing on the relationship between technology and society, the use of various technologies across platforms, and programming fundamentals. Students are provided with opportunities to gain real-world experience through 9 credits of experiential learning. There are six tracks in the program: Interactive User Experience (IUX), Cyber-security, Social Media, Data Analytics, Software Development, and Information Technology (IT). Students in the IT and IUX tracks can complete their program fully online or on campus.

Master of Science in Information Science (IS) Program (42-Credits prior to Spring 2019; now 36 credits)

The IS program, the major focus of this self-study report, was, until the spring of 2019, a 42-credit program consisting of core courses (21 credits) that all students were required to take, various courses depending on track requirements, and electives. Since spring of 2019 the IS program is now 36 credits. The core courses cover technology (6 credits), the information environment (3 credits), information and knowledge organization (3 credits), research methods (3 credits), administration of information agencies (3 credits), and an internship (3-6 credits). The program prepares students for jobs where the generation, management, and use of information is the dominant or an essential requisite. Students work with closely with faculty advisors to develop an individualized program based upon the student's career aspirations, prior experience, and interests. Students, with verification and approval by the faculty advisor, choose courses that align to their program and career choices.

Students in the IS program currently have five tracks to choose from:

- Library & Information Services
- Archives/Records Administration
- Data Analytics
- Information Management & Technology
- Intelligence Analysis
- Information Science School Library (formerly a track; a stand-alone degree since Spring 2018)

The revised and approved curriculum was designed to align the IS program with that of other ALA-accredited programs. Revision of the program began in August 2016 and by September 2017, the revised curriculum was reviewed by the campus governance bodies including the Graduate Academic Council, and the University's Faculty Senate. The program was then reviewed by the New York State Department of Education Office of Higher Education and received approval in October 2018. CEHC has been offering the approved program as of January 2019, and students admitted since October 2018 are being enrolled in the revised program. Please see II.1, II.5, and II.7 for more on the rationale for, and details about, the revised 36-credit MSIS program's curriculum.

Master of Information Library & Information Services/School Library Media Specialist (42 credits) Prior to Spring 2018; now Information Science School Library (ISSL) (36 Credits)

[23] It is worth noting that we are one of the few institutions in the country that requires students to either complete a minor or satisfy the minor requirement with the completion of a double major.

The "Library & Information Services/School Library Media Specialist" 42-credit program was one of the original five tracks/concentrations in the IS program. The ISSL program was initiated and designed in 2018 to comply with the requirement by the New York State Education Department that calls for all Educator of Teacher Preparation Programs to be disaggregated from existing programs. ISSL is designed to lead to a recommendation for the issuance of initial and professional teacher certificate in Library Media Specialist. It builds on the strengths of the pre-existing School Library Media Specialist track and prepares students seeking certification to work in PreK-12 school libraries throughout New York State and in other states with reciprocity with New York State.

ISSL was designed in consultation with program faculty, school library practitioners throughout New York State, University at Albany School Library Media Program alums, and an external consultant whose expertise is in information literacy curriculum. The program is designed to align to the 2017 National School Library Standards (http://standards.aasl.org/) and will help to grow 21st century school library information professionals. Concurrent with accredited IS Programs, the ISSL program consists of 36 credits and was registered as an Educator Preparation Program in February 2018. Since 1999, students in the School Library Media Specialist track and the four other tracks of the IS program have completed 42 credits, including six core/required technology credits. However, the ubiquitous nature of technology and the natural integration of technology instruction in almost all courses within the ISSL program, together with the increased number of students who enter the program possessing requisite or advanced technology skills, prompted the faculty to revise and streamline its course offerings. The updated ISSL program additionally was approved for distance education delivery. For all intents and purposes, the revised IS program is considered a single ALA Accredited program and is treated as such. The new structure allows our students to both earn their degree and qualify for state certification.

II.1: An Evolving Curriculum Based on Goals and Objectives
The curriculum is based on goals and objectives and evolves in response to an ongoing systematic planning process involving representation from all constituencies. Within this general framework, the curriculum provides, through a variety of educational experiences, for the study of theory, principles, practice, and legal and ethical issues and values necessary for the provision of service in libraries and information agencies and in other contexts. The curriculum is revised regularly to keep it current.

Goals and Objectives

Our IS program is intentionally designed for students considering a career in libraries and information environments spanning sectors such as academic, government, non-profit, and corporate. As such, the program and individual courses have learning goals and student learning objectives targeted at students seeking professional careers where library and information services play a critical role in meeting an organization's or community's functions, activities, missions, and goals. The IS program has been designed to meet the following goals that also mirror student learning outcomes of individual courses. After completing the IS program, students will be able to:

1. Demonstrate a sense of professional identity by applying the concepts and principles of library and information sciences and related disciplines [Goal #1]

2. Know the history of the information professions and understand the changing roles of information professionals in a global environment [Goal #2]
3. Create, select, acquire, organize, manage, preserve, retrieve, evaluate, and disseminate information using relevant theories and practices [Goal #3]
4. Assess the information needs of diverse and underserved populations and provide resources and instruction to meet those needs [Goal #4]
5. Recognize the crucial role of users in the design and implementation of information systems [Goal #5]
6. Formulate, interpret, and implement information policy, and promote ethical standards in the production, management, and use of information [Goal #6]
7. Understand the importance of information access issues, including privacy, equity, intellectual property, and intellectual freedom [Goal #7]
8. Conduct and apply research to develop, maintain, and assess information services and systems [Goal #8]
9. Implement and use appropriate technologies in the delivery of information content and services [Goal #9]
10. Apply management principles to the creation, administration, and promotion of information organizations and systems [Goal #10]
11. Understand information environments and be able to build collaborative relationships to strengthen information services and literacy [Goal #11]

Table II.1a shows the list of core courses in the IS program and the corresponding program goals addressed by contents of the courses. Also, the Table presents one or more assessment tools and methods that faculty use to assess student-learning objectives aligned to program goals. The main learning goals of the program and how they address some of the relevant ALA standards with respect to curriculum are discussed in detail below (see, for instance, II.2.1, II.2.2, and II.2.3.).

Table II.1a Program Goals and Matching General Core Courses with Assessment Measures

Program Goal	Core Courses	Represented Evidence of Assessment
#1	601 The Information Environment	Information science expert (open topic) paper and presentation
	602 Information & Knowledge Organization	Literature review paper examining problems of knowledge and information organization Course Portfolio
	673 School Libraries: Theory, Practice & Assessment	Reflections Field Notes Special Topic Paper/Presentation

		Professional Teacher Portfolio
	675 Curriculum & Supportive Resources	Reflections Field Notes Information Seeking Group Project
#2	601 The Information Environment	Information science expert (open topic) paper and presentation
	673 School Libraries: Theory, Practice & Assessment	edTPA Lesson Segment Professional Teacher Portfolio Special Topic Group Project Discussion Board
	675 Curriculum & Supportive Resources	Professional Teacher Portfolio Lessons Discussion Board
#3	602 Information & Knowledge Organization	Midterm exam Assignment comparing different methods of providing metadata in bibliographic networks and social networking sites Assignment examining controlled vocabulary and natural language Course portfolio
	614 Administration of Information Agencies	Information policy memo and outline
#4	601 The Information Environment	Information science expert (open topic) paper and presentation
	602 Information & Knowledge Organization	Literature review paper
	673 School Libraries: Theory, Practice & Assessment	Professional Teacher Portfolio Technology and Student Achievement Contemporary Topic Group Paper/Presentation Danielson's School Librarian Evaluation
	675 Curriculum & Supportive Resources	Professional Teacher Portfolio

		Professional Development Group Project Assistive/Adaptive Technology Project Children in Poverty
#5	601 The Information Environment	Field study paper/Wiki and presentation
	673 School Libraries: Theory, Practice & Assessment	Field notes Reflections edTPA/Teacher Performance Portfolio
	675 Curriculum & Supportive Resources	Field notes Reflections Professional Teacher Portfolio
	614 Administration of Information Agencies	Case study presentation
#6	614 Administration of Information Agencies	Information policy memo and outline
	673 School Libraries: Theory, Practice & Assessment	Reflections Field Notes Professional Teacher Portfolio
	675 Curriculum & Supportive Resource	Reflections Field Notes Professional Teacher Portfolio
#7	601 The Information Environment	Information science expert (open topic) paper and presentation
#8	602 Information & Knowledge Organization	Assignment to compare different methods of providing metadata in bibliographic network and social networking site
	608 Research Methods	Final research/grant proposal
#9	601 The Information Environment	Information science expert (open topic) paper and presentation

	673 School Libraries: Theory, Practice & Assessment	Field Notes Special Topic Paper/Presentation Professional Teacher Portfolio
	675 Curriculum & Supportive Resource	Field Notes Professional Development Paper/Presentation Professional Teacher Portfolio
#10	614 Administration of Information Agencies	Budget memo and revised library budget Case study presentation Final paper
	676 Administration of School Library Media Centers	Final Project
#11	601 The Information Environment	Field Study Paper/Wiki and Presentation
	673 School Libraries: Theory, Practice & Assessment	Reflections Field Notes Professional Teacher Portfolio Teaching Videos Documenting Clinical Practice
	675 Curriculum & Supportive Resource	Reflections Field Notes Professional Teacher Portfolio Teaching Videos Documenting Clinical Practice
	614 Administration of Information Organizations	Case Study presentation

A Variety of Educational Experiences

Core courses in the IS program cover a wide array of topics, theories, and issues relevant to library and information science education and practice. Courses are specifically designed to provide students with options in terms of their specializations and are offered as part of track requirements, and other elective courses that students may take which adds to the list and range of topics. Understandably, some courses cover broader aspects of topics and theories in LIS whereas others are more focused in their coverage. For instance, our

foundations core course, *IST 601: The Information Environment* provides an introduction to a wide range of topics such as information seeking, users, environments, policies, professions, and ethics. On the other hand, the main content of one of the electives (and a required track course in the revised 36-credit program), *IST 565: Human Information Behavior*, reviews theories, methods, and models related to information behavior (HIB), as well as the use of information resources in different social contexts.

To ensure that the content of core and track courses are aligned to current professional standards and students are taught applicable research theory senior, full-time faculty are assigned to teach core courses. In this way, faculty integrate and implement research-based knowledge within coursework to maximize student learning. As our college grows, and we find ourselves in a situation where we need to offer multiples sections of core courses we seek out and employ information professionals with significant professional experience who hold MSIS (or higher) degrees as adjuncts to teach additional sections.

Tables II.1b and II.2a contain descriptions and focus of courses in the IS program and demonstrate the range of topics that the LIS program addresses.

Table II.1b Descriptions of MSIS Core Courses

Course Number & Title	**Description**
IST 601: The Information Environment	Provides a theoretical background for students entering the information science professions. Through guest speakers, field studies, a variety of readings, class discussion, lectures, and writing assignments, students gain knowledge of the critical themes in the field, such as information seeking, users, environments, policies, diversity, and ethics.
IST 602: Information and Knowledge Organization	An introduction to fundamental concepts and theoretical principles of knowledge-organization models and techniques used to facilitate access to information resources. The emphasis in this course is on interdisciplinary ideas and concepts.
IST 608: Research Methods	Basic research methods and statistics for students entering the information science professions. Covers descriptive and inferential statistics through correlation and regression; basic quantitative and qualitative research methods, research ethics, and the creation of grant or research proposals.
IST 614: Administration of Information Agencies	614—Principles and theory of administration. Consideration of planning, organization, budgeting, personnel, standards, inter-institutional cooperation and the role of information in supporting decision-making.

(ISSL students replace IST 614 with IST 676)	676— Problems, practices, and research in the organization, administration and management of school library media centers. The course examines problems, practices and research in the organization, administration and management of school media centers including practices related to local and national standards; services, facilities, policies, and planning including designing and maintaining facilities for persons with disabilities and special needs; budgeting, personnel and organizational factors; public relations, emergency planning, safety and advocacy. The course incorporates knowledge of federal and state laws, policies, and regulations (e.g., Individuals with Disabilities Education Act [IDEA}, Section 504 of the Rehabilitation Act of 1973) and ethical considerations (e.g., confidentiality rights and responsibilities of stakeholders) related to the education of students with disabilities.
IST 668: Internship**	Opportunity for skill development and problem solving through observation and practice in an information environment under the supervision of a faculty member and a cooperating librarian or other information professional. Meetings, reports, and 150 hours of experience required.

***Students may elect to take a second 150 hour internship for an additional three elective credits or a 300 hour internship at a single location for three core and three elective credits.*

In terms of the curriculum's emphasis on practice, in addition to assignments and projects that are integral parts of courses where students spend time in and/or study libraries and information environments, students in the IS program are required to complete a three-credit (150 hours) internship. They also have an option of taking a second three-credit internship or they can combine two internship projects (300 hours) at a single location for a total of six credits. The internship is a capstone course where student interns test and apply principles learned in various courses in the program and develop professional and practical workplace skills. Please note that students in the ISSL program have additional and/or extra practical and internship requirements to meet New York State Teacher Certification requirements.

An Evolving Curriculum

Though the curriculum has continued to grow and evolve over the years, the last *significant* revision of the current LIS curriculum of the IS program was in 1998. As a Department (before January 2018) and now College that offers, among others, an accredited graduate program, we constantly strive for the IS program to meet and exceed ALA standards. Furthermore, the motivation for any and all reviews and revisions of the IS curriculum has been to provide a learning environment that enables students to acquire the knowledge required to succeed, personally and professionally. It is our belief that any LIS curriculum needs to evolve and keep up with changes and challenges related to technology, the characteristics and needs of the student body, and the constantly evolving information environments that our students will enter as information professionals. We try to instill in

our students a willingness to be flexible, to be self-regulated learners, and to be open to and ready to embrace change. To help facilitate the adaption of such qualities, after the implementation of the redesigned IS curriculum a number of courses, mainly track specific and elective courses, were added to the curriculum.

Confirmation of the Department's (and now the College's) regular reviews of the IS curriculum and use of the reviews for systematic planning purposes was realized in the creation of the Student Learning Outcomes Assessment Review (SLO&AR) Committee. Since 2006, the Committee conducted an annual review of evidence of the attainment of student learning outcomes. The SLO&AR Reports for 2011, 2012, 2013-15 are found in Appendix D. To collect data from our growing catalog of online courses, faculty frequently use a feature in Blackboard, an online teaching and learning tool, that allows matching learning goals/objectives with individual assignments and projects (learning outcomes). At the end of each semester, data are generated from Blackboard and analyzed by the SLO&AR Committee as part of an annual review to document evidence of student learning. It should be noted that due to the aforementioned turbulent period of transition, regular SLO&AR reviews were not published in 2016 or 2017 because of faculty and staff eliminations. The 2018-2020 SLO&AR data is currently being analyzed.

The committee (before January 2018), submits a report before the beginning of an academic year, for discussion by the faculty to discuss ways to improve the learning goals, learning objectives, learning outcomes and assessment measures of specific courses. The faculty recognize the importance of setting student learning goals and learning objectives for every course to improve teaching and learning. Consequently, Professor Stefl-Mabry and one of our Ph.D. students - and a graduate of our IS program and now a lecturer in the ISSL program - Shannon Mersand, led a half-day retreat in January 2019 entirely focused on student learning goals, learning objectives, learning outcomes, and assessment. Starting in August 2019 a standing faculty committee is charged with developing college wide and course specific metrics and measurements. This is intended to link every course and section to an overarching set of faculty lead learning goals and objectives.

Any revision of or change in the IS curriculum has always been based on a strategic planning process and regular assessment and programmatic evaluation of student learning goals, learning objectives, and learning outcomes for each course. Systematic reviews of the Student Learning Outcomes Assessment Review (SLO&AR) by the Department (before January 2018) and now a faculty member (since January 2018) are conducted with full participation of the full-time faculty and partial participation of adjunct faculty each semester. This is an essential element of our continuous systematic review of the MSIS curriculum.

In addition, inputs were sought from relevant stakeholders through various mechanisms. For instance, since our last ALA accreditation self-study, we have engaged our alumni, students, and internship mentors through surveys (see Appendices E through H) and course evaluations (Appendix J.2). We have also secured the services of a high-profile consultant in the LIS field to gauge opinions about the IS curriculum and ways to improve it, organization of the program, and opportunities for growth. Data, feedbacks, and findings from the surveys, course evaluations, and the consultant were used to revise and improve the curriculum in order to align it to the needs of students and employers.

Efforts to streamline and improve the IS curriculum have continued after the Department's merger with CEHC. A dedicated standing committee (Graduate Committee) works on proposals for new courses, tracks/concentrations, and alignments between existing tracks in the IS program and programs in Emergency Preparedness, Homeland Security, and Cybersecurity. In the short amount of time since January 2018, the Graduate Committee has already created two additional tracks of the IS program in Intelligence Analysis and Data Analytics and shepherded the proposals through campus governance. Enrollments in the two new tracks began in January 2019, and the number of students showing interest has exceeded our initial projections. Other facets of our curricular evolution include the combined BS/MSIS and 4 + 1 programs that take advantage of the alignments among our undergraduate and graduate programs; and we are expanding these models to affiliate agreements with other SUNY campuses. Additional human resources changes have also been made available in the form of a full-time staff member responsible for graduate programs, and a graduate assistant to assist with administrative initiatives to improve the curriculum.

II.2. Information Resources: Creation, Management, and Use
The curriculum is concerned with information resources and the services and technologies to facilitate their management and use. Within this overarching concept, the curriculum of library and information studies encompasses information and knowledge creation, communication, identification, selection, acquisition, organization and description, storage and retrieval, preservation and curation, analysis, interpretation, evaluation, synthesis, dissemination, use and users, and management of human and information resources.

All core courses in the previous IS program (a total of 21 credits, half of the program's 42 credits) and the revised 36-credits program (15 credits), including the Internship course (IST 678, formerly IST 668); almost all track courses for each of the tracks in both programs; and the majority of elective courses cover all the areas in this Standard either fully or partially.

Tables II.1a (pg.43) & II.2a (below) illustrate how the IS program and its curriculum address Standard II.2 with respect to a focus on topics that spans the full spectrum of the information life-cycle from creation/production, organization/management, search/retrieval, access/dissemination, and use/evaluation. Table II.1a (pg.43) presents a mapping of the core courses in the IS program to program goals as well as assessment tools and methods used to evaluate student-learning outcomes. Table II.2a shows the content of courses in the IS curriculum that are aligned to areas related to this standard. In addition, Appendix K provides descriptions of all courses in the program and provides further evidence that the content of the courses are diverse and cover a wide range of areas relevant to Standard II.2.

Table II.2a Courses with Content Focus Related to Standard II.2

Characteristic of course content	Major Focus	Minor Focus
Information and knowledge creation	502, **523,** 554, 608, 673	560, 656, 666a
Identification, selection, acquisition	**601,** 605, **608,** 653, 655, 656, 666a, 673	523,554, 654
Organization and description	**523, 601, 602**, 603, 605, **608,** 653, 655, 656, 660	673
Information technology	506, **523,** 529, 533, 535, 538, 561, 611, 636, 653, 658, 666a, 666d, 673	666e, 677
Storage and retrieval	506, **523,** 529, 533, 560, 565, **601**, **602**, 605, 653, 660	654, 655, 656
Preservation	653, 654, 655	**601**, 605, 656, 660
Analysis, interpretation, evaluation, synthesis	502, 565, **601**, 603, **608,** 653, 654, 666a, 666c, 666e, 673	523, 554, **602**, 605, **614**, 656, 660
Dissemination and communication	502, **523,** 554, 560, 605, **608**, 654, 666a, 673	**602**, **614**
Management	560, **601, 614,** 654, 666b, 666c	603, 605, 655, 656, 673

**Based on full-time faculty members and syllabi of courses taught between spring 2010 and fall 2018. Course 666a is Developing User Interfaces, 666b is Public Relations and Fundraising for Libraries, 666c is Educational Assessment & Evaluation for School Librarians and Teachers, 666d is Network and Systems Security, 666e is Creating Innovators: The Maker Movement.*

II.2.1. Developing Professional Leaders

Fosters development of library and information professionals who will assume a leadership role in providing services and collections appropriate for the communities that are served.

It is often said that we live in an information age where, due to the dynamic developments and increasing applications of information technologies in the creation, management, and dissemination of information as well as delivery of information services to diverse groups of users, information professionals need to assume leadership roles that require a different set of skills, knowledge, attitudes, and dispositions. Faculty in the IS program recognize that leadership comes in various forms, including awareness of the need for information professionals to be champions and managers of change, diversity, equitable access to information, and, above all, advocates for information creators and users to enjoy intellectual freedom and access guaranteed by the United Nations Universal Declaration of

Human Rights[24]. This is why faculty make efforts to include course content and assessment tools such as assignments, problem-based learning, project management, and other activities to foster leadership development (See Appendix L for course syllabi). At the program level, leadership is the focus of a number of program goals (see p. 47).

Program goals and assessments are at the core of the full spectrum of courses provided in the IS program and the Student Learning Outcomes & Assessment Review (SLOA&R). For example, the foundations course, *IST 601: The Information Environment*, that broadly covers topics/content sometimes delivered by guest speakers who are mostly practicing librarians) emphasize leadership roles that graduates of the program will develop and need in order to succeed in a wide variety of information environments. Another core course, *IST 614: Administration of Information Agencies*, is entirely devoted to topics relevant for managers and information professionals in leadership positions. These topics include planning, organization, budgeting, personnel, standards, inter-institutional cooperation, and the role of information in supporting decision-making.

IS students also have ample opportunities to develop their leadership skills by joining student chapters of professional organizations as members and/or officers. They can also participate in events organized by CEHC and/or student groups. For instance, the University at Albany Student Chapter of the Association for Information Science and Technology (ASIS&T) organizes the Open Source Festival[25], an annual event that involves companies and organizations which are potential employers. Other student groups organize career panel discussions and resume writing workshops where practitioners serve as panelists and/or resources for workshops. In addition, the chair and co-chair of the program's umbrella student organization, the Information Studies Student Association (ISSA), regularly attend faculty meetings where they are involved in discussions revolving around the IS program and decisions that directly affect the student body.

II.2.2. An Emphasis on Research
Emphasizes an evolving body of knowledge that reflects the findings of basic and applied research from relevant fields;

As we have outlined above (see II.1), the IS curriculum is reviewed and revised regularly not only to keep up with developments in the field of library and information science but also to provide students with learning experiences that allows them to acquire knowledge necessary to succeed in the information age. Keeping up with an evolving body of knowledge demands continuously scanning recent and relevant research-based literature for changes and developments in technology, society, characteristics, and needs of the student body, and information environments. Faculty in the IS program, in addition to research and literature in LIS, also rely on literature and findings of research from other related disciplines. Because the IS program is primarily a professional degree, faculty also assign readings that emphasize cutting edge research with practical applications or applied research that translates findings into effective practice in information environments.

What is more, as a result of the move of the Department of Information Science (iSci), to CEHC, the College proposed and received approval for two new tracks, Intelligence

[24] https://www.un.org/en/universal-declaration-human-rights/
[25] https://www.albany.edu/news/68919.php

Analysis and Data Analytics, continuing our commitment to develop new tracks/concentrations to equip students with an evolving and new body of interdisciplinary knowledge and provide them with an array of employment and career opportunities outside traditional information environments. The two new tracks added courses to the IS program whose content draw on bodies of knowledge in domains and areas such as homeland security, text analysis, intelligence analysis, data science, predictive modelling, social & organizational networks, etc. (see Appendix L for course syllabi).

Some of the program goals also demonstrate how the IS program and its curriculum are rooted in rigorous research, especially a student's ability to conduct research, interpret and use the results of research, and apply research findings to address issues around the creation, selection, acquisition, organization, management, preservation, retrieval, evaluation, and dissemination of information in all formats. Program goals that emphasize the importance of research findings from a wide range of fields in LIS programs are:

- Demonstrate a sense of professional identity by applying the concepts and principles of library and information sciences and related disciplines [Goal #1]
- Create, select, acquire, organize, manage, preserve, retrieve, evaluate, and disseminate information using relevant theories and practices [Goal #3]
- Conduct and apply research to develop, maintain, and assess information services and systems [Goal #8]

The various research methods are also the main focus of one of the core courses, *IST 608: Research Methods*. The course covers topics such as basic quantitative and qualitative research methods as well as ethics in human subject research. Students in the course are required to write a grant proposal where they are required to conduct a review of the relevant literature in a topic of their choosing. In addition, faculty who teach other program core and track courses include one or more assignments that require conducting mini research projects and literature reviews. Students also have opportunities to conduct research by taking the independent study course, *IST 669: Independent Study in Library and Information Science*, and *IST 699: Master's Thesis in Information Science*. Appendix M details publications, internship projects, and thesis projects by students between spring 2010 and fall 2018.

II.2.3. Technology integration
Integrates technology and the theories that underpin its design, application, and use

The IS curriculum and its courses reflect the nature of library and information science as a study of information/content, people (users, professionals), technology/system, and the interactions between those three elements. Therefore, although users are often considered the core element in any information environment, technology and theories that govern its application are the drivers of change in how information is created, organized, accessed, retrieved, disseminated, and used. This notion is one of the main points of discussion in our courses. For instance, in *IST 601: The Information Environment*, one of the first courses our students take, the role technology plays in the information environment and specific technologies (such as the printing press, internet, World Wide Web, etc.) that are responsible for ushering in significant periods and developments in the information professions are topics for discussion. At the program level, one of the learning goals states

that students will be able to "Implement and use appropriate technologies in the delivery of information content and services [Goal #9]".

When the IS program was revised in 1999, one of the major additions to the curriculum was a six-credit core requirement that was meant to provide students a solid foundation to succeed in the digital age where information users and information environments are increasingly becoming reliant on information and communication technologies (ICTs). Since then, topics related to relevant information technologies were made integral parts of content of most of the courses in the MSIS program. In addition to a track that is devoted to information systems and technology, elective special-topic technology courses are made available for students to choose depending on their needs. Most of these courses cover the design, application, implementation, evaluation, and use (including user studies and usability) of technologies in the context of delivering efficient and effective library and information services. The following are examples of such courses:

- IST 506 Database Systems and Data Analysis (3)
- IST 523 Fundamentals of Information Technology (3)
- IST 529 Text Analysis (3)
- IST 533 (graduate)/IIST 433 (undergraduate) Information Storage and Retrieval (3)
- IST 535 Web Database Programming (3)
- IST 538 Fundamentals of XML (3)
- IST 547 Electronic Records Management (3)
- IST 561 Web Design and Development (3)
- IST 611 Information Systems (3)
- IST 636 Systems Analysis in the Information Environment (3)
- IST 653 Digital Libraries (3)
- IST 658 Database Design and Development (3)
- IST 666a Developing User Interfaces (3)
- IST 666d Network and Systems Security (3)
- IST 677 Creating Innovators: The Maker Movement (3)

II.2.4. Needs of a Diverse Society and Underserved Groups
Responds to the needs of a diverse and global society, including the needs of underserved groups;

The 21st century economy is global and multifaceted. Because of the diffusion of information and communication technologies (ICTs) worldwide, participation in economic activities, even by those in remote corners of the globe, is gradually increasing. The proliferation of ICTs has enhanced people's ability to access, disseminate, and exchange information at a faster rate and led to the coining of "global village", a metaphor for the shrinking of time and space. The global economy is primarily an information and knowledge economy. In other words, information and knowledge play critical roles in the economic and human development of countries that have the essential infrastructure and policies.

Beginning with the foundations course, *IST 601: The Information Environment*, the content of courses in the MSIS curriculum includes one or more topics directly related to diversity,

the digital divide, and ways information environments such as libraries and information professionals can address such pressing issues. Discussions around these topics are often done in the context of the global information society. Members of the teaching faculty recognize that concepts such as diversity, privacy, and public policy are important and needs to be studied and discussed by our students. Only then can we ensure that our students are prepared to be professionals with strong commitments to universal information access and equity of access.

II.2.5. Future Development of a Rapidly Changing Field
Provides direction for future development of a rapidly changing field.

Since the last major revision of the IS program, recognizing the increasing role information and communication technologies (ICTs) play, almost all instructors in the program have progressively added technology topics and instruction to their non-technology courses (both core, track, and elective courses). Several technology electives have been added, which have allowed students to take courses that they (in consultation with their respective academic advisors) deemed essential to enhancing their technology skills, make their professional portfolios complete, and strengthen their credentials for potential employers. The continuous integration of technology instruction within most of the courses in the IS program was the first step in keeping up with a changing field and information environment.

In the last two years the IS program has gone through three revisions: in 2017 to streamline the program and merge two existing tracks to create a new Information Management & Technology (IM&T) track to meet students' needs, and in 2018 to disaggregate the school library track and create the online ISSL program, and add two tracks, Data Analytics and Intelligence Analysis, that address the changing information and knowledge professions and with significant technology content/courses. As a logical next step, in the proposal to revise the IS program (which was approved in 2018 and implemented immediately) we streamlined the tracks to give priority to high demand areas or specializations.

The new track combined from two old tracks (IM&T) and the two recently added tracks (DA and IA) will allow the program to better focus its information technology concentration and course offerings as well as incorporate recent developments in the field of information management and application of information technologies into the curriculum. This will expand the IS program's appeal to a wider population of potential students, especially undergraduate students majoring in Emergency Preparedness, Homeland Security, and Cybersecurity. It will also make the IS program an attractive option for our students in the BS in Informatics program who are planning to pursue a combined BS/MS degree. In addition, both sets of undergraduate students are already taking advantage of our 4 + 1 program and enrolling in the MSIS program.

II.2.6. Continuous Professional Development
Promotes commitment to continuous professional development and lifelong learning, including the skills and competencies that are needed for the practitioner of the future.

Professional development and lifelong learning are integral components of the IS curriculum as evidenced by the following program goals:

- Demonstrate a sense of professional identity by applying the concepts and principles of library and information sciences and related disciplines [Goal #1]
- Know the history of the information professions and understand the changing roles of information professionals in a global environment [Goal #2]
- Understand information environments and be able to build collaborative relationships to strengthen information services and literacy [Goal #11]

The IS program provides its students and graduates with a solid grounding in the field and the information professions by designing and making available courses relevant to the information and knowledge economy. Faculty also stress in their courses that the field is in constant change and students need to be prepared to be flexible and willing to update their professional portfolio through lifelong learning and professional development to improve their knowledge, skills, and competencies. In a dynamic field and profession that relies heavily on innovation and new technologies to deliver effective and efficient services to users who expect information services to be delivered to or accessed by a variety of devices, including mobile and the Web, LIS educators and information professionals need to embrace lifelong learning to keep up with new developments, challenges, possibilities, and technologies in the field.

In light of this, the IS program not only provides opportunities for students to be part of student groups representing a number of states, regional, national, and international professional organizations, it also assigns faculty advisors to the student groups. Faculty advisors often mentor student group leaders and members on how to connect and network with members of professional associations as well as stay connected so that, in the future, they can tap into the networks to seek professional development opportunities. In some of the courses (for instance *IST 601: The Information Environment*), students work on projects where they reflect on how they plan to position themselves in the information professions, what their career goals are, what their strengths and weaknesses are with respect to the profession, and, most importantly, where they will need to do more in order to develop stronger skills and competencies that will position them to become strong candidates for future jobs in libraries and other information environments. What comes through in their writing is that they acknowledge the need to continuously improve their skills through lifelong learning and professional development.

For professionals who are looking to update their professional and educational portfolio, CEHC offers a certificate of advanced study (CAS) in Library and Information Science[26]. The CAS is targeted toward those who already hold a master's degree but recognize that the LIS field, due to the rapid change and growth in its body of knowledge and information technologies utilized by information environments, is a dynamic field that demands continuous professional development learning. Students in the CAS program are typically information professionals who wish to move into a new area or to update and deepen their knowledge. To keep their program of study coherent, the same level of academic advising is provided so that CAS students can customize a program of study that complements their educational and professional goals.

[26] https://www.albany.edu/graduate/information-science-certificate.php

II.3. Coherent Programs of Study and Student Learning Outcomes
The curriculum provides the opportunity for students to construct coherent programs of study that allow individual needs, goals, and aspirations to be met within the context of program requirements established by the school and that will foster the attainment of student learning outcomes. The curriculum includes as appropriate cooperative degree programs, interdisciplinary coursework and research, experiential opportunities, and other similar activities. Course content and sequence relationships within the curriculum are evident.

Curriculum Allows Students to Construct Coherent Programs

One of the ways the IS program ensures coherence in students' individual program of study is through the alignment of program goals with course content and student learning objectives, and student learning outcomes. Upon their admission, based on their choice of concentration or track, students are assigned an academic advisor who is a full-time faculty member whose interests and field of study most closely aligns with the chosen track. Students, through regular and frequent consultation with their academic advisor, carefully plan their program of study with their professional and career goals in mind. Students are allowed and encouraged to identify course offerings from other units within the University, and work with academic advisors who check that course curriculum ensures a good fit with the student's program of study. Students also have the option of developing an independent study with a faculty member if no course exists that meets their research interests; some student independent studies have resulted in scholarly publications (see Appendix M for a list of projects and publications).

Program Fosters the Attainment of Student Learning Outcomes

In many programs at the University at Albany, it is common practice to use a variety of assignments including individual and small/large group projects, class discussions, weekly quizzes, midterm and final examinations, and self and peer assessments to assess student learning. CEHC views assessment as a systematic process and not as an end-product. Faculty members consider the learning goals and learning objectives associated with the course topics into account when designing assessments. They design instruction to support student attainment of learning goals and learning objectives. Assessment information is routinely gathered and analyzed to determine whether students have attained the learning objectives faculty hope they will attain. Assessment information is shared with students, and assessment information is regularly used by faculty to shape current and subsequent instruction.

Evaluation of all courses (online and on-campus) at the end of each semester is mandated by the University at Albany. Faculty are also encouraged to participate in mid-point evaluations/surveys. University mandated evaluations are conducted using the Student Instructional Rating Form (SIRF), whereby students rate each instructor and course on a Likert type scale and provide comments on the effectiveness of the course and instructor (see Appendix J.2 for Course Evaluation Summaries for the period Spring 2010 to Summer 2017). In addition to the course evaluations conducted by the University, the Department of Information Science (former home of the MSIS program) made use of the above-mentioned standing committee (SLOA&R) that conducts annual reviews of evidence of student learning and reports findings and recommendations for discussion by the faculty. In CEHC, the same faculty member coordinates all the former Committee's charges and produces

regular SLOA&R reports (See Appendix D). Final SLOA&R reports and recommendations are communicated to all faculty who typically agree to implement the suggestions in the next iteration of their course or courses.

II.4. Knowledge Statements and Competencies of Professional Organizations
Design of general and specialized curricula takes into account the statements of knowledge and competencies developed by relevant professional organizations.

Participation in, and awareness of, professional organizations and their statements of knowledge, competencies, and ethics, among others, are often the focus of events either organized by CEHC or students. At the beginning of each fall and spring semester, new students are invited to orientation sessions where representatives and officers of student chapters of professional organizations and alumni, some of whom have served as presidents of state-wide professional organizations, give presentations on their respective student groups and local, state, regional, national, and international professional organizations. They distribute materials with information on how new students can get involved and become aware of the relevance of the professional organizations to both their academic success and professional careers.

In almost all of the core courses and some of the track and elective courses in the IS program, students are introduced to content that takes into account the relevant guidelines and standards on a wide-range of topics or issues such as ethics, privacy, equity of access, the digital divide, censorship, and copyright. In IST 601: The Information Environment, a class session is devoted to privacy and ethics in the information professions where students and faculty discuss scenarios where professional ethics codes or guidelines apply. Some class sessions and a major project/paper are concerned with codes of ethics by four prominent professional organizations. These are: The American Library Association (ALA) code of ethics[27], the Society of American Archivists (SAA) core values statement and code of ethics[28], the Association for Information Science and Technology (ASIS&T) professional guidelines[29], and the Association for Computing Machinery (ACM) code of ethics and professional conduct[30].

Because the IS curriculum and its courses are regularly reviewed and revised, faculty actively seek to align ALA standards, including accreditation standards, with their course content and student learning goals, learning objectives, and learning outcomes. The IS program goals were created with Standard II.5 at their core. The following goals specifically address one or more guidelines or statements of knowledge and competencies by professional organizations:

- Assess the information needs of diverse and underserved populations and provide resources and instruction to meet those needs [Goal #4]
- Recognize the crucial role of users in the design and implementation of information systems [Goal #5]

[27] http://www.ala.org/tools/ethics
[28] https://www2.archivists.org/statements/saa-core-values-statement-and-code-of-ethics
[29] http://www.asis.org/professionalguidelines.html
[30] http://www.acm.org/about-acm/acm-code-of-ethics-and-professional-conduct

- Formulate, interpret, and implement information policy, and promote ethical standards in the production, management, and use of information [Goal #6]
- Understand the importance of information access issues, including privacy, equity, intellectual property, and intellectual freedom [Goal #7]

At the concertation or track level, the majority of the tracks in the IS program and core courses required for the respective tracks adhere to Standard II.5. Our School Library Media Specialist track (in the 42-credit MSIS program) and the newly approved ISSL program were designed to produce graduates who will take on leadership roles in PreK–12 settings. As such, they meet the ALA/AASL Standards for Initial Preparation of School Librarians as well as other relevant guidelines by the New York State to ensure students are adequately prepared to meet the State's rigorous certification requirements. Please see Table II.5a for details on how the ISSL program's courses align with AASL standards.

Table II.4a AASL Standards for the 21st Century Learner* Aligned to Course Offerings for School Library Media Specialists

Standards	Skills	Responsibilities	MSIS Course Offerings
Standard 1: Inquire, think critically, and gain knowledge.	1.1.1 Follow an inquiry-based process in seeking knowledge in curricular subjects and make the real-world connection for using this process in own life. 1.1.2 Use prior and background knowledge as context for new learning.	1.3.1 Respect copyright/intellectual property rights of creators and producers. 1.3.2 Consider diverse and global perspectives in drawing conclusions. 1.3.3 Follow ethical and legal guidelines in gathering and using information. 1.3.4 Contribute to the exchange of ideas within the learning community. 1.3.5 Use information technology responsibly.	IST601—The Information Environment IST673—School Library Media Technology: Theory, Application and Assessment IST675—Curriculum and Supportive Resources IST668—Internship (6)
	1.1.3 Develop and refine a range of questions to frame the search for new understanding. 1.1.4 Find, evaluate, and select appropriate sources to answer questions. 1,1,5 Evaluate information found in selected sources on the basis of accuracy, validity, appropriateness for needs, importance, and social and cultural context.	1.3.1 Respect copyright/intellectual property rights of creators and producers. 1.3.2 Consider diverse and global perspectives in drawing conclusions. 1.3.3 Follow ethical and legal guidelines in gathering and using information. 1.3.4 Contribute to the exchange of ideas within the learning community. 1.3.5 Use information technology responsibly.	IST 571—Literature for Children IST578—Literature for Young Adults IST603—Information Processing IST605—Information Sources and Services IST608—Research Methods IST673—School Library Media Technology: Theory, Application and Assessment IST675—Curriculum and Supportive Resources

	1.1.6 Read, view, and listen for information presented in any format (textual, visual, media, digital) in order to make inferences and gather meaning.		IST668—Internship (6)
	1.1.7 Make sense of information gathered from diverse sources by identifying misconceptions, main and supporting ideas, conflicting information, and point of view or bias.	1.3.1 Respect copyright/intellectual property rights of creators and producers. 1.3.3 Follow ethical and legal guidelines in gathering and using information. 1.3.4 Contribute to the exchange of ideas within the learning community. 1.3.5 Use information technology responsibly.	IST523—Fundamentals of Information Technology IST601—The Information Environment IST602—Information and Knowledge Organization IST603—Information Processing IST605—Information Sources and Services IST668—Internship (6)
	1.1.8 Demonstrate mastery of technology tools for accessing information and pursuing inquiry. 1.1.9 Collaborate with others to broaden and deepen understanding.	1.3.1 Respect copyright/intellectual property rights of creators and producers. 1.3.2 Consider diverse and global perspectives in drawing conclusions. 1.3.3 Follow ethical and legal guidelines in gathering and using information. 1.3.4 Contribute to the exchange of ideas within the learning community. 1.3.5 Use information technology responsibly.	IST523—Fundamentals of Information Technology IST673—School Library Media Technology: Theory, Application and Assessment IST675—Curriculum and Supportive Resources IST523—Fundamentals of Information Technology IST668—Internship (6)

Standard 2: Draw conclusions, make informed decisions, apply knowledge to new situations, and create new knowledge.	2.1.1 Continue an inquiry-based research process by applying critical-thinking skills (analysis, synthesis, evaluation, organization) to information and knowledge in order to construct new understandings, draw conclusions, and create new knowledge. 2.1.2 Organize knowledge so that it is useful.	2.3.1 Connect understanding to the real world. 2.3.2 Consider diverse and global perspectives in drawing conclusions. 2.3.3 Use valid information and reasoned conclusions to make decisions.	IST673—School Library Media Technology: Theory, Application and Assessment IST675—Curriculum and Supportive Resources IST643—Humanities Reference—Elective IST608—Research Methods IST668—Internship (6)
	2.1.3 Use strategies to draw conclusions from information and apply knowledge to curricular areas, real-world situations, and further investigations 2.1.4 Use strategies to draw conclusions from information and apply knowledge to curricular areas, real-world situations, and further investigations.	2.3.1 Connect understanding to the real world 2.3.2 Consider diverse and global perspectives in drawing conclusions 2.3.3 Use valid information and reasoned conclusions to make decisions.	IST571—Children's Literature IST578—Young Adult Literature IST673—School Library Media Technology: Theory, Application and Assessment IST675—Curriculum and Supportive Resources IST668—Internship (6)
	2.1.5 Collaborate with others to exchange ideas, develop new understandings, make decisions and solve problems 2.1.6 Use the writing process, media and visual literacy, and	2.3.1 Connect understanding to the real world. 2.3.2 Consider diverse and global perspectives in drawing conclusions.	IST673—School Library Media Technology: Theory, Application and Assessment IST675—Curriculum and Supportive Resources

	technology skills to create products that express new understandings.	2.3.3 Use valid information and reasoned conclusions to make decisions.	IST605—Information Sources and Services IST523—Fundamentals of Information Technology IST668—Internship (6)
Standard 3: Share knowledge and participate ethically and productively as members of our democratic society.	3.1.1 Conclude an inquiry-based research process by sharing new understandings and reflecting on the learning. 3.1.2 Participate and collaborate as members of a social and intellectual network of learners. 3.1.3 Use writing and speaking skills to communicate new understandings effectively. 3.1.4 Use technology and other information tools to organize and display knowledge and understanding in ways that others can view, use, and assess.	3.3.1 Solicit and respect diverse perspectives while searching for information, collaborating with others, and participating as a member of the community. 3.3.2 Respect the differing interests and experiences of others, and see a variety of viewpoints. 3.3.3 Use knowledge and information skills and dispositions to engage in pubic conversation and debate around issues of common concern. 3.3.4 Create products that apply to authentic, real world contexts. 3.3.5 Contribute to the exchange of ideas within and beyond the learning community. 3.3.6 Use information and knowledge in the service of democratic values. 3.3.7 Respect the principles of intellectual freedom.	IST 601—The Information Environment IST 605—Information Sources and Services IST608—Research Methods IST673—School Library Media Technology: Theory, Application and Assessment IST675—Curriculum and Supportive Resources IST676—Administration of School Media Centers IST668—Internship (6)

	3.1.5 Connect learning to community issues. 3.1.6 Use information and technology ethically and responsibly.	3.3.1 Solicit and respect diverse perspectives while searching for information, collaborating with others, and participating as a member of the community. 3.3.2 Respect the differing interests and experiences of others, and see a variety of viewpoints. 3.3.3 Use knowledge and information skills and dispositions to engage in pubic conversation and debate around issues of common concern. 3.3.4 Create products that apply to authentic, real world contexts. 3.3.5 Contribute to the exchange of ideas within and beyond the learning community. 3.3.6 Use information and knowledge in the service of democratic values. 3.3.7 Respect the principles of intellectual freedom.	IST 571—Children's Literature IST 578—Young Adult Literature IST 605—Information Sources and Services IST673—School Library Media Technology: Theory, Application and Assessment IST675—Curriculum and Supportive Resources IST668—Internship (6)
Standard 4: Pursue personal and aesthetic growth.	4.1.1 Read, view, and listen for pleasure and personal growth. 4.1.2 Read widely and fluently to make connections with the self, the world, and previous reading. 4.1.3 Respond to literature and creative expressions of ideas in various formats and genres.	4.3.1 Participate in the social exchange of ideas, both electronically and in person. 4.3.2 Recognize that resources are created for a variety of purposes.	IST 571—Children's Literature IST 578—Young Adult Literature

	4.1.4 Seek information for personal learning in a variety of formats and genres. 4.1.5 Connect ideas to own interests and previous knowledge and experience. 4.1.6 Organize personal knowledge in a way that can be called upon easily. 4.1.7 Use social networks and information tools to gather and share information. 4.1.8 Use creative and artistic formats to express personal learning	4.3.3 Seek opportunities for pursuing personal and aesthetic growth. 4.3.4 Practice safe and ethical behaviors in personal electronic communication and interaction.	IST 601—The Information Environment IST602—Information and Knowledge Organization ST603—Information Processing IST605—Information Sources and Services IST673—School Library Media Technology: Theory, Application and Assessment IST675—Curriculum and Supportive Resources IST668—Internship (6)

***** American Association of School Librarians. (2007). *Standards for the 21st-Century Learner*.

The Archives and Records Administration track was built on a strong track record of courses offered and taught by faculty members who are leading experts in their sub-field. In addition to broader program level ALA core competencies, courses in the Archives and Records Administration track and some that are in the IS core either partially or fully address the core competencies of the Society of American Archivists (SAA). Table II.4b presents SAA core Competencies and corresponding IS course requirements addressing them.

Table II.4 b SAA Core Competencies and IS Courses in Archives

SAA Core Competencies	**IS Course Requirements**
Provides students with a solid foundation in the theory, methodology, and practice of archival studies, and in the scholarship of their discipline.	Archives track required courses; Archival Representation class; Required internship in archives.
Strengthens this foundation by giving students the opportunity to acquire knowledge from other relevant disciplines.	Courses in library and information science; dual program with History Dept.; option to take elective courses in other departments.
Assists students in developing critical thinking and decision-making skills for records and papers as part of the larger cultural heritage.	Required internship experience; archives track courses.
Prepares students to conduct and communicate scholarly research for the enrichment and development of their own discipline.	Required course in Research Methods (IST 608). Course work in archives track courses.
Inculcates in students the sense of their professional and social responsibilities and the knowledge of the ethical and legal dimensions of their work.	Covered in IST 656 Archives and Manuscripts as well as in general required core course on the Information Environment (IST 601); SAA student chapter activities.

The third track whose courses address statements of knowledge and competencies developed by professional organizations such as the ALA is the Library and Information Services (LIS) track. Students in the LIS track generally elect to pursue careers in academic, public, and/or special libraries. In the IS curriculum, several courses focus on the various types of libraries. These include: IIST 617: Academic Libraries and Higher Education, IST 618: Public Libraries, IIST 619: Special Libraries/Information Centers, and IIST 653: Digital Libraries. Two of the required courses for this track are IST 603: Information Processing and IST 605: Information Sources and Services, addressing two of the main ALA core competencies, the “Organization of Recorded Knowledge and Information” and “Information Resources,” respectively. In addition, students complete their internship projects at various libraries, potentially meeting a number of the ALA core competencies. Table II.4c presents ALA core Competencies and corresponding IS course offerings that address the ALA competencies in the area of public and academic libraries.

Table II.4 c ALA Core Competencies and MSIS Course Offerings for Public and Academic Library Specialized Fields

Competency	**MSIS Course Offerings***
Foundations of the Profession	**IST 601—The Information Environment**
Information Resources	**IST 605—Information Sources and Services** IST 606—Collection Development IST 618—Public Libraries IST 666—Academic Libraries IST 651—Serials IST 643—Humanities Reference IST 571—Children's Literature IST 578—Young Adult Literature Archival Courses Courses out of department (e.g., language, music, history, English) IST 669—Independent Study
Organization of Recorded Knowledge and Information	**IST 602—Information and Knowledge Organization** **IST 603—Information Processing**
Technology Knowledge and Skills	**Plus, an additional technology course**
Reference and User Service	**IST 605—Information Sources and Services** IST 649—Information Literacy Instruction
Research	**IST 608—Research Methods**
Continuing Education and Lifelong Learning	**IST 668—Internship**
Administration and Management	**IST 614—Administration of Information Agencies**

**Courses in bold are either core or concentration and thus required of all students in these areas of study.*

II.5. Continual Evaluation of the Curriculum

Procedures for the continual evaluation of the curriculum are established with input not only from faculty but also representatives from those served. The curriculum is continually evaluated with input not only from faculty, but also representatives from those served including students, employers, alumni, and other constituents. Curricular evaluation is used

for ongoing appraisal and to make improvements. Evaluation of the curriculum includes assessment of students' achievements.

The broader set of procedures used by CEHC for regular evaluation of its IS program are discussed in Standard I above. Here, we focus our discussions on procedures we use to specifically evaluate the curriculum, its courses, and faculty, both full-time and adjunct, who teach the courses as instructors of record. It should be noted that overlaps are unavoidable in terms of the discussions here and in Standard I because the MSIS curriculum is the core component of the program.

Assessment and evaluation of the MSIS curriculum and its courses, on top of being a priority and essential elements of our curriculum design and innovation exercises, they are also conducted in a number of ways and by more than one entity/committee on a continuous basis. The major evaluation procedures, activities, and entities involved in the evaluation of the MSIS curriculum include: two standing committees (Curriculum and SLO&AR - in the Department of Information Science; Graduate Committee – in CEHC); student course evaluations; student, alumni, and internship mentor surveys; external consultant.

Standing committees (Curriculum and SLO&AR)

Based on the findings and recommendations made by the standing committee that conducts the annual SLO&AR review improvements and modifications are often made to enhance content areas specifically and the overall program more generally. Past recommendations have focused on:

- the depth and range of content covered within a track to avoid duplication of course content
- scaffolding and sequencing of instruction to ensure fundamental skills are covered in foundational courses and more advance skills and competencies are provided in upper level courses.
- ensuring that specific learning objectives are aligned to appropriate assessments in order to determine students have attained the learning objectives.
- pedagogical modifications to ensure diversification of instruction
- instructional modifications to engage students in critical thinking
- redesigning course content to provide more opportunities for students to apply theory in real world settings (assignments, special projects, independent studies, etc.).

Faculty who lack technical and pedagogical skills and knowledge are encouraged to attend workshops and training sessions organized by relevant units within the University such as the Institute for Teaching, Learning and Academic Leadership (ITLAL).

Student course evaluations

The University at Albany mandates student evaluation of all courses at the end of each semester. Student evaluations are conducted by administering the Student Instructional Rating Form (SIRF) (Appendix J.1) which includes both open ended and closed-ended items/questions where students use a Likert type scale to rate each instructor and course as well as provide additional/qualitative comments on the effectiveness of the course and instructor (see Appendix J.2 for Course Evaluation Summaries for the period Spring 2010 to Fall 2018). In addition to end

of semester SIRF evaluations, IS faculty often participate in voluntary mid-point evaluations/surveys administered by the University's Institute for Teaching, Learning, and Academic Leadership (ITLAL). Please see Table III.9a for a summary of student ratings of full-time and adjunct faculty in the IS program.

Student, alumni, and internship mentor surveys

As part of our continuous evaluation of the IS curriculum and to prepare this self-study report to be submitted to ALA, input from stakeholders such as current students, alumni, and internship mentors is sought. Two surveys (in 2017 and 2019) were conducted using online questionnaires that covered several topics, including the IS curriculum and its courses. For instance, both surveys of the current students and alumni consisted of items/questions such as the level of students' or alumni's satisfaction with courses, the overall curriculum, class sizes, scheduling of courses, mode (online vs face-to-face), etc. Appendices E, F, & G provide summaries of responses.

External consultant and Department Chair or Program Director

In 2017, a major revision of the IS program was initiated and subsequently conducted based on an extensive review of the program by a high-profile consultant whose experience and knowledge of LIS programs spans several decades. As we have indicated above, the current/revised 36-credit IS program is the result, in addition to the consultant's work, of the faculty's continued and strategic planning efforts to meet the needs of our students. The final report by the consultant, Professor Mike Eisenberg, can be found in Appendix A.

The IS program was reviewed by an external evaluator during the merger of the Informatics Department (BS and Ph.D. programs) and Information Studies Department (Master's program) in 2016. The review was conducted by Mike Eisenberg, Dean Emeritus and Professor of the iSchool, University of Washington, and his report documents how the program performs for students. This is not a regular evaluation to measure how well the program makes decisions for students learning, but it still provides a good documentation about the program performance evaluation (Appendix A).

The former Department Chair and current Program Director also submits biennial narrative reports, based on evaluations of and changes made to the MSIS curriculum and its courses, to ALA between accreditation reviews. When putting these reports together, the Director reviews evaluations of learning outcomes of both online and on-campus courses to determine whether course content and learning outcomes align with the relevant standards. The Program Director is also required to submit annually a statistical report to the Association for Library and Information Science Education (ALISE), as well as to ALA. This report includes statistical evidence of programmatic outcomes and the report is discussed at faculty meetings to inform efforts in teaching and learning improvements.

II.6. Evidence of Decision-Making Processes and Evaluation Data

The program has explicit, documented evidence of its ongoing decision-making processes and the data to substantiate the evaluation of the curriculum.

As we have described in detail in II.1 and II.5 above, the MSIS curriculum undergoes regular systematic reviews and revisions. While the IS program was in the Department of Information Science (before January 2018), the main committee charged with making sure that the revised curriculum meets both program goals and student needs is one of the standing committees, has

been the Curriculum and Program Development Committee, chaired by a senior faculty member. As of January 2018, the CEHC Graduate Committee is charged with executing the responsibilities of the former Curriculum and Program Development Committee. Decisions regarding course or curriculum revisions, additions, or changes are made by the faculty and, eventually, the Department Chair (before January 2018) or the Dean. When the Information Science Department was moved to CEHC, the primary oversight body for curriculum changes and decisions at the graduate level is the Graduate Committee. Final decisions are made after inputs are received from stakeholders that include the faculty, students in the IS program, alumni, internship mentors, and the Dean. Course level assessment and evaluation data are compiled through student evaluations and the SLO&AR evaluations (that include student achievements) done by the faculty. SLO&AR evaluations can be found in Appendix D. Appendices E-H contain the information and results of surveys; and Appendix J.2 contains the course evaluations.

II.7. Program Evaluation and Future Planning
The program demonstrates how the results of the evaluation of the curriculum are systematically used to improve the program and to plan for the future.

As outlined above, the faculty, with input from an external consultant, whose expertise is in Information Science and someone who has successfully reorganized information science programs at a number of institutions including University of Washington, revised and redesigned the IS curriculum between 2016 and October 2018 (when the 2nd of two proposals was approved by the New York State Department of Education, Office of Higher Education). Throughout the revision/redesign process, faculty members were cognizant of the need for the redesigned program to not only meet the highest standards set by the American Library Association (ALA), but also accommodate the needs of future students.

The proposal to revise the IS program was a culmination of more than six months' worth of discussions (July 2016 - January 2017) amongst the faculty and the external consultant. Over a series of five meetings, considering a number of options and then agreeing upon what is outlined in the proposal. Preserving and enhancing the qualities that make the current program attractive to a wider/diverse group of potential students without weakening the quality of the program were key factors in designing the revised program.

In addition to the revision of the IS program between 2016 and 2018, after move to CEHC, further improvements were made to the program based on student and alumni surveys conducted in 2017. Specifically, as a result of the merger, programs at all levels (BA/BS to Ph.D.) were seamlessly integrated to create two innovative new tracks of the IS program, Intelligence Analysis and Data Analytics. These, include seeking input from consultants, students, alumni, internship mentors, and other stakeholders, will be a regular feature of our efforts to evaluate the IS curriculum and its tracks in order to meet the needs of future IS students and potential employers.

Standard III: Faculty

III.1. Tenure Track and Adjunct Faculty

The program has a faculty capable of accomplishing program objectives. Full-time faculty members (tenured/tenure-track and non-tenure-track) are qualified for appointment to the graduate faculty within the parent institution. The full-time faculty are sufficient in number and in diversity of specialties to carry out the major share of the teaching, research, and service activities required for the program, wherever and however delivered. Part-time faculty, when appointed, balance and complement the competencies of the full-time tenured/tenure-track and non-tenure-track faculty and are integral to the program. Particularly in the teaching of specialties that are not represented in the expertise of the full-time faculty, part-time faculty enrich the quality and diversity of the program.

As of the fall 2018 semester, the IS program includes eight faculty members (seven tenured faculty members, one lecturer). The tenured faculty consists of one full professor, and six associate professors. Prior to the integration with CEHC, there were six full-time faculty.

The names and ranks of faculty members are provided below in Table III.1a.

Table III.1a Full-Time Faculty Members Fall 2018

Name	Rank	Year of appointment	Year of promotion
Philip Eppard	Professor	1988	1994 to Associate Prof.; 2008 to Full.
George Berg	Associate Professor	1988	1994
Hemalata Iyer	Associate Professor	1990	1997
Abebe Rorissa	Associate Professor	2005	2011
Donghee Sinn	Associate Professor	2008	2014
Joette Stefl-Mabry	Associate Professor	2002	2008
Xiaojun Yuan	Associate Professor	2006	2017
Michael Young	Lecturer	2016	

The program's full-time faculty consists of a diverse group of scholars. They are nationally and internationally recognized in archives and archival use/user studies, knowledge organization and management, visual resource management, information visualization, user behavior, digital libraries, user interface design and assessment, human-computer interaction, user experience, educational assessment and evaluation, online pedagogy, online higher education curricula structure, machine learning, natural language processing, and policy decision making.

Dr. Eppard's research interests are in archives, records administration, preservation management, electronic records, and history of recorded information. He has been elected a fellow the Society of American Archivists. Dr. Iyer's research focuses on knowledge organization and management, and visual resources management. She is interested in alternative medicine

information organization and use. Dr. Iyer has developed core competencies and guidelines for the management of visual resources, as well as a set of instructional modules and a strategic plan for their integration into the curricula of LIS schools. Dr. Rorissa is interested in digitization, preservation, and use of African digital cultural heritage resources. Dr. Sinn's research interests are in the field of archives, particularly in personal digital archiving and participatory digital archives. She has developed a digital archive of the No Gun Ri massacre. Currently she is investigating personal information management behaviors in diverse contexts. Dr. Stefl-Mabry's area of research is educational assessment and evaluation. She focuses on documenting evidence of practice by understanding the attainment of student learning outcomes (objectives) at a granular level – actual classrooms. She is a recipient of three IMLS (Institute of Museum and Library Services) funded research grants. Currently she is the Principal Investigator, on a major research project: "Seeking Stronger Evidence of School Library Effects on Student Outcomes," sponsored by the Institute of Museum and Library Services, June 30, 2018 – June 30, 2021. Dr. Yuan's research areas include human-computer interaction, user experience, interface design and digital libraries. Dr. Berg is interested in machine learning, artificial intelligence, cybersecurity, and autonomous vehicles. Dr. Young's areas of emphasis are text analysis, policy decision making in homeland security and international relations. Faculty members are well-recognized in their areas of specialization, as evidenced by their leadership positions on national and international associations in their respective fields. The research interests and scholarly work of the faculty illustrate the diversity of their specialties. Details of faculty contributions can be found in the faculty vitae in Appendix N.

Based on faculty academic background, experience, and research interests, teaching assignments are determined by the CEHC Dean. This is done in consultation, and in mutual agreement with the faculty. Full-time tenure track faculty have a teaching load of two courses per semester; however, this load may vary depending on their research and administrative responsibilities. In addition, qualified practitioners also teach in the program as adjuncts.

Table III.1b below represents the type and number of faculty teaching in the program from fall 2010 through fall 2018.

Table III.1b Number and Type of Faculty

		2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019
Tenure Track Faculty	**Fall**	**9**	**9**	**9**	**8**	**8**	**5**	**7**	**6**	**7**
	Spring	**9**	**9**	**8**	**7**	**8**	**5**	**6**	**6**	**7**
Adjunct Faculty	**Fall**	**8**	**7**	**7**	**6**	**10**	**9**	**7**	**3**	**5**
	Spring	**9**	**7**	**9**	**7**	**11**	**13**	**11**	**6**	**8**
Tenure Track Faculty	**Summer**	**3**	**3**	**4**	**3**	**2**	**2**	**1**	**2**	**2**

Adjunct Faculty		**7**	**4**	**5**	**5**	**4**	**5**	**3**	**3**	**3**

The adjunct faculty constitute a crucial part of the program as they complement the scholarly focus of the faculty by bringing real world experience in a variety of information environments, which thus enriches the curriculum. They are drawn from a variety of institutions such as academic libraries, public libraries, library systems, New York State departments, school districts, and private sector companies that provide valuable practitioners' experience. Adjuncts are selected based on their qualifications and professional experience, and they augment the full-time faculty's expertise. All of them have had long-standing relationships with the program – many are also program graduates - which demonstrates their commitment. The adjuncts and their institutional affiliations are presented below in Table III.1c.

Table III.1b Professional Roles and Institutional Affiliations of Adjuncts

Name	**Role/Title**	**Institution**
Theodor J. Borys	Deputy Director of Information Technology	New York State Office of Mental Health
Steve Black	Reference, Instruction, and Serials Librarian	The College of Saint Rose, Albany NY
Timothy G. Burke	Director	Upper Hudson Library System
Jeffrey Cannell	Deputy Commissioner of Cultural Education	New York State Education Department
Dawit H. Demissie	Assistant Professor of Computer Science	The Sage Colleges, Albany NY
Linda M. Fasano	School Library Media Specialist	Schalmont Central School District, Schenectady NY
Carol Anne Germain	Information Studies, Informatics, and Sociology Librarian	University Libraries, University at Albany, SUNY
Gertrude Hutchinson	Director of History & Education	Center for Nursing at the Foundation of New York State Nurses, Inc.
Trudi E. Jacobson	Distinguished Librarian, Head of Information Literacy Department	University Libraries, University at Albany, SUNY
Scott Jarzombek	Executive Director	Albany Public Library

David Lowry	Head of Local Government Advisory Services	New York State Archives
Shannon Mersand	School Library Media Specialist	Yorktown High School, Yorktown Heights NY
Melanie Metzger	Assistant Director	Albany Public Library
Mizanur Rahman	Information Technology Specialist	New York State Office of Information Technology Services
Catherine Stollar Peters	Archives and Records Management Specialist, Systems and Access Tools	Bethlehem Public Library
Mark D. Wolfe	Curator of Digital Collections, Associate Librarian	University Libraries, University at Albany, SUNY

Core courses are traditionally taught by the full-time faculty; but in a semester when multiple core sections are offered, CEHC tries to ensure that at least one section is taught by the full-time faculty. Adjuncts generally teach elective or track required courses, and examples of these courses include Fundamentals of Records Management, Electronic Records Management, Fundamentals of XML, Digital Libraries, Public Libraries, Information Sources and Services, and Makerspace. Adjunct instructors work with the full-time faculty on the instructional design of the courses to ensure curriculum standards are maintained. Table III.1d below presents the distribution of courses taught by full-time and adjunct faculty.

Table III.1c Number of Sections of Core Courses Taught by Full-Time and Adjunct Faculty

	IST 523		**IST 601**		**IST 602**		**IST 608**		**IST 614**	
Semester	**FT**	**PT**	**FT**	**PT**	**FT**	**PT**	**FT**	**PT**	**FT**	**PT**
Fall 2010	2	0	2	0	2	0	1	0	0	2
Spring 2011	0	1	1	0	1	0	2	0	1	0
Summer 2011	0	1	0	0	1	0	0	0	0	0
Fall 2011	2	0	2	0	2	0	1	0	1	0
Spring 2012	1	0	1	0	1	0	2	0	1	0
Summer 2012	0	0	0	1	0	0	0	0	0	0
Fall 2012	2	0	2	0	2	0	1	0	1	0
Spring 2013	1	0	1	0	1	0	1	0	1	0
Summer 2013	0	0	0	0	1	0	0	0	0	0
Fall 2013	1	0	1	0	2	0	1	0	1	0
Spring 2014	1	0	1	0	1	0	2	0	1	0
Summer 2014	0	0	0	1	0	0	0	0	0	0
Fall 2014	1	0	2	0	2	0	1	0	1	0

Spring 2015	1	0	1	0	1	0	2	0	1	0
Summer 2015	0	0	0	0	1	0	0	0	0	0
Fall 2015	1	0	1	0	1	0	1	0	0	1
Spring 2016	1	0	0	1	1	0	1	0	0	1
Summer 2016	0	0	0	0	0	0	0	0	0	0
Fall 2016	1	0	1	1	2	0	1	0	0	1
Spring 2017	0	0	1	0	1	0	1	0	0	1
Summer 2017	0	0	1	0	1	0	0	0	0	0
Fall 2017	0	0	1	0	2	0	1	0	0	0
Spring 2018	0	0	1	0	1	0	1	0	0	0
Summer 2018	0	0	1	0	1	0	0	0	0	0
Fall 2018	0	0	1	0	1	0	1	0	0	1
Totals	*15*	*2*	*22*	*4*	*29*	*0*	*21*	*0*	*9*	*7*
	FT	**PT**	**FT**	**PT**	**FT**	**PT**	**FT**	**PT**	**FT**	**PT**
	IST 523		**IST 601**		**IST 602**		**IST 608**		**IST 614**	

The following are the courses taught in the last two years by faculty in the IS program.

Philip Eppard:	CIST 402/502, 564, 565, 655
Hemalata Iyer:	CIST 565, 601, 602, 603, 668, 669.
Abebe Rorissa:	CIST 601, 608, 668
Donghee Sinn:	CIST 602, 660, 668
Joette Stefl-Mabry:	CIST 668, 670, 673, 675
Jenny Yuan:	CIST 433/533, 561, 462/562
Lecturers:	CIST 533
Adjuncts:	CIST 506, 538 547, 571, 578, 605, 676

*Course descriptions are listed in the Graduate Bulletin on the Graduate School's website.[31]

The IS full-time faculty members serve on CEHC standing committees, Graduate Committee, the Grievance Committee and other ad hoc committees. A full list of the current CEHC committees is included in Appendix O.

The faculty continue to contribute to the University's institutional policies and practices, participate in the University's strategic planning process and various governance initiatives by serving on the University Senate, Councils and Committees. Dr. Stefl-Mabry served as Chair of the University Governance Council (2013-2014), University at Albany's Senate Executive Committee, (2014-2015), Chair of the University Senate (2014-2015), Chair of the University Policy & Planning Council (2015-2016), Member of the University at Albany's Assessment Advisory Committee (2016-2019). Dr. Rorissa, Member, Council on Promotions & Continuing Appointments (CPCA) (2015 – 2017), Chair, Graduate Academic Council (2014 – 2015), Member, Executive Committee of the University Senate (2014 – 2015), Senator, University

[31] https://www.albany.edu/graduatebulletin/i_ist.htm

Senate (2014 – 2015). Dr. Iyer served as member, University Council on Research (COR) (2011-2012, 2013- 2014), and COR, Benevolent Awards Review Committee (2011- 2014). Dr. Yuan, was a member of University Senate (May 2014 – May 2016)

III.2. Prioritizing Teaching, Research, and Service

The program demonstrates the high priority it attaches to teaching, research, and service by its appointments and promotions; by encouragement of excellence in teaching, research, and service; and through provision of a stimulating learning and research environment.

The program's mission is to provide and promote education and leadership in the information professions through distinguished teaching, research and service. The University provides substantial support for research and teaching in diverse forms - research funds, travel funds, sabbatical leaves, pedagogical workshops, online teaching initiatives, etc. The University supports faculty research through the Faculty Research Award Program (FRAP) that provides seed funding for research with a potential for external funding and collaborative, scholarly endeavors. Proposals are reviewed at the College and University levels, and junior faculty applications receive special consideration. Dr. Sinn and Dr. Yuan received FRAP – Category B in 2010 and 2011 respectively.

In addition, sabbatical leave is also available to academic employees who have continuing appointment with at least six consecutive years of service in the University, with the purpose of increasing an employee's value. It is granted for research, formal education, writing and professional development. Drs. Hemalata Iyer, Abebe Rorissa, and Donghee Sinn were granted sabbatical in spring 2010, spring 2013 and the 2015/2016 academic year respectively. Dr. Deborah Andersen, who retired in 2015, was granted sabbatical in 2010/11.

CEHC supports faculty travel to major national and international professional conferences, where they present their research. Available funding directly from CEHC has been limited, and faculty are strongly encouraged to apply for external funding opportunities from the University, the SUNY system, and research grants. Examples of such include annual meetings of the American Library Association (ALA), Association for Information Science and Technology (ASIS&T), international conferences of the International Society for Knowledge Organization (ISKO), Society of American Archivists (SAA), and American Association of School Librarians (AASL). Dr. Eppard consistently attends the annual SAA conference, and Dr. Iyer has attended ASIS&T in 2018. Most recently, Drs. Iyer and Rorissa attended the 2019 iSchools conference, and the Manager of Graduate Studies attended the 2019 ALA annual summer conference. In July 2019, with support from the Provost, the Dean announced a new funding plan that allocated travel funding to all faculty. In 2019-20, funding will be allocated to each faculty member in support of scholarly research. Existing faculty members of the college will receive $1,500; with a $2,000 allocation to faculty members in their first year of employment at the University.

The University's Institute for Teaching, Learning & Academic Leadership (ITLAL) offers professional development workshops and resources for teaching, curriculum and innovative pedagogical practices. Faculty receive support to integrate technology tools such as Blackboard and other technologies into their courses.

CEHC itself has developed an online program to meet the needs of learners who are increasingly seeking flexibility in course offerings, and the pool of available online courses is growing each semester. For the development of online courses, the Provost's Online Teaching and Learning Initiative provided funding from 2013-2017. A total amount of $164,233 was provided to the program. These funds covered graduate assistant stipends and tuition, faculty stipends and course releases for the preparation of online courses and equipment, supplies, software, licenses. In phase 1 (Fall 2014), the first four courses online were prepared and delivered, and by phase 3 (AY 2016-17), twenty-five courses were offered online, plus five during the 2016 Summer Sessions. All Information Systems and Technology, School Library Media, and Library and Information Services track courses are offered fully online. In spring 2017, the first Archives and Records Administration course was rolled out. The final phases of this course conversion plan were focused on converting remaining core and track electives as the IS program is now registered with the State as an online program.

The OTL initiatives offered not only the funds to use but it also created the cohort and culture among the faculty to discuss challenges, and to share achievements throughout the process. In 2014, four faculty members gathered for the OTL initiative in phase 1. In the subsequent three phases of the OTL initiative the entire faculty participated.

In addition to the University funding and support, the greatest strength lies in the culture of collegiality that exists in CEHC which provides mutual support and guidance to all faculty members. The senior faculty serve as mentors for the junior faculty. For example, Donghee Sinn serves as a mentor for Sam Penta, a new Emergency Preparedness professor. And Joette Stefl-Mabry is the mentor for Shannon Mersand, the recently hired ISSL lecturer, who is also an Information Science Ph.D. student. Faculty and staff at all ranks are urged, and in some cases required, to participate in all aspects of operations within CEHC, creating a collaborative effort where all voices are heard, respected, and encouraged towards success.

III.3. Recruiting and Retaining a Diverse Faculty

The program has policies to recruit and retain faculty from diverse backgrounds. Explicit and equitable faculty personnel policies and procedures are published, accessible, and implemented.

The program has eight full-time faculty, seven of whom teach in the MSIS program, who have academic qualifications and experience needed to fulfill the mission and goals of the MSIS program. The faculty consists of three white males, one white female, one Ethiopian male, and three Asian females (Chinese, Indian, Korean). The University's Office of Diversity and Inclusion approves the faculty search process, and all decisions in the recruitment process must be cleared through the same office. The program has, since our last review, tenured and promoted three of its assistant professors to associate professors: Dr. Rorissa in 2011, Dr. Sinn in 2014, and Dr. Yuan in 2017.

Since the last accreditation in the year 2010, four faculty members have left the University. Terry Maxwell left in the 2010. His line was surrendered as part of the budget cutting mandate. Professor D'Andrea's line was not filled since it was not a permanent position. Associate Professor Ozlem Uzuner's line was moved to Department of Computer Science without any compensation for the program. In the 2018-2019 hiring cycle, searches were convened for a

Lecturer position in ISSL, and associate professor positions in data analytics (1) and cybersecurity (2); the ISSL lecturer and one cybersecurity assistant professor vacancy were filled. Job descriptions for these positions can be found is Appendix U.

III.4. Qualifications of Faculty Members

The qualifications of each faculty member include competence in designated teaching areas, technological skills and knowledge as appropriate, effectiveness in teaching, and active participation in relevant organizations.

All full-time faculty members have doctoral degrees in library and information science and related fields. All adjunct faculty members have master's degrees with some having doctoral degrees in information science. Faculty teach in their respective areas of research and they have competencies to do so effectively. Many of our full-time faculty members are nationally and internationally recognized in their fields. A list of their appropriate professional organization affiliations is presented below in Table III.4.

Table III.4a Faculty Affiliations in Professional Associations

Faculty	Professional Affiliations
Berg	• American Association for the Advancement of Science • Association for Computing Machinery • Computer Science Teachers Association • IEEE Computer Society • National Center for Women and Information Technology, Academic Alliance (NCWIT AA) • Open Source Institute
Eppard	• Society of American Archivists (SAA) • Bibliographical Society of America • Society for the History of Authorship, Reading and Publishing • Association for Documentary Editing • Capital Area Archivists of New York • Colonial Society of Massachusetts
Iyer	• International Society of Knowledge Organization (ISKO) • MYLISA • Visual Resources Association (VRA) • Association for Information Science &Technology (ASIS&T)
Rorissa	• Association for Information Science & Technology (ASIS&T) • Association for Library & Information Science Education (ALISE) • American Library Association
Sinn	• Society of American Archivists (SAA) • Korean Society of Archival Studies • The Korean Society of Archives and Records Management
Stefl-Mabry	• American Association of School Librarians (AASL) • American Educational Research Association (AERA) • American Library Association (ALA)

	• International Association of School Librarians • New York Library Association (NYLA)
Yuan	• ASIST (Association for Information Science and Technology) • ASIST SIG/USE (Association for Information Science and Technology), the Special Interest Group on Information Needs, Seeking, and Use • ALISE (Association for Library & Information Science Education) • ACM SIGIR (Special Interest Group in Information Retrieval) • ACM SIGCHI (Special Interest Group on Computer-Human Interaction) • ACM (Association for Computing Machinery) • UXPA (Usability Professional's Association)
Young	• Association of Former Intelligence Officers • International Studies Association • International Society for Political Psychology

Technology has become an essential part of information management today. Faculty members incorporate appropriate technologies into research and their fully online, hybrid, and face-to-face courses. The cutting-edge developments in the field are being taught in core and elective courses, such as XML, various metadata standards, RDA, linked open data, makerspace technologies, and other web technologies. In delivering such knowledge, the faculty utilize relevant technologies for their courses they teach. The Blackboard Learning Management System is used as the basic platform for delivery in teaching, not just for fully online and blended courses but also for face-to-face courses. By using Blackboard, faculty members take advantage of various functions incorporated in the system, such as embedding web resources, video conferencing and presentations, chat room office hours, mobile delivery, etc. In addition, professors make use of collaborative technologies such wikis, blogs and Twitter to build learning communities and to distribute coursework.

III.5 Faculty Research and Scholarship

For each full-time faculty member, the qualifications include a sustained record of accomplishment in research or other appropriate scholarship (such as creative and professional activities) that contribute to the knowledge base of the field and to their professional development.

Faculty members have been actively engaged in various scholarly activities and research projects and have produced numerous publications. The faculty research has been disseminated through high quality peer reviewed journals and conferences covering a range of information science and related fields. The journals include: *The American Archivist*, the *Journal of the American Society for Information Science and Technology*, *Government Information Quarterly, Archivaria, Information Processing and Management, International Journal of Teaching and Learning in Higher Education*; and the conferences include: ACM, SAA. ASIS&T, AASL, ISKO conferences.

Faculty have produced 207 publications from spring 2010 to fall 2018. This includes 10 book chapters, 56 refereed journal publications, 5 non-refereed journal publications, 42 refereed conference papers, and 94 presentations/posters.

Table III.5a Number of research publications, conference presentations and other professional activities produced by the faculty

Faculty	Book Chapters	Refereed Journal Articles	Non-refereed Journal Articles	Refereed Conference Papers
Berg	--	--	--	---
Eppard	1	1	1	
Iyer		4		6
Rorissa	3	15	4	4
Sinn	1	19		2
Stefl-Mabry	2	3		12
Yuan	2	12		16
Young	1	2		
Total	10	56	5	42

Faculty members are actively seeking external funding to support their research and are involved in a number of research grants. During 2010-2017, faculty received funding from the Institute of Museum and Library Services (IMLS), the National Research Foundation in Korea and University at Albany. The details are presented in Table III.5a.

Table III.5b Full-Time Faculty Research Funding -2010-2018

Faculty	# of Awards	Research Grant [Project Title, Funding Source, Amount, Duration]	Amount
Rorissa	1	Co-Principal Investigator. "OTL initiative - phase one of online course conversion plan". University at Albany: Office of the Provost and Vice President for Academic Affairs.	$42,647 (10/15/2013-12/14/2014)
Sinn	3	Youseung Kim and Donghee Sinn, "No Gun Ri Digital Archives: A Digital Platform for Social Memory," 76,200,000 Korean Won (Grants for Humanities and Social Science Research (Collaborative Research Category), National Research Foundation of Korea. Co-Principal Investigator, "OTL initiative - phase one of online course conversion plan". University at Albany: Office of the Provost and Vice President for Academic Affairs	Appx. $75,000 (11/1/2014-10/30/2017). $51,425 (10/15/2013-12/14/2014) $1,762

		Principal Investigator, "Building Collective Memory of No Gun Ri: Creating Archives as Memory," Faculty Research Award Program (FRAP) – Category B.	(May 5, 2010)
Stefl-Mabry	7	1. Principal Investigator, "Seeking Stronger Evidence of School Library Effects on Student Outcomes," sponsored by the Institute of Museum and Library Services, June 30, 2018 – June 30, 2021. RE-96-18-0032-18, $500,000.00. 2. Principal Investigator April 2017 awarded additional funding of $22,950.00 by the Institute of Museum and Library Services re: RE-04-15-0081-15 3. Research Associate (2016-17). American Association of School Librarians. CLASS II: Causality: School Libraries and Student Success II, funded by the Institute of Museum and Library Services grant number RE-00-15-0114-15, $48,000. 4. Principal Investigator "The School Librarian Effect on Student Academic Achievement in New York State Research Project," Sponsored by the Institute of Museum and Library Services, Grant RE-04-15-0081-15, June 1, 2015 – June 1, 2018, $479,997.00. 5. Principal Investigator, "21st Century Assessment Planning for Educators (Project CAPE)," Sponsored by Institute of Museum and Library Services, $50,000 (July 1, 2013 – July 1, 2014). 6. Independent Evaluator (2013-14). New York State Library's Read to Read program. Funded by the Institute of Museum and Library Services, $14,000. 7. Independent Research Evaluator (2010). Council on Addiction Prevention and Education of Dutchess County's Marathon Project. (Co-PI), $8,000.	$500,000 (June 30, 2018 – June 1, 2021) $22,950 2017 $48,000 (2016 – 2017) $479,997 (June 1, 2015-June 1, 2018). $50,000 (July 1, 2013-July1,2014) $14,000 (2013-2014) $8000 2010
Yuan	2	Principal Investigator, "Speak to Me: A Spoken Language Interface to Information Systems" Institute of Museum and Library Services (IMLS) Early Career Award.	$325,780 (September 2010 - August 2012)

		Principal Investigator, "Exploring Visualization Techniques in Evaluation of Music Information Retrieval Systems" University at Albany Faculty Research Awards Program (FRAP) Category B.	$1,979 (May 2011-April 2014)
Young	3	Principal Investigator: "Human Behavior and Decision Making." Subcontract to BAE Systems under DIA contract HHM402-08D0001/0012. PO 41-1006371 February 2012 to 31 January 2013. PO 41-1006371 February 2011 to 31 January 2012. PO 41-1006371 24 August 2010 to 31 January 2011.	$1,608,424.10 (February 2012-January 2013) $1,803,230.98 (February 2011-January 2012) $882,286 (August 2010-January 2011)

III.6. Faculty Backgrounds and Experience

The faculty hold advanced degrees from a variety of academic institutions. The faculty evidence diversity of backgrounds, ability to conduct research in the field, and specialized knowledge covering program content. In addition, they demonstrate skill in academic planning and assessment, have a substantial and pertinent body of relevant experience, interact with faculty of other disciplines, and maintain close and continuing liaison with the field. The faculty nurture an intellectual environment that enhances the accomplishment of program objectives.

All full-time faculty members hold Ph.D. degrees, and bring a wide range of diverse backgrounds to the program. Table III.6a identifies the primary research and teaching areas for each faculty member with his/her year of appointment, field of doctorate, and doctoral-granting institution. A full summary of the faculty's education and experience can be gained by reviewing their curricula vitae in Appendix N.

Table III.6a Full-time Faculty Education

Faculty	Year of Appointment	Research, Teaching & Advising Specialization	Doctoral Degree	Field
Berg	1988	Machine learning, computational biology, natural language processing	Ph.D. (1988) Northwestern University	Computer Science
Eppard	1988	Archives, records administration, preservation management, electronic records, history of recorded information	Ph.D. (1979) Brown University	History of American Civilization

Iyer	1990	Information organization, visual resource management, access issues for variable media resources, vocabulary management, metadata, human user behavior	Ph.D. (1984) University of Mysore	Library and Information Science
Rorissa	2005	Multimedia information organization and retrieval, measurement and scaling of users' information need and their perceptions of a multimedia information sources and services, the use/acceptance/adoption and impact of information and communication technology	Ph.D. (2005) University of North Texas	Information Science
Sinn	2008	Archival research in history, archival use/user studies, digital archives for cultural and historical events, public memory in archival context, personal archiving in the digital environment, personal information management, personal documentation in social web	Ph.D. (2007) University of Pittsburgh	Library and Information Science (Archives and Records Management)
Stefl-Mabry	2002	Integration and assessment of educational technologies, user needs; social implications of technology, media decision-making.	Ph.D. (2001) Long Island University	Information Studies and Education Technology
Yuan	2006	Information-seeking behavior, information retrieval, user interface design and evaluation, information visualization, usability testing, human-computer interaction, and digital libraries	Ph.D. (2007) Rutgers University	Information Science
Young	2016	Policy Decision Making in Homeland Security and International Relations	Ph.D. (1994) Ohio State University	International Relations, Theory & Methods

Internal connections

Faculty members work closely with the libraries and archival units within the university, and with local entities and educational institutions (including PreK-12) for their research and teaching. Faculty connect with other units within the university in several ways, namely, scholarly activities and publications, for guest lecture in their classes, and committee work. Dr. Eppard and Dr. Sinn work closely with the University at Albany's M.E. Grenander Department

of Special Collections and Archives, Dr. Rorissa has co-authored journal articles with faculty from the University Libraries, Dr. Stefl-Mabry works with the School of Education. The interdisciplinary Ph.D. program in Information Science offers opportunities to interact and work with several other units within the University.

External connections

Faculty collaborate on research with organizations outside the university and sometimes with international institutions. Dr. Eppard is a member of the Capital District Library Council (CDLC), Board of Trustees, 2015- present and member, State Archives Advisory Committee, 1991-present. Dr. Iyer connected with Ayurvedic institutes in India for examining alternative medicine information communication behavior, and collaborated with the Media Librarian, Rensselaer Polytechnic Institute. Dr. Rorissa collaborated with Addis Ababa University and mentored a Fulbright scholar from Pakistan. Dr. Sinn continues to work with faculty at the Chung-Ang University, Seoul, Korea on No Gun Ri Digital Archives project. She also works with the College of Medicine, University of Kentucky and the Department of Library and Information Science, The Catholic University of America for a research project on college students' personal information management behaviors. Dr. Stefl-Mabry in her role as program evaluator (K-12 through higher education) works with educators, librarians and educational programmers on issues related to curriculum, instruction and educational assessment and its effect on student achievement. She works closely with the New York State Education Department (NYSED) and has played a major role revising teacher certification exams and requirements, not only for school librarians, but for all public-school educators. These teacher certification exams are used on a national level therefore her contributions extend beyond New York State.

Connections with LIS and related fields

Faculty actively participate in professional associations in LIS and related fields. They participate in conferences, serve on committees, review publications, and maintain close connections with scholars and professionals in many fields. They have been elected to leadership positions in premier professional organizations in their respective fields. For example, Dr. Iyer served as Executive Board Member, International Society for Knowledge Organization (ISKO) (2012-2016); currently a member of the Scientific Advisory Board (SAC), ISKO (2012-present). Dr. Rorissa is a member (Director-at-Large), Association for Information Science & Technology (ASIS&T) Board of Directors, (2016-2018).

Organizing meetings and conferences

Some members of the faculty are involved in organization of conferences and serve as members of conference program committees in national and international conferences. These include: the Annual Conference of the Association for Information Science & Technology (ASIS&T), International Conference on Information Management & Libraries (University of the Punjab, Lahore, Pakistan), the International Society for Knowledge Organization (ISKO) international conferences, and the Special Interest Group on Information Needs, Seeking, and Use (SIG USE) Research Symposium.

Faculty are also engaged in reviewing manuscripts submissions for conferences. A selective list includes: the ACM SIGCHI Conference on Human Factors in Computing Systems, the ACM

SIG IR Conference on Human Information Interaction and Retrieval (CHIIR), the Annual Hawaii International Conference on System Sciences (HICSS), Annual meeting of the Association for Information Science & Technology, Association for Library and Information Science Education (ALISE) Annual Conference, Chinese CHI, Creativity & Cognition, iConference.

Editorial board members and manuscript reviewers

Faculty members are invited to review manuscript submissions to scholarly journals. Selective listings include *ACM Transactions on Information Systems, the American Archivist*, *Archival Science*, *Government Information Quarterly, Information Research, International Journal of Information Processing and Management, International Journal of Library and Information Science, Journal of Education for Library and Information Science, Journal of Information Visualization, Journal of Interacting with Computers, Journal of the Association for Information Science & Technology (JASIS&T), Foreign Policy Analysis,* and *Political Psychology.*

Faculty serve on editorial boards / advisory boards of scholarly journals. Dr. Iyer is a member of the editorial advisory board, *Journal of Information Management*. Dr. Rorissa is a member, editorial board, *Annual Review of Cultural Heritage Informatics* and *Infopreneurship Journal*, member, advisory board*, Libri: International Journal of Libraries and Information Studies* and *Pakistan Journal of Library & Information Science*. Dr. Sinn serves as a member of the editorial board, *Korean Society of Archives and Records Management*. For details see faculty vitae in Appendix N.

III.7. How Faculty Duties Are Assigned

Faculty assignments relate to the needs of the program and to the competencies of individual faculty members. These assignments assure that the quality of instruction is maintained throughout the year and take into account the time needed by the faculty for teaching, student counseling, research, professional development, and institutional and professional service.

Faculty teaching assignments are determined based on their competencies and research interests, and the needs of the College. Faculty teach four courses per academic year, and they are involved in advising, internship supervision, and working with students on independent study projects, and doctoral student mentoring. The teaching load of four courses per academic year provides the time and support needed for faculty to pursue a strong research agenda, and at the same time maintain high quality teaching.

Faculty fulfill appropriate service responsibilities to the College, University and the profession. Formerly, at the Department level they served on the Faculty Development Committee, Curriculum and Program Committee, Admissions Committee, Student Affairs Committee, and Assessment Review and Development Committee. At the College level, some faculty served on College-wide Curriculum Committee. Now, in CEHC, faculty serve on the Graduate Committee, Grievance Committee, and Policy Committee. Some of the faculty also continue to serve on the Information Science Ph.D. program committees, such as Comprehensive Examination Committee, Admissions Committee, and Technology Requirement Committee. Faculty are involved in advising doctoral students, serve as member/chair of doctoral program committees and/or dissertation committees. At the University level, Faculty serve on the University Senate

and Councils. Many of our faculty are very active in participating and taking leadership roles in professional associations. All the above activities, and those mentioned in Table III.6, demonstrate the faculty's specialized knowledge and skills in academic planning and assessment, and their contribution to the field. For details see faculty vitae in Appendix N.

III.8 & III.9. Evaluation of the Faculty

Procedures are established for systematic evaluation of all faculty; evaluation considers accomplishment and innovation in the areas of teaching, research, and service. Within applicable institutional policies, faculty, students, and others are involved in the evaluation process.

The program has explicit, documented evidence of its ongoing decision-making processes and the data to substantiate the evaluation of the faculty.

University at Albany has a procedure for systematic evaluation for faculty in terms of teaching, research, and service. All faculty are required to report their performances annually through the Faculty Activity Reports (FAR). Using DigitalMeasures, FAR is an online system through which faculty members report their professional, academic, and public engagement endeavors at the end of school year. There are five standards to evaluate faculty performance: teaching and advising; scholarship, research and grants; professional, university, and community service; publicly engaged work/activities; and honors, awards, certificates and public recognition. The FAR that each faculty member submits annually in June is reviewed by the Dean and is used to assess the performances of individual faculty members and the program.

For tenure-track faculty, the promotion and continuing appointment review procedure is clearly specified as a University policy. The policy articulates that the University values three areas of excellence for faculty evaluation: quality scholarship; teaching and mentoring; and service to the institution, to the community, and to professions. The policy further states that "Tenure and promotion decisions are among the most important decisions made at the University at Albany, and the university is committed to a clear and transparent tenure and promotion process."[32]

All tenure-track faculty begin collecting information and developing a dossier from their first year. The dossier includes statements for research, teaching, and service and relevant supporting documents as evidences of faculty performances. Additional documents in the dossier include teaching evaluations by students (SIRFs), peer reviews of classroom teaching observation, awards and honors, professional services, etc. The dossier of a faculty member is submitted to the faculty and Dean of CEHC for review in the second, fourth, and sixth years. The Dean forms an ad hoc committee for all levels of reviews which collect and examine the information and issue a written recommendation to the full faculty. A faculty meeting is held to discuss the case, and the tenure track faculty vote by secret ballot on continuing appointment. The CEHC Dean makes a recommendation based on the review and faculty vote, and the dossier along with the Dean's recommendation letter is forwarded to the Provost and then the President for a final decision.

[32] Procedures for Promotion and Tenure Review, http://www.albany.edu/academics/promotion_tenure/introduction.shtml.

For the tenure review (sixth year review), additional documents are collected. Research performances are documented not only by scholarly publications and funded projects but also through the external reviewers' letters to evaluate the quality of work. Similarly, teaching and service evidence is supplemented by letters from former students and committee chairs who have worked with the candidate for service activities. Once the dossier is ready for review, CEHC holds a faculty meeting and the Chair of the Faculty facilitates the meeting to discuss the case. All voting faculty decide whether CEHC recommends the tenure for the candidate. With the Dean's independent letter of recommendation and the votes from the faculty, the case is sent to the University Council on Promotion and Continuing Appointment (CPCA) for review and then the Provost. Tenure decisions occur at the end of the sixth year. The details of the procedure for promotion and continuing appointment are clearly described on the University's website.[33] The CEHC Tenure and Promotion Policy was approved in May 2019 is aligned with the University policy and can be found in Appendix R.

University at Albany is a highly respected international research university. Research performance is particularly important for all faculty members. Faculty members' research performance is evaluated primarily based on scholarly publications and research grants. Scholarly publications in prestigious peer-reviewed journals and conference proceedings are weighted the most. Research grants are recognized as important contribution and indicate faculty members' leadership and expertise in the field. Our faculty members publish mainly in highly prestigious peer-reviewed journals and conference proceedings. Many of the faculty have received major research grants in the field, and some have an international reputation for their scholarship.

To ensure the quality of teaching and mentoring, all courses are evaluated by students and by peer faculty. As mentioned previously, University at Albany uses the online Student Instructional Rating Form (SIRF). This is an assessment tool for evaluating courses that employs quantitative and qualitative scales. Our faculty consistently have high scores in SIRFs. The SIRF is administered towards the end of a semester (final period), and students are actively encouraged to participate. Some faculty employ additional evaluation for their courses at midpoint for feedback purposes, even though it is not required by the administration. The SIRF data in Table III.9a given below presents SIRF data rating the instructors and the courses. It demonstrates consistently high rating of the instructors and the courses. The SIRF form and questions, and course evaluation summaries can be found in Appendix J.1 and J.2.

Table III.9a Spring 2010-Fall 2018 Summary of Instructional Ratings (Full-Time and Adjuncts)

Semester	**Instructor Overall Score**	**Course Overall Score**
Spring 2010	4.14	4.09
Fall 2010	4.21	4.01
Spring 2011	4.12	3.99
Fall 2011	4.25	4.28
Spring 2012	4.25	3.95
Fall 2012	4.28	3.97

[33] http://www.albany.edu/academics/promotion_tenure/introduction.shtml.

Spring 2013	4.24	4.27
Fall 2013	4.22	4.32
Spring 2014	4.37	4.08
Fall 2014	4.17	3.69
Spring 2015	4.22	4.28
Fall 2015	3.96	3.81
Spring 2016	4.21	4.06
Fall 2016	4.52	4.19
Spring 2017	4.52	4.42
Fall 2017	4.42	4.30
Spring 2018	4.47	4.29
Fall 2018	4.29	4.26

**All Scores are based on a 5-point Likert Scale*

Service performance demonstrates good citizenship within the University as well as in the Information Science field. Service activities are evaluated based on committee work and positions held by the faculty member. Faculty members are assigned to department or college level committees in their earlier years of employment, after which institutional service expands to the University level. Faculty have been involved in many important committees and decision-making bodies within CEHC and University, such as Faculty Senate and Professional Union. All of our faculty are active members of professional organizations and play important roles in various professional activities: for example, scholarly journal peer reviews, journal editorial boards, and conference organization.

Promotion to the rank of Full Professor:

Faculty in the rank of Associate Professor for a minimum of 5 years are eligible for promotion to the rank of Full Professor The University expects that the candidates for Full Professor rank "demonstrate continued scholarship, excellence in research; a record of high quality teaching and substantial service to University and scholarly communities and with evidence of international recognition by peers."[34] The process is similar to the one described above for continuing appointment (tenure review).

III.10. Faculty Evaluations and Program Planning

The program demonstrates how the results of the evaluation of faculty are systematically used to improve the program and to plan for the future.

Faculty evaluations by students (SIRF) are reviewed annually by the dean in conjunction with a review of Faculty Activity Reports. Any issues that surface in student evaluations can be addressed with the individual faculty member. At the same time, student evaluations will sometimes include general comments about the content or direction of courses. If such comments seem to represent more than just an individual preference, faculty can bring such comments to the Graduate Committee for consideration of changes to the program. The self-assessment

[34] http://www.albany.edu/academics/promotion_tenure/introduction.shtml

exercise of the SLO&AR process provides another opportunity for faculty to detect ways in which changes to individual courses can lead to program improvement.

In summary, the faculty bring diverse knowledge and experience and are active in teaching, research and service to the University and the profession. We are proud of the quality of our faculty and their dedication and commitment to the program. We believe that it meets the ALA Standards for Accreditation.

Standard IV: Students

Introduction

Enrollment in the IS program had gradually declined over several years with some fluctuation, due primarily to economic and employment conditions as well as reduced resources for marketing, advertising, and student support. However, the last two years saw the enrollments slightly bounce back even without aggressive recruiting efforts. The synergy of multiple changes in the IS program, such as merging into CEHC, becoming an iSchool, and providing a fully online degree program may have resulted in some positive effects. Thus, we anticipate the enrollment will continue to grow due to these recent changes. We also expect it will grow even further with appropriate marketing efforts and the implementation of a 4+1 program this year.[35] The majority of our students enroll in the Library/School Media, followed by Library and Information Services track and Archives and Records Management track. Table IV.0a shows enrollment trends by track for the past eight years.

Table IV.0a MSIS Student Enrollment Trends, Fall 2011 to Fall 2018

# and %* of students	Fall 2011	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017	Fall 2018	Total
Library and Info. Services	75 (34.09%)	71 (36.59%)	66 (42.03%)	48 (40%)	43 (38.05%)	27 (27.55%)	23 (22.12%)	26 (22.41%)	379 (33.78%)
School Library Media	55 (25%)	33 (17.01%)	20 (12.74%)	14 (11.67%)	16 (14.16%)	19 (19.39%)	36 (34.62%)	51 (43.96%)	244 (21.75%)
Archives & Records Mgt	38 (17.27%)	40 (20.61%)	26 (16.56%)	18 (15%)	18 (15.93%)	20 (20.41%)	23 (22.12%)	22 (18.97%)	205 (18.27%)
Information Syst. & Tech.	26 (11.81%)	25 (12.89%)	27 (17.2%)	29 (24.17%)	25 (22.12%)	18 (18.37%)	13 (12.5%)	13 (11.21%)	176 (15.69%)
Information Mgt. & Policy	7 (3.18%)	11 (5.67%)	8 (5.09%)	3 (2.5%)	2 (1.77%)	2 (2.04%)	2 (1.92%)	1 (0.86%)	36 (3.21%)
Certificate of Advanced Standing	2 (0.9%)	3 (1.55%)	1 (0.64%)	3 (2.5%)	1 (0.88%)	1 (1.02%)	1 (1.96%)	1 (0.86%)	13 (1.16%)
Non-degree	17 (7.72%)	11 (5.67%)	9 (5.73%)	5 (4.17%)	8 (7.08%)	11 (11.22%)	6 (5.77%)	2 (1.72%)	69 (6.15%)
Total	**220**	**194**	**157**	**120**	**113**	**98**	**104**	**116**	**1122**

** Percentage of students by track each year*

The program's physical location in Albany allows it to serve residents in the eastern part of New York State and surrounding areas, including a concentrated population area (the Capital Region) as well as a much wider geographic area including the mid-Hudson Valley, the northern rural Adirondack region, central NY, and western Massachusetts, southern Vermont, and northern New Jersey. The addition of online courses is expected to further expand the program's service areas in near future. Table IV.0b identifies the number of applications and resulting enrollees from New York State, other U.S. states, and other countries, since 2011.

Table IV.0b Geographic Makeup of MSIS New Students, 2011-2018

[35] The 4+1 program allows undergraduate students to begin IS program during their final undergraduate years and with this streamlined program from undergraduate to graduate, students will be able to acquire both undergraduate and graduate degrees in 5 years.

Registered new students	2011	2012	2013	2014	2015	2016	2017	2018
NYS	19	29	20	23	33	24	22	24
Other states	8	5	4	0	3	1	0	1
International	1	2	1	2	1	1	1	0

Recruitment, Admission, Financial Aid, Placement

STANDARD IV.1: The program formulates recruitment, admission, retention, financial aid, career services, and other academic and administrative policies for students that are consistent with the program's mission and program goals and objectives. These policies include the needs and values of the constituencies served by the program. The program has policies to recruit and retain students who reflect the diversity of North America's communities. The composition of the student body is such that it fosters a learning environment consistent with the program's mission and program goals and objectives.

The mission of the IS program is to educate, challenge, and inspire library, archival, and information professionals to be leaders in an information-driven and interconnected society. The collection, organization, retrieval, preservation, management, and dissemination of information resources enrich cultures within society and promotes equity, diversity, accountability, and intellectual development. Toward that end we recruit, admit and support students in the IS in accordance with University at Albany's procedures and policies. The program works closely with the Graduate Studies Office to ensure that all standards and policies are consistently and fairly applied, and that the information available to students is accurate and accessible.

We provide the program information for prospective students on the University at Albany website. The American Library Association's directory of accredited programs and the Society of American Archivists' directory for archival program list the IS program and they serve as a pointer to our website. We receive numerous e-mail and telephone inquiries from all parts of the world, and these are answered promptly by office staff or the Manager of Graduate Studies and Research who coordinates admissions. The professional staff team builds relationships with prospect students who reach out to CEHC for questions and information requests.

Recruitment for students occurs in various venues. Direct recruitment takes place mostly through personal contact between faculty, staff, and prospective students at University at Albany events and through our widespread network of alumni and colleagues. University at Albany events include an annual *Graduate and Professional School Fair* which is advertised to colleges throughout New York State as well as career programs for current and prospective undergraduate students (such as *Amazing Career Race* at Empire Commons). This year, the Dean and Dean's office attended the *Honors College Reception* for brief presentation about the IS program. Our staff members occasionally visit undergraduate classrooms (e.g. INF 301, INF 499, and EHC 310) to provide information about the program. Student organizations and fraternity clubs (e.g., Epsilon Delta Psi) have invited our staff and faculty members to speak about the IS and 4+1

programs. CEHC has held an information table about our programs at various career events, such as University at Albany's annual *Career Expo* and *Graduate Fair*. CEHC also holds informal events, such as *CEHC Pizza with the Programs* where we meet with students at all levels and have informal conversations with prospective graduate students. Our faculty also attend professional career events, such as *New York City Library System Gent Certified! Prospective Librarian Information Session*, and *New York City School Library System Annual Fall Conference*. In the current year, we have launched a digital marketing campaign in conjunction with (and funded by) Graduate Education to draw in enrollment for our new tracks and new programming.

The program uses on-campus and local conferences as a marketing venue for students. For example, at the annual CEHC Showcase, a college-wide event for research presentations and class showcases of undergraduate and graduate students, we have an information table for students who have questions about the program. We participate in local conferences, such as the New York State Cyber Security Conference at the Empire State Plaza, to promote our program. Also, we regularly have a presence at local and national conferences such as NYLA, NYAC, ASIS&T, and SAA.

University at Albany is an institution which highly values diversity and inclusion in its education and research agendas. The University has a clear policy on equal opportunity and non-discrimination.[36] Office of Diversity and Inclusion ensures that the University is in compliance with State and Federal non-discrimination Laws and Executive Orders by various activities and programs. The University at large has a diverse undergraduate student body which is composed of 49% males and 51% females; 44% Caucasian, 19% African American, 18% Hispanic, 8% Asian, and 5% international students.[37] We recruit from the University's diverse population of undergraduates, including CEHC's undergraduate programs.

In the IS program, the average for degree awards to self-identified minority students stands around 20-25 percent in recent years. Data on the number of minority and international students in the IS program for the past eight years is provided in Table IV.1a. While this ratio is not as diverse as in the University's whole student body, we saw some increase in the percentage of minority students last year. We recognize the need to increase our success in recruiting a student population that reflects the diversity of New York and North American populations.

Table IV.1a Minority* and International Students Enrolled in the IS program
(Data from ALISE reports)

[36] President's Statement and Equal Opportunity and Non-Discrimination, http://www.albany.edu/diversityandinclusion/files/Presidents_statement_on_EO_and_Non-Discrimination_2014.pdf.
[37] http://www.albany.edu/admissions/who.php

	Fall 2011	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017	Fall 2018
# Minority students*	38 (17%)	33 (17%)	32 (20%)	22 (18%)	20 (17%)	21 (21%)	20 (19%)	29 (25%)
# International Students	4 (2%)	6 (3%)	5 (3%)	8 (6%)	11 (9%)	5 (5%)	6 (5%)	2 (1.7%)
Total # of enrolled students	220	194	157	120	113	98	104	116

** Based on IPEDS Race/Ethnicity Reporting Category Description.*

In an effort to ensure an inclusive environment within our IS program, faculty members have actively participated in University wide programs and activities, such as diversity trainings (e.g. safe space training[38]) and Diversity Dialogue Series (round-table dialogues). Some faculty members have represented CEHC in the meetings held by the Office of Diversity and Inclusion and the Dean is a member of the University's Diversity and Inclusion Committee.

The University offers the Carson Carr Graduate Diversity Scholar program, which provides targeted assistantship funding for graduate students who will contribute to the diversity of the student body in their graduate or professional program. While the majority of funds from this program are awarded to doctoral students, some funding is set aside for students at the Master's level. The application form for this funding is included with graduate application materials, and the Graduate Studies office selects the recipients.

Information to Support Student Planning

STANDARD IV.2: Current, accurate, and easily accessible information about the program is available to students and the general public. This information includes documentation of progress toward achievement of program goals and objectives, descriptions of curricula, information on faculty, admission requirements, availability of financial aid, criteria for evaluating student performance, assistance with placement, and other policies and procedures. The program demonstrates that it has procedures to support these policies.

The program maintains a website that has detailed information on programs, procedures, and resources for students. We revise and update the information on this web page on a regular

[38] https://www.albany.edu/lgbt/38103.php

basis.[39] The mission and goals of CEHC can be easily accessed from the web site.[40] The "Graduate Programs" section of the program webpage provides IS details along with admission procedures and contact information. Along with the college's own website, the Graduate School portal is the main source of information for prospect and current students.[41] Specific details on deadlines and requirements for application are provided, including the information about step-by-step application process and the link to University at Albany Application Portal, so that applicants have direct access to official admission procedures, requirements, and forms.

The IS course and credit requirements are available on the College's website, and the same information is in the University's official online Graduate Bulletin (updated yearly). Students who call, write, or send e-mail inquiries are directed to the online information, or may request printed information via mail. Current schedules, course descriptions, faculty profiles, and College news and events are all available on the web site and are updated frequently. University graduate student policies and procedures and other important administrative information for students, including policies for or violation of academic integrity, academic grievance, program change and withdrawal, leave of absence, auditing courses, academic standards for students' performances and grading of graduate courses, are also available on the Graduate Education Bulletin web site.[42]

The Manager of Graduate Studies and Research has primary responsibility for overseeing the admission process and is available to meet with prospective students and answers phone and e-mail inquiries with the help of a graduate student assistant. Previously, the Assistant Dean of the program oversaw the admission process and together with the department secretary and a student assistant handled communications with prospect students. Feedback from students indicates that this personal contact is highly valued as they move from the initial stages of considering a graduate program through the application and admission stages. The graduate student survey indicates that students are satisfied (20.7% in 2017 and 27.7% in 2019) or very satisfied (34.5% in 2017 and 36.36% in 2019) with the services of College and program administration (see Appendices E (2019), S (2019) graduate student surveys) As a way to welcome students and to be responsive to any inquiries, faculty members often send out a welcome email message or make a phone call to their newly admitted advisees for any questions students might have about the program before the start of their study.

[39] https://www.albany.edu/cehc/info-science-masters.php and https://www.albany.edu/cehc/info-science-school-library.php

[40] https://www.albany.edu/cehc/office-dean#about. Before being merged into the new college in Nov. 2017, the Program provided its mission, goals, and objectives on its previous web pages, including the program's history. These pages could be accessible through the Internet Archive (https://web.archive.org/web/20171026111642/http://www.albany.edu/information-science/about-info-studies.php and https://web.archive.org/web/20171118083157/http://www.albany.edu/ceasweb/is_history_mission_goals.html).

[41] https://www.albany.edu/graduate/

[42] https://www.albany.edu/graduatebulletin/requirements_degree.htm#academic_standards.

General financial aid information for graduate students is available on the Office of Financial Aid web page.[43] This includes information on applying for assistantships, subsidized federal loans, special opportunities and programs, external funding, and part-time employment.

The program strives to provide financial support to as many students as possible through assistantships, scholarships, and part-time employment opportunities. As for assistantships, we have one full position which provides a stipend and tuition support. This position is for administrative support to the program. In years of 2014 through 2018, we were provided another full position whose funding came from the University's initiative to promote online education (Online Teaching and Learning funds), to support instructors who develop online courses. These assistantships are advertised and awarded to new or continuing students based on academic excellence and the demonstration of knowledge/skills needed for particular duties. The application for these positions is included with general application materials, with a separate form for continuing students. Assistantship award decisions are made by the Manager of Graduate Studies and Research and the Assistant Dean for Finance and Administration.

There are also various scholarship opportunities the program offers to students. These scholarships include short term tuition and/or travel grants, ranging from $500 to $5000. Additional grant-funded and other on-campus assistantship opportunities are announced as they become available and all MSIS students may apply for these positions.

The University hosts a webpage that provides scholarship information on external funding available from a variety of sources, usually donors and professional organizations.[44] We regularly announce scholarship opportunities and their deadlines via our listserv (IST-L). Many of our students have been recipients of scholarships from local and national professional associations, such as NYLA or NYAC. The program also maintains a listserv dedicated to announcing employment opportunities for MSIS degree graduates as well as part-time positions for current students. Students who subscribe to ISTJOBS receive announcements on a regular daily/weekly basis, and we also maintain an archive of these announcements that is generally available on our web page.[45]

University at Albany has worked to develop and maintain "MOU" agreements with the New York State Library and other New York State agencies that provide part-time employment opportunities for many of our students. There are typically about twenty positions in any given semester at the New York State Library. In these cases, appointment and payroll functions are provided through the university, giving all students (including international students) the opportunity for employment.

Consistent Admission Standards

STANDARD IV.3: Standards for admission are applied consistently. Students admitted to the program have earned a bachelor's degree from an accredited institution; the policies and procedures for waiving any admission standard or academic prerequisite are stated clearly and

[43] https://www.albany.edu/financialaid/index.shtml.
[44] https://www.albany.edu/financialaid/apply_scholarship.shtml
[45] https://listserv.albany.edu/cgi-bin/wa?A0=ISTJOBS

applied consistently. Assessment of an application is based on a combined evaluation of academic, intellectual, and other qualifications as they relate to the constituencies served by the program, the program's goals and objectives, and the career objectives of the individual. Within the framework of institutional policy and programs, the admission policy for the program ensures that applicants possess sufficient interest, aptitude, and qualifications to enable successful completion of the program and subsequent contribution to the field.

Applicants to the MSIS must have a four-year bachelor's degree completed by the intended semester of admission (or equivalent if not from a U.S. college or university) and provide official transcripts for all credit applied to earned degrees. Applicants must also provide official GRE scores, a statement of background and goals, and three letters of recommendation. The GRE is waived only if an applicant has earned a previous graduate degree (MA, MS, JD, etc.). International students from non-English speaking countries are required to also provide official TOEFL scores. Requirements for application to the MSIS are available on the Graduate Admission Office website.[46]

However, there is one exception on this premise. As of January, 2019 we offer combined 4+1 program. This is an opportunity for capable, highly motivated students who are pursuing an undergraduate degree offered by CEHC to begin their graduate study and professional preparation for a career in Information Science during the senior year. Undergraduate students who have successfully completed at least 56 credits with a cumulative grade point average of 3.2 or higher can apply for the combined program. For these students, GRE is not required. Information about the combined program is available on the Graduate Admission Office website.[47]

The required documents are received and verified by the Graduate Admissions Office and made available to CEHC for review when the application is complete. An electronic imaging system (Slate) has made this process fast and efficient and allows applicants to track the progress of their applications.

Our published standards for admission to the MSIS include a 3.0 undergraduate grade average (GPA) *or* a score of at least 300 for the verbal/quantitative sections of the GRE, with an analytical writing score of 4.0 or better. The statement of background and goals must demonstrate that the applicant has an adequate understanding of the program and the profession. Letters of recommendation must indicate motivation and the ability to succeed at graduate-level academics. The Manager of Graduate Studies and Research reviews all applications and admits applicants who meet or exceed the standards for admissions. For the applications that do not meet all of the above-mentioned standards, she holds a meeting of the program faculty to discuss the applications in question. The decision to admit a candidate who has not met these standards is based on demonstrated professional competence, strong motivation, evidence of academic ability not demonstrated by GPA or GRE, and strong recommendations from appropriate sources.

[46] https://www.albany.edu/graduate/information-science-ms-degree.php.
[47] https://www.albany.edu/graduatebulletin/requirements_combined_baccalaureate_masters.htm.

Students have the option to take MSIS courses as non-degree graduate status. The University clearly states in the non-degree admission letter that non-degree admission "cannot be considered in any way as a commitment for future admission to degree study." However, if a student is admitted after non-degree study, the successfully completed courses may be included for MSIS credit. Non-degree students have access to all available IS courses, advisement, and all other resources available to students in the IS program. Students may also enter the program with non-degree status if they are eager to begin studies but have missed the deadline for IS degree application. Non-degree admission requires a simple one-page application and a transcript submission. Up to twelve credits may be completed as a non-degree student and can subsequently be applied to a degree program. Students admitted for non-degree study must meet the standard of a 3.0 GPA, or provide supplementary information indicating an ability to succeed in graduate study.

On some occasions, students who have been denied IS program admission are allowed to take one or two Information Science courses with non-degree graduate status. If the student is successful in these courses and has strong recommendations from the course instructors, the MSIS application may be reconsidered.

Table IV.3a Average GRE Scores, MSIS Admitted

Semester	Average GRE Verbal	Average GRE Quant.
Fall 2016	154.47	149.72
Fall 2017	150.11	151.17
Fall 2018	155.33	148

Constructing and Evaluating a Coherent Student Program of Study

STANDARD IV.4: Students construct a coherent plan of study that allows individual needs, goals, and aspirations to be met within the context of program requirements established by the program. Students receive systematic, multifaceted evaluation of their achievements. Students have access to continuing opportunities for guidance, counseling, and placement assistance.

Every student admitted to the IS program is assigned a faculty advisor as part of the admission process. The assignment is based on the student's choice of concentration and interests as expressed in the application statement. This assignment may change if the student changes concentration or requests a different advisor. Non-degree students and 4+1 students are advised by the Manager of Graduate Studies and Research and their Undergraduate Academic Advisor. All other IS students are advised by full-time faculty members. Faculty members typically advise 10-40 MSIS students each semester. Faculty advisors are available on a regular schedule of weekly office hours (3 to 5 hours weekly) and also by telephone, e-mail, and online chat (virtual classroom in Blackboard or Skype). Students must contact their faculty advisor at least once during a semester to discuss their progress and needs, and to determine the appropriate selection

of courses and receive a registration code for the following semester. As part of the internship placement process, students discuss internship goals and plans with their faculty advisor.

The program held a student orientation for new students at the beginning of each semester until 2018. The orientation included introduction of faculty and staff, a review of the student handbook and other information, a presentation by the university library bibliographer for library and information science, and presentations by representatives of our student association and professional organizations. Attendance is not mandatory, but most new students attended. Students who were unable to attend can pick up the information packet in the Dean's office. However, currently a great number of students pursue the MSIS degree online or taking online course and are not present physically at school buildings frequently. Thus, the program makes the Student handbook and any important information for new students available via email request and/or on the web site.

Each IS concentration includes both required and elective courses. Students receive guidance from their advisor in selecting appropriate courses, electives, and in some cases, courses from other academic units. Guidance in these areas is also provided in the detailed IS student handbook and college's website.[48]

Student progress is evaluated in a variety of ways depending on the specific course evaluation instruments in use. In all courses, faculty feedback and evaluation are provided throughout the semester. Rubrics have been developed by many faculty to allow for participatory self-evaluation of the effort and result in specific assignments. Students become active partners in the evaluation of their progress and growth as information professionals through frequent reflective assignments, and through articulation of their course and career goals. As students prepare for their capstone internship, they prepare goals and identify the areas where more practical experience is needed.

The IS program is actively working towards documenting student learning using a student-centered approach to evaluation. The program objectives reflect the competencies needed by graduates of the program. The objectives are included in the syllabi of core and many other courses. The faculty regularly use a Student Learning Outcomes Assessment Report (SLOAR) that tracks progress in assessing student success in selected assignments linked to objectives. In addition, the internship mentor uses an intern evaluation form to track student success in all program objectives, and this is studied each semester. A recent internship mentor survey in 2017 found that students completing internships are generally successful in meeting the program's student learning objectives. The range of student success evaluated by internship mentors in meeting specific objectives is ranged from 3.51 to 4.32, with a mean score of 4.14 (in 2017 Survey) and from 4.16 to 4.47 with a mean score of 4.34 (in 2019 Survey) on a scale of 1 to 5, with 5 being the highest possible score. The full reports are available in Appendices E-H, S (Surveys of 2019 and 2017, respectively).

[48] https://www.albany.edu/sites/default/files/2019-05/Fall%202017%20Handbook%20PDF-able%20version.pdf

All graduate students at the University at Albany must maintain a "B" average in their program of study. Faculty pay close attention to students whose progress during the semester indicates that they may not achieve this level. Tutoring, counseling, and other university services (such as help through the writing center) are offered to students who need academic support. When students fall behind because of unavoidable personal or health situations, faculty and/or the graduate students' academic advisor meet with the student to discuss strategies for moving forward. Also, the University offers *Student CARE Services* to connect on and off-campus resources and support for various difficulties student may have from unexpected financial and medical challenges to potential crime victimization.[49] Students who self-identify as disabled may utilize support services through the university's Disability Resource Center. This office coordinates alternative testing, tutoring, and assistive technology, as well as counseling, referral, and other support services.

The University and our IS program provide employment assistance in several ways. The IST-JOBS employment listserv was described above. The Career and Professional Development Office provides a variety of resources, including resume review and mock interview sessions, job search assistance, and announcements for on- and off-campus recruiting and interviewing events[50]. Within our program, required courses (e.g., *IST 601: The Information Environment*) and elective courses (e.g., *IST: 617 Academic Libraries and Higher Education*, *IST 618: Public Libraries*) discuss specific career paths and the strategies for applying for positions in these areas. Student chapters of professional organizations (described in detail in the next section) facilitate access to conferences and networking. Students' organizations regularly organize, and CEHC supports, career events for resume workshops and career panels for IS students that bring in alumni and other practicing professionals to offer advice to students on the search process (see table IV 5.a).

Student Participation in Program Planning

STANDARD IV.5: The program provides an environment that fosters student participation in the definition and determination of the total learning experience. Students are provided with opportunities to:

IV.5.1. Participate in the formulation, modification, and implementation of policies affecting academic and student affairs;

The IS program offers various opportunities for students to participate in their own learning experiences. All students are invited on a regular basis to participate in informal group conversations with the faculty. Students may also express ideas, concerns, and suggestions at any time by communicating with their faculty advisor, the College's Manager of Graduate Studies and Research, the Vice Dean, or the Dean. We survey our students to allow for anonymous feedback on various matters, and ISSA (Information Science Students Association), a collective student body, has also been provided with program's resources to conduct surveys to assess student opinions. An example of ISSA administered student surveys can be found in Appendix P

[49] https://www.albany.edu/ualbanycares/
[50] https://www.albany.edu/career/index.shtml

(ISSA Survey 2013). Representatives from ISSA and the leaders of other student organizations were invited to speak when we held the new student orientations to explain the purpose of the group and invite active participation. ISSA provided student representatives to participate in faculty meetings and was involved in committee work until 2017 when the program was an independent department.

IV.5.2. Participate in research;

The IS program acknowledges that student participation in research provides invaluable learning experience. Students are encouraged to work on publishable research projects, and course projects can be further developed with faculty advice or collaboration. Faculty members invite students to participate in their research projects and sometimes fund students for their work. Even though it is not required, students can write a thesis during their MSIS. The course, IST 669 Independent Study in Library and Information Science and Policy, is often used for students who want to pursue a research project in their interest areas. Students who publish scholarly articles are recognized at the commencement ceremony. Details about students' participation in research, including student research publications, Master's theses, and independent study projects, are shown in Appendix M (Student Research Projects).

IV.5.3. Receive academic and career advisement and consultation;

Through regular academic advisement, student will have opportunities to receive assistance for academic progress and career consultation. Upon admission, students are assigned a faculty advisor, and the faculty advisor will provide guidance and feedbacks throughout students' program. Meetings with advisors often include various discussions regarding students' academic progress, career goals, and professional development in addition to course selections and internship placements.

In formal courses, the program creates an environment to promote the relationship with local professionals in a way to offer students diverse learning experiences for their career interests. As mentioned in the section IV.4, our program offers courses related specific career paths. In other courses, faculty members invite professionals for guest lectures (e.g., *IST606: Collection Development and Management*) or offer field trips to local libraries and/or archives (e.g., *IST656: Archives and Manuscripts)*. Access to professionals and alumni has offered rich resources for students, including internship placements, professional networks, research collaboration, instructors for elective courses, and professional mentorships. To show our appreciation for their time and energy into supporting the IS program, we have held *Appreciation Receptions* for past five years from 2013 to 2017. This event was a casual time to mingle among faculty, staff, recent graduates and mentors from a variety of information professionals.

IV.5.4. Receive support services;

The University as well as the program have systems to support students for their study and to ensure students experiencing difficulties to receive timely assistance. As mentioned in IV.4. the University provides many support services for students' success, such as writing center, tutoring, counseling, disability supports and Student CARE Services. The Office of Graduate Education's

audit process monitors students who fall behind or having issues academically. Within the program, the faculty advisors and the Manager of Graduate Studies and Research also overview students' progress and reach out to students if they need any assistance. There are also committees in CEHC to support students (e.g., *Committee of Student Affairs* till 2017, and *Grievance Committee*).

IV.5.5. Form student organizations and IV.5.6. Participate in professional organizations.

ISSA functions as the collective voice of MSIS students within CEHC. All MSIS students are considered members of ISSA, and all meeting and informational announcements are posted on the College's listserv. ISSA is a student-organized and student-run group, so activities vary from semester to semester depending on the interests of the involved students. ISSA has sponsored lectures, panels, trips, and social events. As an established student organization, they are eligible to receive funding for these activities from the university's umbrella Graduate Student Association.

The program provides the opportunity for students to develop a professional identity through participation in student chapters of professional associations. In the past several years, active student chapters of professional associations include American Library Association (ALA), New York Library Association (NYLA), the Society of American Archivists (SAA), and the American Society for Information Science and Technology (ASIS&T). Our faculty members serve as the advisors of the student groups. There are many benefits for students to participate in the professional associations and to be a member, including various opportunities to network with professionals and discounted rates for student membership. Most recently, REFORMA (the National Association to Promote Library & Information Services to Latinos and the Spanish Speaking) offered our students a complimentary one-year membership.

Connecting and networking with local professionals are main events of MSIS student groups. For example, *Librarian Panel*, which is held annually, offers great networking opportunities for students and local librarians. Through the student groups, students join professional activities, such as joining librarians of New York in Advocacy Day. At the Annual Resume Workshop, local professionals (public librarians, academic librarians, archivists) are invited to review resumes for students who seek a position in the same professions. Also, ISSA has a presence at local conferences for showcasing students' work, such as NYLA conference's Trade Show. ASIS&T student group organizes numerous workshops for students, including GIT, HTML, R Rollcall Scaling workshops. The Open Source Festival is an annual favorite event for students, faculty, staff, community members, local government, and industry to present and learn about open source software. ASIS&T hosts this event and in 2017 over 250 people were attended. Student groups often volunteer at local conferences, such as Programs Squared Symposium and NYLA conference. Invitations to participate in these events are announced regularly on the MSIS student listserv. Through these activities and networks, students have various opportunities to build their professional identity. The student groups are active in social media presence, using Facebook, Twitter, Blog, and their own websites, using hashtags for conferences, jobs, and internships. A sampling of programs and activities sponsored by student groups can be found in Table IV.5a.

Table IV.5a Sample Events Sponsored by Student Groups 2014 to 2018

Sponsoring Organization	Event/Activity	Date
Information Science Student Association (ISSA) Student Chapter of ALA Student Chapter of NYLA Student Chapter of SAA	Resume Workshop Book Sales and Bake Sales Librarian Panels (Talks by local practitioners) Trips to local libraries, archives, and museums "Preserve Your Sanity" nights Meet the department staff and ask a question!	Annual spring event 4/2015, 11/2015, 4/2016, 10/2016 Annual events Occasionally Every semester 2/6/2019
American Society for Information Science and Technology (ASIST)	Open Source Festival Git Workshop Emacs Workshop HTML Workshop Operating Systems Workshop Rollcall Scaling Workshop Google NYC Field Trip Internship Workshop Resume Workshop Virtual Reality and Escape Room Event Student Success Spotlight MakerSpace opening party	Annual spring event 10/1/2016 Annual Fall event 11/21/2014 5/2/2018 4/18/2018 12/6/2018 2/20/2018 9/28/2018

Student Input in Program Development

STANDARD IV.6: The program applies the results of evaluation of student achievement to program development. Procedures are established for systematic evaluation of the extent to which the program's academic and administrative policies and activities regarding students are accomplishing its objectives. Within applicable institutional policies, faculty, students, staff, and others are involved in the evaluation process.

Several methods, ranging from formalized surveys to ongoing informal communications, are used to gather student feedback about the program and integrate student concerns into planning. CEHC administers surveys to gauge student satisfaction about the program, where students have the opportunity to rate the program's performances, including administration, curriculum, courses, facilities, etc. They are asked to comment on strengths and weaknesses of the program, and the comments are reviewed and studied by faculty in the process of evaluation and planning. In the recent surveys in 2017 and 2019, students indicated that they are generally satisfied with the program. For example, the satisfaction for the curriculum and courses was scored 3.71 on average in 2017 and 3.24 on average in 2019 in the scale from 1 to 5, with 5 as highly satisfied (specific questions were about the satisfaction for core courses, choice of elective courses, overall curriculum design, class sizes, scheduling, online courses, internship, and quality of instruction). Student answers for the major strengths of the IS program include "the variety of tracks"; "the faculty are very accessible and supportive. Faculty have many connections in the field and can give practical advice. The program is well-known in the area, and it is flexible and affordable."; "highest quality of instruction"; "the classes address current technology and information environment"; "The classes are excellent and the professors have been very knowledgeable"; "The program is also successful at exposing students to different environments where they may find employment after graduation through field trips and course work." Around eighty per cent of students responded "yes" to the question, "Would you recommend this program to other?" in both 2017 and 2019 surveys. The details of the survey results are presented in Appendix E (Graduate Student Survey 2019), and Appendix S (Graduate Student Survey 2017).

Sometimes, students initiate surveys to collect student feedback on the program. For example, the ISSA survey of fall 2013 asked students' expectation of the program, quality of the courses preparing for job, the points of attraction about the program, any challenges and frustration they experienced, etc. (see Appendix P ISSA Student Survey 2013).

Students are also asked to rate instructor effectiveness at the end of each semester via a university-wide survey instrument, SIRF (*Student Instructional Rating Form*) that includes quantitative and qualitative information. This process provides regular feedback about individual instructors and courses. Midterm point surveys could be administered through the University service by ITLAL (Institute for Teaching, Learning, and Academic Leadership). Instructors are notified the results of the midterm survey in a timely manner, so that instructors can modify their instruction with the feedback from students for the remainder of the semester. The final survey results notifications are sent to instructors after final grades are due for each semester. The prompt notifications of SIRF results and other feedback from students help instructors to adopt the information to their courses in next offering. See Appendix J.1 (SIRF form) for the evaluation elements being used in the final survey of SIRF.

More informal and anecdotal data is collected through discussions and advisement meetings between students and the faculty. Students are also encouraged to share information and suggestions through the student listserv (IST-L@listserv.albany.edu).

All of these methods are used to help formulate curriculum and steer other planning discussions and decisions. For instance, student comments have led to the development of blended and online courses, a change in the goal setting and evaluation activities in the capstone internship program, a capstone course in the School Library Media Program (IST 673) to provide School Library Media students with hands-on teaching and learning opportunities with in-service educators in PreK-12 departments, additional course offerings, and the addition of more late afternoon and evening courses to accommodate the needs of students who work full-time. Additional course offerings are often reflected through experimental IST 666 courses in a variety of areas. If student interest and demand seem sufficient, these courses are converted to a regular course.

Documenting Student Learning

STANDARD IV.7: The program has explicit, documented evidence of its ongoing decision-making processes and the data to substantiate the evaluation of student learning outcomes, using appropriate direct and indirect measures as well as individual student learning, using appropriate direct and indirect measures.

The decisions about the program are discussed and made in faculty meetings. Regular faculty meetings are held once a week during academic years, and ad hoc meetings could be called as needed. Standing committee meetings are also held regularly, weekly or biweekly. All faculty meetings are documented in minutes with details about decision making processes and faculty discussions. For example, the changes in curriculum and online courses of the past few years have been discussed and are documented clearly in faculty meeting minutes. Meeting minutes are stored in the Dean's Office.

In addition to the normal business of faculty meetings, the program employs a specific method to evaluate students learning outcomes according to the program goals and objectives. As already mentioned, this evaluation method, SLOAR (Student Learning Outcomes Assessment Report), was developed within the program. Prof. Stefl-Mabry whose expertise is in educational assessment and evaluation has developed the methodology as part of her research. The SLOAR form uses evaluation metrics to link student learning outcomes to assignments and methods of assessments of a course; it also connects course activities to program goals and objectives (see Appendix B.2 *Past iterations of the SLO&AR Form* for details). Using the SLOAR metrics, faculty members are able to measure how their course activities are performed for student learning outcomes the program intends to achieve.

Improving Program Based on the Evaluation of Student Learning

STANDARD IV.8: The program demonstrates how the results of the evaluation of student learning outcomes and individual student learning are systematically used to improve the program and to plan for the future.

As previously explained, program recently revised its curriculum, reducing the credits required from 42 to 36 credits and adding Data Analytics and Intelligence Analysis tracks to reflect the demands of professional fields and students, stream lining track concentrations and their requirements, and offering fully online programs. The process of the curriculum revision has

been promoted by the SLOAR reports, student feedback, and the new College's support in addition to the research and discussion within faculty meetings. The collective data from SLOAR reports of courses in the program are regularly analyzed for holistic understanding of student learning through our curriculum. The accumulated SLOAR data from 2013 to 2018 indicates several strengths in the program's performance, such as faculty trying to marry theory and practices in their courses. It also suggests some areas of concern about students' writing and research skills and the difficulty of encouraging meaningful discussions in online courses (see Appendix D SLO&AR Report for 2013-2015). Those data were vigorously discussed in faculty meetings to improve courses, curriculum, and the program. The SLOAR reports are used as important data for fueling change and decisions toward increasing online course offerings and curriculum revision.

Issues for Further Discussion

The IS program plays a valuable role in educating the next generation of information professionals, particularly in northeastern New York, Vermont and Massachusetts. This catchment area has provided the program with a steady stream of qualified candidates. Now, the transition toward an online degree has expanded the geographical boundaries for LIS education.

Even though the IS enrollment has only recently started to rebound, the prospect of a fully online IS degree is expected to bring further increase in enrollment. Likewise, the exciting changes in curriculum, degree requirements, implementing a combined 4+1 program, and the addition of two new tracks are expected to attract additional new students. With the move to CEHC, the program became part of a larger community that embraces diverse research and opportunities for the faculty, administrators and students. The synergy and commitment of the new community already shows potential for strong LIS education, and signs for success of the program. Now, CEHC offers an expanded IS program including a traditional information science concentration as well as the new tracks. This allows the program to streamline degrees within the same college for students from undergraduate to doctoral programs in the information field. The program has continued to perform effectively and efficiently even during a time of extremely limited resources.

An area requiring improvement is the need of scholarship resources used to attract outstanding minority and international students. CEHC has been making effective use of scholarship opportunities both within and outside the university, but fiscal support is more competitive each year. Students also have an opportunity to participate in a variety of paid positions, including paid and unpaid internships, in order to advance their careers and help support their education and living expenses. However, the program would thrive further with increased funding for students, especially minority and international students.

Standard V: Administration, Finances, and Resources

V.1. Administrative Structure and Self-Determination
The program is an integral yet distinctive academic unit within the institution. As such, it has the administrative infrastructure, financial support, and resources to ensure that its goals and objectives can be accomplished. Its autonomy is sufficient to assure that the intellectual content of its program, the selection and promotion of its faculty, and the selection of its students are determined by the program within the general guidelines of the institution. The parent institution provides both administrative support and the resources needed for the attainment of program objectives.

Since the last accreditation review of the IS program in fall 2010, the program has gone through a period of reorganization, finally arriving at stability in 2018. Formerly, the program was based in the Information Studies Department of the College of Computing and Information (CCI), which also included the Computer Science and Informatics Departments. With the creation of the College of Engineering and Applied Sciences (CEAS) in 2015, the program was moved to a new home. In early October 2017, Provost Stellar announced a decision to move the Information Science Department to the new CEHC, effective as of January 1, 2018.

This administrative shift signaled the prospect of dramatic changes in all aspects of the IS program, and so we requested a postponement of the accreditation review originally scheduled for February 2018. This request was granted, and it has provided time for the program to integrate itself into the new college, which is itself still working to reach full maturity. Partly because of the dramatic growth in the College's undergraduate programs, a more robust administrative infrastructure through the Dean's Office is now in place to support the IS program than there was when it was housed in a distinct department. CEHC does not have a departmental structure, and so the administration of the IS program is now viewed as part of the centralized work of the Dean's Office. A Manager of Graduate Studies position was created and filled in November 2018, tasked with recruitment and administrative oversight of CEHC's graduate portfolio.

The former departmental committee structure has been replaced with a set of college-wide committees. Any curricular matters pertaining to the IS program, for example, are first reviewed by the Graduate Committee, whose membership is representative of all four areas on which CEHC focuses, and the Manager of Graduate Studies.

The addition of tracks in Data Analytics and Intelligence Analysis will further serve to integrate the IS program with the research and teaching interests of all CEHC faculty. IS faculty teach appropriate classes in the undergraduate Emergency Preparedness, Homeland Security, and Cybersecurity and Informatics programs, and faculty in the three areas have begun teaching in the IS program. Advising duties continue to be handled by the IS program faculty, and with the addition of the new tracks the number of faculty advising now includes those faculty who specialize in the new concentrations.

V.2. College and University Representation

The program's faculty, staff, and students have the same opportunities for representation on the institution's advisory or policy-making bodies as do those of comparable units throughout the institution. Administrative relationships with other academic units enhance the intellectual environment and support interdisciplinary interaction; further, these administrative relationships encourage participation in the life of the parent institution. Decisions regarding funding and resource allocation for the program are made on the same basis as for comparable academic units within the institution.

Faculty governance at the University at Albany is centered in the University Senate. Representation on the Senate is distributed among the different schools and colleges with additional at-large senators elected by the faculty. In the past, faculty of the program have represented CCI and CEAS on the Senate. Prof. Stefl-Mabry served as president of the Senate during the 2015-16 academic year. CEHC currently has two faculty members on the Senate. Other faculty members regularly serve on various Senate committees and councils, whose membership expands to include faculty and staff who are not elected members of the Senate. IS students also have the opportunity to participate in the University Senate through the Graduate Student Association (GSA).

Faculty participation in the interdisciplinary Information Science Ph.D. program is one of the primary ways in which the faculty is connected to other academic units whose faculty participate in that program. The dual master's degree programs with History and English are another vehicle for connecting the department with other units. Connections with the History Department are particularly close because of our archives and records track and History's concentration in public history. Students in the IS program are encouraged to take courses in other schools or departments, often in the School of Business or in the Public Administration Department in Rockefeller College, as students are permitted to take up to twelve credits of appropriate courses in other departments. The ISSL program provides a natural connection to the School of Education, and students in that program can take courses in the School of Education to satisfy some of their certification requirements. Base funding allocations for CEHC and the IS program are made through the office of the Provost and Vice President for Academic Affairs according to the same process by which other schools and colleges at the University at Albany are funded.

V.3. College and Program Leadership

The administrative head of the program has authority to ensure that students are supported in their academic program of study. In addition to academic qualifications comparable to those required of the faculty, the administrative head has leadership skills, administrative ability, experience, and understanding of developments in the field and in the academic environment needed to fulfill the responsibilities of the position.

Before coming to the University at Albany, Dean Griffin was acting undersecretary for science and technology in the United States Department of Homeland Security. He has a deep background in public administration at different levels as well as experience in university teaching. Before the IS program became part of joining CEHC in 2018, the Information Science Department had been led by Professor Philip B. Eppard, who began service as department chair

in 2011. A member of the University at Albany faculty since 1988, Prof. Eppard served as Dean of the School of Information Science and Policy, predecessor of the Information Science Department, from 1995 to 2003. After the merger with CEHC, Prof. Eppard continued to play the role of program director for the MSIS until the appointment of the Manager of Graduate Studies and Research in November 2018. Since New York State required that the school library concentration be registered as a separate program and because of the significant growth of that program, Prof. Joette Stefl-Mabry has been designated director of the ISSL program. She has been the lead faculty in the program since she joined the faculty in 2002. A full-time lecturer who also serves as the ISSL program administrator was hired in May 2019.

An organizational chart can be found in Appendix T.

V.4. A Nurturing Environment

The program's administrative head nurtures an environment that enhances the pursuit of the mission and program goals and the accomplishment of its program objectives; that environment also encourages faculty and student interaction with other academic units and promotes the socialization of students into the field.

The Dean maintains an open and collegial environment for both faculty and students. Formal faculty meetings, which are normally scheduled weekly during the fall and spring semesters, are the most common way in which information is shared. Both faculty and students are encouraged to bring issues or concerns to the dean. The collegial attitude permeating all the faculty and staff was a hallmark of the IS program for many years. We have been very pleased that a similar culture has been developed within CEHC, and this fact has made the transition to CEHC a very smooth one.

As discussed elsewhere, students are encouraged to take some of their courses in other departments as their special interests may dictate. Similarly, faculty members are also encouraged to develop and maintain relationships with other academic units. Many of these connections come through the interdisciplinary Ph.D. program, while others happen through collaborative research efforts. Faculty members have served on doctoral committees for students in other programs in the university.

CEHC is the host to student chapters of the American Library Association, the New York Library Association, the American Society for Information Science and Technology, and the Society of American Archivists. Our electronic distributions lists are used to encourage student participation in local and national professional associations.

V.5. Targeted Administrative Support and Substantive Faculty Decision Making

The program's administrative and other staff support the administrative head and faculty in the performance of their responsibilities. The staff contributes to the fulfillment of the program's mission, goals, and objectives. Within its institutional framework decision-making processes are determined mutually by the administrative head and the faculty, who regularly evaluate these processes and use the results.

After the 2016 merger of the Information Studies and Informatics Departments, the assistant dean had to provide support for all three-degree programs; no additional administrative support was provided when the Information Science Department was formed. This made it necessary for the Information Science faculty to pick up some of the duties previously carried out by the assistant dean. Additionally, the part-time position of school library media specialist internship coordinator was eliminated, as well department secretary.

In general, the administrative support for the program has improved significantly since the move to CEHC. Two administrative assistant deans provide academic and fiscal leadership and support for the IS program, as well as the other degrees offered by the college. There is a director of student success, two undergraduate academic advisers, and an assistant to the dean. One IS student also works as a graduate assistant in the office for twenty hours a week.

Of particular importance has been the addition of the Manager of Graduate Studies and Research, filling the role of the previous department's assistant dean. To fill the needs of the ISSL program as it continues to grow, a full-time lecturer who also provides internship and placement assistance was hired in May 2019. A Director of Experiential Learning, previously appointed to coordinate internships and training for only undergraduates, was re-evaluated in spring 2019 to include graduate student support in conjunction with the Manager of Graduate Studies and Research and the faculty advisors. A secretary vacancy was awarded to CEHC in spring 2019, and the search process was started during the summer break.

The move to CEHC has once again assured adequate administrative support for the IS program, and though the structure is still relatively new, the faculty are encouraged by the Dean's support for the program and his willingness to respond to faculty concerns about administrative support.

V.6. Continuing Financial Support

The parent institution provides continuing financial support for development, maintenance, and enhancement of library and information studies education in accordance with the general principles set forth in these Standards. The level of support provides a reasonable expectation of financial viability and is related to the number of faculty, administrative and support staff, instructional resources, and facilities needed to carry out the program's teaching, research, and service.

The college, and thus the IS program, receives funding from three sources: "state" support (which includes tuition and the New York State appropriation), grants and contracts, and donations from individuals, corporations, and foundations. Reporting financial support for the IS program is a bit more complicated since the move to CEHC because of the fact that the college does not have a departmental structure and therefore funding for the IS program is not clearly separated from other programs within the college. The tables showing financial data in this section provide historical data for the Information Studies/Science Department since the last accreditation review. For current data, we have tried to segregate money dedicated to the IS program when possible or have indicated when the figure is inclusive of the whole college.

Tables V.6a and V.6b show expenditures and income for the past seven years.

Table V.6a Total Expenditures for the Information Science Program

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Salaries & Wages and Operating Expenses TOTAL	2,410,518	2,173,157	2,460,687	2,115,525	2,031,001	2,264,029	2,696,518

Table V.6b Total Income for Information Science Program

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
State Budget	1,621,770	1,390,458	1.518.382	1,558,004	1,455,810	2,110,660	2,678,144
Grants & Contracts	782,583	625,156	675,427	524,788	389,599	220,213	500,000
Endowment & Giving	501,612	390,656	174,892	9.047	202,063	26,870	12,748
TOTAL	2,905,965	2,396,270	2,368,701	2,091,839	2,047,472	2,357,743	3,190,892

There are two other mechanisms through which the university provides additional funding to the department. First, a percentage of the indirect costs on externally funded projects is returned to the academic units participating in such research and management projects. These funds are returned to CEHC after Research Foundation indirect cost budget reconciliations at fiscal year-end. CEHC is encouraged to use these funds to incentivize additional research activities or to fund services and items not allowable in direct cost charges in grants or contracts. The following table indicated the funds returned for the last five years.

Table V.6c Research Incentive Funds Returned (for Information Science Faculty)

Year	Funds Returned
2012-13	12,929
2013-14	10,735
2014-15	10,610
2015-16	3,322
2016-17	8,967
2017-18*	9,603

**Note: 2017-18 figure includes all CEHC faculty*

Another source of funding is the university's summer sessions, which operate on a different financial basis than the regular academic year. Each year academic units receive an allocation to pay for instruction during the summer sessions; thus, regular faculty can increase their income if they teach in the summer. Summer session revenues are centrally managed and provide funding for general university services, but each unit receives a small financial return based on its contribution to enrollment in the overall summer sessions. The following table V.6d shows salaries paid for Information Studies/Science summer session instruction and the amount returned for each year.

Table V.6d Summer Session Salaries and Income Returned

Year	Salary Expense	Return to IST
2012	33,200	4,434
2013	24,000	3,934
2014	24,740	3,118
2015	26,060	2,380
2016	33,160	2,128
2017*	19,180	4,172
2018*	24,590	5,702

**Note: 2017 and 2018 figures include only salaries and return for MS courses.*

Each year the University Development Office solicits contributions from alumni and the IS program and faculty have benefited from this general fund-raising effort, which raised $16,761 from 2011–2017. We have come to depend on these funds for many routine supplies and expenses, and also for the costs associated with faculty recruitment, technology upgrades, and faculty travel. Table V.6f below details the amounts raised from the Annual Fund as well as other foundation gifts and bequests over the last five years.

Table V.6e Annual Fund Giving History for Information Science

ACCOUNT	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
H.W. Wilson Foundation			$10,000			$15,000	
Information Science Annual Giving	$2,678	$1,975	$2,015	$3,699	$3,300	$3,094	$2,625
Shirley Edsall Scholarship			$9,100				
Dorothy McGinniss Fund	$2,634	$2,508	$5,011	$5,348	$2,776	$5,526	$5,621
Nora Jason Fund			$24,690	$1,306	$1,975	$3,250	$3,253
Charlotte Stafford Fund					$9,100		
Total	$5,312	$4,483	$50,816	$10,353	$17,151	$26,870	$11,499

It is clear that external funding, either from research grants or from annual giving and endowments are essential to the support of the program. Like many public universities, the University at Albany does not have a strong tradition of fundraising, though significant efforts have been made in recent years to change this reality. With the move into CEHC, we will finally be in a stable situation and able to develop a stronger effort to reach out to our alumni base for financial support. We recognize that program identity has been an issue over the past decade with the shift from the School of Information Science and Policy to departmental status in CCI and a home that proved temporary in the new engineering college. While placement in a College of Emergency Preparedness, Homeland Security, and Cybersecurity also requires some extra

explanation to our constituency groups, we are confident that we will have the resources and support to make a strong case for fundraising for IS programs in the context of the crucial issues being addressed by this new college.

V.7. Equitable and Competitive Compensation

Compensation for the program's faculty and other staff is equitably established according to their education, experience, responsibilities, and accomplishments and is sufficient to attract, support, and retain personnel needed to attain program goals and objectives.

The following two tables (V.7a and V.7b) show academic year mean faculty salaries for the tenure-track faculty in Information Science over the past four years and how they compare to salaries at other library and information science programs in the Northeast. Because of the relatively small numbers in certain ranks at certain years, comparisons to other departments are somewhat problematic. The figures indicate that Albany is above the mean salary for the professor, but somewhat below the mean for associate and assistant professors.

Table V.7a IST Academic Year Mean Faculty Salaries by Rank

Rank	2013-14	2014-15	2015-16	2017-18
Professor	140,962	145,325	151,644	151,933
Associate Professor	92,765	93,971	96,687	89,358
Assistant Professor	69,575	76,223	79,861	n/a

**iSci faculty only*

Table V.7b IST 2017–2018 Academic Year Mean Faculty Salaries Compared to Other ALA Accredited Departments in the Northeast

Rank	Albany	ALA Northeast
Professor	$146,290	$148,302
Associate Professor	$90,314	$98,018
Assistant Professor	$79,343	$88,619

Source: ALISE 2017 Library and Information Science Statistical Report

Salaries for newly hired faculty and staff are established within ranges set by the university and take into account the varying standards of different fields of study. All faculty at the university are represented by a bargaining unit, United University Professions (UUP), and annual salary increases are governed by the union's contract with the State of New York. UUP recently negotiated a new six-year contract with the state, and it was approved in fall 2018, retroactive to July 2, 2016. The contract provides 2% salary increases for each year, 2016 through 2021. It also provides for on-base discretionary salary increases beginning in 2019 as well as funds for on-base increases to address salary compression. When funds for discretionary salary increases are available, faculty activity reports are reviewed by the dean, who then makes a recommendation to the university provost. In addition to these discretionary increases, faculty who are promoted to the rank of associate professor receive an increase in salary of $3,000 and faculty who are promoted to the rank of full professor receive a salary increase of $5,000.

Junior faculty in CEHC receive startup packages that, on average, include $20,000 in funding, to be used over a period of three years. This funding can be used for travel, supplies, IT, software, etc. Additionally, junior faculty receive moving expense reimbursement that, on average, total $3000. In some instances, startup funding has been given to faculty to establish research labs. This amount has ranged between $15,000 and $20,000 in one-time funding and is in addition to the other startup funding outlined above. In other instances, junior faculty have received up to 2.5 months of summer funding for 2 years, also in addition to the other startup funding outlined above.

V.8. Funds to Support Research and Students

Institutional funds for research projects, professional development, travel, and leaves with pay are available on the same basis as in comparable units of the institution. Student financial aid from the parent institution is available on the same basis as in comparable units of the institution.

The University has an internal funding program, the Faculty Research Awards Program (FRAP), which annually makes seed money available for research projects. Information Science faculty members have competed successfully for various funding opportunities made available by the university to faculty in all units of the institution. These awards primarily target junior faculty to assist them in developing their research agenda. Another university program provides support for conferences and for journal editing. Information Science faculty have in the past received both FRAP awards and journal editing funds. The New York State/UUP Joint Labor-Management Committee sponsors the Dr. Nuala McGann Drescher Affirmative Action/Diversity Leave Program to help prepare faculty, particularly minorities and women, for continuing appointment (tenure). The committee also sponsors a professional a development program that offers small individual awards for faculty to attend conferences and workshops or otherwise support research efforts.

The Dean's Office endeavors to support faculty travel to present their research and to be active in professional organizations. The amount expended by CEHC can vary widely from year to year and is influenced by the level of faculty activity, conference location, and by whether faculty have research grants that include support for conference travel to disseminate their findings. The following table provides data on support for faculty travel that is provided out of departmental resources.

Table V.8a Funds for Information Science Faculty Travel, 2011–2018

Year	Number of Faculty	Total Expended	Average per faculty
2011-2012	3	$6,418	$2,139
2012-2013	2	$1,882	$941
2013-2014	5	$5,000	$1,000
2014-2015	4	$6,000	$1,500
2015-2016	6	$5,000	$833
2016-2017	8	$7,078	$885
2017-2018	8	$5,768	$721

Members of the faculty are eligible for sabbatical leaves according to terms specified in the union contract. Faculty members may apply for full-year (at half pay) or half-year (at full pay) sabbaticals. One faculty member took a sabbatical leave in spring 2013 and two faculty members took sabbaticals during the 2015-2016 academic year. In addition to these leave opportunities, provision is made for faculty working on research grants to have all or part of their teaching time bought out by the grant.

The University's Division for Research maintains the Sponsored Programs Administration unit (SPA) that assists faculty in identifying and applying for external funds and managing their awards. All external grants are administered through the Research Foundation of the State of New York, an affiliated not-for-profit administrative organization that provides the flexibility and support services that are needed to conduct funded research. The manager of Graduate Studies and Research in the CEHC Dean's Office serves as a liaison between faculty in CEHC and the Sponsored Programs staff.

As for student support, iSci has had funding for one full graduate assistantship for a student in the MS program. The assistantship pays a stipend of $14,000 for twenty hours of service per week during the academic year and carries with it a tuition waiver of nine credits per semester. Graduate assistants at the University at Albany are unionized and thus receive health benefits and salary adjustments as specified in the contract. CEHC offers additional assistantships with funding supported and apportioned by the Dean of the Graduate School as available. Other assistantships are available each year from research project grants and other sources or projects. In addition there are opportunities for students to work at various locations in the university. The university maintains a formal agreement with the State Education Department, under which the New York State Library and the New York State Archives both employ students in the master's program.

V.9. A Physical Infrastructure Conducive to Learning and Research
The program has access to physical and technological resources that allow it to accomplish its objectives in the areas of teaching, research and service. The program provides support services for teaching and learning regardless of instructional delivery modality.

The IS program has access to the necessary physical and technological resources to accomplish its objectives. The classrooms in which face-to-face classes are taught are all equipped with basic equipment and educational technology necessary to provide instruction. Educational technology in our classrooms generally consists of projectors, speakers, DVD players, internet-capable computers, and connections for external devices. In addition, the program has access to three computer classrooms on the downtown campus.

All full-time faculty have individual office space and access to computing capacity. Adjunct faculty have a space that is dedicated to their use, where they can work, receive mail, and meet with students. Students also have a student lounge which is used for association meetings, group projects and informal interaction.

Husted Hall, adjacent to Draper Hall on the downtown campus, is the classroom building were most of the face-to-face classes in the IS program are delivered. The building was totally

renovated nearly ten years ago, reopening in January 2010. Husted Hall houses five small and four large seminar rooms, seven classrooms which are configured for collaborative instruction, two lecture-style classrooms, a thirty-seat computer classroom, and a 75-seat amphitheater, as well as cafeteria facilities and informal group study spaces. Occasionally courses will be scheduled on the main campus, particularly shared resource courses (courses that share instruction for undergraduate and graduate credit) or when computing facilities are unavailable downtown. Students and faculty may ride the university's shuttle bus between campuses or utilize city buses free of charge as part of the University's agreement with the Capital District Transit Authority. It takes fifteen to twenty minutes to travel between campuses.

On the other side of Draper Hall is Hawley Hall, home to the Governor Thomas E. Dewey Graduate Library, which houses the university's library and information science collection. It has been refurbished in recent years to improve the efficiency of space usage and provide for more computers to accommodate increased on-site demand for electronic resources. Students in the information processing class regularly visit the University Library to observe the procedures in cataloging and classification, and the rare books class regularly meets in the special collections reading room in the Science Library. Floor Plans for the downtown campus buildings are available in Appendix Q.1.

V.10. Facilities to Support Learning, Teaching, Research and Advisement
Physical facilities provide a functional learning environment for students and faculty; enhance the opportunities for research, teaching, service, consultation, and communication; and promote efficient and effective administration of the program.

The main office of CEHC is located in the basement of Draper Hall, one of the six buildings on the university's downtown campus. Administrative and faculty offices, a small information technology lab and the student lounge for the IS program are also located in Draper Hall.

The department shares facilities with the other units on the downtown campus, including classrooms, meeting/seminar rooms, and a cafeteria. The Dewey Library in Hawley Hall, one of three library locations at the university, is conveniently adjacent to Draper Hall. Faculty and teaching assistants also have access to a shared space for office hours on the uptown campus. This space serves as a satellite office primarily for the undergraduate program.

Both the Draper and Husted buildings, which house the department's offices and classrooms, are ADA compliant. Renovations to these spaces have included the construction of ramps, new wheelchair accessible bathrooms, elevators, and Braille signage.

In March 2019 CEHC opened The Drone Lab, a first-of-its-kind space where students and community members can learn and train to use drones. A large overhaul project transformed the former Page Hall gymnasium with netting, obstacles, and protective flooring, as well as lockers for visitors, were added. The Drone Lab operates in partnership with the CEHC Maker Lab, which opened in fall 2018. Both promote use, experimentation, and applied learning.

The University Police Department (UPD) maintains police and security personnel throughout the campus 24/7 with an average response time to all calls for assistance of less than two minutes. The UPD maintains an office on the downtown campus in Husted Hall.

V.11. University Support Facilities

Instructional and research facilities and services for meeting the needs of students and faculty include access to information resources and services, computer and other information technologies, accommodations for independent study, and media production facilities.

University Libraries: General Support

The University Libraries are housed in three buildings, the University Library, the Science Library, and Dewey Graduate Library. The University Library's collections and services focus on social sciences, humanities, education and business, and the Science Library focuses on sciences, technology, and health. The Dewey Graduate Library serves the programs housed on the downtown campus (School of Social Welfare, School of Criminal Justice, Information Science, and the Rockefeller College of Public Affairs and Policy). Each library houses collections and provides reference and circulation services. Collectively the Libraries' staff comprises 69 FTE faculty, 31 FTE support staff, and 18 FTE student staff.

The Science Library is a modern facility built in 1999, with sufficient wiring and data for PCs, group study spaces, sufficient shelving, and extensive storage areas. The busiest of the three libraries, the University Library was built in 1965. In 2015, major renovations in the Library included the complete rewiring of the building with the addition of hundreds of electrical outlets and additional Wireless Access Points (WAPS) were installed to boost bandwidth. Dewey Library, built in 1909, has wiring and data connections that were upgraded in the 1990s and are currently sufficient. Compact shelving has made room for adequate study space.

The University Libraries collection supports research and study for faculty, students and researchers affiliated with the university. It includes books, journals, electronic journals, electronic books, databases, government documents, microforms, special collections, archives, software, CDs, DVDs, and maps. The Libraries own 2,305,867 print volumes, 2,939,727 microforms and 485,479 e-books; 412,494 government publications; receive 110,303 print and electronic journals and serials; and subscribe to over 300 databases. Virtually all electronic materials can be used from on or off campus 24/7.

The M.E. Grenander Department of Special Collections and Archives, a repository for manuscript collections, university archives, and rare books provides students, faculty, and researchers with opportunities to consult and study collections of primary source materials, some of which are internationally known. Featured collections include the New York State Modern Political Archive; the German Intellectual Émigré Collections; and the National Death Penalty Archive. The Miriam Snow Mathes Historical Children's Literature Collection focuses on books and periodicals for children and young adults, published in the United States between 1875 and 1950.

The University Libraries website is the research portal that provides access to the University Libraries' collections and services. This is a complex site developed and maintained by library

systems staff and a committee of public services librarians. It provides a gateway to all collections and resources including: the online catalog (Minerva); databases and online journals; services such as reference, tutorials, interlibrary loan and circulation; and news and information about the Libraries. The Libraries have extensive technical software, equipment and expertise to provide access to not only this complex website, but to its online catalog and extensive collection of online journals and databases.

During the 2017-2018 academic year, visits to the University Libraries totaled 1,170,826, the Libraries' website was visited 1, 422, 262 times. Current statistics of the most heavily used databases document 2,719,787 searches with 1.159.367 full text requests, there were 55,273,734 federated searches using the e-discovery tools. There were 44,048 downloads from the University Libraries' institutional repository, Scholars Archive. Users checked out 874,012 items, Interlibrary Loan borrowed 30,895 items from other academic libraries for UA students and faculty; lent 14,112 items to other libraries; and the Libraries' intra-campus document delivery service delivered 18,804 items directly to library users. During the period before and during mid-term final exams, the University Library was open 24/5 during the week and 16 hours/day on weekends.

The Interlibrary Loan Department supplements the University Libraries' collections by providing electronic article delivery and loans of books and other types of materials from a vast network of libraries on a local, statewide and international basis. State-of-the-art software is utilized to manage requests and deliver materials efficiently. Relationships with several consortia (libraries from libraries, ARL RAPID, IDS Project, and Capital District Library Council) enable the department to maintain cost effective resource sharing. The Preservation Department coordinates efforts to prolong the useful life of the University Libraries' collections and the information they contain. An on-site storage facility houses nearly 340,000 volumes of less frequently used materials that are available by paging.

Services are available at all three libraries. Service is also available by phone, e-mail, IM, and texting. Individual appointments with reference librarians and subject specialists are available for students and faculty who have more complex research projects. Reference services are analyzed according to difficulty of questions, time of day and week, communication medium (i.e. in-person, IM, etc.)

Librarians play an important role in the campus-wide effort to teach students how to access and evaluate information, and how to use it ethically. The Libraries offer four one-credit courses that teach information literacy. Information and Subject librarians teach sessions for other credit courses and special programs, such as the Educational Opportunity Program; in the 2017-2018 academic year 495 sessions were presented. Library interactive tutorials include Plagiarism 101 (which addresses proper citation and plagiarism avoidance), Finding Books for Research, and Keyword Searching.

The IMC (InnovateMakeCreate Center) offers an array of multimedia and web design tutorials. Digital scholarship services enable faculty and students to engage in new and exciting research made possible by digital technologies. This Center, unique on campus in assisting students to

develop their competency with new media, was upgraded in 2018. It provides digitizing services, equipment for loan, scheduled instruction, lectures to academic courses and an open lab with onsite consultation in the areas of audio and video digitizing and web development applications. A full description of their services is available on their website: https://library.albany.edu/imc/

In addition to these services, librarians attend orientations for freshmen, graduate students, transfer students, international students, and parents. The Libraries continually reach out to patrons through the website, blogs, podcasts, flyers, signs, and handouts alerting patrons to research resources and processes, events, and services. Each library has at least one large screen in its lobby where events, services and collections are advertised.

Each library has a coordinator for services to patrons with disabilities. Software and equipment for students with visual and mobility impairments are available in each building and the Libraries provide copying, paging and retrieval, home and office delivery, as well as orientations and reference assistance for patrons with disabilities. These services are described in detail on the "Services to Persons with Disabilities" website.

The University Libraries have long been a welcoming gathering place for students to study and meet. There are varied settings in the Libraries including designated quiet study areas, collaborative space, carrels, group study areas (some with white boards), comfortable seating areas, and the Information Commons (IC). The IC, a nexus of research assistance and computing resources, is a partnership between the libraries and University's Information Technology Services (ITS). This initiative provides resources that had not previously been available to such a degree in the University Libraries. Space within the Libraries was repurposed and the Libraries now house more than 550 public PCs and Macs that provide access to an extensive set of internal and external resources. Students have access to networked and wireless printing and wireless access for laptops. The IC encourages and supports the knowledge-centered, student-centered, social, interactive, and technologic aspects of teaching and learning at the university. The Libraries and campus ITS have demonstrated sustained commitment to this partnership.

Library faculty strive to be aware of constantly shifting landscape of library services—new technologies, new techniques, new discovery services, new directions from OCLC and library system vendors—as well as changing user needs and expectations. The Libraries have invested heavily in a more complex library management system, including a new OPAC and a new interlibrary loan system. Staff members have expended extensive time and effort to configure them to best meet student needs.

University at Albany Libraries: LIS-specific Support

The Dewey Graduate Library occupies 12,010 net square feet for library materials to support the departments on the downtown campus. It provides seats for 161 users or approximately 9 percent of the FTE students on the downtown campus. The Dewey Graduate Library collections consist of 135,000 volumes to serve the needs of graduate students on the downtown campus. It provides the same full array of electronic resources and public services available on the uptown campus via the university network and the Internet. The Dewey Library is equipped with wireless technology for students with laptop computers to access the Internet. Remote access to the

majority of the research databases and the library catalog is available. In addition, there is a daily delivery service between the libraries on the three campuses to assure users at any campus ready access to all library materials. Students, staff and faculty are also able to request scanned electronic copies of journal articles. Significant investments have been made to enhance this library. They include the installation of compact shelving in the lower floor, new carpet and new furniture throughout the building, two service desks, air-conditioning, and the development of an electronic classroom. Additionally, the libraries have worked with the campus information technology department to create an information commons within the library in which forty-three computers with a full array of software are made available to the students, faculty and staff on the campus. There is also a computer with scanner dedicated specifically for students with visual impairments. This computer is equipped with Dragon, Jaws, and Kurzweil voice recognition software.

Each academic department has a library faculty member assigned to it as a subject specialist. The subject librarians work with the faculty in their assigned departments to identify the books, journals and other types of information resources they need to support their research and teaching. When new money is available, they identify subject allocations that need to be adjusted to reflect and support new programs and when budget shortfalls are anticipated, they work with the departmental faculty to develop strategies to reduce spending. The subject librarian for library and information science also provides instruction in researching library and information science topics, using research databases and other electronic resources, and general information literacy. This librarian also maintains an Information and Library Science subject libguide. This resource includes access to relevant databases and special collections and archives, such as the Miriam Snow Mathes Historical Children's Literature Collection at the University at Albany. The site also has research guides for library and information science, children's literature/school library media, and archives.

The annual budgetary support for the monographs, periodicals, and standing orders for the Department of Information Science is approximately $52,000 (see Table VI.3a). Students in the Department of Information Science are also encouraged to use computer science, education and business databases to which the University Libraries subscribes. Periodicals include both paper and electronic. Electronic Resources include databases that are specific to library and information science.

University Library Funds Allocated to Support Library and Information Science Sources

The funds specifically earmarked for Information Studies make up only a portion of the library support for the research and teaching activities of the department, with significant sets of resources available in other relevant domains such as education and policy. The majority of standing order types of materials are funded from the Dewey Library reference fund and the many electronic databases that support the department are funded from general library electronic resources funds.

Included among the web-based databases to which students and faculty have access both on and off-campus are: the university's online catalog, ACM Digital Library, American Book Prices Current, American Reference Books Annual (ARBA) Online, ArchiveFinder, Computers &

Applied Sciences Complete, Education Source, Encyclopedia of Library and Information Sciences, ERIC, IEEE/IET Electronic Library, INSPEC; LISTA with full text, LISA, Resources for College Libraries, ScienceDirect, Ulrich's International Periodicals Directory, and Web of Science. The University Libraries also provide access to several other databases that are not specific to the field of information and library science, but that are used by faculty and students for coursework and research. These include such titles as: Art Abstracts, Humanities Abstracts, PolicyMap, Social Science Abstracts, etc. In addition to the full-text offerings from EBSCO Academic Search Complete and InfoTrac, the Libraries subscribe to JSTOR and Project Muse. A complete list of the electronic indexes and abstracts that are provided to our user community can be found on the University Library homepage by clicking on Databases or directly by going to: http://library.albany.edu/dbfinder/

In addition, a well-developed web-based reference collection is accessible through the libraries' home page, as well as other services such as interlibrary loan and document delivery. Frequently updated online tutorials are offered via the libraries' homepage. The librarians at Dewey and at the uptown libraries provide numerous workshops and in-class instructional sessions.

Institute for Teaching, Learning and Academic Leadership (ITLAL)

The Institute for Teaching, Learning and Academic Leadership (ITLAL) is the university's center for assisting faculty in innovation in their teaching based on "pedagogical approaches and methods that are supported by research in teaching and learning." ITLAL's professional staff offers a series of workshops throughout the academic year and also provides one-on-one consultation with faculty to review course materials, and assist in course design. Nearly all of the M.S. classes are now available in online format, and ITLAL has played a very important role in working with faculty to convert their classes from a traditional to an online format. ITLAL hosts a library of resources on teaching and learning, faculty evaluation, and institutional issues in higher education.

Closely allied with the work of ITLAL is the Educational Technology Center (ETC), a unit of the University's Information Technology Services. ETC provides consulting services on the use of educational technology, and training and support for Blackboard, the primary learning management system used at Albany.

Technology Support

In addition to computers with Ethernet connections in all faculty offices, the faculty have access to electronic classrooms in Draper and Husted Hall. All classrooms on the downtown campus and the uptown campus have Ethernet connections and Wi-fi connectivity. As part of a current website redesign project, CEHC is working with University Communications and Marketing to upgrade and redevelop our website on the campus's server using Drupal.

Students also have individual access to additional computer laboratories, the InnovateMakeCreate Center in the University Library, and in many locations in the Science Library on the uptown campus. Media production facilities are offered on the uptown campus through the Marketing and Communications Office in a recently built, state-of-the-art recording and television studio. Audiovisual services are decentralized and managed by the downtown

campus audiovisual equipment office. Equipment is available by reservation, and delivered to classrooms or faculty offices.

The program has access to a wide variety of information technology for office, classroom, and student use. This includes equipment owned by the department (located in our technology lab) and Downtown Campus's Public User Room and "Smart Classrooms" in Draper and Husted. Classrooms on the downtown campus are equipped with projectors, VCRs, computers, speakers, Ethernet, Wi-fi and connections for external computers.

Information Technology Services (ITS) offers a sophisticated IT environment that advances enriched learning experiences, excellence in teaching, service, and distinguished research programs commensurate with its status as a nationally recognized public university. As the centralized provider of campus technology services, ITS works collectively across divisions on all three university campuses. Reporting to the Vice President of Information Technology Services and Chief Information Officer (CIO), the organization offers a broad range of campus IT services. ITS employs approximately 120 professional staff and is comprised of six different groups: Client Support Services, Enterprise Application Services, Enterprise Infrastructure Services, Information Security, the Office of the CIO, and Research IT.

Classroom and Other Course Technologies

Since 1999, 59 classrooms and lecture halls with a combined total seating capacity of approximately 7,273 have been equipped with computing technology, including seven computer classrooms equipped with workstations for each seat (201 student PCs total; average of 28 PCs per smart classroom) and 27 smart classrooms. There is also a suite of applications to support teaching, learning, research, and communication.

Outside the classroom, ITS has helped faculty to stay current with other emerging technologies. For example, the 2007–2008 instructional Wiki Pilot project resulted in a phased production implementation of the Confluence wiki service hosted on campus by ITS beginning in 2008–2009. From the beginning of the pilot, approximately 52 instructors used wiki spaces for 1,215 enrollments (duplicated headcount). Expanded usage will be facilitated as experience yields best practices for instructional and learning strategies using wikis. It will be important to provide learning opportunities for instructors to use wikis in teaching effectively.

Information Access and Online Modalities

To facilitate more effectively online information access, augment traditional instructional strategies and to support online learning modalities, the university has employed course management system technology using Blackboard. Additionally, the MyUAlbany web portal allows students and faculty to access their enrollment services and course resources securely and reliably online. Between 1999–2000 and 2007–2008, enrollment in web-enhanced courses increased by 1000% (from 5,000 to 55,150). In order to address student and faculty needs for course management, an investigation of the interoperability of Blackboard with electronic reserve systems is underway.

As online course offerings steadily increase, the university continues to support faculty in developing and teaching online courses. All instructors scheduled to teach an online course for

the first-time (10-15 annually) participate in the Online Course Development Seminar. This program strives to ensure quality course design and effective online pedagogy, which is expected to result in higher levels of student and faculty satisfaction and more effective teaching and learning outcomes.

V.12. Staffing and Servicing of Facilities and Accessibility

The staff and the services provided for the program by libraries, media centers, and information technology units, as well as all other support facilities, are appropriate for the level of use required and specialized to the extent needed. These services are delivered by knowledgeable staff, convenient, accessible to people with disabilities, and are available when needed.

During the academic year, the Dewey Library is open 84.5 hours per week. The University Library on the main campus is open 114.25 hours a week and the Science Library is open 88.5 hours per week. As noted above, there are 69 FTE faculty, 31 FTE support staff, and 18 FTE student staff across the three library locations. The technical support provided to the students and faculty through the Interactive Media Center is available for 101 hours a week. Information Technology Services provides online and telephone assistance to students and faculty, as well as workshops on particular software packages. The Information Science computer laboratory in the basement of Draper Hall is available on the same schedule as the Dewey Library.

Student Lounge Area

A recently renovated student lounge is located in the basement of Draper Hall, in close proximity to the dean's office and to faculty offices immediately above. This room has Wi-Fi access, reference works, and file folders that serve as mail drops for students. The lounge is furnished with a variety of seating and tables that allow for individual study or for group meetings. The Student Association and other student groups hold their meetings in the student lounge. The lounge is also used by Ph.D. students and contains a collection of bound dissertations done in the Ph.D. program. The Downtown Café in Husted Hall gives students another centrally located facility for relaxation or for meetings.

Services for Off-Campus Students

The development of our online program enables geographically-distant students to receive an Albany education. All students, whether on or off-campus, are provided with university computer accounts and e-mail addresses as soon as they enroll, with remote access to library and computing resources and services. All students are strongly encouraged to subscribe to IST-L, the program's listserv, which is the primary vehicle for dissemination of announcements and other information and schedule updates. The Blackboard course management system ensures that all students have access to electronic reserves and other course materials.

Through the College's Graduate Committee there is informal assessment of the degree of adequacy of present facilities and resources. The Information Science Student Association brings student concerns to the faculty through their representatives at faculty meetings.

V.13. College Involvement in Space Planning

The program's systematic planning and evaluation process includes review of its administrative policies, its fiscal and support policies, and its resource requirements. The program regularly reviews the adequacy of access to physical resources and facilities for the delivery of face-to-face instruction and access to the technologies and support services for the delivery of online education. Within applicable institutional policies, faculty, staff, students, and others are involved in the evaluation process.

The buildings on the downtown campus range from sixty to ninety years old. A plan for systematic renovation of these buildings was part of the university's master plan update completed in 1998. Husted Hall, adjacent to Draper Hall, was identified as the first building on the downtown campus to be renovated, and the new facility opened in January 2010. The opening of Husted as a classroom facility has significantly increased the amount of space available, and improved the quality of the teaching facilities, allowing for such necessities as integrated heating, ventilation and air conditioning, instructional technology updates and improved handicapped access. The department had been involved in planning for this and other renovations through participation in the Husted Planning Committee and direct communication with the Vice Provost in charge of downtown maintenance, and construction.

University's Facilities Management staff meet with the CEHC Dean to discuss priorities for classrooms and instructional and research space at regular intervals. Representatives from each facet of CEHC participate in preparing for this meeting, and carrying forward the needs of the entire faculty and staff. The campus developed the Facilities Master Plan (FMP) over the 2010-12 period with University wide community input. The main document can be found on the University's website[51] Planning in our temporary location continues to evolve

Issues for Further Consideration

The move to CEHC means that Information Science will have a new physical home opening in 2021: ETEC – Emerging Technologies and Entrepreneurship Complex. The complex is currently under construction, and the latest version of the plans can be found in Appendix Q.2.

CEHC Dean's Office staff is working in conjunction with University leadership regarding its move into a new facility, ETEC, in the summer of 2021. There is currently a master plan in place that includes allocation of space within the ETEC building by unit/department. Dean's office staff will continue to work with University personnel on planning for this eventual move.

V.14.The program has explicit, documented evidence of its ongoing decision-making processes and the data to substantiate the evaluation of administration, finances, and resources.

The figure below illustrates the flow of decision-making processes in CEHC.

[51] https://www.albany.edu/facilities/fmp/documents/UA-FMP2012.pdf

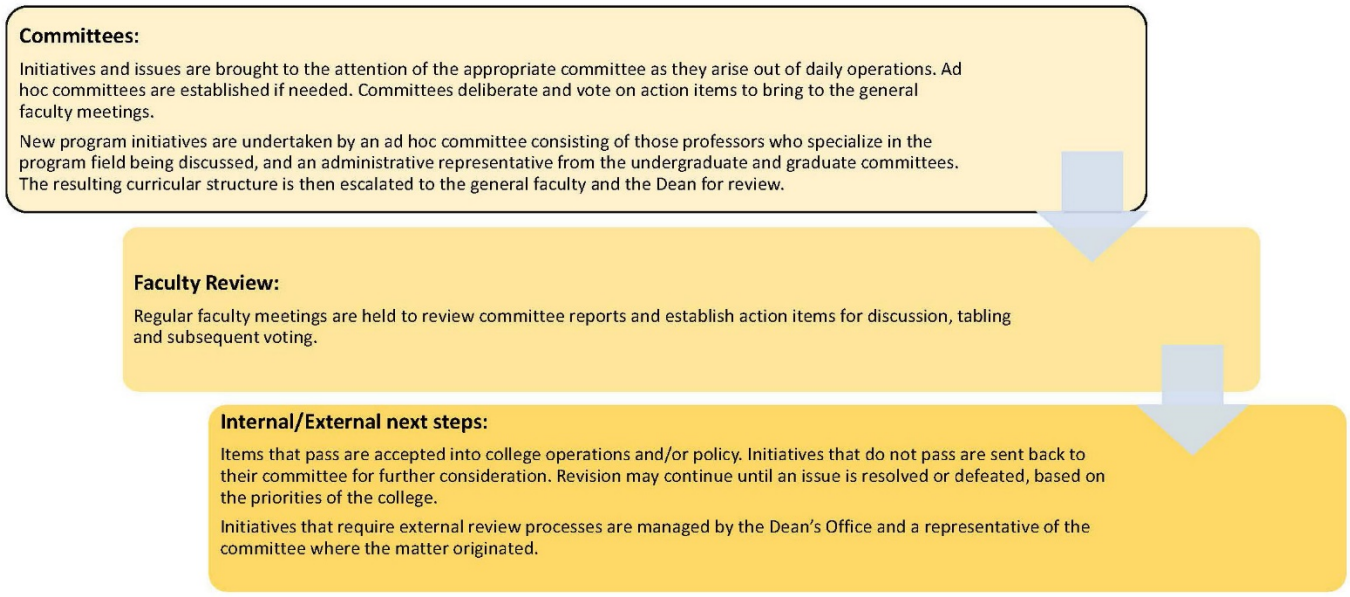

Figure 5a: CEHC Decision Making

Meeting minutes for faculty meetings are currently taken by the Assistant to the Dean, and stored on the CEHC faculty internal drive where they can be accessed at any time.

The Assistant Dean for Finance and Administration holds the records that pertain to the evaluation of how resources are allocated within CEHC. The fiscal year runs from July 1 to June 30, and the Assistant Dean interfaces with the Provost's Office consistently over the term, providing updates on the college's fund allocations, hiring plans, facilities plans, and any other matters related to the fiscal management of CEHC.

V.15. The program demonstrates how the results of the evaluation of administration, finances, and resources are systematically used to improve the program and to plan for the future.

The Dean of CEHC is transparent in sharing information about the College's finances and physical and administrative infrastructure with the faculty. He provides updates on these matters regularly at the weekly faculty meetings. As CEHC plans to move into a new building in two years, the Dean has consulted frequently with faculty about their needs and wishes for how the space can be developed to best meet the needs of our programs. It is fair to say that information about resources at the University at Albany is not generally subject to systematic future planning. Nevertheless, faculty are regularly involved in making suggestions or proposals for resource planning whenever the opportunity presents itself.

Conclusion

"We have full confidence that this courageous decision, initiated by Dr. Robert P. Griffin, the founding dean of CEHC, will forever transform, invigorate, innovate, and challenge the traditional boundaries of library and information studies together with the field's associated and ancillary disciplines."

This quote, first included in our introduction, is an accurate representation of the culture created by our integration into CEHC. Our progressive vision strives to marry the traditional core values of library and information science with interdisciplinary topics that illustrate the way information is collected, used, processed, analyzed, and acted upon in a global society influenced by the challenges and opportunities the world now faces. The future of our program looks bright as we continue to weave innovation, creativity, and diversity into the fabric of all we strive to accomplish to bring the Master of Science in Information Science program to the forefront of information science education as a destination degree.