Department of Information Science

Self Study

for the American Library Association

Committee on Accreditation

January 20, 2020

University of North Texas
College of Information
Department of Information Science

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AA/EOE/ADA

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REQUIRED INFORMATION

I. Name of Unit:

Department of Information Science

II. Name and Title of the Chief Administrator of the Unit:

Dr. Jiangping Chen, Professor and Chair

The Department of Information Science (DIS) is a unit within the College of Information. The College of Information consists of three departments: the Department of Information Science, Department of Learning Technologies, and Department of Linguistics.

The Chair of the Department of Information Science reports to the Dean of the College of Information.

III. Name of Parent Institution:

University of North Texas

Chancellor:	Ms. Lesa Roe
President:	Dr. Neal Smatresk
Provost:	Dr. Jennifer Evans-Cowley
College Dean:	Dr. Kinshuk

IV. Name of institution accrediting the parent organization:

Southern Association of Colleges and Schools (SACS)

V. Program Name:

Master of Science with majors in Library Science and Information Science

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INTRODUCTION

The Department of Information Science is a unit under the College of Information at the University of North Texas. Change at the Department of Information Science is the result of an on-going systematic planning process. There have been several areas of changes in this process since the last accreditation review. These areas are described next.

Major Changes Since Last Accreditation

Distance Learning and Online Education

To support online education, the UNT acquired a new learning system (http://canvas.unt.edu) for all online courses. The reviewing of online courses is an on-going process. The DIS continues to enhance distance learning and online education with a unique approach that involves a blend of on-site and online instruction to cohorts of students. Cohorts are formed in partnership with other institutions to meet a need for Library and Information Science (LIS) education in a particular geographical area. This effort has also been continually supported by the federal government. For example, the University was awarded another Institute of Museum and Library Services (IMLS) grant in the amount of $498,363 as part of the 2013 Laura Bush 21st Century Librarian Program to start an Arkansas cohort. “The ELMS - Educating Librarians in the Middle South - Diversifying Librarianship for our Digital Future” was a three-year project carried out by the University of North Texas Department of Library and Information Sciences in collaboration with the UNT Libraries and the University of Arkansas for Medical Sciences (UAMS). These grants helped the Department to enroll diverse students and increased the visibility of the University and the Program. Despite the geographic dispersal of the students, the UNT LIS program strives to improve learning for students conforming to the requirements of the Standards. Students in several of the UNT LIS cohorts have established their own local chapters of the student organization LISSA (Library and Information Science Student Association), as well as organized and hosted several professional development events for students to participate in locally.

Changes at the University, the College, and the Department

At the University level in 2016, the UNT attained Tier I status and now is ranked among the nation’s 130 top-tier research universities, according to the 2018 Carnegie Classification of Institutions of Higher Education™. The University’s official Carnegie Classification is R1 Doctoral University with the highest research activity, which is Carnegie’s top classification for research universities.

Under UNT President Neal Smatresk’s leadership, who joined the University in 2014, the biggest impacts include the budget turnover from deficit to holding reasonable reserves and the focus of the institution as a whole towards establishing itself as a valued institution. Some of the top priorities as a result of President Smatresk's vision have been a targeted focus on improving our rank under the Carnegie ranking system, increasing the number of programs among the top-ranked institutions in the *US News and World Report* and other ranking agencies, and establishing UNT as a "First Time in College (FTIC)" serving institution.

Provost Jennifer Cowley joined UNT in 2017, after the retirement of Provost Finley Graves. Provost Cowley has focused on implementing President Smatresk's vision by systematically and strategically focusing on "Student Success". Provost Cowley's efforts on the reduction of DFWI grades, improving student retention, decreasing the graduation time and increasing the graduation rate have not only impacted the students very positively but have also provided the University a clear path towards

improved ranking and becoming a major FTIC-serving institution.

At the College level, the founding dean, Dr. Herman L. Totten, retired on August 15, 2015. Dr. Kinshuk from Athabasca University in Canada was appointed to the position effective August 15, 2016. His focus has been on building the infrastructure to support research and instruction of faculty and students, targeting the creation of new programs in emerging areas, building external relationships to advance the activities of the College and its departments, and ensuring budget funding to support those activities. The impact of his vision and action is evident from the significantly increased research grant submissions from college faculty, the creation of dedicated student work spaces, an increase in donations and endowed scholarships, the creation of new programs in emerging areas (such as data science), and an increase in new faculty lines to better support instruction.

At the Department level, the faculty, in consultation with students, the Board of Advisors, and the alumni, voted unanimously to change the department's name from the Department of Library and Information Sciences to the Department of Information Science in 2016. The name change represents the diversity of programs in the Department and helps better prepare students to meet the challenges of both traditional and emerging areas in the information science and technology fields.

After serving as Department Chair, Dr. Suliman Hawamdeh returned to the faculty as a full professor in January 2018. Dr. Yunfei Du was appointed as the interim Department Chair from January 16 to November 11, 2018. Dr. Jiangping Chen was appointed as the Department Chair on November 12, 2018. Her focus on enhanced research activities, curriculum improvement, and budget alignment with departmental priorities has positively impacted the Department within a very short period of time, and has aligned the Department better with the University and the College's "Student Success" focus. The impact of her leadership can be clearly seen in sustained rankings of the departmental programs, growth in student enrolments in emerging areas, and departmental research activities and outcomes.

Changes in the Funding Allocation Policy

In past years, the Department derived a large part of its operating expenses from Out of State Teaching Fee (OSTF) funding and the Distance Learning Funding Model (DLFM). The Department was receiving 83% of the tuition from OSTF and DLFM, with only 17% contribution going to the University. The University streamlined the fund allocation for these two revenue streams in 2017 to bring them into alignment with the rest of the University. Both OSTF and DLFM now return 52% to the Department. With the change, the College has created several new faculty positions funded at the college level. No negative impacts to the Department are expected as the OSTF and DLFM revenue historically had added surplus revenue to the Department. The University and the College have committed to provide appropriate support for the DIS in teaching, research, and service.

The Self Study will focus on significant changes that have occurred since the last accreditation review and on any anticipated or appropriate changes that may be identified in the process of preparing for this accreditation review.

Context of the Program

The library science program at University of North Texas started in 1939 with the launch of the Department of Library Service in the College of Arts and Sciences. At that time, the Department was the main supplier of librarians throughout the state of Texas. In the late 1940s and early 1950s, new courses were added in books and materials for children and young adults, academic library administration, and special libraries. During the mid-1950s, the primary aim of the Department was to provide prospective librarians in all fields with a basic professional education. Increased attention to the role of the post-baccalaureate program as the basic preparation for librarians at that time led to the start of the Master of Library Science degree in 1963, replacing the fifth-year Bachelor of Science in Library Service degree. The master's program was accredited by the American Library Association in 1965 and has been continuously accredited since then. In 1968, the Federation of North Texas Area Universities was established and a formal cooperation with the Texas Woman's University School of Library Science (now School of Library and Information Studies) was instituted. At the same time, the UNT Department of Library Science was reorganized and established as the freestanding School of Library and Information Sciences.

During the late 1970s, undergraduate course offerings were reviewed in light of recent developments in the field, and in 1981, the undergraduate major was reactivated. The concentration in information science on both the graduate and undergraduate levels was added in Fall 1983, at which time the master's degree designation was changed to MS with majors in Library Science or Information Science. In September 1988, the School's first extension program began at Texas Tech University. With the addition of students in the Texas Tech program and continued growth on campus, enrollment in all programs reached 420 by Spring 1990, making the School the largest in the state. A complete program of study was established in Houston in January 1991, with courses taught on the University of Houston campus by full-time members of the School's faculty. The program, now in its 30th year, has developed into a major asset for the College and the Department.

In 1999, the DIS program and the University became the first in the nation to offer the Learning Resource Endorsement online. The program met with immediate success. In Spring 2001, enrollment increased 40% over the previous Spring due to the popularity of the web-based courses and, in Spring 2004, enrollment by master's students totaled 827, an increase of 45% over the previous Spring. In answer to the needs of students pursuing all or part of their program in distance learning mode, the Department launched the first Web Institute in June 2001. The institutes have now become an integral and required part of the learning experience for all students working toward the master's degree. Starting in 1999, the School began offering the master's degree at out-of-state locations in partnership with local institutions. The first was offered in Minnesota when the School entered into an agreement with St. Cloud State University. Second and third cohorts were launched in 2001 and 2004, respectively, when agreements were renewed with the University of Minnesota Law Library. In 2001, the School formed a partnership with the University of Nevada Las Vegas and began the first Nevada Cohort in 2002. The Nevada/Utah cohort has continued to do well with 32 students enrolled by Fall 2011. The out-of-state programs continue to thrive with grant-based cohorts beginning in Virginia, Georgia, California, and the U.S.-affiliated Pacific Islands. In 2004, the Institute of Museum and Library Services awarded the school a grant to recruit 20 bilingual students to complete a master's degree online. The program was designed to help alleviate the problem of unfilled professional positions in both academic and public libraries along the Texas and New Mexico border.

The Capital Campaign was launched on March 10, 2001, with the aim of creating a million dollar endowment for the school. The University set the School's goal at $1.1 million, which was met with a total

of over $1.4 million. One of the efforts begun during the campaign resulted in the establishment of the Hazel Harvey Peace Professorship in Children's Library Services honoring the Fort Worth educator and community leader. At about the same time, it was announced that Emeritus Professor Sarah Law Kennerly (1951-1977), who died in 2002, left $2.25 million to the school. The Department is planning to place at least one DIS faculty into the endowed professorship.

In Fall 2008, the School of Library and Information Sciences consolidated with the Department of Learning Technologies to become the College of Information (COI). At the same time, the College moved to the Discovery Park research complex located 4.5 miles from the main campus. The facility provides ample classroom, lab, and library and office space for the Department's growing needs.

In 2010, Dr. Hawamdeh joined the University as the first permanent chairperson of the Department of Library and Information Sciences. During his tenure, the Department continued to grow by increasing enrollment and expanding the number of cohorts around the country. The Department received several IMLS grants to support the establishment of cohorts around the country including a one-and-a-half million dollars grant to support the Hawaii and the Pacific Islands cohorts. In 2011, the Department joined the Web-based Information Science Education (WISE) group to offer online quality education to participating library and information science schools around the country. WISE provides UNT students with the opportunity to take online courses from other MLIS-accredited programs. The Department and the College also took a leadership position by joining the iCaucus consortium in 2015. iCaucus is the executive body of the iSchools movement and consists of the top 25 information science schools in the country. Joining ICaucus increased the visibility of the Department and the University and helped the Department and the Program to recruit diverse and quality students. In 2013, Dr. Hawamdeh oversaw the successful re-accreditation and re-affirmation of accreditation of the master's programs in Library Science and Information Science by the ALA. In 2016, the Department's name was changed to the Department of Information Science to better represent the increase in program offerings and the diverse body of students. In 2013, the Interdisciplinary Ph.D. program was moved from the Toulouse Graduate School and the College of Information to the Department of Information Science. At the same time, the University was awarded a collaborative NSF grant in the area of cybersecurity with the participation of Dr. Hawamdeh. As a result of the NSF grant, a concentration in cybersecurity was added to the Ph.D. program paving the way for the creation of several other concentrations, such as data science and health informatics. The support for Ph.D. students increased substantially and the number of full-time students supported by the Department and the University grew significantly. The former part-time Ph.D. program has transformed into one of the largest full-time doctoral programs on campus.

Dr. Hawamdeh also founded the Master of Science in Data Science which started in 2017. He also took keen interest in undergraduate education by restructuring the curriculum for the existing undergraduate program in information science and planting the seeds for the creation of the undergraduate program in data science. During Dr. Hawamdeh's tenure, endowment and endowed funding grew to more than 5 million dollars. As a result, the Department created several scholarships and received several generous donations. The biggest donation received was in 2017 in the amount of a $1.2 million endowment from alumna Jesse Reinburg for a new endowed data science professorship.

The University of North Texas (UNT) System is comprised of the University of North Texas, the UNT Health Science Center at Fort Worth, and the UNT Dallas. The University of North Texas is located in Denton, Texas, and is the flagship of the system. It is the largest and most comprehensive University with a student body of more than 36,000. The University is accredited by the Southern Association of Colleges and Schools. Within the University, the College is a relatively small but highly visible entity and considered a leader in external research funding. The master's program is the largest graduate program in the University, and is one of three DIS degree programs. The Interdisciplinary Information Science Ph.D.

program fosters an intellectual and synergetic environment with research agendas generated by a student body of more than 80 and an interdisciplinary faculty from academic and research units across campus. This environment enriches DIS faculty research, in part through the program's relationship with the Texas Center for Digital Knowledge, and enhances the quality of instruction at the master's level. The Bachelor of Science program in Information Science is small, and valued primarily as a way to attract students to the master's program.

The Department offers several non-degree graduate programs that draw students into the master's program. The largest is School Library Certification, followed by eight Graduate Academic Certificate Programs: Advanced Management in Libraries and Information Agencies; Storytelling; Digital Curation and Data Management; Leadership in Professional Development in Technology for Schools; Rural Library Management; Archival Management; Digital Content Management; and Youth Services in Libraries and Information Agencies. Together these factors contribute to the nature and direction of the Department and should help provide a context for understanding the Department and the master's program.

SELF STUDY OVERVIEW

The Self Study follows the 2015 Standards and the revision on January 28, 2019. The document will be submitted in electronic format. The Self Study will be mailed to the external review panel (ERP) members and ALA Office for Accreditation in flash drives and will also be available online.

All documents and material that will be used as evidence in the Self Study will be available on-site and in the centralized repository. The ERP members will be given access to the repository. Most of the documents, with the exception of confidential materials, can be provided as appendices to the program's Self Study.

Much of the information needed for the Self Study is readily available as a result of the on-going reporting practices of the Department. The narrative and statistical reports submitted to COA and the Department's Strategic and Working Plan (the result of on-going strategic planning) are the primary source of evidence.

Process and Timeline

Preparation of the Self Study is a natural extension of the on-going systematic planning process at the Department of Information Science. This process, articulated in the Department's Strategic and Working Plan, has resulted in a series of meetings and other special events undertaken to guide our Self Study preparations and to inform others about our preparations. These are as follows:

- The IS Department retreat. The DIS faculty retreat was an annual event. It has been extended to include all full-time faculty and staff since 2019 and is now a department retreat. The retreat is a day-long strategic planning and team building activity. The DIS Strategic and Working Plan is the culmination of a year-long period of activities by the faculty as part of the continuous improvement process. At the faculty retreat, the faculty reviewed the current Strategic and Working Plan and started to develop the plan for the next five years. There are one or two foci for the retreat. For

example, the 2018 faculty retreat focused on the improvement of the DIS online courses. At the 2019 department retreat, faculty and staff reviewed and discussed the initial version of the draft Self Study.

- The DIS Board of Advisors (BOA) meeting. The DIS BOA meets every year to discuss progress made and challenges faced by the Department. The BOA has met every year since the last accreditation in 2013. The last BOA meeting was held at the University on September 16, 2019, and the Department Chair's report and the revision of the BOA bylaws were discussed. The next BOA meeting is scheduled to take place in September 2020.
- The preparation for the ALA (American Library Association) reaccreditation Self Study started two years prior to the ERP (External Review Panel) visit. The faculty, staff, and student representative met for their monthly Faculty-Staff-Student Council meeting and discussed the preliminary plans for accreditation, including appointments to specific committees, and future deadlines for materials.
- The monthly Faculty-Staff-Student Council meetings were also extended to include an item on ALA reaccreditation activities since December 2018. This is for the faculty to review the progress and make sure that the preparations for the reaccreditation are on track.
- Plan for the Self Study. The Self Study working groups created the preliminary draft of the Plan for the Self Study and submitted the draft to the Department Chair and College Dean for further review in January 2019. The Department Chair and College Dean reviewed the preliminary draft of the Plan for the Self Study and sent recommendations for review to faculty to use in preparing the final draft of the Plan. The final draft of the Plan for Self Study was submitted to the ALA Office for Accreditation (OA) and the chair of the ERP for review on March 3, 2019.
- Draft of the Self Study. The DIS faculty and staff in each of the Self Study working groups started to work on a draft Self Study during Summer 2019. The draft of the Self Study was made available for ERP members and COA on November 3, 2019.
- This final program Self Study will be submitted to COA in January 2020.

A centralized repository for all COA (Committee on Accreditation)-related documents and data has been established in PBWorks (http://www.pbworks.com/), a UNT licensed wiki platform. Users must create a login and send a formal request to the site administrator to gain access to any relevant COA documents. Once approved for site access, users are free to post comments and make suggestions for any changes they deem necessary. Material and documents relevant to COA and deemed to be sensitive or confidential are also placed on the Department's SharePoint Portal repository. Links are placed on the wiki that allows the user to locate and request access to such information. During the process of Self Study, the working group members will be given access to the PBWorks wiki. In addition, faculty will be given access to the SharePoint repository.

Working Groups

This Self Study draft is the result of a collaboration by all faculty members, the College of Information Dean, the Information Science Department Chair, and the administrative staff at the Department and College levels.

The faculty and staff have formed Self Study working groups, one group for each standard, and the assignments follow below. The name of the chair of each working group is in bold.

1. ***Standard I: Systematic Planning***
   J. Chen (Department Chair), ***A. Cleveland*** *(Regents Professor), D. Smith (Associate Professor), S. Evans (Assistant Professor), J. Pryce-Henry (staff), and P. Enamela (student)*

2. ***Standard II: Curriculum***
   H.-C. Chang (Assistant Professor), ***S. Miksa*** *(Associate Professor), J. Philbrick (Senior Lecturer), B. Schultz-Jones (Associate Professor), O. Zavalina (Associate Professor), S. Lancaster (staff), and C. Graves (student)*

3. ***Standard III: Faculty***
   Y. Chandler (Associate Professor), J. Ding (Professor), ***Y. Du*** *(Professor), S. Hawamdeh (Professor), M. Wheeler (Associate Professor), N. Herod (staff), and M. Dodson (student)*

4. ***Standard IV: Students***
   J. Allen (Regents Professor), B. Bushman (Lecturer), ***L. Enoch*** *(Senior Lecturer), T. Kuon (Multiple-year Lecturer), L. Hong (Assistant Professor), N. Tyler (staff), and K. Pierce (student)*

5. ***Standard V: Administration, Finances, and Resources***
   J. Kim (Associate Professor), ***W. Moen*** *(Associate Professor), J. Chen (Department Chair), B. O'Connor (Professor), X. Wang (Senior Lecturer), T. White (staff), and S. Byrne (student)*

Data Coordinator: *X. Zhang (student), J. Faulkner (student)*

Consultant: *P. Turner (Dean Emeritus)*

The Department Chair, chairs of the Self Study working groups, the administrative assistant, and the data coordinator will coordinate the gathering of documentation and the creation of the Self Study. The Dean of the College of Information will be regularly briefed on the process.

Each working group will undertake the following tasks:

a) Describe how the statement of the Department's mission, goals, and objectives relates to the subject of the Standard.
b) State the ways in which the Department's activities in the area of the Standard relate to the mission and purposes of the parent institution. Describe how the interaction between the Department and parent institution promotes the fulfillment of the Department's mission.
c) Describe how the Department plans and administers the outcomes assessment, utilizing results of the assessment; describe how the Department is meeting its mission, goals, and objectives, and the Standard.
d) Identify gaps and initiatives that will enable the Department to better reach its mission, goals, and objectives, and the Standard.
e) Describe how the Department's planning processes relate to the Standard, and how planning can be improved to ensure that the Department meets the Standard.

Glossary of Terminology and Abbreviations

Terminology

Board of Advisors (BOA). A group of multidisciplinary individuals who meet annually to discuss progress made and challenges faced by the Department. Current board members are Jim Ashley**,** Bridget Barry-Thias, Diane Bruxvoort, Daniel Burgard, Stacy Cameron, Lisa Casto, Denise Chochrek (Chair), Joe Dahlstram, Carol Everhart, Lisa German, Mary Jo Guidice, Donna Kearley, Angela Kennedy, Tom Kimbrough, Jennifer LaBoon, Edward Melton, Tuan Nguyen, Mark Smith, James Spence, Nigel Thurlow, Clarice Weeks, and Donghui Wu.

Center for Learning, Experimentation, Application and Research (CLEAR). Initially established in 1998 as a service to assist faculty with the development and delivery of distributed learning at the University. Now, the center combines technology resources with expert consultation and personnel in course design/redesign, assessment, pedagogy, and many other topics in an effort to provide faculty with "one-stop" support for creating quality courses – regardless of the instructional delivery method (per https://clear.unt.edu/about).

Cohort. A group of students from a particular location pursuing the MS with a major in Information Science or Library Science. National UNT student cohorts are:

El Paso-New Mexico

Greater Los Angeles

Nevada-Utah

Northern California

South Dakota-Wyoming-Idaho-Montana (SWIM)

Vermont-New Hampshire-Maine

Virginia-West Virginia

INFO. The prefix of every UNT Information Science course.

Library & Information Science Student Association (LISSA). The student organization sponsored by UNT College of Information and the Department of Information Science. LISSA is constituted for the purpose of enhancing the academic and professional careers of all its members.

Program of Study (POS). Students may choose from nine coherent Programs of Study, one directed to general career development and the rest to building competencies in specialized areas. The programs include the General Program of Study, Archival Studies and Digital Image Management, Health Informatics, Information Organization, Information Systems, Law Librarians and Legal Informatics Specialist, Music Librarianship, and Youth Librarianship.

Student Evaluation of Teaching Effectiveness (SETE). The psychometrically valid faculty teaching evaluation instrument that minimizes bias by controlling for student demographic influences. This evaluation method was fully replaced with the SPOT evaluation in Spring 2016 (per http://www.smartersurveys.com/sete/).

Student Learning Outcomes (SLO). Statements that describe the knowledge, skills, and behaviors that students acquire as they progress through the program (per ALA's glossary http://www.ala.org/educationcareers/accreditedprograms/standards/glossary).

Student Perceptions of Teaching (SPOT). The student evaluation system for the University, implemented in Summer 2015, to comply with the state of Texas House Bill 2504. Developed and offered by the University of Washington (*IASystem*®), this proven system offers online administration options, as well as evaluation forms that support different pedagogical formats (e.g., large lecture, online, studio). This system also offers many benefits to obtain an overall assessment of the course and instructor (per https://vpaa.unt.edu/spot).

UNT ASIS&T. The University of North Texas Student Chapter of the Association for Information Science and Technology provides opportunities for members to connect with other students, faculty, researchers, and the ASIS&T community at large (per ASIS&T's www.asist.org/groups/university-of-north-texas/).

Abbreviations

AASL	American Association of School Librarians
AEAH	Art Education and Art History
ALA	American Library Association
ALISE	Association or Library and Information Science Education
ASIST	American Society for Information Science and Technology
ATS	Advanced Topic Seminars
BOA	Board of Advisors
CAS	Certificate of Advanced Study
CLEAR	Center for Learning, Experimentation, Application and Research
COA	Council on Accreditation
COI	College of Information
CV	Curriculum vitae
DFW	Dallas/Fort Worth Metroplex
DIS	Department of Information Science
DLFM	Distance Learning Funding Model
EOP	End of Program
ERP	External Review Panel
FIS	Faculty Information Systems
GAC	Graduate Academic Certificate
GPA	Grade Point Average
iARTA	Initiative for Advanced Research in Technology and the Arts
IE	Institutional Effectiveness
IEEE	Institute of Electrical and Electronics Engineers
IJNKM	*International Journal of Nuclear Knowledge Management*
IMLS	Institute of Museum and Library Services
INFO	Information Course
IS	Information Science
JCDL	Joint Conference on Digital Libraries
JIS	*Journal of Information Science*
KDDI	Knowledge Discovery from Digital Information
LEAP	Library Education for the American Pacific
LIS	Library and Information Studies
LISSA	Library & Information Science Student Association
MS	Master of Science
NSF	National Science Foundation
OA	Office of Accreditation

ODA	Office of Disability Accommodation
ORED	Office of Research and Economic Development
OSTF	Out of State Teaching Fee
PAC	Personnel Affairs Committee
POS	Program of Study
PPT	Microsoft PowerPoint
RDA	Resource Description and Access
RPTC	Reappointment, Promotion, and Tenure Committee
SACS	Southern Association of Colleges and Schools
SETE	Student Evaluation of Teaching Effectiveness
SLA	Special Libraries Association
SLC	School Library Certification
SLIS	School of Library and Information Science
SLO	Student Learning Outcomes
SPOT	Student Perceptions of Teaching
SWIM	South Dakota, Wyoming, Idaho, and Montana
TEA	Texas Education Agency
TExES	Texas Examinations of Educator Standards
TLA	Texas Library Association
TxCDK	Texas Center for Digital Knowledge
UAEM	Universidad Autónoma del Estado de México
UIT	University Information Technology
UNT	University of North Texas
UT	University of Texas
VMGO	Vision, Mission, Goals, and Objectives
WebCT	Web Course Tools
WISE	Web-based Information Science Education

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2	I	DIS Strategic and Working Plans, 2013-2019
3	I	DIS Systematic Planning Process
4	I	EOP Evaluation and Results, 2013-2019
5	I	Recent Graduate Placement Survey
6	I	Employer Feedback Questionnaire and Results
7	I	Alumni Survey and Results
8	I, II,	Faculty Student Council Meeting Minutes
9	I	MIRS 2019 Report
10	I	Selected Faculty-Student Co-Authored Publications
11	I	Practicum Forms and Examples
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17	III	Full-Time Faculty Curriculum Vitae
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STANDARD I: SYSTEMATIC PLANNING

INTRODUCTION

The Department of Information Science (DIS) is a unit in the College of Information (COI) at the University of North Texas (UNT). As illustrated in Figure I.1, the COI is one of the 14 colleges at UNT. The COI has three departments: Learning Technologies, Information Science, and Linguistics. The Department of Information Science (DIS) is the largest department in the COI. The DIS currently has five programs: a Bachelor of Science in Information Science and Applied Technologies, a Bachelor of Science in Data Science, a Master of Science with the major in either Library Science or Information Science, a Master of Science in Data Science, and a Ph.D. in Information Science. The Master of Science with the major in either Library Science or Information Science is accredited by the American Library Association (ALA).

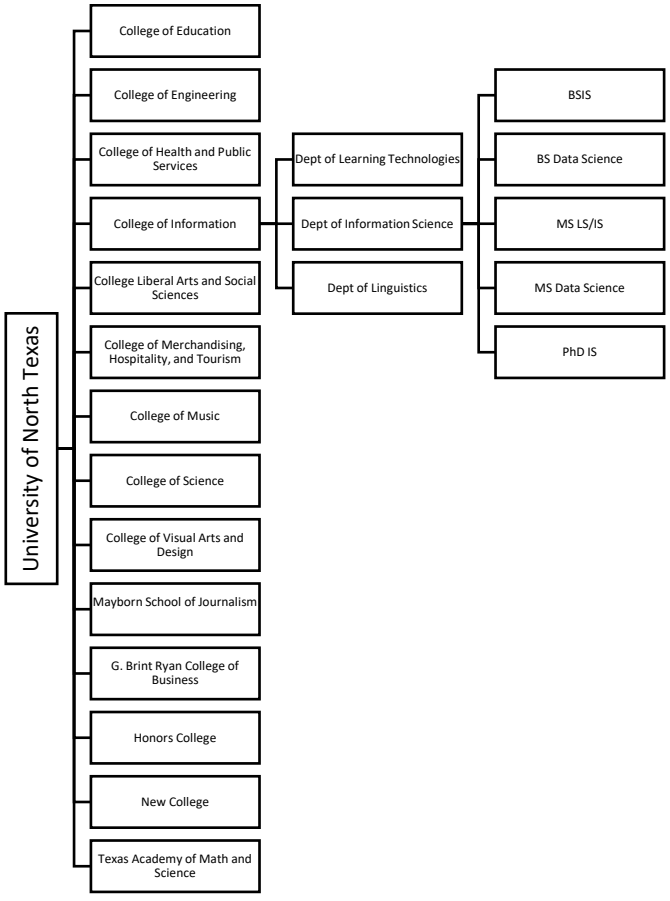


Figure I.1 UNT Organizational Chart

The Department of Information Science (DIS) has a specified Vision and Mission, as well as Goals and Objectives (VMGO) (https://informationscience.unt.edu/mission), which provide the foundation for the on-going systematic planning for the master's program and departmental activities. The DIS continues to utilize systematic planning processes through which the Department's VMGO are planned, implemented, evaluated, and updated. Program-level student learning outcomes for the DIS Master of Science with majors in Library Science (MS-LS) and Information Science (MS-IS) were developed based on the three core courses in the master's program. The achievement of the program's goals, objectives, and student learning outcomes is evaluated directly and indirectly through the end of program assessment, practicum, and four surveys. The data and evaluation results are systematically used to improve the program and plan for the future.

Standard I.1

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 constituency that a program seeks to serve.

The Department of Information Science (DIS) has a published Vision, Mission, Goals, and Objectives (VMGO) (https://informationscience.unt.edu/mission), which provide the foundation for the on-going systematic planning for the master's program and departmental activities.

The DIS continues to have systematic planning processes in place to foster quality education for the students in the master's program, and the systematic planning processes are aligned with the planning activities of the College of Information (COI) and the University of North Texas (UNT).

COI Planning Process. The COI planning process starts with analyzing the COI Strategic Plan during the latter part of the Fall semester every year. A first revision is drafted by the Dean and is brought to the COI community for discussion and finalization. The strategic plan is focused on the key priorities of the College, and is aligned with the University priorities, as stated by the University President in the annual State of the University presentation in September every year. The latest COI Strategic Plan (revised February 2019) can be found in Appendix 1. The plan is currently being revised, and the first revised draft was presented to the COI community in the November 2019 COI Staff and Faculty meeting. The draft revised plan is then discussed within the College's various academic units and support departments for identification of their action plans in order to support the College's strategic vision. The resource needs at the unit levels are then identified by the members of those units to carry out the identified activities.

The units within the COI then request the needed resources in the annual budget cycle, sometime in January/February each year, when the University opens up the annual budget request cycle. All those requests are analyzed by the Dean within the context of the COI Strategic Plan and discussed by the COI Executive Committee. The Dean then finalizes the prioritized budget requests and submits it to the Provost's office.

UNT Systematic Planning. As described on the UNT President's website at: https://president.unt.edu/planning-implementation, each year, through planning implementation workshops, the president and UNT stakeholders develop an action plan that details what the university should accomplish in the academic year to make progress and move closer to its goals. President Smatresk unveils the action plan at the annual State of the University in September and assigns implementation

teams. By the end of the academic year, the teams report their progress with metrics and next steps. The UNT Planning Implementation and Budget Cycle is outlined in Figure I.2.

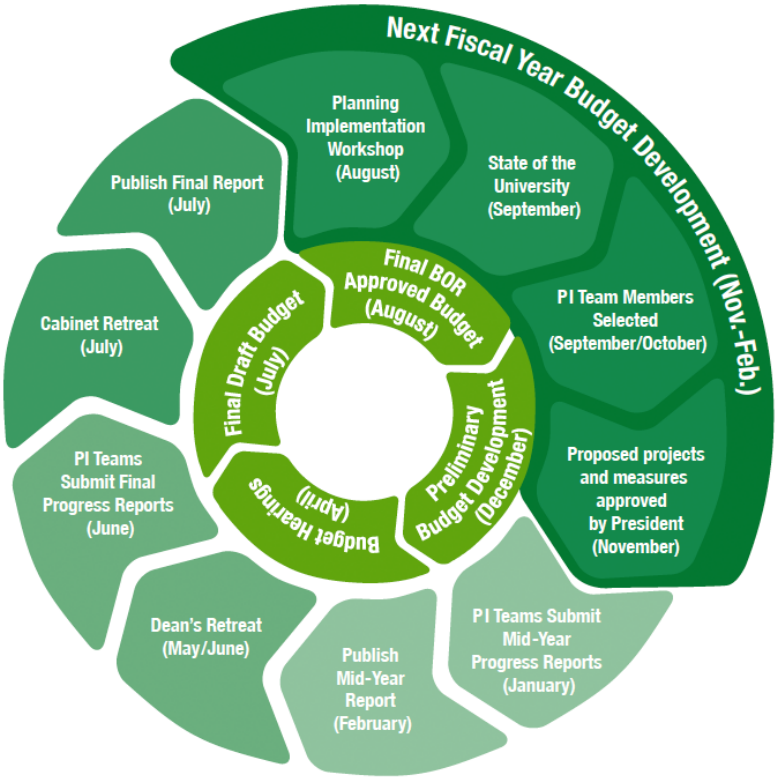


Figure I.2 UNT Planning Implementation and Budget Cycle

The Provost brings the requests from all colleges to the Deans' Council for discussion, and then makes a final priority list for submission to the President's Cabinet. The President then makes a final recommendation to the Board of Regents, based on the discussions with his cabinet members. The Board of Regents makes the final decision on the annual budget.

DIS Systematic Planning Process. The DIS Strategic and Working Plan (Appendix 2 contains all the Plans since 2013) is a central organizing tool for an on-going systematic planning process that involves the department's internal and external constituents throughout the year. The Plan contains a description of the systematic planning process. It lists the mission and goals of the Department, and the program objectives of all programs. The main body of the Plan lists tasks that the Department identifies to perform in the next five years. These tasks are organized around the five areas of the ALA accreditation standards. The DIS Strategic and Working Plan provides guidance for the activities of the faculty, staff, and administration. It is continuously modified by the collective wisdom of the department faculty, staff, and the Chair.

The DIS systematic planning process is dynamic and iterative, with the Strategic and Working Plan both impacting and being impacted by all of these groups. Below is a short description of the process:

The DIS collects data from students, graduates, alumni, and employers and summarizes the results during the academic year through surveys. At the end of the academic year, the DIS Chair reviews the survey results, department council meeting minutes, student perception of teaching (SPOT), and faculty annual evaluation reports to prepare a presentation of the State of the Department (see an example: https://untdliscoa.pbworks.com/w/file/136124205/2019-StatusofDepartment_BOA.pptx). The presentation lists achievements, including progress toward the tasks in the current version of the plan, as well as proposed improvements for the next academic year.

A faculty retreat is held at the beginning of each academic year in which the Chair presents the State of the Department presentation for discussion. Another item on the agenda is to review and revise the previous academic year's Strategic and Working Plan, especially to revise and update tasks for the current year (see an example agenda: https://untdliscoa.pbworks.com/w/file/137759598/DepartmentRetreat-Agenda.docx). The tasks listed in the Strategic and Working Plan are assigned as charges to be carried out by faculty standing committees and by individuals with input from appropriate constituents. Revisions from the retreat are incorporated in a final document – the Department's Strategic and Working Plan – for the next five years for faculty approval at the next Faculty-Student Council meeting. More information about the systematic planning process can be found in Appendix 3: DIS Systematic Planning Process.

Elements of systematic planning include:

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

The DIS Strategic and Working Plan includes the systematic planning process and DIS vision, mission, goals, and objectives. The Chair and Executive Committee are responsible for reviewing and revising (as needed) the DIS vision, mission, goals, and objectives to be presented to the faculty for input and approval. The Chair also engages the Board of Advisors (BOA) (https://informationscience.unt.edu/board-advisors-members) in the review and revision of the program's vision, mission, goals, and objectives. The members of the Board of Advisors are leaders in the library and information sciences profession selected by the faculty and are representative of the diversity of programs of study offered by UNT, and they meet annually in Denton, Texas.

While the vision and mission of the department have undergone continuous review, they have been retained for the past few years.(See various versions of the DIS Strategic and Working Plans in Appendix 2), These statements are presented in Table I.1 together with the UNT and COI statements.

The department's goals have had some changes over the years. For example, one of the goals in 2015 was: "Maintain a supportive and flexible learning environment to accommodate students' individual backgrounds, needs, and aspirations." This goal was changed in 2019 to "Maintain a healthy enrollment, student retention, and a supportive and flexible learning environment to accommodate students' individual backgrounds, needs, and aspirations." The change reflects the Department's consensus on continually aligning departmental goals with the UNT and COI goals. The DIS goals are listed in Table I.2 along with the COI and UNT goals.

The DIS MS program objectives have been reviewed every year but have been kept the same because DIS faculty believes these objectives were relevant and applicable. The objectives are presented in Standard I.4 in this Self Study.

The DIS program-level student learning outcomes (SLOs) for the MS-LS and MS-IS have remained unchanged since the last reaccreditation. They are listed in Table I.3. Three program-level student learning

outcomes were developed based on the three core courses in the master's program. These were assessed every semester through the end-of-program (EOP) examination. The assessment results were reported following the UNT Institutional Effectiveness (IE) process (described in more detail in I.1.2). These program-level SLOs have been reviewed and discussed at the annual retreat and monthly departmental council meetings. The faculty decided not to change them before the department reached consensus on a better set of SLOs. The Department plans to revise the program-level student learning outcomes in 2019-2020 when the new e-Portfolio Capstone Experience is implemented. The plan is described in ***Conclusions and Improvement Plans*** at the end of this Self Study.

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

The program goals, objectives, and student learning outcomes have been continually assessed through:

- The End of Program (EOP) evaluation, which measures the attainment of MS program objectives through a survey of students taking the EOP examination. The summaries of the evaluation results are presented in Table I.5 and Appendix 4: EOP Evaluation and Results 2013-2019.

- There are three other surveys, the Recent Graduate Placement Survey (Appendix 5: Recent Graduate Placement Survey), the Employer Feedback Questionnaire (Appendix 6: Employer Feedback Questionnaire and Results), and the Alumni Survey and Results (Appendix 7: Alumni Survey Results) (https://untdliscoa.pbworks.com/w/page/43694950/COA%20Surveys), assessing all aspects of the Program including program goals and objectives. They also indirectly assess student learning outcomes. For example, the Recent Graduate Placement Survey has four questions (8a – 8d) asking the graduates their capabilities to perform 13 tasks from information organization to information system design to collaboration. The majority of the participants (more than 90%) responded that they have good skills in these areas or are capable of performing the tasks.

- The EOP examination is designed to directly measure the program-level student learning outcomes. The results of the examination are reported to the UNT. The UNT Office of University Accreditation administers the Institutional Effectiveness (IE) process which focuses on SLOs and services. The university assessment of IE requires that each academic program includes their SLOs in the Improve database (https://unt.tracdat.com/tracdat/), and the three program-level SLOs based on the three core courses are included. Measurements of achievements and evidence for each of the SLOs are required to be in the Improve database by UNT. This provides the DIS the opportunity to assess the learning outcomes and revise them as appropriate in order to meet the demands of the profession (https://vpaa.unt.edu/accreditation/improve).

Per UNT Policy 06.049 Course Syllabi Requirements, every course syllabus is required to include course learning objectives. The learning outcomes of the program's three core courses (INFO 5000: Information and Knowledge Professions, INFO 5200: Information Organization, INFO 5600: Information Access and Knowledge Inquiry) reflect the program's goals and objectives and are measured by the assignments or projects, which are reviewed and revised continuously.

In addition to the summative methods for assessment, direct feedback from practicum supervisors and course evaluations are used to inform how well the program is meeting its goals and objectives. The Chair regularly meets with faculty practicum coordinators and faculty and reviews course evaluations. Issues that arise are discussed with the Executive Committee and at the monthly department council meetings filtered through the systematic planning process.

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

The analysis of assessment data has been conducted mainly during the summers and the results are summarized in the chair's State of the Department presentation given to the department at the department retreat and the BOA meetings. These results are used in multiple ways to improve the program, as described in Appendix 3: DIS Systematic Planning Process. For example, the length of the onsite institutes for the core courses was reduced to one day based on feedback received from students in the End of Program evaluation. As another example, some students reported in the End of Program evaluation that they would like to see more information technology integrated into the Health Informatics Program courses, and this has been addressed by adding and expanding units on information technology in healthcare in INFO 5365: Health Sciences Information Management and INFO 5637: Medical Informatics.

I.1.4 Communication of planning policies and processes to program constituents.

The DIS website (https://informationscience.unt.edu/) presents departmental policies and processes to program constituents. Data collected are analyzed and made available to internal constituencies including faculty, student, administrators, and staff. Students' annual evaluations of program objectives are publicly available on the Department of Information Science webpage (https://informationscience.unt.edu/program-evaluation). The planning policies and processes are communicated to the program's faculty, staff, student, and Board of Advisors through the department's monthly Faculty-Student Council meetings (Appendix 8 – Faculty Student Council Meeting Minutes).

The DIS has mission, vision, goals, and objectives in the context of the COI and UNT. They provide guidance for developing the Strategic and Working Plans of the Department, which **outlines the needs and resources** to continue to run a successful and high-quality master's program.

The DIS mission and the strategic plan are consistent with the UNT and COI mission and strategic plan. The UNT administration **supports** the DIS mission, vision, goals, and objectives as they reflect the core values of the institution. The UNT support to the DIS is evidenced by the financial support, technology services, and physical resources as explained in Standard V. As an example, the 2018-2022 Strategic and Working Plan identified a need for more faculty lines in emerging areas, such as data science and analytics, and the UNT administration has granted more faculty lines in this area. The Department is currently hiring 3 faculty positions, one lecturer position in data science, one school librarianship tenure-track faculty position, and one health informatics/data science tenure-track faculty position.

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 university administration.

The DIS Mission, Vision, Goals, and Objectives in the Context of the COI and UNT

Neal J. Smatresk became president of the University of North Texas in 2014, and he continued the *University of North Texas Strategic Plan 2012-17,* which includes Four Bold Goals relating to undergraduate education, research and graduate education, student support and operational effectiveness, and regional partnerships (https://www.unt.edu/four-bold-goals/). The Strategic Plan was extended for two more years until 2019 while UNT undergoes an extensive strategic planning process seeking input from the UNT community about the university's characteristics, mission, vision, and purpose.

UNT's new strategic plan will focus on creating a culture of collaboration that will enhance the three strategic priority areas identified as:

- Student empowerment and transformation
- People and processes
- Scholarship and innovation

The strategic plan is slated to be submitted to the UNT Board of Regents in November 2019. President Smatresk and Provost Jennifer Cowley conducted a listening tour to gather feedback from faculty, staff, students, and external groups about the mission, vision, goals, and objectives of the university. At a well-attended meeting on March 28, 2019, the COI faculty, staff, and students had the opportunity to provide input regarding the future direction of the university. Once UNT has finalized its Strategic Plan, then the COI and DIS will align their mission, vision, goals, and objectives with them.

UNT was re-affirmed by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) on December 6, 2016, and its next reaffirmation is slated for 2026.

Table I.1 lists the UNT, COI, and DIS mission and vision statements. It clearly demonstrates that the DIS aligns its mission and vision with the COI and UNT. The DIS and UNT missions are in alignment as the DIS is preparing high-quality information professionals to serve in dynamic roles in a changing world. The UNT and DIS visions are in alignment as the DIS is cultivating excellence in preparing the next generation of leaders in the global information society.

Table I.1 UNT, COI, and DIS Mission and Vision Statements

	UNT	COI	DIS
Missions	"At the University of North Texas, our caring and creative community prepares students for careers in a rapidly changing world."	"Our mission is to generate, integrate, and disseminate knowledge in a learner-centered environment. We advance domains of knowledge in information science, library science, computing and technology systems, learning and cognition, and human performance."	"The Department of Information Science provides and supports resources, research, and services for the education and leadership to the library and information sciences community and prepares information professionals of the highest quality to serve dynamic roles in the state, the nation, and the world."
VISIONS	"As the most comprehensive public research university providing a top quality education in one of the nation's largest, most dynamic regions, UNT will be celebrated for its academics, arts, and athletics. UNT will be a diverse and inclusive institution creating knowledge and innovations that will shape the future, while cultivating excellence in the next generation of scholars and leaders for the global community."	"Our college will continually evolve as we operate within a nexus of learning, research, information, and technology to facilitate the creation and assimilation of knowledge, innovation, and performance. The college will attract high quality faculty, students, and staff to lead its evolution. Graduates will have choice placement and advancements in their fields. Our faculty, staff, and students will continue to rise to leadership positions in their professions and advance the body of knowledge of our field."	"The Department of Information Science will expand its leadership role in preparing information professionals to meet the needs of the global information society. LIS graduates will continue to serve as intermediaries between information and information seekers, as well as serve crucial roles in a wide variety of settings with increasingly sophisticated technological tools. The diverse faculty of LIS will contribute individual strengths to increase the quality of teaching, research, and service that will maintain the department as a center of excellence."

The program's goals and objectives are consistent with the values of the parent institution and the culture and mission of the program and foster quality education.

Table I.2 lists the goals of UNT, COI, and DIS. The UNT and DIS goals are in alignment as the DIS is educating future leaders in the information professions and contributing to UNT's Tier One status. Both UNT and the DIS are committed to providing student support and quality education.

Table I.2 UNT, COI, and DIS Goals

UNT (https://www.unt.edu/four-bold-goals/)	COI (http://catalog.unt.edu/content.php?catoid=22&navoid=2378)	DIS (https://informationscience.unt.edu/mission)
Goal 1: Provide the best undergraduate educational experience in Texas; **Goal 2:** Provide superior graduate education, scholarship, and artistic endeavors, and achieve status among the nation's Tier One research institutions; **Goal 3:** Become a national leader among universities in student support, employee relations, operational effectiveness, and service to constituencies; and **Goal 4:** Establish UNT as a nationally recognized, engaged university and regional leader by building and expanding mutually beneficial partnerships and resources.	**Goal 1**: Provide exemplary learning opportunities and instruction facilitated through varied formats, technology-rich environments, and an accomplished faculty who embrace diversity in all college endeavors; **Goal 2**: Contribute leading-edge research, scholarship, and creative pursuits for a global informational society; and **Goal 3:** Nurture the professional endeavors of faculty and staff, the university, and the general public through outstanding leadership, consulting, community engagement, and continuing education.	**Goal 1**: Prepare information professionals who demonstrate excellence in leadership, service, research, and education in a technology-driven environment; **Goal 2**: Advance and contribute to leading-edge research, scholarship, and advancement activities toward the university's Tier One status; **Goal 3**: Maintain a healthy enrollment, student retention, and a supportive and flexible learning environment to accommodate students' individual backgrounds, needs, and aspirations; and **Goal 4:** Contribute to professional, academic, and public interests through alumni engagement, faculty and staff development, continuing education, and disciplinary leadership.

Standard I.2

Clearly defined student learning outcomes are a critical part of the program's goals.

Student Learning Outcomes

The first goal of the Department of Information Science is to "*Prepare information professionals who demonstrate excellence in leadership, service, research, and education in a technology-driven world."* The goal and objectives of the master's program align to prepare information professionals for excellence in library and information sciences.

The program goals and objectives of the Master of Science with the major in either Library Science or Information Science were created by the DIS faculty with key input from students and external constituencies. Students provide feedback on the objectives through their participation in Faculty-Student Council meetings and standing committee assignments.

Goal

The master's program goal is to prepare students for careers as information professionals in a variety of roles and settings.

Objectives

The master's program objectives are for students to demonstrate knowledge and skills related to:

1. The roles and impacts of information policies, practices, and information itself on diverse populations, including underserved groups, in a rapidly changing technological and global information society.

2. The design and implementation of conceptual and technological systems and services to facilitate the identification, selection, acquisition, organization and description, storage and retrieval, preservation, dissemination, management, and use of recordable information in any format for effective access.
3. Human information behavior in order to develop and implement information systems and services that meet user needs related to information and knowledge creation, communication, identification, selection, retrieval, analysis, interpretation, evaluation, synthesis, management, and use.
4. Communication and networking for personal and professional growth, leadership, collaboration, policy development, and change management relevant to specific professional specializations and organizations.
5. Teaching, research, and service, including interdisciplinary activities that contribute to the advancement of the field.
6. The philosophy, principles, and legal and ethical responsibilities of the field.

The three core courses in the master's program include: INFO 5000: Information and Knowledge Professions, INFO 5200: Information Organization, and INFO 5600: Information Access and Knowledge Inquiry. Each student enrolled in the program is required to take these three core courses. To achieve the DIS program's objectives, each core course (INFO 5000, INFO 5200, and INFO 5600) designed its course learning outcomes. These course objectives are designed as student learning outcomes that are to be measured by the course's assignments and class projects. The syllabi of the core courses are at: https://untdliscoa.pbworks.com/w/browse/#view=ViewFolder&param=CourseSyllabi.

Additionally, the program developed its program-level student learning outcomes, as listed in Table I.3: Program-level Student Learning Outcomes and Assessment. These SLOs are assessed every semester through the EOP examination. The results of the assessment are reported to UNT as part of the UNT Institutional Effectiveness (https://vpaa.unt.edu/accreditation/improve) practice.

Table I.3 Program-level Student Learning Outcomes and Assessment

Student Learning Outcomes	*Related Core Courses*	*Assessment Methods*	*Criteria*
1. Management/Leadership - Students will be able to describe and/or propose valid solutions to typical organizational problems in their professional areas by demonstrating skills in management and leadership.	**INFO 5000: Information & Knowledge Professions**	**Capstone Assignment/Project** - Answers to comprehensive exam questions on management/leadership topics are each rated by two faculty members on a 1-5 scale for each standard in the rubric.	70% of average ratings for all answers meet or exceed 3.33 (67%).
		Course Assignment/Project - Students complete two (2) three credit hour advanced seminar courses referred to as Advanced Topic Seminars (ATS). INFO 5970 is taken first after completing at least 18 hours of course work and INFO 5980 (second course) is taken after successfully completing INFO 5970.	Successful completion of both courses (INFO 5970 and INFO 5980). Proficient ratings average 80% or higher on the rubric.

2. Information Organization/Systems - Students demonstrate knowledge in information organization and presentation as well as systems for organizing information and facilitating information access by describing and/or proposing valid solutions to typical professional problems in these areas.	**INFO 5200: Information Organization**	**Capstone Assignment/Project -** Answers to comprehensive exam questions on information organization/systems topics are each rated by two faculty members on a 1-5 scale for each standard in the rubric.	70% of average ratings for all answers meet or exceed 3.33 (67%).
		Course Assignment/Project - Students complete two (2) three credit hour advanced seminar courses referred to as Advanced Topic Seminars (ATS). INFO 5970 is taken first after completing at least 18 hours of course work and INFO 5980 (second course) is taken after successfully completing INFO 5970.	Successful completion of both courses (INFO 5970 and INFO 5980). Proficient ratings average 80% or higher on the rubric.
3. Information Access/Resources - Students demonstrate knowledge in information access and information resources by describing and/or proposing valid solutions to typical professional problems in these areas.	**INFO 5600: Information Access & Knowledge Inquiry**	**Capstone Assignment/Project -** Answers to comprehensive exam questions on information access/resources topics are each rated by two faculty members on a 1-5 scale for each standard in the rubric.	70% of average ratings for all answers meet or exceed 3.33 (67%).
		Course Assignment/Project - Students complete two (2) three credit hour advanced seminar courses referred to as Advanced Topic Seminars (ATS). INFO 5970 is taken first after completing at least 18 hours of course work and INFO 5980 (second course) is taken after successfully completing INFO 5970.	Successful completion of both courses (INFO 5970 and INFO 5980). Proficient ratings average 80% or higher on the rubric.

The core course learning outcomes (as described below) and the program-level student learning outcomes of the DIS MS LIS (Table I.3) describes what knowledge and skills that the graduate should have. For example, graduates will be able to describe and /or propose valid solutions to typical organizational problems in the library and information studies fields. They will be able to demonstrate knowledge in information access and resources by describing and/or proposing valid solutions to professional problems in the library and information studies fields.

The DIS program objectives, the core course learning objectives/outcomes, and the program-level learning outcomes have been collectively developed and approved by the DIS faculty. The faculty arrives at a common understanding of the expectations for student learning in order to achieve consistency across the curriculum.

The entire program is designed to address the program objectives, the core course learning objectives/outcomes, and the program-level learning outcomes. All courses and practica offered in the program aim to achieve one or more of the MS LIS program objectives or program-level learning outcomes.

Student learning outcomes address:

Standard I.2.1 The essential character of the field of library and information studies;

Table I.4 presents a mapping of program objectives, three program-level SLOs (listed in Table I.3) and core courses to Standards I.2.1 to I.2.8. Specifics of the learning objectives/outcomes are described below. Many other courses are able to address one or more of the program objectives and SLOs. For example, the program has at least **ten courses** (INFO 5205, INFO 5206, INFO 5210, INFO 5212, INFO 5223, INFO 5240, INFO 5707, INFO 5717, INFO 5731, and INFO 5735) that address SLO 2: **Information Organization/Systems -** Students demonstrate knowledge in information organization and presentation as well as systems for organizing information and facilitating information access by describing and/or proposing valid solutions to typical professional problems in these areas.

Table I.4 Mapping of Program Objectives, Program-level Student Learning Outcomes, and Core Courses to Standard 1.2.1 to 1.2.8

Standard	Program Objectives	Program-level Student Learning Outcomes	Core Courses
I.2.1	2, 3	1, 2, 3	INFO 5000, 5200, 5600
I.2.2	6	1	INFO 5000, 5600
I.2.3	4	1	INFO 5000, 5200, 5600
I.2.4	5	n/a	INFO 5000, 5200
I.2.5	5	1, 2	INFO 5000, 5200, 5600
I.2.6	1	1, 3	INFO 5000, 5200, 5600
I.2.7	1	1, 2, 3	INFO 5000, 5200, 5600
I.2.8	3	1, 2, 3	INFO 5000, 5200, 5600

Standard I.2.1 is addressed by the following IS master's program objectives, program-level learning outcomes, and learning outcomes of the core courses:

DIS Master's Program Objective 2:

The design and implementation of conceptual and technological systems and services to facilitate the identification, selection, acquisition, organization and description, storage and retrieval, preservation, dissemination, management, and use of recordable information in any format for effective access.

DIS Master's Program Objective 3:

Human information behavior in order to develop and implement information systems and services that meet user needs related to information and knowledge creation, communication, identification, selection, retrieval, analysis, interpretation, evaluation, synthesis, management, and use.

Student Learning Outcome (SLO) 1:

***Management/Leadership** - Students will be able to describe and/or propose valid solutions to typical organizational problems in their professional areas by demonstrating skills in management and leadership.*

SLO 2:

***Information Organization/Systems** - Students demonstrate knowledge in information organization and presentation as well as systems for organizing information and facilitating information access by describing and/or proposing valid solutions to typical professional problems in these areas.*

SLO 3:

Information Access/Resources *- Students demonstrate knowledge in information access and information resources by describing and/or proposing valid solutions to typical professional problems in these areas.*

Core Courses

INFO 5000: Information and Knowledge Professions

- Describe the nature, scope, and key attributes of the information professions
- Explain the history and origin of information and library sciences
- Relate ethics, values, norms, and foundational principles of the IS profession to the scenarios/situations of their working environment
- Assess current and emerging issues in information and library sciences and their impact on information professions
- Analyze the evolving role and attributes of an effective IS professional
- Assess the impact of technology (both positive and negative sides) on individuals, society, and the information profession
- Develop skills in scholarly communication, research, and writing that are key to the success of both an academic program and future career goals
- Appraise the IS literature independently, critically, and creatively
- Apply rules and norms of scholarly communication frequently used in the academic writing process
- Use current software to cite, organize, and present information professionally

INFO 5200: Information Organization

- Describe a collection
- Apply user demographics to describe a user group
- Apply user knowledge types and levels for a user group
- Apply representative techniques to model information-seeking behavior and represent that behavior in terms of attributes, precision, and recall
- Integrate the study of user groups and user information behavior into the concept of user-centered design
- Use a template report format
- Determine and apply to a design the components of a metadata scheme including:
    - entities and entity level
    - elements and their relationship to attributes
    - FRBR and other organizational models
- Construct an online library catalog using a database management system that meets user needs

INFO 5600: Information Access and Knowledge Inquiry

- Explain the foundations, philosophy, and ethics of information services
- Describe issues concerning users and diversity
- Identify the attributes of information behavior
- Use and evaluate information resources
- Describe basic principles of information retrieval
- Demonstrate search and retrieval skills
- Conduct a reference interview
- Explain effective practices in information and instructional services
- Identify the elements of collection management of information resources
- Describe management responsibilities

- Articulate the purpose of evaluation and evaluate information access services
- Describe and evaluate information technologies
- Summarize emerging trends and issues in the field of information access and knowledge inquiry

Standard I.2.2 the philosophy, principles, and ethics of the field;

Standard I.2.2 is addressed by the following IS master's program objectives and the learning outcomes of the core courses:

DIS Master's Program Objective 6:

The philosophy, principles, and legal and ethical responsibilities of the field.

SLO 1:

***Management/Leadership** - Students will be able to describe and/or propose valid solutions to typical organizational problems in their professional areas by demonstrating skills in management and leadership.*

Core Courses

INFO 5000: Information and Knowledge Professions

- Relate ethics, values, norms, and foundational principles of the IS profession to the scenarios/situations of their working environment

INFO 5600: Information Access and Knowledge Inquiry

- Explain the foundations, philosophy, and ethics of information services

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

Standard I.2.3 is addressed by the following IS master's program objectives and the learning outcomes of the core courses:

DIS Master's Program Objective 4:

Communication and networking for personal and professional growth, leadership, collaboration, policy development, and change management relevant to specific professional specializations and organizations.

SLO 1:

***Management/Leadership** - Students will be able to describe and/or propose valid solutions to typical organizational problems in their professional areas by demonstrating skills in management and leadership.*

Core Courses

INFO 5000: Information and Knowledge Professions

- Develop skills in scholarly communication, research, and writing that are key to the success of both an academic program and future career goals
- Appraise the IS literature independently, critically, and creatively
- Apply rules and norms of scholarly communication frequently used in the academic writing process
- Use current software to cite, organize, and present information professionally

INFO 5200: Information Organization

- Use a template report format

INFO 5600: Information Access and Knowledge Inquiry

- Conduct a reference interview
- Explain effective practices in information and instructional services
- Describe management responsibilities

Additionally, each program of study (POS) is based upon the relevant professional associations' competency statements. The faculty members supervising the POS ensure that the curriculum for each program of study prepares students for the current demands of the specialized area. The DIS faculty have strong connections and leadership within professional communities and engage stakeholders in conversations about current trends.

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

Standard I.2.4 is addressed by the following IS master's program objectives and the learning outcomes of the core courses:

DIS Master's Program Objective 5:

Teaching, research, and service, including interdisciplinary activities, which contribute to the advancement of the field.

Core Courses

INFO 5000: Information and Knowledge Professions

- Develop skills in scholarly communication, research, and writing that are key to the success of both an academic program and future career goals
- Appraise the IS literature independently, critically, and creatively
- Apply rules and norms of scholarly communication frequently used in the academic writing process

INFO 5200: Information Organization

- Integrate the study of user groups and user information behavior into the concept of user-centered design

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

Standard I.2.5 is addressed by the following IS master's program objectives and the learning outcomes of the core courses:

DIS Master's Program Objective 5:

Teaching, research, and service, including interdisciplinary activities, which contribute to the advancement of the field.

SLO 1:

***Management/Leadership** - Students will be able to describe and/or propose valid solutions to typical organizational problems in their professional areas by demonstrating skills in management and leadership.*

SLO 2:

> ***Information Organization/Systems*** *- Students demonstrate knowledge in information organization and presentation as well as systems for organizing information and facilitating information access by describing and/or proposing valid solutions to typical professional problems in these areas.*

Core Courses

INFO 5000: Information and Knowledge Professions

- Describe the nature, scope, and key attributes of the information professions
- Explain the history and origin of information and library sciences
- Analyze the evolving role and attributes of an effective IS professional

INFO 5200: Information Organization

- Integrate the study of user groups and user information behavior into the concept of user-centered design
- Use common system evaluation techniques, including:
    - SWOT
    - PEST

INFO 5600: Information Access and Knowledge Inquiry

- Explain effective practices in information and instructional services

Sponsored Activities In addition to the formal classroom learning, the DIS makes a concerted effort to sponsor events that engage speakers from other disciplines to give presentations face-to-face and virtually for students in the master's program. Providing these opportunities for students demonstrates the interdisciplinary nature of the field and gives them exposure to viewpoints beyond the library and information sciences. For example, the DIS co-sponsors the annual Multi-Disciplinary Information Research Symposium, which allows researchers and students to share their work on information-related topics (Appendix 9 MIRS 2019 Report). Additionally, weekly Research Brown Bags (https://informationscience.unt.edu/research-meetings) sponsored by the DIS, on topics such as Submitting an Institutional Review Board (IRB) Application and The Power of #100daysWriting, provide students and faculty (both inside and outside of the DIS) an opportunity to share information about research-related topics in an informal setting over lunch. More information about such events are posted to DIS news at: https://informationscience.unt.edu/

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

Standard I.2.6 is addressed by the following IS master's program objectives and the learning outcomes of the core courses:

DIS Master's Program Objective 1:

> *The roles and impacts of information policies, practices, and information itself on diverse populations, including underserved groups, in a rapidly changing technological and global information society.*

SLO 1:

Management/Leadership *- Students will be able to describe and/or propose valid solutions to typical organizational problems in their professional areas by demonstrating skills in management and leadership.*

SLO 3:

Information Access/Resources *- Students demonstrate knowledge in information access and information resources by describing and/or proposing valid solutions to typical professional problems in these areas.*

Core Courses

INFO 5000: Information and Knowledge Professions

- Analyze the evolving role and attributes of an effective IS professional

INFO 5200: Information Organization

- Apply user demographics to describe a user group
- Apply user knowledge types and levels for a user group
- Apply representative techniques to model information-seeking behavior and represent that behavior in terms of attributes, precision, and recall

INFO 5600: Information Access and Knowledge Inquiry

- Describe issues concerning users and diversity
- Identify the attributes of information behavior

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

Standard I.2.7 is addressed by the following IS master's program objectives and the learning outcomes of the core courses:

DIS Master's Program Objective 1:

The roles and impacts of information policies, practices, and information itself on diverse populations, including underserved groups, in a rapidly changing technological and global information society.

SLO 1:

Management/Leadership *- Students will be able to describe and/or propose valid solutions to typical organizational problems in their professional areas by demonstrating skills in management and leadership.*

SLO 2:

Information Organization/Systems *- Students demonstrate knowledge in information organization and presentation as well as systems for organizing information and facilitating information access by describing and/or proposing valid solutions to typical professional problems in these areas.*

SLO 3:

Information Access/Resources *- Students demonstrate knowledge in information access and information resources by describing and/or proposing valid solutions to typical professional problems in these areas.*

Core Courses

INFO 5000: Information and Knowledge Professions

- Analyze the evolving role and attributes of an effective IS professional
- Assess the impact of technology (both positive and negative sides) on individuals, society, and the information profession
- Assess current and emerging issues in information and library sciences and their impact on information professions

INFO 5200: Information Organization

- Construct an online library catalog using a database management system that meets user needs
- Use creative problem solving when designing information systems

INFO 5600: Information Access and Knowledge Inquiry

- Describe and evaluate information technologies
- Summarize emerging trends and issues in the field of information access and knowledge inquiry

Standard I.2.8 The needs of the constituencies that a program seeks to serve.

Standard I.2.8 is addressed by the following IS master's program objectives and the learning outcomes of the core courses:

DIS Master's Program Objective 3:

Human information behavior in order to develop and implement information systems and services that meet user needs related to information and knowledge creation, communication, identification, selection, retrieval, analysis, interpretation, evaluation, synthesis, management, and use.

SLO 1:

Management/Leadership *- Students will be able to describe and/or propose valid solutions to typical organizational problems in their professional areas by demonstrating skills in management and leadership.*

SLO 2:

Information Organization/Systems *- Students demonstrate knowledge in information organization and presentation as well as systems for organizing information and facilitating information access by describing and/or proposing valid solutions to typical professional problems in these areas.*

SLO 3:

Information Access/Resources *- Students demonstrate knowledge in information access and information resources by describing and/or proposing valid solutions to typical professional problems in these areas.*

Core Courses

INFO 5000: Information and Knowledge Professions

- Describe the nature, scope, and key attributes of the information professions

INFO 5200: Information Organization

- Apply user demographics to describe a user group
- Apply user knowledge types and levels for a user group

- Apply representative techniques to model information-seeking behavior and represent that behavior in terms of attributes, precision, and recall
- Integrate the study of user groups and user information behavior into the concept of user-centered design
- Determine and apply to a design the components of a metadata scheme including:
    - entities and entity level
    - elements and their relationship to attributes
    - FRBR and other organizational models
- Construct an online library catalog using a database management system that meets user needs
- Develop basic cataloging rules
- Use creative problem solving when designing information systems
- Create a classification system and associated call numbers

INFO 5600: Information Access and Knowledge Inquiry

- Describe issues concerning users and diversity
- Identify the attributes of information behavior
- Use and evaluate information resources

Standard I.3

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

The DIS is committed to teaching and service, as evident in our mission, values, goals, and objectives. Teaching and service are integral to our goals and objectives set and achieved with each planning cycle. Our systematic planning processes prioritize teaching and service and recognize collaboration and interdependency as necessary for excellence.

Teaching

We are committed to preparing students for dynamic information environments in which they will engage in on-going adaptation to new technologies and service demands. The DIS is dedicated to excellence in this regard, as evidenced by collaborative development and the on-going review of courses, the incorporation of peer and student feedback in the revision of course curricula, and responsiveness to innovation in the field, evolving technologies, and changing service demands. Moreover, we recognize our critical role as a catalyst for transformational change in the field as information professionals are supported throughout their professional development. Further, our values, as reflected in our strategic plans, include a focus on creating new knowledge and making contributions to the field, addressing social and technological change, developing communities of practice and learning, and promoting diversity in perspective and scholarship. These values guide the strategic planning process. Systematic planning is critical to the development, evaluation, and maintenance of goals and objectives that advance these values.

DIS Master's Program Objective 5:

> *Teaching, research, and service, including interdisciplinary activities, which contribute to the advancement of the field.*

Core Courses

INFO 5000: Information and Knowledge Professions

- Describe the nature, scope, and key attributes of the information professions

- Analyze the evolving role and attributes of an effective IS professional

INFO 5600: Information Access and Knowledge Inquiry
- Explain effective practices in information and instructional services
- Summarize emerging trends and issues in the field of information access and knowledge inquiry

Translating Research into Teaching

The DIS faculty understands the importance of translating research into their teaching of future information professionals. Specifically, the faculty incorporates their research initiatives into the development of course materials as well as in the delivery of course content. In addition, faculty views research as crucial to adding to the knowledge base of the profession, and they promote research to their students in order to address the critical issues in the field.

The following are some examples of how faculty have embedded their research into their teaching via lecture materials, assignments, or discussions. Courses and research topics are listed.

- INFO 5220: Resource Description and Access II - Methods of data collection tested in studies of MARC 21 bibliographic and authority records.
- INFO 5224: Metadata for Information Organization and Retrieval II - Evaluation of metadata quality and changes in digital and traditional libraries.
- INFO 5365: Health Sciences Information Management - Use of knowledge management techniques in succession planning in libraries.
- INFO 5600: Information Access and Knowledge Inquiry - Use of social media in academic health sciences libraries.
- INFO 5610: Advanced Information and Access Services - Use of virtual reference services in academic health sciences libraries.

Graduate students have worked with faculty in developing publications, presentations, and sponsored research projects, which have provided them with a rich educational opportunity to experience the whole cycle of the research process (Appendix 10: Selected Faculty-Student Co-Authored Publications).

Service

The DIS master's program goals and objectives incorporate the value of service to the LIS field. One of the goals of the department is: *"Prepare information professionals who demonstrate excellence in leadership, service, research, and education in a technology-driven environment"* (https://informationscience.unt.edu/mission). The value of service is also incorporated in the DIS master's program objective 5:

DIS Master's Program Objective 5:

> *Teaching, research, and service, including interdisciplinary activities, which contribute to the advancement of the field.*

Core Courses

INFO 5000: Information and Knowledge Professions
- Describe the nature, scope, and key attributes of the information professions
- Analyze the evolving role and attributes of an effective IS professional

INFO 5600: Information Access and Knowledge Inquiry

- Explain effective practices in information and instructional services
- Summarize emerging trends and issues in the field of information access and knowledge inquiry

In practice, the DIS places a high value on service, as demonstrated through leadership and contributions in committee work within the College of Information as well as the broader university. Engagement in external service is found among faculty engaged in local, regional, national, and international professional organizations, as well as community service. Examples include the organization and sponsorship of research forums and conferences. The DIS proactively facilitates professional networks, including students and alumni.

The DIS students are engaged in service activities through the Denton-headquartered Library and Information Science Students Association, a student-run organization, and the ALA student chapter. LISSA (https://unt.campuslabs.com/engage/organization/lisstudentassociation) organizes activities and events that promote academic and professional development. The annual LISSA Fall Kick-Off and All School Day (on topics such as "Choosing your Career Path") provide a learning and networking opportunity for students to gain insight into the field as well as a time to meet with professors and colleagues. Through their social media accounts, they share information relevant to students, such as job opportunities, scholarships, research opportunities, conferences, webinars, and activities.

Students in each of the cohorts are encouraged to have their own chapter of LISSA and offer localized programming. Below are some examples of cohort activities:

- The Maine, New Hampshire, and Vermont cohort held an All School Day at the Manchester City Library, where a panel of practitioners spoke about their positions.
- The Virginias cohort held an All School Day on finding and getting a job.
- The Greater Los Angeles cohort held a Resume and Interviewing Workshop.

Standard 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 DIS vision, mission, goals, and objectives (VMGO) form the essential frame for external and internal evaluation of the master's program. The VMGO are posted publicly on the department's website (https://informationscience.unt.edu/mission) and published in the UNT Graduate Catalog and in various promotional materials. Additionally, annual student evaluations of the master's degree program are posted (https://informationscience.unt.edu/node/971).

Standard I.4.1

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

The DIS master's program evaluation involves students, faculty, employers, alumni, and other constituents. The external evaluation, which includes conducting regular surveys of graduates, alumni, and employers,

focuses on their perspectives of the VMGO as well as assessing student outcomes. The three instruments that are routinely used are the:

- End of Program evaluation (exit questionnaire) – conducted every semester, three times a year (Appendix 4),
- Recent Graduate Placement Survey – conducted annually (Appendix 5), and
- Employers Feedback Survey – conducted annually (Appendix 6).

The three main instruments are designed with the master's program objectives in mind and explicitly solicit responses to each of the program objectives. Another evaluation tool is the Alumni Questionnaire, which is conducted annually (Appendix 7: Alumni Survey and Results).

The End of Program (EOP) evaluation or exit questionnaire is one of the main instruments used to assess the program objectives and student learning outcomes (Appendix 4: EOP Evaluation of the MS Program Objectives 2013-2019). The End of the Program Assessment Committee designed the questionnaire and was approved by the faculty representing the DIS program objectives and the SLOs. In the survey, the six program objectives are converted into 13 statements regarding tasks that they can perform or skills. Students are asked to rate their ability to perform the 13 tasks/skills as a result of completing the program. Each of the five provided responses is given a score from five to one as: 5 - Excellent, 4 - Very Good, 3 - Good, 2 - Fair, and 1 - Poor. The survey results for the past seven years (Table I.5 and Appendix 4) showed that most of the mean scores are above 4 (Very Good). 2019 scores on average, especially, are better than previous years. The response rates of the EOP evaluation surveys were as follows: 2017 - 84% (326/388), 2018 - 92% (388/422), and 2019 - 83% (274/331).

The DIS uses different methods to assess student learning outcomes. Besides the three main instruments discussed above, faculty teaching is evaluated through the Student Perceptions of Teaching (SPOT) administered by UNT. All students have the opportunity to complete the SPOT evaluation for their courses; however, participation is not mandatory. UNT sends several reminders directly to the students, and the response rate varies. Faculty are encouraged to view their SPOT evaluations at the conclusion of the semester and make adjustments to their syllabi and teaching as needed. They are required to report the SPOT scores of their courses for annual performance evaluation.

Faculty assess how well students have met learning outcomes through the review of course assignments from individual courses. Assignments include graded papers, quizzes, exams, project reports, and video recordings of in-class presentations. They are encouraged to demonstrate course revision based on student feedback in their annual performance evaluation narratives.

For practica and internships, each faculty supervisor works with the site supervisor (or a mentor in the case of school librarianship) to assign the student a pass/fail grade. The site supervisor also completes an evaluation form to assess student performance. In the case of school librarianship, the mentor must complete a proficiency checklist, stating that the student is proficient in each area of the list (Appendix 11: Practicum Forms and Examples).

Table I.5 End of Program (EOP) Evaluation 2013-2019: Means of Objective-Related Questions

Survey Questions Evaluated	*Year(s) Evaluated*						
	2013	*2014*	*2015*	*2016*	*2017*	*2018*	*2019*
1. Remain flexible and able to manage change in a technology-driven and knowledge-based environment.	*4.4*	*4.4*	*4.4*	*4.4*	*4.5*	*4.5*	*4.5*
2. Collaborate, interact with, and understand the needs of diverse populations in a technological and global information society.	*4.4*	*4.5*	*4.5*	*4.5*	*4.5*	*4.5*	*4.5*
3. Understand human information behavior in order to design and implement information systems and services that meet user needs.	*4.3*	*4.3*	*4.3*	*4.3*	*4.4*	*4.4*	*4.2*
4. Effectively evaluate, synthesize, and present information for client/user use.	*4.4*	*4.5*	*4.5*	*4.4*	*4.5*	*4.4*	*4.1*
5. Develop and implement conceptual and technological systems and structures for the organization of information in any format for effective access.	*3.9*	*3.9*	*3.9*	*3.9*	*4.0*	*4.1*	*4.5*
6. Plan, manage, and/or implement information systems in a networked environment for the creation, organization, and dissemination of information.	*4.0*	*4.0*	*4.1*	*4.1*	*4.2*	*4.2*	*4.7*
7. Demonstrate the communication skills necessary for personal and professional growth, leadership, interaction, and collaboration in appropriate professional contexts.	*4.5*	*4.5*	*4.5*	*4.5*	*4.6*	*4.6*	*4.7*
8. Participate in teaching, research, and service activities that contribute to the advancement of the library and information science field.	*4.3*	*4.3*	*4.3*	*4.3*	*4.3*	*4.3*	*4.8*
9. Understand the importance of professional development, continuing education, and participation in professional organizations.	*4.6*	*4.7*	*4.6*	*4.6*	*4.6*	*4.7*	*4.7*
10. Participate in networking activities for personal and professional growth, leadership, collaboration, policy development, and change management.	*4.3*	*4.3*	*4.3*	*4.2*	*4.3*	*4.3*	*4.6*
11. Understand and uphold the philosophies, principles, and legal and ethical responsibilities of the library and information science field.	*4.6*	*4.7*	*4.6*	*4.6*	*4.6*	*4.6*	*4.4*
12. Demonstrate additional knowledge and competencies appropriate to my individual interests, specializations, and career goals.	*4.5*	*4.5*	*4.5*	*4.5*	*4.5*	*4.5*	*4.8*
13. Relate the methodologies and content of other disciplines to the information field, and understand the contribution of the information field to other disciplines.	*4.4*	*4.4*	*4.3*	*4.4*	*4.4*	*4.4*	*4.5*

At the end of the program, students either complete an End of Program (EOP) examination or take two 3-credit hour organized seminar courses – INFO 5970: Advanced Topics Seminar I and INFO 5980: Advanced Topics Seminar II – which focus on completing research projects. An overwhelming majority of students choose to take the EOP examination instead of the two 3-credit hour organized seminar courses. For example, in Spring 2019, 137 students took the EOP examination, and three students were enrolled in INFO 5970: Advanced Topics Seminar I and two students enrolled in INFO 5980: Advanced Topics Seminar II. The pass/fail rates for the EOP examination from Spring 2013 to Spring 2019 are included in Table I.6. Most students (more than 92%) passed the EOP examination or the two seminar courses.

The DIS solicits and welcomes input through faculty retreats, student representation on department governance committees, and focus groups and meetings with constituents, including members of the Board of Advisors and the Alumni Society.

Table I.6 End of Program (EOP) Exam Pass/Fail Rates

Semester	# of Students	# of Passes	# of Fails	% Passed
Spring 2013	105	101	4	96%
Summer 2013	152	145	7	95%
Fall 2013	106	101	5	95%
Spring 2014	106	101	5	95%
Summer 2014	110	106	4	96%
Fall 2014	86	82	4	95%
Spring 2015	89	86	3	97%
Summer 2015	85	81	4	95%
Fall 2015	93	88	5	95%
Spring 2016	84	79	5	94%
Summer 2016	86	79	7	92%
Fall 2016	89	86	3	97%
Spring 2017	117	104	13	89%
Summer 2017	130	124	6	95%
Fall 2017	141	136	5	96%
Spring 2018	175	162	13	93%
Summer 2018	131	126	5	96%
Fall 2018	114	107	7	94%
Spring 2019	137	130	7	95%

Standard 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.

The DIS master's program has policies and multiple arenas for decision making and explicit documentation of the processes.

The DIS Bylaws (https://informationscience.unt.edu/departmental-policies) document is the most important one defining the operations of the department and its programs. The Bylaws define and make distinctions between administrative and faculty roles, and provide guidance on the function of the Faculty-Student Council and standing committees. They specify the standing committee structure of the department, including the methods for appointing committee members.

The primary decision making avenue for the DIS is the Faculty-Student Council meetings (Appendix 8: Faculty Student Council Meeting Minutes). Faculty-Student Council members include all full-time faculty in the department who hold regular and continuing appointments, full-time staff, and student representatives (traditionally, the president of LISSA). The Faculty-Student Council meets monthly during the academic year. Per the DIS Bylaws, the chair, executive committee, or three primary faculty members may call special meetings of the council if deemed necessary. The council provides oversight or input on all aspects of the department, including curriculum, faculty hiring, promotion and tenure, and graduation of students. Important decisions, including any change of the program mission, vision, goals, and objectives need to be proposed to the council meeting and approved by faculty. The decisions made in these meetings are documented in the meeting minutes (Appendix 8).

The council meeting minutes record the activities by faculty committees, departmental programs, and student groups and include examples of the evaluation of the program's success in achieving its mission, goals, and objectives. For example, the Faculty-Student Council voted to replace the End of Program comprehensive exam with an ePortfolio based on EOP Evaluation Survey data and the recommendation of the End of Program Assessment Committee in 2018. The End of Program Assessment Committee conducted an extensive review of the end of program assessments used by other ALA-accredited library and information sciences master's programs and presented this data to the faculty for consideration when making the decision.

The DIS Executive Committee serves in an advisory capacity to the Chair and typically meets monthly during the academic year, scheduling called meetings as necessary. It consists of one elected faculty member per tenure-track rank. This committee reviews and proposes, if any, changes to the program's mission, goals, and objectives for faculty approval at the council meeting.

The evaluation of the program's success in achieving its mission, goals, and objectives is conducted through several surveys, student core course evaluations, and the BOA meetings, as explained in I.4.

Standard I.6

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

The DIS has a systematic planning process, as described in Appendix 3. That document specifies that the results of the evaluation are used in the following ways:

a) The Chair uses the results to develop a presentation about the State of the Department, which is presented to faculty, staff, and Board of Advisors (BOA) in the beginning of an academic year for discussion;

b) The Chair uses the results to develop a draft of the IS Strategic and Working Plan for the next five years. This draft is then discussed by faculty, staff, and student representatives at the Department's annual faculty/staff retreat; which, in turn, sets the charge for each of the Department's standing committees to act to make improvements to the program, curriculum, and related areas;

c) The Chair uses the results to develop the budget for the next academic year, specifically to ask for more faculty lines, staff lines, and other resources;

d) Faculty and Chair use the results to negotiate faculty workload for the next academic year, and to discuss ways that individual faculty could grow to their full potential;

e) Faculty committees use the results to plan their tasks. For example, the Curriculum Committee developed peer review guidelines in response to a request from administration; the Student Admission Committee reviewed the DIS enrollment situations which helped the Department to revise one of its goals;

f) Faculty members use the results to improve their teaching and advising. They are required to report the SPOT scores of their courses and address ways to enhance student learning in their annual evaluation documents;

g) Staff and the Chair use the results to revise staff job descriptions, usually at the end of an academic year. For example, the Department increased its staff number from six to eight in 2019;

h) The Chair uses the results to communicate departmental resource needs with the College, including the advising office, the Dean, and the associate deans. For example, the alumni survey indicated that more efforts should be made to connect alumni with the Department.

The Department's systematic planning process is focused on achieving the Department's goals, program objectives, and student learning outcomes, This process is demonstrably effective and has produced consistent, satisfactory outcomes as evidenced by the survey results and feedback from students, graduates, employers, and alumni.

STANDARD II: CURRICULUM

INTRODUCTION

The curriculum of the UNT DIS master's program has continued to evolve and expand, meeting the needs of its constituents and the changes in the field. While the UNT DIS master's program is one of the pioneers in online delivery, the program maintained face-to-face course offerings as well as requiring a one-day on-site institute for the core courses. The program continues to add courses, specialized programs, and concentrations that give students the flexibility needed to prepare them for a job in a continuously changing work environment.

Research plays an important part of curriculum development with faculty integrating current research into courses through continual research, faculty grants, and knowledge gained through active participation in professional associations. In striving to achieve UNT's four bold goals, we have recruited new faculty with expertise in new areas, such as data science and cyber-security, and also strengthened traditional areas, such as school librarianship and youth librarianship and literature. We help students to gain knowledge and practical skills through internships and student association activities, including leadership activities and scholarships.

Curriculum in the Department of Information Science is continually updated to reflect current trends and processes in the profession. Faculty propose additions, deletions, and modifications of courses and programs of study as needed. Individual faculty often propose new courses based on changes in standards or technologies and new areas of research, as well as growing trends. Alternatively, the department Chair may ask faculty to develop new courses based on student demand or need. Faculty first approach the Department Chair with ideas for new courses or course revisions which are then passed to the DIS Curriculum Committee. Particulars of the actual course creation and approval process are discussed in II.5.

Evaluation of the curriculum is continuous through individual faculty review and assessments received from stakeholders. Recommendations for updates and/or examination of curriculum areas is detailed in the DIS Strategic and Working Plan with responsibility assigned to action items.

Since our last accreditation, there have been a number of changes and activities carried out by the Curriculum Committee and the faculty with participation from representative students. These changes were based on feedback from stakeholders, such as students, employers, and the Board of Advisors. Some of the activities include:

- Review of core and required courses.
- The addition of an ePortfolio as the end-of-program requirement, replacing the comprehensive exam.
- Continual review of courses and programs of study, and work on converting programs of study into official concentrations that will appear on student transcripts.
- Offering new courses and the addition of new programs of study in music and rural librarianship.
- The addition of new concentrations in the Ph.D. program.
- The addition of a new Master in Data Science.
- The restructuring of the Bachelor of Science in Information Science and Applied Technology.
- The addition of a new Bachelor of Science in Data Science.

The master's curriculum fully addresses the accreditation standards with courses emphasizing theoretical understanding, conceptual and application knowledge, professional socialization, and problem-solving

skills. The program prepares students to become professionals who will continue to develop and increase their knowledge and skills throughout their professional careers.

The following sections address how the program's curriculum continues to meet the Curriculum Standard.

Standard II.1

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

The ALA Curriculum Standard serves as the foundation of the Department of Information Science (DIS) master's program and its curriculum, and the goals and objectives of the program are closely aligned with this standard. The three core courses of the master's program, required for all master's students, introduce the students to the discipline of library and information sciences.

The core courses include:

- **INFO 5000: Information and Knowledge Professions**
- **INFO 5200: Information Organization**
- **INFO 5600: Information Access and Knowledge Inquiry**

Table II.1 illustrates how each of the program objectives maps to the content of the core courses. Program objectives are also covered outside of the courses as evident in the course syllabi.

Table II.1 Program Objectives Mapped to Core Courses

Program Objectives	Core Courses
The roles and impacts of information policies, practices, and information itself on diverse populations, including underserved groups, in a rapidly changing technological and global information society.	INFO 5000 INFO 5600
The design and implementation of conceptual and technological systems and services to facilitate the discovery, identification, selection, acquisition, organization and description, storage and retrieval, preservation, dissemination, management, and use of recordable information and knowledge in any format for effective access.	INFO 5000 INFO 5200 INFO 5600
The study of human information behavior in order to develop and implement information systems and services that meet user needs related to information and knowledge creation, communication, discovery, identification, selection, retrieval, analysis, interpretation, evaluation, synthesis, management, and use.	INFO 5000 INFO 5200 INFO 5600

The effective use of communication and networking for personal and professional growth, leadership, collaboration, policy development, and change management.	INFO 5000 INFO 5200 INFO 5600
Teaching, research, and service, including interdisciplinary activities that contribute to the advancement of the field.	INFO 5000 INFO 5200 INFO 5600
The philosophy, principles, and legal and ethical responsibilities of the field.	INFO 5000 INFO 5600

Table II.2 illustrates how each of the program objectives maps to the eight ALA Core Competencies (http://www.ala.org/educationcareers/careers/corecomp/corecompetences). The competencies are developed across the spectrum of the DIS courses.

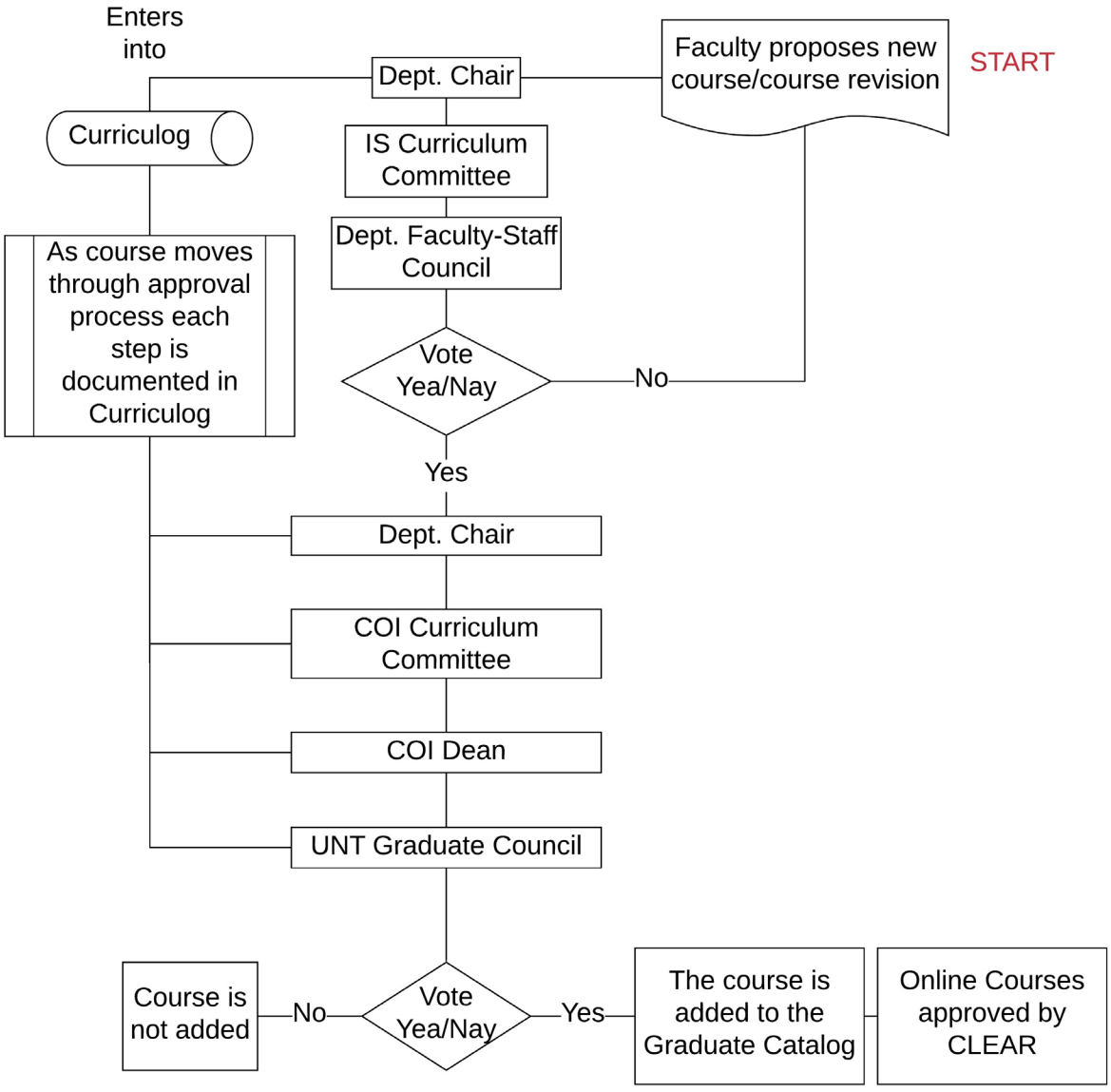
Table II.2. Courses Mapped to ALA Core Competencies

ALA Core Competencies	DIS courses
Foundations of the Profession	5000, 5200, 5600
Information Resources	52xx, 537x, 56xx, 54xx, 58xx
Organization of Recorded Knowledge and Information	52xx, 58xx
Technological Knowledge and Skills	52xx, 53xx, 54xx, 55xx, 57xx, 58xx
Reference and User Services	56xx, 50xx
Research	50x0, 508x, 53xx, 59xx
Continuing Education and Lifelong Learning	5095, 532x, 5347, 5350, 5360, 5369, 5410, 544x, 5050, 5845
Administration and Management	5000, 5200, 5600, 5070, 53xx, 5750, 5760, 5814, 5819

Systematic Planning Process

The curriculum in the Department of Information Science is continually updated to reflect current trends and processes in the profession. Faculty propose additions, deletions, and modifications of courses and programs of study as needed. Individual faculty members often propose new courses based on changes in standards or technologies and new areas of research and growing trends. Alternatively, the Department Chair may ask faculty to develop new courses based on student demand or need. Faculty first approach the Department Chair with ideas for new courses or course revisions which are then passed to the DIS Curriculum Committee. The DIS Curriculum Committee, which includes faculty members and a student representative, reviews these requests and brings them to the Faculty-Student Council for approval before being submitted to the UNT Graduate Council for approval. Figure II.1 illustrates a flowchart of the new course or course revision process.

Figure II.1 Curriculum Process Flow Chart



The DIS Curriculum Committee also reviews data collected from assessment surveys, students, and external constituencies, including the Board of Advisors and makes recommendations to the faculty concerning changes in the curriculum. Decisions regarding curriculum are documented in the DIS Curriculum Committee meeting minutes and Faculty-Student Council meeting minutes (Appendix 8: Faculty Student Council Meeting Minutes). The DIS Curriculum Committee meeting minutes were housed on SharePoint, but many were lost during a system upgrade. However, a limited number of the DIS Curriculum Committee meeting minutes are available at: https://untdliscoa.pbworks.com/w/browse/#view=ViewFolder&param=2020%20Curriculum.

The DIS Strategic and Working Plan (Appendix 2) includes a section on Curriculum, which provides the guidance for reviewing and revising the curriculum and structure of programs, providing innovative and interactive learning experiences to enhance student engagement, and ensuring interdisciplinary connections are made in learning experiences. The executive committee and department chair work together to review and revise the DIS Strategic and Working Plan yearly before submitting it to the faculty as a whole for review and adoption. This plan provides a regular schedule for reviewing all aspects of the curriculum (Appendix 3: DIS Systematic Planning Process).

One task included for the DIS Curriculum Committee in the 2018-2022 DIS Strategic and Working Plan called for the *"Review of …MS course rotation schedule annually for match between student demand and course offerings to revise as needed for optimal use of faculty and physical offerings."* The development of an updated course rotation schedule was completed in June 2019 and was posted on the DIS website (https://informationscience.unt.edu/course-rotation/). Faculty and student feedback identified a need for a more rigorous review of the rotation of courses, so it was specified as a task in the Strategic and Working Plan.

Another task included to *"Evaluate and revise, if necessary, the MS program exit requirements, including the End of Program (EOP) assessments."* In Spring 2019, the Chair established an *ad hoc* committee to design, develop, and implement the ePortfolio for use by incoming students in Fall 2019. The move to an ePortfolio instead of examinations or seminar courses reflects the larger trend at the University of North Texas to use online portfolios to showcase and assess student achievement of marketable skills from their courses. The *ad hoc* committee reviewed the literature on ePortfolios, especially their implementation in ALA-accredited library and information science programs. Starting in Fall 2019, the Capstone experience degree requirement for the Master of Science with a major in either Information Science or Library Science will be an ePortfolio. The ePortfolio will provide evidence that students have met the stated professional competencies (American Library Association and Association for Information Science & Technology), master's program objectives, and program-level student learning outcomes, and it is tied to the curriculum as students will include documentation from their courses (projects, assignments, etc.) to demonstrate mastery of these competencies, objectives, and learning outcomes. The ePortfolio development is discussed more fully in Appendix 12: ePortfolio Development.

Educational Experiences

The three core courses, which are required of all master's students, are the cornerstone for the study of theory, principles, practice, and legal, ethical issues, and values necessary for the provision of service in libraries and information agencies as well as other contexts (see Table II.1). The program offers courses at the 50xx level, and introduces library and information science foundations, economics, behavior, history, research, and the practicum to prepare the students for their roles of library and information professionals.

The curriculum delivery uses a variety of educational modalities, including face-to-face, hybrid of face-to-face and online, and completely online. One course delivery model used for the core courses (INFO 5000,

5200, and 5600) is the Institute format where students attend a one-day session to be oriented to the course and then complete the course online. Online courses are delivered both asynchronously and synchronously. Faculty use a variety of techniques to deliver course content in each of these modalities, such as active learning, flipped classroom, didactic lectures, group activities, group projects, and Socratic seminars and discussions. Students who have not worked in libraries and/or information settings are required to complete a practicum/field experience. School Librarianship students must complete a separate mentor/practicum process where no waivers are permitted.

Students in the master's program choose to major either in library science or information science, and can select one of the prescribed programs of study. Each major and program of study has specific requirements. These choices in major and program of study provide students with flexibility in their educational experience. Programs of study are added through the research and analysis of trends in the profession and faculty development. For example, the program of study in Archival Studies and Imaging Technology (https://informationscience.unt.edu/ms-ls-archival-studies-and-imaging-technology) was expanded based on the need for digital archivists and student demand. Additionally, students can choose to pursue a Graduate Academic Certificate (GAC) in addition to their master's degree.(See II.2.6 below for information on the Graduate Academic Certificate.)

Regular Curriculum Revision

The DIS master's program curriculum is continually evolving to make sure students have a solid basis for their work in libraries and information agencies as well as in other contexts.

In 2014, the DIS faculty approved changing the prefix for all courses from SLIS to INFO. The SLIS prefix referred to the former name of the DIS – the School of Library and Information Sciences. Changing the prefix to INFO reflects the diversity of the programs within the department and disassociates them from the old courses.

A total of 36 new DIS courses were added to the UNT Graduate Catalog from 2013 to 2019 (Table II.3), with 17 of these courses taught first as experimental courses and then approved by the DIS faculty to be included in the 2015-2016 Graduate Catalog. The course additions reflect changes in the profession and support the programs of study and the GACs. A majority of the new courses were added during the 2014-2016 period, including nine new 53xx courses reflecting the addition of archival courses, knowledge management, and rural librarianship. INFO 5714, 5715, and 5716 were changed to 5814, 5815, and 5816, respectively, when the new 58xx segment of digital content management courses were created. Additional 58xx courses were added to reflect the growing interest in digital curation and management, and a series of 55xx courses were added to reflect knowledge management and data analytics. INFO 5970 was changed to an advanced topic seminar I and INFO 5980 was added as an advanced seminar II. No courses were discontinued, but some were modified as to course number, name, and content.

Table II.3 New Courses Added to the Curriculum, 2013-2019

Course Number	Course Title
INFO 5041	Cognitive Science for Information Professionals
INFO 5085	Research Skills for Theses and Dissertations
INFO 5224	Metadata for Information Organization and Retrieval II
INFO 5240	Archival Arrangement and Description
INFO 5307	Knowledge Management Tools and Techniques
INFO 5310	Marketing and Customer Relationships for Information Professionals

INFO 5315	Competitive Intelligence
INFO 5325	Topics in Rural Libraries
INFO 5347	Digital Citizenship
INFO 5350	Library Partnership and Outreach
INFO 5369	Seminar in Special Types of Libraries and Information Systems
INFO 5371	Archives and Manuscripts
INFO 5375	Archival Appraisal
INFO 5427	Multi-ethnic Materials for Children and Young Adults
INFO 5442	Digital Storytelling
INFO 5443	Storytelling in Knowledge Transfer
INFO 5500	Foundational Principles in Knowledge Management
INFO 5501	Fundamentals of Data Analytics
INFO 5502	Analytic Tools, Techniques, and Methods
INFO 5503	Knowledge Management Processes and Practices
INFO 5634	Disaster/Emergency Management for Information Professionals
INFO 5635	Genomics and Translational Medicine for Information Professionals
INFO 5636	Community-based Health Information
INFO 5709	Data Visualization and Communication
INFO 5731	Computational Methods for Information Systems
INFO 5735	Usability and User Experience Assessment
INFO 5737	Information and Cyber-Security
INFO 5741	Digital Humanities
INFO 5760	Leadership in Technology
INFO 5810	Data Analysis and Knowledge Discovery
INFO 5841	Digital Curation Fundamentals
INFO 5842	Digital Curation Tools and Applications
INFO 5843	Preservation Planning and Implementation for Digital Curation
INFO 5844	Advanced Topics in Digital Curation
INFO 5845	Creating Online Content for Youth Services
INFO 5980	Advanced Topics Seminar in Information Science II

The DIS continues to be a member of WISE (Web-based Information Science Education) and, as part of this consortium, the DIS both offers courses to students from other universities and offers our students courses from member universities. In doing so, students can take courses not currently available in the DIS master's program curriculum. Appendix 13: WISE Courses Enrollment has information on enrollment in those courses.

The UNT also participates in the Federation of North Texas Area Universities along with Texas Woman's University (TWU) and Texas A&M University - Commerce (TAMU Commerce), which allows the DIS students the opportunity to cross-register at the member universities. Of the federation program, one student wrote:

> *Loved the ability to take courses through the federation program. That's how I got into this program from TWU and was one of my final courses at AM Commerce. The course at AM Commerce turned out to be the one that got me the job that I'll start in October working as a database administrator for a state agency. I couldn't be happier with this program. I came wanting to work with databases and that's exactly what I'm going to do. This program has improved my future and I am very grateful!* (Fall 2018 student comment on the EOP questionnaire)

The End of Program (EOP) examination has been a topic of discussion among the faculty and internal and external constituencies over the last seven years. In the 2015-2016 academic year, the DIS Curriculum Committee reviewed a proposal for adding two advanced topic courses (INFO 5960: Advanced Topics Seminar in Information Science I and INFO 5970: Advanced Topics Seminar in Information Science II) as another option for the EOP assessment in addition to the existing comprehensive exam, and it was approved after extensive discussion with internal and external constituencies with regards to the types of skills and competencies that students need in order to excel in today's work place. In December 2018, the DIS faculty voted to eliminate the EOP examination in favor of an ePortfolio option that was developed by an *ad hoc* committee.

In Spring 2019, the department chair established an *ad hoc* committee to design, develop, and implement the ePortfolio application for use by incoming students in Fall 2019. This committee reviewed the literature on ePortfolios, especially their implementation in ALA-accredited library and information science programs, and conducted a survey of the accredited programs; the results from that research indicated a good number of programs currently use ePortfolios as exit requirements for their students. The department's efforts coincide and build upon a broader UNT initiative called Career Connect (https://vpaa.unt.edu/careerconnect) that is spearheading the use of student portfolios in the university core curriculum as well as graduate programs. The approach Career Connect is taking includes mapping required competencies to what the provost's office calls "signature assignments", which are defined as, *An assignment to a core course meant to assess one or more core objectives. The signature assignment should be assigned in every section of the course that is taught* (https://vpaa.unt.edu/ccg/glossary). Appendix 12 describes in more detail the ePortfolio development.

For all students starting in the Fall 2019 semester, the Capstone experience degree requirement for the Master of Science with a major in either Information Science or Library Science is an ePortfolio application. The department's application uses Foliotek, UNT's enterprise ePortfolio platform, which is supported by the Career Connect staff. The *ad hoc* committee created an ePortfolio template that all students use. Students develop their ePortfolio during their program of study, completing sections of the ePortfolio each semester and also documenting their reflections on their learning and competency development in sections of the ePortfolio. The *ad hoc* committee surveyed instructors of the three Master of Science core courses (i.e., INFO 5000, INFO 5200, and INFO 5600) to discover which assignments they want to have considered as signature assignments. Successful completion of these assignments will be presented in each student's ePortfolio. During 2019-2020, instructors of elective courses will be surveyed to identify additional signature assignments, successful completion of which can be used to demonstrate achievement of other required or desired competencies. Information about the ePortfolio is available for students, faculty, and the public at: https://informationscience.unt.edu/capstone-experience-eportfolio.

Standard II.2

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.

The master's program objectives (Table II.1) require students to demonstrate knowledge and skills related to these aspects. The Department of Information Science offers comprehensive coverage of these topics through the variety of courses and the multiple offerings of the courses. The UNT Graduate Catalog (http://catalog.unt.edu/content.php?catoid=19&navoid=2010) for 2018-2019 lists 138 courses which include master's level courses as well as 15 seminars and provide opportunities for internships, practicums, cooperative education, and directed study (i.e., special problems courses). As stated earlier, 36 new courses have been added to the catalog since 2013. New course development is informed by SPOT, EOP survey, employee feedback survey, and suggestions from the Board of Advisors. The DIS faculty members also identify needs for new courses by research, attending workshops, or addressing the learning gap. Faculty members who develop the new courses prepare proposals and consult the Department Chair. With the approvals of the department chair and DIS Curriculum Committee, new courses are developed by individual faculty members as experimental courses, usually as 5900 and 5910 Special Problems courses, and address emerging topics. These courses must be offered at least twice and are reviewed by the DIS Curriculum Committee and the faculty before submission to the Graduate School for approval as permanent courses.

The DIS course number sequences illustrate the general organization of the curriculum by subject:

- 50xx library and information science (foundations, economics, behavior, history, research, practicum)
- 52xx information organization
- 53xx management and leadership of libraries and information centers
- 54xx information resources development
- 55xx knowledge management and data analytics
- 56xx information access and retrieval
- 57xx technological systems development and administration
- 58xx digital content management
- 59xx special problems (independent study) and seminars (including experimental courses)

Standard II.2 is mapped with the curriculum concerns (A-C) and areas (D-L) using the following coding:

Curriculum Concerns

A. Information Resources

B. Services

C. Technologies

Curriculum Areas

D. Information and Knowledge Creation

E. Communication

F. Identification, Selection, Acquisition

G. Organization and Description

H. Storage and Retrieval

I. Preservation and Curation

J. Analysis, Interpretation, Evaluation, Synthesis

K. Dissemination

L. Use and Users

M. Management of Human and Information Resources

The following table (Table II.4) demonstrates the connection between the curriculum areas specified in Standard II.2, ALA Core Competencies, DIS Course Number, and DIS Core/Required Courses.

Table II.4 DIS Core/Required Courses Mapped to Standard II.2 Elements

ALA Standard II.2 Elements	ALA Core Competencies	DIS Course Number	Core Course and First-Level Required Course Title
A, B, C, D, E, F, G, H, I, J, K, L, M	Foundations of the Profession	5000, 5200, 5600	INFO 5000: Information and Knowledge Professions INFO 5200: Information Organization INFO 5600: Information Access and Knowledge Inquiry
A, B, C, D, F, H, I, K, L, M	Information Resources	52xx, 537x, 56xx, 54xx, 58xx	INFO 5200: Information Organization INFO 5400: Information Resources Development INFO 5600: Information Access and Knowledge Inquiry INFO 5814: Web Content Development and Maintenance
A, B, C, D, G, H, I, L	Organization of Recorded Knowledge and Information	52xx, 58xx	INFO 5200: Information Organization INFO 5814: Web Content Development and Maintenance
A, B, C, D, E	Technological Knowledge and Skills	52xx, 53xx, 54xx, 55xx, 57xx, 58xx	INFO 5200: Information Organization INFO 5305: System Analysis and Design INFO 5306: Project Management for Information Systems INFO 5400: Information Resources Development INFO 5707: Data Modeling for Information Professionals INFO 5717: Networked Data Modeling and Processing INFO 5814: Web Content Development and Maintenance
A, B, C, F, I, K, L	Reference and User Services	56xx, 50xx	INFO 5000: Information and Knowledge Professions INFO 5600: Information Access and Knowledge Inquiry
A, B, C, D, E, J, K, L	Research	50x0, 508x, 53xx, 59xx	INFO 5000: Information and Knowledge Professions INFO 5080: Research Methods and Analysis INFO 5300: Management of Information Agencies INFO 5307: Knowledge Management Tools and Technologies
A, B, C, D, E, F, G, H, I, J, K, L, M	Continuing Education and Lifelong Learning	5000, 5090, 5095, 532x, 5347, 5350, 5360, 5369, 5410, 544x, 5050, 5845	INFO 5000: Information and Knowledge Professions INFO 5090: Practicum and Field Experience

A, B, C, D, E, F, G, H, K, L, M	Administration and Management	5000, 5200, 5600, 5070, 53xx, 5750, 5760, 5814, 5819	INFO 5000: Information and Knowledge Professions INFO 5200: Information Organization INFO 5300: Management of Information Agencies INFO 5307: Knowledge Management Tools and Technologies INFO 5600: Information Access and Knowledge Inquiry

In 2013, the DIS Curriculum Committee reviewed several course proposals, engaged in extensive discussions, and made recommendations that led to the approval of several new courses including INFO 5841: Digital Curation Fundamentals, INFO 5842: Digital Curation Tools and Applications, INFO 5843: Preservation Planning and Implementation for Digital Curation, and INFO 5844: Advanced Topics in Digital Curation. The four digital curation courses are part of the approved Graduate Academic Certificate (GAC) in Digital Curation. The GAC was created with an IMLS grant awarded to Dr. William Moen, Dr. Martin Halbert, and Dr. Jeonghyun Kim. The DIS Curriculum Committee reviewed and approved a request for a program change for this GAC in October 2016. A new requirement of the GAC includes completion of 12 credit hours of coursework, including nine hours of required courses and three hours of elective courses. See the following link for details: http://catalog.unt.edu/preview_program.php?catoid=21&poid=8472.

The DIS number sequences are represented in nearly every program of study (POS), depending on the focus of the POS. The description of the General Program of Study in particular demonstrates the logic of its coverage. The link to the programs of study and their descriptions can be found at: https://informationscience.unt.edu/programs-study/.

The following table (Table II.5) indicates the alignment of each standard element with our core and first-level required courses across different programs of study.

Table II.5 Mapping Standard Components II.2.1 to II.2.6 with Core/Required Courses

II.2 Standard Elements	Corresponding Core/First-Level Required Courses in our Curriculum
II.2.1 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;	INFO 5000: Information and Knowledge Professions INFO 5300: Management of Information Agencies
II.2.1 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;	INFO 5000: Information and Knowledge Professions INFO 5300: Management of Information Agencies
II.2.2 Emphasizes an evolving body of knowledge that reflects the findings of basic and applied research from relevant fields;	INFO 5080: Research Methods and Analysis
II.2.3 Integrates technology and the theories that underpin its design, application, and use;	INFO 5000: Information and Knowledge Professions INFO 5200: Information Organization INFO 5206: Information Retrieval and Design INFO 5223: Metadata and Networked Information Organization/Retrieval INFO 5305: System Analysis and Design INFO 5707: Data Modeling for Information Professionals

II.2.4 Responds to the needs of a diverse and global society, including the needs of underserved groups;	INFO 5000: Information and Knowledge Professions INFO 5300: Management of Information Agencies INFO 5600: Information Access and Knowledge Inquiry
II.2.5 Provides direction for future development of a rapidly changing field;	INFO 5000: Information and Knowledge Professions INFO 5300: Management of Information Agencies INFO 5307: Knowledge Management Tools and Technologies INFO 5731: Computational Methods for Information Systems
II.2.6 Promotes commitment to continuous professional development and lifelong learning, including the skills and competencies that are needed for the practitioner of the future.	INFO 5000: Information and Knowledge Professions INFO 5080: Research Methods and Analysis INFO 5090: Practicum and Field Experience INFO 5300: Management of Information Agencies

Curriculum development in the DIS is an on-going activity informed by data and information collected every semester. At the university level, the Institutional Effectiveness process focuses on improving UNT's student learning outcomes (SLOs) and services. UNT assesses the student learning outcomes of core curriculum classes using the Institutional Effectiveness system, called Improve. Therefore, the DIS programs must report the student learning outcomes and the measurement of achievement and evidence for each of these SLOs in the Improve database. Student Perceptions of Teaching (SPOT) is the student evaluation system for UNT, implemented in Summer 2015, to comply with the state of Texas House Bill 2504. The SPOT system offers evaluation forms that support different pedagogical formats (e.g., large lecture, online, studio). Part of the SPOT evaluations deals with curriculum and course content. Comments from the evaluation are assessed by the Department and the faculty every semester to determine the level of coverage and popularity of courses, as well as their relevance to students' specializations and career paths.

The SPOT evaluations for core courses between 2015 and 2019 averaged 4.18 (out of 5 – superior) for the Overall Summative Rating and 6.45 (out of 7 - most challenging) for the Challenged and Engagement index, with an overall response rate of 47.2% (Table II.6). The results indicate the high quality of the DIS core courses.

Table II.6 SPOT Evaluations for Core Courses from 2015 to 2019

Courses	Year	Overall Summative Rating (out of 5)	Challenge and Engagement Index (out of 7)	Response Rate
INFO 5000	2015	4.1	4.9	52.80%
	2016	4.5	5.6	60.10%
	2017	4.2	5.2	47.20%
	2018	4.1	5.6	50.90%
	2019	4	5.5	59.60%
INFO 5200	2015	4	6	28.50%
	2016	4.1	6.5	37.40%
	2017	3.9	6.1	49.00%
	2018	4	5.9	37.60%
	2019	4.4	6.3	49.23%
INFO 5600	2015	3.7	5.5	40.63%
	2016	4.4	5.9	54.81%
	2017	4.3	5.7	45.20%
	2018	4.4	5.7	53.56%
	2019	4.6	5.8	42.01%
Averages		**4.18**	**6.45**	**47.2%**

The department also collects information through the End of Program assessment and employer feedback surveys with regard to the 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. The department regularly seeks input and feedback from external constituencies, such as our Board of Advisors and potential employers about planning and revisions to the curriculum.

The curriculum:

II.2.1 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;

The DIS core courses (INFO 5000, INFO 5200, and INFO 5600) address the role of information professionals, management and leadership skills, and the abilities to provide services and collections for the communities students are going to serve after they graduate.

The DIS 50xx courses, 52xx courses, 53xx courses, and 54xx courses allow students to develop knowledge and skills as a qualified library and information professional who understands the foundations of LIS, human information behavior, and information organization theories and technologies. The core and required courses prepare leadership skills (e.g., interpersonal soft skills of leadership, teamwork, and professional communication skills) for our students; and, hence, they learn the skills necessary to perform the

management of libraries and information centers, and information resource development when they graduate.

To foster the development of leadership, the DIS faculty encourages the students to take on leadership roles in both the Library and Information Science Student Association (LISSA) chapter boards and UNT Association for Information Science and Technology (ASIS&T) Student Chapter. The UNT ASIS&T student chapter provides opportunities for students to build knowledge in the field of Information Science, while connecting with faculty and industry professionals. Under the supervision and advising of Drs. Jeonghyun Kim and Daniel Alemneh, our UNT ASIS&T Student Chapter was selected as the recipient of the award for ASIS&T Student Chapter of the Year in both 2018 and 2019. The jury considered the chapter's membership, activities, communications, financial and administrative management, and contributions to ASIS&T and the broader information science community. In addition to the Chapter of the Year award, the Student Chapter's President, Ana Roeschley, also received the 2018-2019 ASIS&T New Leader award. This award is given to members who show leadership potential within the field. Ana Roeschley credits the recognition to the support of the chapter's faculty advisors; associate professor, Dr. Jeonghyun Kim, and adjunct professor, Dr. Daniel Alemneh, supervisor in the Digital Curation Unit at UNT Libraries.

Based on the exit survey in the End of Program assessment (see Table II.7 below), the student evaluation of program objectives is clearly demonstrated. This survey used a Likert scale with the following rating: 5.0 = "Strongly Agree," 4.0 = "Agree," 3.0 = "Neutral," 2.0 = "Disagree," 1.0 = "Strongly Disagree." The evaluation results reveal that our students gave high scores on our program fostering their professional development from several aspects, including professional communication skills, activities that contribute to the advancement of the library and information science (LIS) field, and ethical responsibilities of the LIS field.

Table II.7 Student Evaluation of Program Objectives Regarding Serving LIS Profession, 2013-2019

Survey Questions Evaluated	Year(s) Evaluated						
	2013	2014	2015	2016	2017	2018	2019
7. Demonstrate the communication skills necessary for personal and **professional growth, leadership, interaction, and collaboration in appropriate professional contexts.**	4.5	4.5	4.5	4.5	4.6	4.6	4.7
8. Participate in teaching, research, and service activities that contribute to the **advancement of the library and information science field.**	4.3	4.3	4.3	4.3	4.3	4.3	4.8
11. Understand and **uphold the philosophies, principles, and the legal and ethical responsibilities of the library and information science field.**	4.6	4.7	4.6	4.6	4.6	4.6	4.4

With the employer survey, the same sets of questions were sent as a survey to employers and recent graduates who have entered the job market. In general, as shown in Table II.8, over half of employers perceived that our students' professional communication skills and ability to engage in professional activities are excellent, while most of our recent graduates felt their professional communication skills and ability to engage in professional activities are either excellent or very good.

Table II.8 Survey Results Regarding Serving LIS Profession, 2016-2019

Survey Questions	Evidence Source	2016	2017	2018	2019
Ability to demonstrate the **communication skills necessary for personal and professional growth, leadership**, interaction, and collaboration in appropriate professional contexts.	Employer Feedback Survey #2a.1	N/A	Excellent (50%) Very Good (33.33%)	Excellent (58.33%) Very Good (33.33%)	Excellent (58.33%) Very Good (29.17%)
	Recent Graduate Placement Survey #8c.1	Excellent (40%) Very Good (50%)	Excellent (45.24%) Very Good (42.86%)	Excellent (41.67%) Very Good (31.25%)	N/A
Ability to **participate in networking activities for personal and professional growth, leadership**, collaboration, policy development, and change management.	Employer Feedback Survey #3a.1	N/A	Excellent (38.89%) Very Good (27.78%)	Excellent (60%) Very Good (10%)	Excellent (56.52%) Very Good (26.09%)
	Recent Graduate Placement Survey #8d.1	Excellent (31.25%) Very Good (34.38%)	Excellent (34.15%) Very Good (41.46%)	Excellent (38.3%) Very Good (27.66%)	N/A

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

The first-tier elective course that addresses an evolving body of knowledge that reflects the findings of basic and applied research from relevant fields is INFO 5080: Research Methods and Analysis. This course not only covers the principles, techniques, and areas of research but also introduces basic research designs and measurement issues, evaluation of representative studies, and quantitative/qualitative methods as well as their applications. Additionally, the program emphasizes an evolving, relevant body of knowledge by offering 36 new courses (Table II.3), such as INFO 5310: Marketing and Customer Relationships for Information Professionals, INFO 5315: Competitive Intelligence, INFO 5347: Digital Citizenship, INFO 5709: Data Visualization and Communication, INFO 5731: Computational Methods for Information Systems, INFO 5737: Information and Cyber-Security, and INFO 5842: Digital Curation Tools and Applications. The End of Program assessment from 2013 to 2019 (see Table II.9 below) shows that students gave a rating of 4.5/5 for the additional knowledge and competencies appropriate to their individual interests, specializations, and career goals. On average, the students also gave a rating of 4.4/5 on the degree that our courses can relate the methodologies and content of other disciplines to the information field.

Table II.9 Student Evaluation of Program Objectives Regarding Relevant Body of Knowledge, 2013-2019

Survey Questions Evaluated	Year(s) Evaluated						
	2013	2014	2015	2016	2017	2018	2019
12. Demonstrate **additional knowledge and competencies** appropriate to my individual interests, specializations, and career goals.	4.5	4.5	4.5	4.5	4.5	4.5	4.8
13. **Relate the methodologies and content of other disciplines to the information field**, and understand the contribution of the information field to other disciplines.	4.4	4.4	4.3	4.4	4.4	4.4	4.5

The employer surveys (Table II.10) indicate that both employers and our recent graduates recognize our program graduates have excellent/very good abilities to participate in teaching, research, and service activities that contribute to the advancement of the library and information science field. Similarly, the employers and our recent graduates confirm our program graduates have the ability to relate the methodologies and content of other disciplines to the information field, as well as understand the contribution of the information field to other disciplines. However, there is room for improvement.

Table II.10 Survey Results Regarding Participating in Teaching, Research, and Service Activities, 2016-2019

Survey Question	Evidence Source	2016	2017	2018	2019
Ability to participate in teaching, research, and service activities that contribute to the advancement of the library and information science field.	Employer Feedback Survey #3a.2		Excellent (52.94%) Very Good (11.76%)	Excellent (40%) Very Good (30%)	Excellent (47.83%) Very Good (21.74%)
	Recent Graduate Placement Survey #8c.3	Excellent (32.14%) Very Good (35.71%)	Excellent (35.71%) Very Good (38.10%)	Excellent (32.65%) Very Good (32.65%)	N/A

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

The program includes courses with the prefix 57xx (technological systems development and administration) designed to enhance the students' capabilities to integrate technology and the theories that support its design, application, and use. Since 2013, six technological courses with the prefix 57xx have been added to the curriculum, including INFO 5709: Data Visualization and Communication, INFO 5731: Computational Methods for Information Systems, INFO 5735: Usability and User Experience Assessment, INFO 5737:

Information and Cyber-Security, INFO 5741: Digital Humanities, and INFO 5760: Leadership in Technology. As a result, the student evaluation score of program objectives regarding technology design, application, and use (Table II.11) has been increasing.

Table II.11 Student Evaluation of Program Objectives Regarding Technology Design, Application, and Use, 2013-2019

Survey Questions Evaluated	Year(s) Evaluated						
	2013	2014	2015	2016	2017	2018	2019
3. Understand human information behavior in order to design and implement information systems and services that meet user needs.	4.3	4.3	4.3	4.3	4.4	4.4	4.2
5. **Develop and implement conceptual and technological systems and structures for the organization of information in any format for effective access.**	3.9	3.9	3.9	3.9	4.0	4.1	4.5
6**. Plan, manage, and/or implement information systems in a networked environment for the creation, organization, and dissemination of information.**	4.0	4.0	4.1	4.1	4.2	4.2	4.7

The employer feedback survey (2017-2019) in Table II.12 found that over half of employers (ranging from 52.63% to 63.4%) confirm that our graduates have an excellent ability to manage change effectively in a technology-driven and knowledge-based environment. In the same table, the recent graduate placement survey (2016-2018) concurs with the fact that, on average, 73% of graduates rank their ability to manage change effectively either excellent or very good.

Table II.12 Survey Results Regarding Technology Design, Application, and Use, 2016-2019

Survey Question	Evidence Source	2016	2017	2018	2019
Ability to remain flexible and overall ability to manage change effectively in a technology-driven and knowledge-based environment.	Employer Feedback Survey #1a.1	N/A	Excellent (52.63%) Very Good (31.58%)	Excellent (63.64%) Very Good (36.36%)	Excellent (54.17%) Very Good (20.83%)
	Recent Graduate Placement Survey #8a.1	Excellent (41.94%) Very Good (42.42%)	Excellent (36.56%) Very Good (29.55%)	Excellent (43.14%) Very Good (27.45%)	N/A

II.2.4 Responds to the needs of a diverse and global society, including the needs of underserved groups;

To respond to the needs of a diverse and global society, the courses in the 50xx library and information science (foundations, economics, behavior, history, research, and practicum) and the 53xx management of libraries and information centers address the value of inclusion, diversity, and globalization in terms of working with different user groups. As presented in Table II.13, the average student evaluation score (4.5/5) of the program objective, *"Collaborate, interact with, and understand the needs of diverse populations in a technological and global information society"*, demonstrates that the needs of diverse populations have been well received by our students.

Table II.13 Student Evaluation of the Program Objective Regarding Working with Diverse Populations, 2013-2019

Survey Question Evaluated	Year(s) Evaluated						
	2013	2014	2015	2016	2017	2018	2019
2. Collaborate, interact with, and understand **the needs of diverse populations** in a technological and global information society.	4.4	4.5	4.5	4.5	4.5	4.5	4.5

As presented in Table II.14, the employers of our graduates and our recent graduates also share the positive perception about the graduates having excellent/very good abilities to collaborate, interact with, and understand the needs of diverse populations in a technological and global information society.

Table II.14 Survey Results Regarding Working with Diverse Populations, 2016-2019

Survey Question	Evidence Source	2016	2017	2018	2019
Ability to collaborate, interact with, and **understand the needs of diverse populations** in a technological and global information society.	Employer Feedback Survey #4a.1	N/A	Excellent (55.56%) Very Good (27.78%)	Excellent (70%) Very Good (30%)	Excellent (52.17%) Very Good (21.74%)
	Recent Graduate Placement Survey #8a.2	Excellent (36.36%) Very Good (45.45%)	Excellent (37.78%) Very Good (42.22%)	Excellent (55.56%) Very Good (27.78%)	N/A

A Certificate of Advanced Study in Rural Librarianship (https://informationscience.unt.edu/certificate-advanced-study/) is offered for those who seek further specialization in this particular aspect of library or information science, such as those entering the program that need to prepare for a level of competency beyond that provided by the master's degree. The emphasis on rural librarianship is a direct result of a research funded and conducted by Dr. Yunfei Du on rural libraries in Texas and recognizes these underserved groups.

II.2.5 Provides direction for future development of a rapidly changing field;

In 2018, Drs. Jiangping Chen and Jeff Allen initiated the DIS Brown Bag meetings (https://informationscience.unt.edu/research-meetings) focusing on providing directions for future development of a rapidly changing world and improving the quality of scholarly work at the department. The meetings are meant to support faculty and graduate students in their research projects. The weekly meetings are open to all faculty and students who are interested in sharing their ideas and emerging trends in the field of library science or information science.

In addition, we have faculty members integrating IMLS-funded research results into teaching. For example, the Data Literacy Leadership Project led by Drs. Marino, Evans, Schultz-Jones, and Smith aims to develop competencies and leadership skills that support data-informed decision-making and address the need for data use services in school and public libraries. In addition, this project not only scales up training to provide access to in-service library professionals in underserved communities but also involves community design teams to promote changes that adapt to community needs in a rapidly changing information environment.

Previously mentioned in section II.2.3, the project offers a variety of technological courses and added six new courses over the period from 2013 and 2019 to address the rapidly changing technology trends in the field. Another 30 new courses have been created based on the feedback from students and the Board of Advisors to motivate students to learn new knowledge and to meet the demands of the fast-paced and transforming information field.

As shown in Table II.15, student evaluation of the program objectives regarding the development of a rapidly changing field shows that the graduates rate their flexibility and ability to manage change in a technology-driven and knowledge-based environment higher (4.5/5) in the most recent two years. The survey results in Table II.11 also validate the positive perceptions from the employers and recent graduates who are in the workforce.

Table II.15 Student Evaluation of the Program Objective Regarding the Development of a Rapidly Changing Field, 2013-2019

Survey Question Evaluated	Year(s) Evaluated						
	2013	2014	2015	2016	2017	2018	2019
1. **Remain flexible and able to manage change in a technology-driven and knowledge-based environment**.	4.4	4.4	4.4	4.4	4.5	4.5	4.5

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

The DIS faculty and the Library and Information Science Student Association (LISSA) organize the annual All School Day event inviting a panel of hiring directors from various library and information science fields to discuss insight into how to prepare for a career in their field, the hiring process, and interview do's and don'ts. The DIS also partners with the UNT Career Center to organize events such as the Library Science Networking Brunch for our students to engage with faculty sharing research trends and potential employers looking to recruit.

To promote commitment to continuous professional development and lifelong learning, the DIS offers a variety of non-degree certificate programs for practitioners, including school library certification, graduate academic certificates (GACs) for library and information science as well as other professionals, and the certificate of advanced study in rural librarianship. It is worth mentioning that the GACs provide a method by which master's students can emphasize an area judged by the faculty to be particularly needed by practitioners of the future. For most students in the general POS, they can do this within the 36 credit hours for the master's degree.

Graduate academic certificates (GACs) are offered in the following areas:

- youth services in libraries and information settings (https://informationscience.unt.edu/youth-services-libraries),
- storytelling (https://informationscience.unt.edu/youth-services-libraries),
- advanced management in libraries and information agencies (https://informationscience.unt.edu/advanced-management-libraries),
- archival management (https://informationscience.unt.edu/archival-management),
- digital content management (https://informationscience.unt.edu/digital-content-management),
- digital curation and data management (https://informationscience.unt.edu/digital-curation-and-data-management),
- leadership in professional development in technology for schools (https://informationscience.unt.edu/leadership-professional-development), and
- rural library management (https://informationscience.unt.edu/rural-library-management/).

While the GACs were originally designed for returning practitioners to obtain new competencies, they also provide an important tool for master's students to structure their program and to engender a commitment to lifelong learning. See Table II.16 for the number of students graduating with GACs.

Table II.16 Students Graduating with GACs, 2013-2019

Graduate Academic Certificate	Student Graduates per Year					
	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
Youth services in libraries and information settings	42	25	24	28	38	37
Storytelling	4	5	8	7	4	8
Advanced management in libraries and information agencies	23	25	12	25	25	22
Archival management	-	-	-	12	23	33
Digital content management	28	25	24	12	12	13
Digital curation and data management	2	5	3	4	4	14
Leadership in professional development in technology for schools	2	2	1	1	1	1
Rural library management	-	-	1	5	1	1

The GACs are reviewed annually within an on-going process of collecting and analyzing data to implement data-informed decisions regarding the success of these professional development opportunities in meeting their goals and outcomes. The UNT Office of University Accreditation (UA) supports these efforts by managing the Improve database for institutional effectiveness (IE) plans, and reports this data to the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) (https://vpaa.unt.edu/accreditation/improve/).

Results of the data collected for the academic year 2018-2019 indicate that the GACs for leadership in professional development in technology for schools have minimal participation with only four students currently participating. As a result, a plan is being formulated to refocus this professional development on STEM activities and/or data literacy to be implemented in Spring 2020. Dr. Barbara Schultz-Jones leads the Preparing Librarians for Data Literacy Leadership Project initiative team from the University of North Texas (UNT) and Texas Woman's University (TWU) to develop and scale a competency development program in data literacy leadership for pre-service school librarians and as a continuing education program.

One of our master's students pursuing the Storytelling GAC in 2018 provided this positive feedback:

> "*all of my courses for the School Library were extremely beneficial to my career as an elementary librarian and never felt as if I were completing busy work. I felt all of our assignments had a purpose and that has been greatly appreciated.*"

The student evaluation of the program objective regarding the professional development and lifelong learning (Table II.17) indicates that the students rank high (mean = 4.63/5) on their understanding of the importance of professional development, continuing education, and participation in professional organizations.

Table II.17 Student Evaluation of the Program Objective Regarding Professional Development and Lifelong Learning, 2013-2018

Survey Questions Evaluated	Year(s) Evaluated						
	2013	2014	2015	2016	2017	2018	2019
9. Understand the importance of **professional development, continuing education**, and **participation in professional organizations**.	4.6	4.7	4.6	4.6	4.6	4.7	4.7
10. Participate in networking activities for personal and professional growth, leadership, collaboration, policy development, and change management.	4.3	4.3	4.3	4.2	4.3	4.3	4.6

Table II.18 shows that the majority of the employers and recent graduates consistently rate our graduates' ability to understand the importance of professional development, continuing education, and participation in professional organizations as excellent or very good.

Table II.18 Survey results Regarding Professional Development and Lifelong Learning, 2016-2019

Survey Question	Evidence Source	2016	2017	2018	2019
Ability to understand the importance of **professional development, continuing education**, and **participation in professional organizations**.	Employer Feedback Survey #4a.2	N/A	Excellent (55.56%) Very Good (27.78%)	Excellent (60%) Very Good (40%)	Excellent (56.52%) Very Good (30.43%)
	Recent Graduate Placement Survey #8c.3	Excellent (45.16%) Very Good (35.48%)	Excellent (50%) Very Good (7.14%)	Excellent (58%) Very Good (24%)	N/A

The DIS has endeavored to serve students with a variety of educational and professional needs. The evidence from multiple surveys supports the fact that the DIS curriculum (comprising regularly offered classes, new courses, and non-degree certificates) provides students with the means to address the components of Standard II.2.

Standard II.3

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.

The DIS curriculum provides three mechanisms for students to develop a degree plan that fits their individual needs, goals, and aspirations, which foster the attainment of 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…

Programs of Study

Embedded into the articulation, which includes the three core courses, "guided" and "general" electives, are programs of study (POS) which help students prepare for a wide variety of professional goals. These nine POS allow students to follow a general program or to specialize in an area of their choice.

Newly admitted students are tentatively assigned to a POS by staff advisors based on the information on the student's interests that they provide in the application package. Based on the POS, students are assigned to a faculty advisor (please see below).

The general program of study is the most flexible and is available for both the majors in library science and information science. The general POS requirements are specified at: https://informationscience.unt.edu/ms-ls-general-program-study and https://informationscience.unt.edu/ms-general-program-study. Students interested in academic librarianship or public librarianship, as well as students without a specific focus, enroll in the general program of study. Dr. Zavalina serves as a faculty advisor for the general program of study.

Specialized programs of study include:

- *Archival Studies and Imaging Technologies*. The POS requirements are detailed at: https://informationscience.unt.edu/ms-ls-archival-studies-and-imaging-technology. Dr. Hawamdeh serves as a faculty advisor for this program of study.
- *Health Informatics*. The POS requirements are detailed at: https://informationscience.unt.edu/ms-health-informatics. Dr. Cleveland serves as a faculty advisor for this program of study.
- *Information Organization*. The POS requirements are detailed at: https://informationscience.unt.edu/ms-ls-information-organization and https://informationscience.unt.edu/ms-information-organization. Dr. Miksa serves as a faculty advisor for this program of study.
- *Information Systems*. The POS requirements are detailed at: https://informationscience.unt.edu/ms-information-systems. Dr. Chang serves as a faculty advisor for this program of study.

- *Law Librarianship and Legal Informatics*. The POS requirements are detailed at: https://informationscience.unt.edu/ms-ls-law-librarianship. Dr. Chandler serves as a faculty advisor for this program of study (since August 2019 substituted by Dr. Chen).
- *Music Librarianship*. The POS requirements detailed at: https://informationscience.unt.edu/ms-ls-music-librarianship. Dr. Wheeler serves as a faculty advisor for this program of study.
- *School Library Certification*. The POS requirements are detailed at: https://informationscience.unt.edu/school-librarian-certification/. Dr. Schulz-Jones serves as a faculty advisor for this program of study.
- *Youth Librarianship*. The POS requirements are detailed at: https://informationscience.unt.edu/ms-ls-youth-librarianship/. Dr. Schulz-Jones serves as a faculty advisor for this program of study.

In addition to the general program of study, students majoring in library science (https://informationscience.unt.edu/ms-majoring-library-science/) have an additional four specialization options from those listed above: Information Organization, Law Librarianship and Legal Informatics, Music Librarianship, and Youth Librarianship.

For students majoring in information science (https://informationscience.unt.edu/ms-majoring-information-science/), besides the general program of study, have an additional four specialization options from those listed above: Archival Studies and Imaging Technologies, Health Informatics, Information Organization, and Information Systems. One specialized POS – Information Organization – is offered to both majors, due to centrality and general applicability of this area to the entire field of library and information sciences. The master's program articulation clearly shows the differences between the two majors (library science and information science) and re-emphasizes the importance of the programs of study with their required advising and breadth of course offerings. As a result, students have a clearly stated program for each major.

The POS selection is flexible. If a student initially enrolled in the general program of study decides to choose a specialized POS, staff and faculty advisors help them make the choice based on the student's interests. If a student decides to change their previously selected specialized POS to another specialized POS or to the general program of study, they contact their faculty advisor and/or college advising officers. Advisors notify them what additional courses need to be taken to meet the requirements of the new specialized POS; however, change from a specialized POS to the general program of study usually does not involve additional course requirements.

The progress of students in their selected POS is tracked by staff advisors by querying the UNT EIS system.

Table II.19 shows the breakdown of students by POS over the last seven years. The DIS made the decision to discontinue the Distributed Learning program of study due to a lack of students and lack of courses. Also, the public and academic librarianship have been placed within the general program of study.

Table II.19 POS Breakdown by the Number of Students, 2013-2019

Semester and Year	General			Archival & Imaging	Distributed Learning	Health	Info Org	Info Sys	Legal	Music	School	Youth	Total
	Academic	Public	General (all other)										
Fall 13	15	10	351	10	-	13	11	10	2	-	98	15	535
Spring 14	20	14	296	14	-	16	13	12	3	-	107	15	510
Summer 14	20	5	173	12	1	14	5	6	3	-	115	14	367
Fall 14	29	15	209	23	1	19	9	10	6	-	115	22	457
Spring 15	25	23	196	32	1	23	9	20	6	1	180	25	539
Summer 15	20	16	129	22	1	16	5	13	5	1	212	12	451
Fall 15	25	17	219	45	1	27	8	36	9	3	236	21	646
Spring 16	23	15	230	50	3	22	8	59	7	4	251	25	674
Summer 16	8	8	153	32	2	10	7	49	2	4	259	14	546
Fall 16	19	11	250	59	4	18	10	180	5	7	286	26	874
Spring 17	18	9	265	62	5	18	13	90	5	10	298	26	818
Summer 17	11	4	166	34	3	8	8	244	3	5	245	18	749
Fall 17	16	8	248	64	4	19	13	72	4	8	270	31	757
Spring 18	20	9	235	67	4	16	14	62	3	8	257	32	727
Summer 18	13	4	131	40	3	7	9	25	3	3	179	20	437
Fall 18	23	15	225	70	2	18	14	38	6	6	230	26	673
Spring 19	25	21	222	67	2	16	12	34	5	7	210	29	650
Summer 19	17	10	136	35	0	8	7	19	2	4	159	14	411
Fall 19	23	28	249	78	1	18	10	38	8	12	198	38	701

One of the specialized POS – Music Librarianship – was added since the last program review and accreditation. The Archival Studies and Digital Image Management POS was renamed as Archival Studies and Imaging Technologies. Starting in 2015-2016, seven students had the opportunity to pursue a Rural Librarianship Graduate Academic Certificate as a result of a grant awarded to Dr. Yunfei Du for research on rural libraries in Texas.

The courses listed for each program of study were chosen by the faculty to cover flexible sets of choices for students to enable them to meet their needs while at the same time providing a strong, coherent

program. With the consent of the faculty advisor, students may substitute an experimental course for an elective that better meet their career expectations. The exception is the School Librarianship POS where the courses are prescribed and aligned with state certification requirements, allowing one elective only.

When students graduate with a POS completion, they receive both their diploma and a POS completion certificate. Full descriptions of the programs of study can be found at: https://informationscience.unt.edu/programs-study/.

Independent Study Courses

Students may also enroll in Independent Study courses (INFO 5900-5910: Special Problems) which add flexibility to the program and address the needs of individual students. These courses are developed and supervised by faculty members and provide opportunities for a student to gain more in-depth knowledge or to have hands-on experiences not available in regular classes.

Practicum Experience

Real world knowledge and skills are an important component of the educational experience of a master's student and the master's program is designed to ensure that all students graduate with some experience in appropriate professional contexts. These opportunities are provided through practicum and mentoring experiences.

The master's program requires students to complete INFO 5090: Practicum and Field Experience for three credit hours which do not count towards the 36 credit hours for the master's degree. The practicum is a minimum of 120 hours of supervised work in a profession library or information center setting. Information about the practicum, as well as a list of approved sites, is available on the Department's website (https://informationscience.unt.edu/practicum-field-experience). On the UNT side, practica are coordinated by department faculty, often but not always based on the student's POS (please see the list of faculty practicum coordinators at: https://informationscience.unt.edu/practicum-field-experience). The on-site supervisor evaluates the student's work and the student submits to the faculty practicum advisor their goals and objectives as determined in collaboration with the site supervisor, a site description, and a summary report of their practicum experience. Students in the Health Informatics and Law Librarianship and Legal Informatics programs of study have an expanded practicum experience and those in School Librarianship have an alternate requirement which will be explained in a subsequent paragraph.

The curriculum includes as appropriate cooperative degree programs, interdisciplinary coursework and research, experiential opportunities, and other similar activities…

Students in the School Librarianship POS and those who already have a master's degree in another area and are only taking the courses for state certification are required to complete the School Library Certification Mentor Program (https://informationscience.unt.edu/slc-mentor-program). This program replaces the professional experience for other master's students and does not allow for waivers based on prior experience as a school librarian. It is designed to combine theoretical information gained throughout the required course sequence with simultaneous practical experience in a professional setting. Every School Library Certification (SLC) student must spend **160 clock hours** or more in a 70-30 or 60-20-20 combination of school library types (elementary, middle, or high) under the mentorship of a qualified school librarian. Students begin when they enroll in their first course, INFO 5001: School Librarianship and choose their mentors. The mentors must be registered in the UNT Mentor Database or apply to be added. The students and mentor follow a School Libraries Proficiencies Checklist which is regularly updated with the input of mentors who work with the program. The most current checklist can be located at: https://informationscience.unt.edu/sites/default/files/drafproficiencychecklist_review1.pdf. School library

students must record the hours worked with their mentor throughout their program of coursework. The timesheet can be found at: https://informationscience.unt.edu/sites/default/files/unt_school_librarian_mentor_timesheet.pdf.

Here are some typical student comments taken from the EOP questionnaire:

- *"The practicum is the most beneficial aspect of the degree, as well as courses that force students to go in to various libraries, observe, and speak to professionals. Those prepared me for my job in the library more than any of my classes."* [Spring 2014 EOP]
- *"I feel much more confident about a professional IS career. My main weakness is my lack of programming experience with leading and planning programs which the online degree could not fully prepare me for. However, I am gaining programming experience with my practicum, so I am grateful for that."* [Spring 2018 EOP]
- *"From what I can tell while completing my practicum, my schooling has prepared me quite well to take on a library job."* [Summer 2013 EOP]

Since all of the programs have clearly stated criteria for the professional setting and practitioners involved, as well as expectations for tasks and behaviors of practitioners and students, the department provides lists and potential sites, supervisors, and mentors, but students are encouraged to find their own. (See https://informationscience.unt.edu/available-practicum-sites-0 for listings.) Through this process, the department has successfully accomplished the common purpose of these programs: to encourage a community of practice that provides an opportunity for students to communicate with experienced practitioners and to observe and learn professional behaviors.

Course content and sequence relationships within the curriculum are evident

Students have additional opportunities to develop their interdisciplinary, experiential opportunities, and professional knowledge and skills. This includes practical experience obtained through the courses they take as part of the program. Here are some typical student comments on practical experience in organized coursework taken from the EOP questionnaire:

- *"You all did a wonderful job in crafting a curriculum that emphasizes both the scholarly and the practical."* [Summer 2014 EOP]
- *"These were really top-notch courses. I learned a lot. And I especially learned very practical, real world stuff."* [Summer 2015 EOP]
- *"The practical focus of many of the courses and assignments is very helpful in interpreting what I learned to real world applications."* [Spring 2016 EOP]
- *"I really feel I was adequately prepared for a career in librarianship. I did not fully realize that until recently when I began interviewing for a library position with various school districts. I interviewed three different places and received three offers for employment! I have never worked in a library aside from my practicum experience, but was certainly knowledgeable enough from just my classes to feel comfortable and authoritative in the interviews. I'm very pleased with my degree overall."* [Summer 2013 EOP]

Students may take up to nine hours of advisor-approved coursework from outside of the department or the university. For instance, the Archival Studies and Imaging Technologies POS requires students to take at least one course in the area of art, archives, and museums:

- AEAH 5940: Seminar in Art Museums
- AEAH 5942: Seminar in Art Museum Education I
- AEAH 5945: Seminar in Art Museum Education II

The UNT College of Information advising office requests POS faculty advisor approval for courses a student wants to take outside of the program (unless it is already a part of the approved curriculum, such as the art

history seminars for the archival POS). First, a student will typically request to take a course outside of their program. The advising office will then forward this request to the appropriate faculty member or inform the student to contact that faculty. Once the advising office receives approval, it is noted on the student's record and the advising office connects the student to the correct office to get the course added. Sometimes the outside department/program in which the course is housed might require additional approval from their department (depending on the course).

Also, students occasionally have an opportunity to enroll in courses offered by Information Science department jointly with other departments. For example, in the Spring 2020 semester, students enrolled in the INFO 5224: Metadata for Information Organization and Retrieval II course taught by Dr. Zavalina will work on metadata applications for language data together with the Linguistics department students enrolled in LING 5030: Linguistics and Languages of South Asia course taught by Dr. Chelliah.

In 2018-2019, Dr. Chandler who coordinated the Law Librarianship and Legal Informatics POS, started working with the new UNT at Dallas College of Law (founded in 2014) on developing a joint degree program. Once created, this program will offer additional opportunities for interdisciplinary coursework and practical experiences for DIS students.

Results from the End of Program (EOP) survey administered in 2013-2019 show that between 60% and 65% of students agreed or strongly agreed with the statement: *"I had opportunities for interaction with students in other units."*

In the Summers of 2013-2016*,* students were offered the opportunity to participate in a two-to-three week service learning study abroad experience where they worked in international school libraries of the host country. The time frame for the study abroad program of coursework extends beyond the dedicated time on-site, to meet the requirement of a standard eight week summer semester. The additional timeframe allowed for submission of the personal assignments associated with the study abroad coursework. A minimum of ten students and a maximum of 24 students met the requirements of: being a current UNT IS student, having a valid passport, and had expressed interest through an application letter where they identify their personal learning objectives and contributions they are prepared to make. Experience in a library was not necessary.

The program offering was designed not only to extend professional experience but also to provide a chance to expand their cultural acuity. The course objectives include building student competence to: assess the needs of the library community for library access, identify and address the cultural competencies from the context of the clientele, assess the school library collection, prepare a comprehensive library work plan, prepare recommendations for a dynamic library program, present the library policy to stakeholders, and reflect and discuss the impact of a multicultural experience. Destinations have included Denmark, Czech Republic, Russia, and Germany. The focus for each project depended on the needs of the individual school library, and always involved the introduction or assessment of an automation system and the impact of technology. Participating UNT students earned credit for two courses (six credit hours), with one course focused on *Managing Library Automation Projects* and the second course focused on *Information Resources and Services for Special Clientele*. Students funded their own participation in the study abroad projects. Airfare arrangements were left to the students, with a coordinated schedule of instructor departures and arrivals, and a specific time to meet at the project location. Each student was assessed a program fee that included shared accommodation, transportation on-site, and some special events. The host institution provided breakfast and lunch at the school, some on-site transportation, and a dedicated workspace on-site. Applicants from all library disciplines, regardless of their progress through their program's coursework, were encouraged to experience the range of library programs and services in a fully contained setting. This meant that school librarians worked alongside academic librarians and public librarians, all focused on meeting student needs in an international setting.

Faculty members also involve students in research activities and other projects through which students develop an understanding of research and enhance the skills and knowledge acquired through coursework. Students work as research assistants, including on grant-funded projects (e.g., Intelligent Information Access Lab, Data Innovation Lab). Also, students work together and with faculty on research through other venues, such as through the Multidisciplinary Information Research Symposium MIRS (https://mirs.unt.edu/cfp), and meetings of the Information Science Department Research Brownbag and Research Spotlight: https://informationscience.unt.edu/research-meetings.

Students develop a solid foundation, both theoretical and application oriented, that is applicable to professional work, and can also concentrate on specific aspects of library and information services through parts of major articulations of the programs of study, thus providing a more individualized learning experience best suited to the student's professional and personal goals.

Course content and sequence relationships within the curriculum are evident.

All students in the School Librarianship POS, due to state certification requirements, must follow the same required sequence of courses (see https://informationscience.unt.edu/school-librarian-certification). Students in other specialized programs of study and the general POS are required to take the three core courses (INFO 5000, 5200, and 5600) within the first 18 credit hours of beginning the program. The sequence in which the rest of the courses, beyond the three core courses, are taken within each POS (other than School Librarianship) is more flexible. The course rotation information is available for students and advisors (https://informationscience.unt.edu/course-rotation#graduate) to help in planning the sequence of courses that would work best for the student.

When courses clearly build upon one another, the department employs a system of prerequisites (Appendix 14: Master Program Articulation). The syllabi of courses offered by the department list prerequisites, if any. The course numbering and course naming conventions adopted by the department faculty also convey the sequence of courses (e.g., INFO 5210: Resource Description and Access I is a prerequisite for INFO 5220: Resource Description and Access II; INFO 5223: Metadata I is a prerequisite for 5224: Metadata II). The course rotation schedule on the department website links to the UNT Graduate Catalog (http://catalog.unt.edu/index.php?catoid=21) in which students can view course descriptions (including prerequisites) for the courses they are interested in. Each individual student's program of study is the result of faculty and student dialog.

The degree articulation within the embedded programs of study (https://informationscience.unt.edu/programs-study) provides an effective mechanism to help students see the relationship between and among courses. Both majors – library science and information science – have core courses, guided electives, programs of study, and general electives that provide a cohesive program as well as allowing for individual learning experiences.

Standard II.4

Design of general and specialized curricula takes into account the statements of knowledge and competencies developed by relevant professional organizations.

Specialized learning experiences in the UNT LIS program are built upon a general foundation of library and information studies. The design of each specialized area and the learning experiences created takes into account the statements of knowledge and competencies developed by relevant professional organizations.

A complete list of these associations and statements of knowledge and competencies are available on the American Library Association and ASIS&T websites. Some of these relevant organizations' lists include the:

- American Library Association (ALA) Core Competencies of Librarianship
- American Library Association (ALA) Core Competencies for Cataloging and Metadata Professional Librarians
- AALL Guidelines for Graduate Programs in Law Librarianship
- AASL Standards for Initial Preparation of School Librarians
- American Society for Information Science and Technology (ASIS&T) Educational Guidelines
- Association for Library and Information Science Education (ALISE) Information Ethics in Library and Information Studies Education
- Medical Library Association (MLA) Competencies for Lifelong Learning and Professional Success
- Music Library Association Core Competencies and Music Librarians
- Special Libraries Association (SLA) Competencies for Information Professionals
- Young Adult Library Services Association (YALSA) Teen Services Competencies for Library Staff

In the School Library Certification Program, the AASL Standards for the Initial Preparation of School Librarians provide an essential framework for the design of course content and the program of study. The introductory course for school librarians is constructed around the roles identified in these standards. Keeping pace with the standards is regularly scheduled. The latest AASL Standards were introduced in November 2019 (http://www.ala.org/aasl/sites/ala.org.aasl/files/content/aasleducation/ALA_AASL_CAEP_School_Librarian_Preparation_Standard_%202019_Final.pdf).

The scheduled review of the school library curriculum in February 2020 will address these changes so they can be incorporated into the Summer semester course content. In 2018, the AASL National School Library Standards were introduced, as were the Texas School Library Program Standards and Guidelines (https://www.tsl.texas.gov/ldn/schoollibrarystandards). These standards influence what we teach – the previous edition was 2007 (AASL) and 2005 (for Texas). In 2009, our school library faculty did a program course review to ensure we met the existing Education Preparation Guidelines, the AASL Standards for School Librarians, and the Texas School Library Standards and Guidelines. Course content was updated as a result. The current program course review began in Spring 2019 and will complete in Spring 2020 with the inclusion of the new Education Preparation Guidelines and incorporating feedback from the school library Board of Advisors members and meetings with Texas school library directors in January 2019 and January 2020.

The Medical Library Association (MLA) released their updated competencies in May 2017, and the DIS faculty member Dr. Jodi Philbrick served on the Task Force to Review MLA's Competencies for Lifelong Learning and Professional Success. The DIS faculty member Dr. Ana D. Cleveland served as a consultant on the competencies. Based on the revisions to the professional competencies, the health informatics librarianship faculty reviewed the current curriculum for this program of study in 2019 and made changes based on a competency mapping exercise. The mapping of the competencies to the course curriculum is available in Appendix 15: Mapping of Competences.

Professional Competencies

Beyond regularly scheduled courses, independent studies, and the advance topic seminars discussed above, real world knowledge and skills are an important component to the educational experience of the LIS master's students.

The master's program is designed to ensure that all student graduates gain some experience in appropriate professional contexts in line with the knowledge and competencies stated by relevant professional organizations. These opportunities are provided through practicum and mentoring experiences.

The program requires students who are not already working in library or information center settings and without prior library or information science experience to complete INFO 5090: Practicum and Field Study (https://informationscience.unt.edu/practicum-field-experience) for three credit hours that do not count toward the 36 credit hours for the master's degree. The practicum is a minimum of 120 hours of supervised work in a professional library or information center setting. Information about the practicum, as well as a list of approved sites, is available on the department's website.

The on-site supervisor evaluates the student's work and the student submits their goals and objectives, a site description, and a summary report of their practicum experience to the faculty practicum advisor in collaboration with the site supervisor. Students in the health and legal programs of study have an expanded practicum experience and those in school librarianship have an alternate requirement through the school library mentoring program (https://informationscience.unt.edu/slc-mentor-program).

Given that a number of master's students arrive with considerable professional experience, the practicum course experience can be waived. On average, about 50% of students who are already employed in libraries and other information settings elect to waive their practicum (not counting school library students, 995 students out of 1,395 elected to waive the practicum). To do so, they must submit a formal request with documentation for approval by CI-Advising. The school library practicum cannot be waived. During the period from Fall 2013-2019 (see Table II.20) waivers were approved for 995 out of 1,897 graduates (52%).

Table II.20 Practicums Completed and Waived, Fall 2013 to Summer 2019

Semester	School Library Completed	Other Completed	Waived	Total
Fall 2013	13	41	52	106
Spring 2014	27	30	44	101
Summer 2014	28	19	56	103
Fall 2014	26	16	47	89
Spring 2015	21	25	42	88
Summer 2015	30	22	28	80
Fall 2015	9	19	57	85
Spring 2016	13	16	52	81
Summer 2016	31	13	35	79
Fall 2016	25	14	44	83
Spring 2017	32	14	66	112
Summer 2017	35	18	64	117
Fall 2017	31	28	83	142
Spring 2018	38	20	110	168
Summer 2018	55	26	44	125
Fall 2018	23	29	61	113
Spring 2019	41	29	64	134
Summer 2019	24	21	46	91
Total	502	400	995	1,897

The School Library (SL) Certification Practicum is subject to the rules established by the Texas Education Agency (TEA). The most recent TEA audit in 2018 passed this educator preparation program (the documentation letter is available upon request). According to the TEA, a student is required to spend 160 clock hours or more working with the mentor.

Students in the school library certification program must complete the following:

- Proficiency Checklist, available at: https://informationscience.unt.edu/sites/default/files/drafproficiencychecklist_review1.pdf. The mentor must sign the proficiency checklist stating that the student is proficient in each objective and area on the list.
- Record of Time with Mentor spreadsheet, available at: https://informationscience.unt.edu/files/untschoollibrarianmentortimesheetversion1.xlsx, and
- ePortfolio that includes a reflective blog of the practicum experience (https://informationscience.unt.edu/practicum-requirements).

The experience culminates with registration in INFO 5090, a required course that culminates the practical experience and counts towards the master's degree, during which the TExES certification exam is taken and passed, and submission of the completed checklist, the Record of Time with Mentor spreadsheet, and the ePortfolio are required.

Here are some student comments taken from the End of Program questionnaire about the overall program experience:

- *"I've worked at a small college library, a large university library, a community college library, and a brand new public library. The courses I took helped me focus my work experience with an educational structure and academic theory. I purposefully took courses that would be challenging and broaden my understanding of librarianship and information science."* [Summer 2013 EOP]
- *"I think this program prepared me really well for school librarianship. I began my job as a librarian halfway through the program. I felt well prepared."* [2018 EOP]
- *"The web-based program has been incredibly effective and efficient. Taking all of the courses online was convenient and worked well with a busy life. Additionally, the online format still maintained the authenticity of face-to-face courses where faculty was overall easily accessible through email and GoToMeetings provided the feeling of a real classroom."* [2018 EOP]

Through this process, the department has successfully accomplished the common purpose of these programs: to encourage a community of practice that provides an opportunity for students to communicate with experienced practitioners and to observe and learn professional standards and behavior.

Standard II.5

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.

Curriculum Review and Evaluation Procedures

Curriculum evaluation is an important and ongoing process. The master's program is continually evaluated and incorporated into the courses. The Board of Advisor's (BOA) meeting minutes (https://untdliscoa.pbworks.com/w/browse/#view=ViewFolder&param=Board%20of%20Advisors) as well as student and employer surveys give insight into the process and have been incorporated into the DIS Strategic and Working Plans (Appendix 2).

The DIS Curriculum Committee is comprised of three to four faculty members and one student member. Several times each semester the committee meets to discuss and approve a variety of matters related to the master's curriculum, including new courses, revisions to courses, and so on. The UNT employs an online system called Curriculog (https://vpaa.unt.edu/curriculum/curriculog) to track the process of designing, changing, or removing courses and programs.

The UNT Policy 06.037: Course and Curriculum Development (https://policy.unt.edu/policy/06-037) prescribes how new programs (i.e., departments, schools, degree programs, and/or certificate programs) can be added, or substantively changed or expanded, as well as identifies the entities engaged in the approval process. The procedures for the course preparation and teaching are provided in the DIS Faculty Teaching Handbook (2015-2016) and are updated on an as-needed basis.

Faculty-Student Council meetings take place every month during long semesters. According to the Bylaws, *"The faculty is responsible for the establishment of educational policy, including standards for admission to the various degree programs and content of the curriculum"* (Bylaws: https://informationscience.unt.edu/departmental-policies, Article 4, Section 2).

Faculty are individually responsible for the continuous formative and summative review and updating of courses they teach, as well as those taught by adjuncts. Each course has a documented faculty instructor of record. The courses may be taught by the faculty member or by an adjunct instructor. However, faculty are responsible for the on-going update and review of those courses.

Faculty receive on-going feedback from the students they teach through interaction with students online or in class, scheduled course evaluations at the end of each semester, input from the Board of Advisors who represent stakeholders, and members of the profession related to particular specializations. For example, faculty members of the School Librarianship program attend quarterly meetings of the North Texas District Library Directors group and annually attend the meeting of the Texas Association of School Library Administrators (TASLA). Faculty regularly attend conferences relevant to their specializations; for example, bibliographic standards are changing yearly and it is imperative the faculty teaching those courses stay in tune with those changes (e.g., RDA Update Forum at the annual ALA conferences, incorporation of IFLA's new Library Reference Model (LRM) into INFO 5210 and 5220, etc.). Dr. Philbrick and Dr. Cleveland stay current with issues in health informatics through services in the Medical Library Association (MLA). Dr. Philbrick has served as President of the South Central Chapter of the MLA. As evidenced by their faculty profiles, many of the faculty are active in the profession nationally and internationally in many capacities.

The University of North Texas administers the Student Perceptions of Teaching (SPOT) course evaluation, which was implemented in Summer 2015. Prior to SPOT, UNT used the Student Evaluation of Teaching (SETE). Faculty members receive their SPOT reports three days after official grades are submitted to the university, and the reports contain both quantitative and qualitative feedback from the students. Individually, faculty members review the SPOT results for each course they teach each semester. Revisions to the curriculum are made in response to student evaluations. For example, if students remark on the order of course content delivery or they identify particular assignments they found confusing, then adjustments can be made in subsequent semesters.

Overall summative ratings from SPOT are provided in the UNT Faculty Information System (https://facultyinfo.unt.edu). On average, SPOT scores for all faculty, faculty adjunct, and teaching fellows are 4.22 (out of 5) for the overall summative rating and 5.47 (out of 7) for the Challenge and Engagement Index, with an average response rate of 56.5%. The SPOT evaluation results for the core courses are presented in Table II.6.

From the Employer's Survey (Appendix 6) the potential areas for improvement are examined for concerns that could be addressed within coursework or course objectives. For example, in 2017 and again in 2019, it was recommended that we consider moving from one End of Program exam to an electronic portfolio. This has been addressed and the ePortfolio as the End of Program assessment vehicle was introduced in Fall 2019 (Appendix 12: ePortfolio Development). Another concern has been requiring students to participate more in professional associations; while we cannot require it, we do encourage participation in professional organizations through the joint student membership in the Texas Library Association (TLA) and American Library Association (ALA): it is promoted in both the core INFO 5000 course and in the introductory course in the school library program. The student's association (LISSA) also holds All School Days twice a semester in which various professionals are invited to speak and network with students. In particular, a request for speakers about how to prepare for job interviews has been highly successful.

The Recent Graduate Survey (Appendix 5) provides valuable feedback from students who have completed the MS degree. There were a range of concerns regarding the scope of the public library courses from 2015 to 2017. For example, there are suggestions for a course that addresses the history of youth services, more programming for youth and children's services, and better cross cultural perspectives in youth services. Due to unexpected medical issues, the faculty member responsible for this area was unable to address these concerns. However, beginning with Fall 2019, the newly hired youth librarianship faculty member is reviewing and redesigning the coursework. A History of Youth Services course will be offered in Spring 2020.

The End of Program exam was again a concern identified in the Recent Graduate surveys in 2015, 2016, and 2017. Some students suggested that a thesis option would be more appropriate. In response, we offer an alternative to the End of Program exam in the form of two additional courses that we hoped would ease the stress of a timed exam. However, the low enrollment in these courses led us to the recent adoption of the ePortfolio approach instead.

Consistent feedback indicates that there is a challenge in participating in the institutes required for the core courses. While some students indicate that the experience is highly beneficial, others suggest that the time and expense of travelling to one site for the required class days is difficult. This has been addressed by reducing the number of days required from three days per core course to one day each and additional consideration is being made for full online delivery.

We recognize student achievement from the curriculum by nominating top students to the Beta Phi Mu, awarding the Lis and Phil Turner Paper/Project Award, and other awards as recognized on UNT's Honor's Day (see Student chapter for more examples). We regularly recognize current and former student achievements on the department homepage of the website (www.informationscience.unt.edu/news/).

The curriculum of the master's program has been reviewed and revised continuously since the last accreditation effort. New courses and new programs of study have been added, especially in areas of emerging information technologies, such as data analytics and digital curation, knowledge management, rural libraries, and the renaissance of archival work, including digital archives and digital humanities. Considerable attention has been given to maintaining comprehensiveness and quality of course content as the number and variety of courses and course delivery modes has increased.

When asked how they would rate the quality of instruction, programs, and services while in the program, students overall thought it excellent to good, with some variation over a four year period. Table II.21 shows the data taken from the Recent Graduate survey question #6a from 2015-2018.

Table II.21 Question 6a from the Recent Graduate Survey, 2015-2018

Survey Question	2015	2016	2017	2018
Please rate the following for quality of instruction, programs, and services received during your time as a UNT library and information sciences student.	Excellent (35.71%) Very Good (42.86%) Good (14.29%)	Excellent (42.42%) Very Good (27.27%) Good (18.18%)	Excellent (41.30%) Very Good (36.96%) Good (17.39%)	Excellent (28.57%) Very Good (35.71%) Good (26.79%)

Cumulative percentages from employer's survey are all at 50% or above (excellent). Each question on the survey relates to an ability that we have developed within our curriculum.

Standard II.6

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

Evidence of Curriculum Review and Evaluation

Evidence that the program employs procedures for continual evaluation of the curriculum is included in Table II.22.

Table II.22 Procedures for continual curriculum evaluation

Source	Nature of Evidence
Department Bylaws: https://informationscience.unt.edu/sites/default/files/is_bylaws_approved-sept6-2019.pdf Section 8. Curriculum Committee. Membership consists of three faculty and one student. The committee makes recommendations concerning changes in the curriculum, including faculty requests for addition, deletion, or modification of courses or programs. The committee coordinates and oversees periodic reviews of the curriculum in order to ensure that program objectives are being met.	DIS Curriculum Committee minutes of meetings
DIS Strategic and Working Plan	Action items related to the curriculum

Board of Advisors feedback on curriculum matters reviewed for issues and action	Board of Advisors meeting minutes and action items brought forward to the DIS Curriculum Committee and the Strategic Plan
SETE/SPOT student evaluations	Feedback on curriculum matters gathered after each semester and system alerts sent to faculty to review for issues and action. Annual faculty evaluations identify action taken individually.
UNT Policy number: 06.037 Curriculog	Procedures and schedule to utilize the system to input and track course additions, changes, and deletions.
Annual Institutional Effectiveness Review Improve database	System online documentation for the annual data collected for the preceding academic year on how a program is meeting its stated learning outcomes and action plans to address deficiencies.
2012-2013 Faculty Handbook (Appendix 16)	Procedures for the course preparation, evaluation, and teaching
End of Program survey	Procedure to issue the survey following the EOP
Recent Graduate survey	Procedure and schedule to issue the survey
Employer survey	Procedure and schedule to issue the survey
CLEAR	Online course review using standards provided by Quality Matters (QM); how course components align and contribute to the student learning experience

As per the UNT Policy 06-030: Review and Approval of Online Courses and Programs (https://policy.unt.edu/policy/06-030), beginning in 2019, every three years the Center for Learning Experimentation, Application, and Research (CLEAR) (https://clear.unt.edu/) will review online courses using standards provided by Quality Matters (QM), a non-profit, international organization that is recognized as a leader in quality assurance for online education. Course reviews are used as an opportunity to assure consistency and quality in course design and accessibility to all. The course review process (https://clear.unt.edu/policies-procedures/approval/course-review-initiative) is scheduled to begin with

courses developed prior to 2016; the CLEAR Course Review Team will review these courses in the coming months of 2020.

The state of Texas requires that all public institutions of higher education implement approval processes for courses and programs to be delivered electronically (i.e., online through digital transmission) or offsite (i.e., away from campus). A course or program is considered to be electronically-delivered or off-site if more than 50% of the course or program is conducted via that delivery method (i.e., digital transmission or off-site).

State rules governing the delivery of distance education (electronically-delivered) and off-site courses and programs can be found here:

- 19 TEX. ADMIN. CODE Chapter 4 Subchapter P: Approval of Distance Education Courses and Programs for Public Institutions

  (https://texreg.sos.state.tx.us/public/readtac$ext.ViewTAC?tac_view=5&ti=19&pt=1&ch=4&sch=P&rl=Y)

- 19 TEX. ADMIN. CODE Chapter 4 Subchapter Q: Approval of Off-Campus and Self-Supporting Courses and Programs for Public Institutions

  (https://texreg.sos.state.tx.us/public/readtac$ext.ViewTAC?tac_view=5&ti=19&pt=1&ch=4&sch=Q&rl=Y)

Evidence that input from all constituents for curriculum evaluation is gathered and considered is included in Table II.23.

Table II.23 Evidence of Constituent Input for Curriculum Evaluation

Source	Nature of Evidence
DIS Curriculum Committee minutes of meetings	Action items reported and updated
DIS Strategic and Working Plan	Action Items scheduled and completed
Board of Advisors meeting minutes	Action Items scheduled and completed in the DIS Strategic and Working Plan
SETE/SPOT student evaluations	Annual faculty evaluations identify action taken individually
Faculty monthly meeting minutes	Updates on curriculum issues and votes on curriculum changes
Professional organizations competencies	Minutes of program reviews (ex. School Library Program) and course updates as detailed

Standard II.7

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.

Curriculum Evaluation Review

There are several methods used to evaluate the curriculum, ranging from the university to departmental level and program of study. Appendix 3: DIS Systematic Planning Process provides a general description of how the department uses the results of evaluations to improve the program and departmental operations. The curriculum is reviewed on an annual basis inline with the systematic planning process used by the Department.

As part of its on-going assessment of institutional effectiveness, the University of North Texas Office of University Accreditation manages the Improve database (formerly called TracDat) which contains data regarding all the academic programs offered by the university (https://vpaa.unt.edu/accreditation/improve). (Note: One year was skipped because TracDat was transitioning to a database.) Each academic program must include their student learning outcomes (SLOs) and the measurement of achievement and evidence for each of these SLOs in the database. A four column Improvement report is generated for each academic program which includes Expected Outcomes, Assessment Methods, Results, and Recommendations. When there are recommendations included in the report, follow-up on those recommendations is expected. The follow-up on the recommendations informs the planning of the next year's activities. This process allows the DIS and COI administration to reflect upon areas of improvement in the master's program curriculum and to plan for the future. For instance, there was a recommendation to identify an additional assessment to measure SLOs besides the End of Program exam and, in 2016 - 2017, the two-part Advanced Topic Seminars option became available for students to take instead of the End of Program examination.

As stated in Standard II.5, the University of North Texas administers the Student Perceptions of Teaching (SPOT) course evaluation, which was implemented in Summer 2015. Prior to SPOT, UNT used the Student Evaluation of Teaching (SETE). Faculty members receive their SPOT reports three days after official grades are submitted to the university, and the reports contain both quantitative and qualitative feedback from the students. Overall summative ratings from SPOT are provided in the UNT Faculty Information System (https://facultyinfo.unt.edu). Faculty members are encouraged to use their SPOT reports to assess their courses and make revisions as needed. For instance, in INFO 5600: Information Access and Knowledge Inquiry (one of the core courses), two assignments (information hunts and evaluations, and the final project) were revised and restructured based on student feedback in SPOT. The department chair also reviews the scores and comments and discusses them with the faculty. Student evaluations are incorporated into annual faculty reviews.

In the DIS, three surveys assess how effectively the master's program objectives are met. Graduating students complete the End of Program survey, recent graduates complete the Recent Graduate survey, and employers of DIS graduates complete the Employer survey. The DIS Curriculum Committee reviews the results of these surveys as part of their systematic planning process. The Board of Advisors is informed of the survey results and asked to provide feedback on the curriculum.

In addition to the methods described above, the DIS faculty members are very engaged within professional associations and networks and have their ear to the ground when it comes to emerging trends in the profession and changes in professional standards/competencies. Faculty engage in research to identify job

market trends, such as the Health Informatics faculty who have analyzed job postings on the Medical Library Association's listserv from July 2018 to July 2019 to determine current workforce needs.

The DIS Strategic and Working Plan provides guidance in the ongoing evaluation of curriculum and, at the same time, is informed by the results of these evaluations. Therefore, curriculum evaluation is an annual process.

STANDARD III: FACULTY

INTRODUCTION

The faculty of the Department of Information Science (DIS) offers a range of specialties and skilled expertise to accomplish the goals and objectives of the master's program. They address the challenges of maintaining a quality graduate professional education, the demands of a geographically diverse student population, and the exciting opportunities offered by new teaching technologies in a number of ways. Methods include offering innovative class arrangements, using creative types of team approaches to course management, conducting research projects in library and information studies, employing experienced and knowledgeable part-time faculty, providing skilled technological support for faculty members, and continuing to lead the implementation of new instructional technologies across the campus. This section describes the extent to which the faculty continues to deliver quality education in conformance with this Standard.

Standard III.1.1

The program has a faculty capable of accomplishing program objectives.

The faculty of the Department of Information Science is comprised of a diverse group of educators and researchers with the required knowledge and expertise to carry out the major share of the research and service activities required for the Master of Science program. Faculty expertise spans seven broad research areas: information use and behaviors; organization and knowledge representation; information resources and systems; information management and evaluation; social, community, and organizational informatics; data management; and digital knowledge curation and preservation (Appendix 19: Full Time Faculty Curriculum Vitae). Full-time faculty members have the expertise needed to teach the three required core courses and to oversee clusters of courses in their areas of expertise that collectively span the range of courses taught to master's students (Appendix 25: Full Time Faculty Teaching Clusters). The curriculum is supported by a cadre of adjunct faculty drawn from the professional community of the University, the Dallas/Fort Worth Metroplex, and other cities where cohort programs are delivered.

As discussed in Standard I.1.1, the DIS faculty collaboratively update the vision, mission, goals, and program objectives of the Department. Two recent major efforts in this area were the creation of the College of Information (COI) and the updating of the Strategic Plan of the University of North Texas (UNT)r. In Fall 2017, the COI's Strategic Vision (Appendix 1: Strategic and Working Plan) was created by the college faculty to align with UNT President Smatresk's State of the University report (https://president.unt.edu/state-university-2019) on November 3, 2017. The Department of Information Science has maintained and revised its strategic and working plans based on the input from faculty, students, and its Board of Advisors. The DIS Strategic and Working Plan 2019-2023 was reviewed by its faculty and Board of Advisors in Fall 2019 (Appendix 2: DIS Strategic and Working Plans 2013-2019).

The DIS faculty views the concept of diversity in two ways. One is in the variety of backgrounds in subject area expertise and experience and the other is in the variety of cultures, ethnicities, and languages. The faculty is strong in both kinds of diversity and welcomes both kinds as extra value that individuals bring to the Department.

Evidence of the ability of the faculty to accomplish the master's program objectives includes the overall positive responses of students, alumni, and employers to surveys based on the program objectives (see Table I.5, Table II.8, Table II.10, Table II.12, Table II.14, and Table II.18). The necessary credentials and

experience of the faculty are evident in their curricula vitae (Appendix 17: Full Time Faculty Curriculum Vitae). The faculty's curricula vitae document the background and accomplishments of the DIS full-time faculty that allow them to work collaboratively to accomplish the DIS program objectives.

Standard III.1.2

Full-time faculty members (tenure/tenure-track and non-tenure-track) are qualified for appointment to the graduate faculty within the parent institution.

Graduate faculty advance the research, teaching, and professional development mission of the University of North Texas through excellence in graduate education. The graduate faculty is composed of full members and associate members. The University of North Texas Policy for Graduate Faculty Membership states that members of the UNT graduate faculty are expected to actively participate in the graduate programs of the University through scholarly and creative accomplishments, effective teaching of graduate courses, and mentoring of graduate students.

The policy for graduate faculty membership is located in the University of North Texas Policy Manual in Chapter 06 – Faculty Affairs, 06.26 at: https://policy.unt.edu/sites/default/files/06.026_GraduateFacultyMembership_2014.pdf. As of Fall 2019, the UNT/DIS currently has 22 full-time faculty members. All 22 UNT/DIS faculty members are either full or associate members of the graduate faculty holding permanent membership status with the right to teach graduate level courses, serve as members of master's advisory committees, or serve as members of dissertation committees. Current rank distributions of the UNT/DIS faculty are listed in Table III.1.

Table III.1 Current Rank Distribution of the UNT/DIS Faculty

Faculty Rank	Faculty Member(s) Associated with the Specified Rank
Regents Professor (2)	Ana D. Cleveland Jeff M. Allen
Professor (5)	Brian O'Connor Suliman Hawamdeh Jiangping Chen Yunfei Du Junhua Ding
Associate Professor (11)	Yvonne J. Chandler Elizabeth Figa* Martin Halbert* Jeonghyun Kim Shawne Miksa William Moen Guillermo Oyarce* Barbara Schultz-Jones Maurice Wheeler Daniella Smith Oksana Zavalina
Assistant Professor (5)	Hsia-Ching Chang

	Janet Hilbun* John Marino* Sarah Evans Lingzi Hong
Principal Lecturer (1)	Lawrence Enoch
Senior Lecturer (2)	Jodi Philbrick Xin Wang
Lecturer (2)	Tricia Kuon Bobbie Bushman*
Retired/Modified Service and Professor Emeritus(4)	Barbara Stein Martin (Hazel Harvey Peace Professorship in Children's Library Services) Philip Turner Herman Totten Linda Schamber
Professor Emeritus (3)	Donald Cleveland** John Corbin** Margaret Nichols**

* Last held rank of a departed faculty member.

** Faculty members deceased since the last accreditation.

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.

The DIS faculty is comprised of a diverse group of educators and researchers who each make valuable and unique contributions to the MS program and curriculum, research productivity, and departmental activities.

The UNT/DIS has faculty members to teach the full curriculum and specializations as defined in the goals and objectives of the Department. Table III.2 demonstrates that full-time faculty taught a majority of the courses. They also taught or co-taught all of the core courses, with some core courses being co-taught with part-time faculty. On average, more than 80% of the core courses were taught by full-time faculty only. Of the 22 current faculty members (as of Fall 2019), six have joined since the MS program was last reviewed in Spring 2013. The UNT/DIS faculty includes two regents professors, five full professors, eight associate professors, three assistant professors, and one principal lecturer, two senior lecturers, and one lecturer (see Table III.2). Faculty losses are accounted for by two retirements (Dr. Elizabeth Figa and Dr. Guillermo Oyarce), and the departure from the department of three non-tenured professors for the advancement of their careers (Bobbie Bushman, John Marino, and Michele Villagran). Three faculty members have the rank of professor emeritus.

Table III.2 Percent of Master's Level Courses Taught by Full-Time vs. Part-Time Faculty

Term	# Courses/Core Taught by FT*	# Courses/Core Taught by PT**	Total % Courses by FT / PT	Total % Core Course by FT / PT
Fall 2013	60/10	48/1	56%/44%	91%/9%
Spring 2014	50/8	55/2	48%/52%	80%/20%
Summer 2014	58/3	43/1	57%/43%	75%/25
Fall 2014	67/5	54/1	55%/45%	83%/17%
Spring 2015	69/10.5	59/1.5	54%/46%	87.5%/12.5%
Summer 2015	58/8	47/2	55%/45%	80%/20%
Fall 2015	70/10	56/2	56%/44%	83.3%/16.7%
Spring 2016	64/7.5	53/2.5	55%/45%	75%/25%
Summer 2016	49/5.5	49/0.5	50%/50%	91.6%/8.4%
Fall 2016	68/7.5	67/2.5	50%/50%	75%/25%
Spring 2017	57/9	63/3	48%/52%	75%/25%
Summer 2017	44/4	46/1	49%/51%	80%/20%
Fall 2017	57/9.5	62/3.5	48%/52%	73%/27%
Spring 2018	61/8	56/3	52%/48%	73%/27%
Summer 2018	38/5	33/1	54%/46%	83.3%/16.7%
Fall 2018	61/5	46/1	57%/43%	83.3%/16.7%
Spring 2019	65/13	45/5	59%/41%	72.2%/27.7%

Note: * Full-time faculty co-teaching a class are counted as 50% of the workload. ** Part-time faculty may only co-teach a core course with a full-time faculty and are counted as 50% of the workload.

One faculty member, Dr. Ana Cleveland, has a joint appointment with the School of Public Health in the UNT Health Science Center. Dr. Martin Halbert, who served as Dean of Libraries for the University of North Texas University Libraries, joined the faculty in 2010 and participated in the DIS governance. He departed UNT on June 2017 to advance his career at another institution. In April 2018, Diane Bruxvoort started as the UNT Dean of Libraries and Librarian. She was formerly the Libraries, Special Collections and Museums

University Librarian and director at the University of Aberdeen in Scotland. Previously, she has worked at the University of Florida, the University of Houston, the Houston Public Library, the Harris County Public Library, and the Newberry Library - Chicago's Independent Research Library. She holds a bachelor's degree in English literature from Northwestern College and a master's in library science from the University of Texas at Austin.

Currently, 21 of the DIS faculty members teach courses offered in the master's degree program. This number includes three full-time lecturers who are associate members of the faculty and participate in all activities of the faculty. According to UNT Policy, associate members are faculty and practitioners appointed to the graduate faculty without the right to direct master's or doctoral theses. Dr. Lawrence Enoch, who is an associate graduate faculty member, has an appointment in the Department at the rank of principal lecturer. Two faculty members, Drs. Jiangping Chen and Yunfei Du, have administrative appointments and, therefore, have reduced teaching loads. The current distribution of the DIS faculty across ranks is noted in Table III.1.

The faculty of the UNT/DIS include scholars pursuing research and teaching in the majority of the areas identified by the Association of Library and Information Science Education (ALISE) on the Research Areas Classification Scheme that is published on the ALISE website on its mailing list order form at: https://www.alise.org/assets/documents/mailing_list_order_form.pdf. The University also includes research and areas of expertise for faculty on the Faculty Profile System. Appendix 18: DIS Faculty Expertise and Research Areas illustrates the areas of research, study, and teaching identified by the UNT/DIS faculty.

Concentrations and Graduate Academic Certificates

The concentrations (also called *programs of study* in the current UNT catalog and on the DIS website: https://informationscience.unt.edu/programs-study) are intended to prepare graduates to succeed in a wide range of positions and information settings in both private and public organizations. They serve as advising guides for students. Each student works with a faculty advisor to create an individualized program reflecting the student's career goals. The concentrations are useful to provide guidance for both the advisor and the student when selecting courses during their matriculation. An individual DIS faculty member is in charge of each concentration. All eight concentrations are directed by the DIS faculty.

The DIS faculty also offers eight Graduate Academic Certificates (GAC) designed by the University for people who want to enhance job skills, pursue a different career path, or simply explore new topics of interest. The DIS faculty member teaching in an area of specialization defined by the GAC supervises the completion of the required courses for the certificate. The faculty member selects the required courses to be completed and approves any changes or exceptions for students. The certificates require completion of between three courses (nine hours) or four courses (12 hours) to earn. The GAC's are used by masters students as a way to focus on an area of interest without having to pursue the entire program of study.

Size of the DIS Faculty

The DIS faculty are well qualified and productive in accordance with Standard III on faculty and are dedicated to executing the goals and objectives of the program. The department adheres to University, College, and Department policies and procedures for hiring and evaluating faculty. The faculty is sufficient in number to support the teaching, research, and service for the master's degree program. The total enrollment for both the DIS MS-IS and MS-LS programs is 776 students as of Fall 2018. The full-time faculty/student ratio of UNT/DIS is 35. Counting part-time faculty as 50% full-time equivalent, the faculty/student ratio at UNT is 1:25. While the faculty/student ratio is still comparatively higher than similar

LIS programs, the size of the UNT/DIS faculty has increased 20% (from 21 to 22 full-time faculty members, plus three on-going searches) since the last COA visit in 2013. At the same time, the number of students maintained the same level (from above 771 to 776). Of the library and information studies schools compared with the UNT/DIS program, five have large enrollments with master's students in the degree programs of over 500 (Table III.3).

Increasing the size of the DIS faculty to balance instruction to the size of the student body has been an on-going goal and concern of the faculty and a task on the DIS Strategic and Working Plans (Appendix 2). The Department has been recruiting faculty every year since 2013, but has not always succeeded. The faculty continue to work on balancing the workload among all faculty members across teaching, research, and service to align departmental needs and the knowledge and skill inventory of individual faculty members. Workload assignments take into account various faculty teaching, research and service efforts, master's and doctoral students' advising, class sizes, and responsibilities of cohort directors. Table III.3 presents faculty and student body size of schools with comparable programs to the DIS based on ALISE 2018 data.

Table III.3 DIS Faculty and Student Enrollment as Compared with Other LIS Programs (Year 2018)

School	Faculty	MS-LS Students	MS-IS Students	Total MS Students
University of North Texas	22	545	231	776
Kent State	23	531		531
Simmons College	24	706		706
Wayne State	13	803		803
San Jose State	24	1931		1931
Drexel	58	179		179
Florida State	27	190		190
Syracuse	44	195		195
UT Austin	20	254		254
University of Illinois	33	485		485
Clarion	8	337		337
Dominican	12	201		201
Indiana	13	113		113
Pittsburgh	63	87		87
Rutgers	19	375		375
Wisconsin - Milwaukee	28	102		102
Texas Woman's	13	500		500

The need to assist faculty members with the demands of teaching, advising, and working with students was identified and addressed in the DIS Strategic and Working Plan. The recommendation in the plan was to ensure that full-time faculty productivity would be continued through the provision of appropriate and sufficient resources including all appropriate human and emerging technologies and innovative instructional methods. To address the large student enrollment to faculty ratio along with the need to balance other

faculty responsibilities, the Advising Office has grown from two full-time advisors and supporting staff to five full-time staff and three student assistants (a 150% growth from the last accreditation visit). This office allows faculty to remain involved and connected with students. The Advising Office meets a number of needs for both faculty and students. The office provides academic advising, technical support, and answers other student life questions for our online student majority as well as our full-time campus-based students. Advising and interaction with cohort students by the cohort coordinators is still provided in person during the two required Web Institute weekends and through online and face-to-face advising sessions. These students are also supported by the work of the Advising Office in coordination with the faculty cohort coordinators. The cohort locations and faculty directors are listed in Table III.4.

Table III. 4 Cohort Location and Faculty Directors

Cohort Locations	Faculty Coordinator
Greater Los Angeles – Calif. State Univ. Northridge	Yvonne J. Chandler
Nevada/Utah	Yvonne J. Chandler
Pacific Region – Library Education for the American Pacific	Yvonne J. Chandler
El Paso, Texas	Yunfei Du, Tricia Kuon
Virginia	Philip Turner/Agnes Pearcy
Maine/New Hampshire/Vermont	Philip Turner/Agnes Pearcy

Standard III.1.3

Part-time faculty, when appointed, balance and complement the teaching competencies of the full-time faculty and are integral to the program.

Table III.2 above presents the proportion of all sections of MS courses taught by full-time faculty versus the proportion taught by all categories of part-time faculty over the past 20 terms (with all Maymester, Summer I, and Summer II classes and sections combined). This data illustrates that the UNT/DIS courses taught by part-time adjuncts is in balance to those taught by full-time faculty members. Slightly more Summer courses are taught by part-time faculty because full-time faculty generally devote Summers to their research and publication efforts.

The UNT/DIS program depends on a range of part-time or adjunct faculty to teach in areas that complement the teaching competencies of the full-time faculty, enriching the quality and diversity of the MS program. Some part-time faculty have an on-going relationship with the DIS (emeritus faculty, doctoral students, academic professional staff, Dallas Metroplex and Houston library practitioners, and members of the Board of Advisors). Other part-time faculty (UNT Libraries faculty, other UNT staff, professionals from the Dallas/Fort Worth area, University of Houston, and University of Texas Southwestern) are drawn from the local areas of the Dallas/Fort Worth Metroplex, Houston, the cohort locations, and across the country.

Team Approach

The UNT/DIS program maintained a stable enrollment between 2013 and 2019 since the last accreditation review period. The program maintained its enrollment in the school library certification program at nearly 40% of the whole master's program student body. As a method for handling large classes while maintaining quality control, a number of full-time faculty members maintained a team approach to course management. The team approach was used for all seven courses in the School Librarianship Program of Study. This approach made creative use of subject experts and skilled support people who worked in faculty-supervised teams for teaching and support. Depending on the demands of the course, the teams consisted of various combinations of full-time faculty as managers and instructors, part-time faculty and practitioners, and student teaching assistants.

The team approach enabled faculty to provide individualized learning experiences in large classes. Large classes were divided into smaller sections of classes of no more than 30 students per section, a size comparable to that of many traditional lecture classes. Team members were assigned to the smaller groups to interact with individual students in providing instruction, advice, and technical support. Many classes are further divided into small discussion or work groups of about ten students each. As enrollment has leveled off during the past few years, the number of classes using the team management approach decreased. Currently, the School Librarianship master's and certification program utilizes a group of seven library professionals as adjuncts for the program. These teachers have long-time relationships with the program and years of experience teaching the classes in 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 a program.

Adjuncts and Part-time Teachers

Part-time/adjunct professors contribute to the delivery of the MS program with specialized expertise. Part-time faculty balance and complement the teaching competencies of the full-time faculty, teaching courses in music librarianship, rare books, preservation, medical informatics, copyright, database technology, government documents, business information, economics of information, and telecommunications.

The Department is fortunate to have programs located in two of the largest metropolitan areas in the nation, Dallas and Houston. In addition, the DIS has access to potential instructors through its large network of top-level information professionals in the alumni base or in major cities that host the online master's cohort program. The names of part-time adjuncts and teaching fellows who taught for the DIS since the last accreditation are listed in Table III.5. Teaching fellows are DIS doctoral students who have expertise in the areas of their teaching.

Table III.5 Adjunct Faculty and Teaching Fellows

Organization Affiliation	Names of Adjuncts
UNT/DIS Emeritus or Retired Faculty Members	Dr. Barbara Stein Martin Dr. Philp Turner
UNT/DIS Alumni	Dr. Daniel Alemneh Dr. Sharon Jenkins Dr. Rich Anderson Dr. Margaret Carroll Constance Coyle Dr. Gale Hannigan

	Stephanie Fulton Valli Hoski Dr. Lynne Simpson Dr. Agnes Goz Pearcy Paul Birchall Gayle Prybutok Elena Vassilieva K. Masten-Cain M. McKnight Tisha Slagle Karen Snow-Bartholomew Kristi Johnson Starr
UNT University Libraries Professional Staff	Cynthia Batman Dr. Sian Brannon Gayla Byerly Morgan Gieringer Melody Kelly Frances May Will Senn Jennifer Sheehan Beth Thomsett Scott Mark Philips Morgan Gieringer Laurel Crawford Maristella Feustle Eric Upchurch
UNT/DIS Doctoral Students [assigned as Teaching Fellows to teach MS courses based on special expertise of the student]	Abdulrahman Habib Haihua Chen Hammad Khan Duha. Al Smadi Y. Alfarhoud Pranathy Enamela M. Farabough Guruprasad Gadgil Artemida Kabashi Spencer Keralis Priya Kizhakkethil Ryan Knudson Min Namgoong Serhiy Polyakov Fariba Sadeghinaeenifard Shadi Shakeri Ahmet Tmava Vyacheslav Zavalin Jenny Mumah S. Muwanguzi

	Melody McCotter
Adjunct Faculty in Dallas/Fort Worth, Houston, or Other Metropolitan Area or LIS Professionals	Deborah Jennings Marilyn Joyce Nancy LaCrone Kathy Royall Gina Minks Kimberly Moore Suhasini Ramisetty-Mikler Christina Reedy Adrianne Washburn Claudia Wayland Marco Zannier
Public Libraries	Dr. Reah Lawson Edward Hoyenski R. Hoyt
Academic Libraries	Tonda Bone Dr. Tyrone Cannon Jimmy Newland Pat Bozeman Michael Robertson
Special/Data or Knowledge Management	Katherine Chaumont Denise Chochrek Deborah Halsted Kristie Holmes Mon Yin Lung Dr. Florence Mason Mary O'Connor Dr. Timothy Stettheimer Barbara Fullerton Guonan Wang Shuyi Wang

Note: Others/Teaching Fellows also include K. Acosta, Stephen Brogden, Michelle Brown, P. Durkee, A. Frith, C. Givens, K. Gonzalez, M. Johnson, Julie Judkins, Andrew Justice, Michael Karabinos, J. Klein, J. Merkel, Julie Nichols, Danielle Plumer, and K. Thomas.

The Dallas/Fort Worth Metroplex is home to two of the five largest public universities in the state (UNT including the UNT Health Sciences Center and UT Arlington), as well as several other colleges and universities (Southern Methodist University and Texas Christian University), two major public library systems (Dallas and Fort Worth), three law schools (Southern Methodist University, University of North Texas at Dallas, and A&M in Fort Worth), the national or regional headquarters of many Fortune 500 companies, service institutions, such as law firms, advertising, and accounting companies, and many independent school districts.

The growth in enrollment of the Houston program has allowed the Department to serve libraries in one of the most diverse and fastest-growing cities in the nation via distributed learning methods by inviting

professionals from the Houston area to serve as part-time instructors. As the fourth largest city in the country, the Houston metropolitan area offers a community of readily available professionals due to the large number of universities, colleges, corporations, museums, public library systems, medical centers, research institutions, and hundreds of school libraries. The UNT/DIS program has a longstanding relationship with members of the professional community working in libraries and systems in the Houston community. These institutions include the Houston Public Library, Harris County Public Library, Houston Public Schools, Montgomery County Library System, Houston Independent School District, Houston Area Law Librarians, University of Houston, and Texas Southern University. The University of Texas-M.D. Anderson Cancer Center has proven to be a particularly fruitful source of instructors for the Health Informatics concentration.

Over the years, the Department has taken advantage of the rich communities of professional librarians in the large cities it serves outside of our home state of Texas. Relationships are maintained with the professional communities in Los Angeles, Atlanta, Las Vegas, Salt Lake City, Billings, Richmond (Virginia), Manchester (New Hampshire), and other areas that enrich the MS program in the cohort sites. Library professionals in the cohort areas are advisors on the community, teach classes, act as guest speakers, offer lectures, provide mentoring and practicum experiences to students, and provide leadership and support to the DIS program.

Each of the cohort locations has a professor who is in charge of maintaining and developing relationships with the professional community, alumni, and recruiting new students (Table III.4). They identify interested and qualified professionals and work with them to develop courses and deal with problems. Strong relationships are forged by the DIS faculty members at each of the cohort sites that have yielded many positive partnerships and experiences for the MS program and the University.

In conclusion, the UNT/DIS harmoniously utilizes a blend of experienced and knowledgeable library and information science professionals to augment the expertise and specializations of the full-time faculty members. The faculty recognizes the desirability of having a larger proportion of courses taught by full-time faculty, particularly the value of having full-time faculty with responsibility for core areas of the curriculum. The UNT/DIS faculty has continuously agreed that all core courses will be taught by full-time tenured or tenure track faculty members or lecturers. Each of the concentrations (programs of study) is also directed by a full-time faculty member to ensure quality and stability in the program.

Courses taught in the master's program by part-time adjunct faculty include those listed in Appendix 19: Courses Taught by Adjunct Faculty. These courses were taught during the period Fall 2013-Fall 2019.

Part-Time Faculty Selection

UNT part-time faculty are screened by the Provost Office on their credentials, and they need to re-apply every year through an open portal (facultyjobs.unt.edu). Part-time faculty are selected by the Department based on domain expertise and teaching ability; many are accomplished alumni of the UNT/DIS program and thus already have an understanding of the DIS program goal objectives. Part-time faculty who have taught master's level courses for us in the period Fall 2013-Fall 2019 are listed in Table III.5. The list reflects the nature of their affiliation.

Supporting the adjunct and part-time instructors was identified by the DIS faculty as an on-going initiative in the Working Plan, as evidenced by the DIS faculty manual (Appendix 20 - to be revised in 2020-2021). The DIS faculty continues to use the team approach model to support adjunct instructors and to maintain quality and consistency in the program which uses a lead faculty member to work with adjuncts. Other

support systems have also been started to support these important members of the Department's instructional team including getting their input in the planning process.

Standard III.2.1

The program demonstrates the high priority it attaches to teaching, research, and service by its appointments and promotions;

The faculty of the UNT/DIS is comprised of a group of diverse scholars with specializations reflecting the interdisciplinary nature of the library and information science field. The interdisciplinary approach to professional education of the master's degree shapes the selection and appointment of faculty as well as the research and other creative activities of professors. Candidates for faculty positions are evaluated in terms of their potential for success in teaching, research, and service. The importance of both teaching and research are emphasized in faculty appointment, as evidenced in the job posting at: https://facultyjobs.unt.edu/applicants/Central?quickFind=53675.

The DIS Guidelines for Promotion and Tenure (https://informationscience.unt.edu/departmental-policies) clearly spell out the criteria considered for promotion, with high expectations for research (strong evidence of research productivity; significant impact on the field of LIS; an intellectual and professional identity and a cohesive body of research), teaching (including classroom teaching, mentoring, and course and curriculum development), and service (including evidence of the quality and impact of service activities, with particular attention to relation to research and teaching in the case of public and professional/disciplinary service). Faculty are encouraged to be leaders through innovation in teaching, research, and service. The DIS Promotion and Tenure Guidelines and College Bylaws (Appendix 21: College of Information Charter and Bylaws) clearly detail the criteria and procedure for promotion and tenure. Each candidate must present strong evidence of research productivity, excellent teaching, and significant involvement in service to the department, the university, and the profession. Since 2013, eight faculty members have received promotion in rank or promotion with tenure, including three associate professors, two professors, and three senior or principal lecturers. During this time, all of the Department's recommendations to the Provost regarding tenure and promotion were granted.

Standard III.2.2

by encouragement of excellence in teaching, research, and service; and through provision of a stimulating learning and research environment.

The UNT/DIS continues to be a leader in excellence in teaching on the University of North Texas campus. The School of Library and Information Sciences, now the Department of Information Science, was a leader on the campus in the development of the highly successful distance learning programs now offered by programs and departments across the UNT campus. The UNT/DIS faculty has partnered with other colleges, departments, and the University Libraries to develop new graduate master's and doctoral programs, courses, revisions of existing courses, innovative curriculum development, and groundbreaking cohorts. The DIS faculty participate in departmental, college level, and university level services, and demonstrate leading the library field at the state and national levels. For example, Dr. Yvonne Chandler served as the President of Texas Library Association from 2013-2014. Dr. Jiangping Chen served as the Conference General Chair of the prestigious Joint Conference of Digital Libraries 2018. Dr. Shultz-Jones served on the IFLA School Libraries Standing Committee, and Dr. Sarah Evans and Dr. Barbara Schultz-Jones were the prime movers for the co-sponsorship of the 2020 International Association of School

Libraries conference in Denton, Texas. Faculty are encouraged and rewarded in the process of promotion, and this is reflected in merit-based salary increases.

..and through provision of a stimulating learning and research environment.

Faculty Teaching Excellence

Teaching excellence is highly encouraged and supported at the UNT and within the DIS. The University provides resources and learning materials through its Center for Learning Experimentation, Application and Research (https://teachingcommons.unt.edu/). The teaching handbook (https://teachingcommons.unt.edu/teaching-handbook/teaching-unt/effective-teaching) provides resources for learning effective teaching techniques and skills, including assessment and evaluating students. New faculty attend orientations that introduce these resources.

The Department's faculty annual evaluation guideline (Appendix 22) and reappointment, tenure, and promotion policy (https://informationscience.unt.edu/departmental-policies) specifies requirements and criteria for teaching performance. The PAC and RPTC committees are responsible for explaining these policies to new or junior faculty members. Working with the college, the Chair encourages faculty to nominate colleagues for UNT faculty awards on teaching, research, or service excellence.

Faculty Research

Faculty research is given high priority at the DIS and UNT. An on-going effort articulated by the DIS faculty in the Working Plan was to increase the level of external grants and research funding by all DIS faculty. The plan included recommendations to develop strategies to encourage increased faculty research productivity to strengthen faculty research development efforts, such as supporting participation in intramural programs, collaboration, and faculty research using doctoral students. The range of funded research projects is one indicator of the innovation that characterizes research undertaken by the UNT/DIS faculty. A review of the C.V.s of the UNT/DIS full-time faculty (Appendix 17) demonstrates the range of expertise and activities that contribute to making the UNT/DIS an exciting, stimulating, and innovative learning and research environment.

Ms. Janet Thompson is currently the grant officer housed in the College of Information. The grant officer provides grant support and budget management assistance. With this level of support, the DIS faculty have been successful at obtaining teaching and research grants from internal and external sources. The University publishes its annual grant submissions and awards by the Office of Grants and Contracts Administration (OGCA) site, and the DIS faculty submissions and awards is available from its site (https://research.unt.edu/about-us/reports-statistics). According to the UNT OGCA data, since the last accreditation, the DIS faculty have submitted more than $26 million in funding proposals and have been funded more than $5 million, as shown in Table III.6.

Table III.6 Externally Funded Grant Projects

Funding Agency	Project and Funded Amount	Principal Investigators or Co-Principal or Investigators or Partner
American Association of School Librarians	Year: 2017	Daniella L. Smith

	Enhancing STEM achievement. A school librarian transmedia project, $12,189	
Carl Perkins Vocational and Technical Education Act Fund, U.S. Department of Education	Year: 2017 Career & Technical Education Cluster Grant – Arch & Constr., STEM, Manufacturing, $60,000	Jeff M. Allen
	Year: 2017 Career & Technical Education Cluster Grant – Business, Mgmt. & Admin., Marketing, Sales & Services, $60,000	Jeff M. Allen
Institute of Museum and Library Services	Year 2013 Laura Bush 21st Century Librarian Program – "ELMS: Educating Librarians in the Middle South - Diversifying Librarianship for out Digital Future.", $498,363	Yvonne Chandler, PI; Ana D. Cleveland, Co-PI Daniella L. Smith, Co-PI
	Year: 2013 Effective and Efficient Multilingual Information Access to Digital Collections, $486,078	Jiangping Chen
	Year: 2015 Laura Bush 21st Century Librarian Program – "LEAP II: Library Education for the American Pacific: A Project to Strengthen Libraries in the US-Affiliated Pacific Islands", $499,991	Yvonne Chandler
	Year: 2016 Developing Library Cyberinfrastructure Strategy for Big Data Sharing and Reuse, $308,175	Jiangping Chen
	Year: 2018 Training Library Professionals for Data Literacy Leadership, $45,598	John Marino, Jr. Barbara A. Schultz-Jones
	Year: 2018 Exploring Methods and Techniques for Facilitating Access to Digital Language Archives, $50,000	Oksana L. Zavalina
National Science Foundation	Year 2017 SFS-NEW: Advancing Learning and Leadership Through an Integrated Multidisciplinary Doctoral Program in Information Assurance, $1,269,469	Suliman Hawamdeh, Co-PI

	Year: 2018 REU Site: Data Analytics and Information Retrieval, $379,879	Junhua Ding, PI Jiangping Chen, Co-PI

The DIS sponsors a weekly Brown Bag research seminar (https://informationscience.unt.edu/research-meetings) jointly for the DIS faculty members and students to discuss various research topics. These meetings provide a valuable opportunity for the DIS faculty to hear about new projects and experiences. Faculty from other departments are also invited. Students and visiting scholars participate as well in these meetings and exchange research experiences from different perspectives.

All DIS faculty have access to intramural funding offered by the Office of Research and Grants Administration Grants Administration (OGCA) and the Office of the Provost to fund research and scholarly and creative projects. The University awards a number of funding opportunities including the Research Initiation, Research Opportunity Program, and Research Enabling grants. The Junior Faculty Summer Research Grants are sponsored by the Office of the Provost. These grants provide funding to stimulate and aid the initiation of research by junior faculty, seed money to develop pilot-data and/or conduct preliminary research that shows a high potential for attracting and maintaining funding from external agencies, summer salary support, and monies for research and scholarly activities for which extramural funding is not available. A number of the DIS faculty have received intramural funding awards including Dr. Xin Wang, who received the UNT Provost's Venture Fund for China, and UNT CLEAR, and NetDragon Digital Research Center. Dr. Carrie Chang received two Junior Faculty Research Seed Grants and new DIS faculty members Drs. Junhua Ding, Sarah Evans, and Lingzi Hong received UNT Global Venture Funds to collaborate with researchers in China, as listed in Table III.7.

Table III.7 Intramural Research Funding

Fiscal Year	Program	Total Funded Amount	Project	LIS Faculty Member
2014	Provost's Venture Fund for China	$3,350	Enhancing U.S. – China library exchange	Xin Wang
2015	CLEAR Office of University of North Texas	$6,000	The Re-design of a Large-Size LIS Core Course	Xin Wang
2018	NetDragon Digital Research Center	$6,071	User Experience Research for 101 PPT application	Xin Wang
2018	UNT Research Seed Grant	$6,310	Making Sense of the Internet of Things (IoT) Data Breach with a Topic Map	Hsia-Ching Chang
2019	UNT Global Venture Fund	$2,000	A Big Data to Knowledge Infrastructure for Analyzing and Modeling the Morphology of Biology Cells	Junhua Ding

2019	UNT Global Venture Fund	$1,500	Comparative Study of Data Literacy Education for College Freshman in the U.S. and China	Sarah Evans
2019	UNT Global Venture Fund	$2,000	Hosting a Visiting Scholar from China	Lingzi Hong
Total	$27,231			

The DIS faculty have a tradition of producing excellent research and this trend continues. As of September 2019, the DIS faculty have published 19 books, 29 book chapters, 82 journal articles, 129 conference proceedings, and many other formats of publications, as evidenced in Table III.8.

Table III.8 Faculty Scholarly Productivity Since 2013

Type of Scholarly Work	Total
Books	19
Book Chapters	29
Journal Articles	82
Proceedings	129
Papers and Presentations	203
Invited Papers	7
Posters	27
Panels	42
Editorial Roles	18
Grants Funded	15
Proposals Submitted - Unfunded	6
Consultant/Accreditation Visitor	19

Faculty Honors and Recognition

One indicator of faculty excellence is the external recognition of quality. At the campus level, several current UNT/DIS faculty have received recognition for outstanding scholarship, teaching, and service, as indicated in Table III.9. This is noteworthy given that there are more than 1,000 tenure track faculty at UNT and that

the College of Information is the smallest college on the UNT campus. The excellence of the UNT/DIS faculty has similarly been recognized with awards from professional associations.

More than half of the DIS faculty received national or campus awards, as indicted in Table III.9. Examples are: Dr. Yvonne Chandler was awarded the DEMCO/ALA Black Caucus Award for Excellence in Librarianship Award in 2016, the Albert Nelson Marquis Lifetime Achievement Award in 2018 by the Black Caucus of the American Library Association, and the James Andrews Literature Award for the book Celebrating Diversity – Leadership in 2019 by the American Association of Law Libraries. Dr. Ana Cleveland was awarded the Marcia C. Noyes Award in 2018, and the Fellow of the Medical Library Association in 2013 by the Medical Library Association; as well as the Distinguished Service Award in 2013 by the South Central Chapter of the Medical Library Association. These awards are recognitions of the DIS faculty's excellence in teaching, research, and service to the library and information communities.

Table III.9 Faculty Receiving National and Campus Awards

Faculty Member	Award
Yvonne J. Chandler	James Andrews Literature Award for the book Celebrating Diversity – Leadership, 2019, American Association of Law Libraries Albert Nelson Marquis Lifetime Achievement Award, 2018 Black Caucus of the American Library Association DEMCO/ALA Black Caucus Award for Excellence in Librarianship Award, 2016
Jiangping Chen	Association for Computing Machinery (ACM) Recognition of Service Award, 2018
Ana Cleveland	Medical Library Association Marcia C. Noyes Award, 2018 Fellow of the Medical Library Association, 2013 South Central Chapter of the Medical Library Association Distinguished Service Award, 2013 Sarah Law Kennerly Endowed Professorship, 2013
Yunfei Du	University of North Texas Provost Commendation for the UNT Thank a Teacher Program, 2013-2014 International Conference on Integrated Development of Digital Publishing and Digital Libraries (CDPDL) Best Presentation Award, 2017

Jeonghyun Kim	International Conference on Information and Social Science Outstanding Paper Award, 2017 University of North Texas Honor's Day Faculty Recognition List Provost Commendation for the UNT Thank a Teacher Program, 2013-2014
Tricia Kuon	Keller Independent School District Innovative Teacher's Inspiring Students Award, 2016
Jodi Philbrick	Medical Library Association President's Award, 2017-2018 South Central Chapter of the Medical Library Association First-Time AHIP Applicant Award, 2016
Barbara A. Schultz-Jones	Association for the Advancement of Computing in Education (AACE) E-Learn Outstanding Paper Award, 2017 University of North Texas Honor's Day Faculty Recognition List, 2013, 2017-2018 Provost Commendation for the UNT Thank a Teacher Program, 2013-2015, 2017
Daniella Smith	American Association of School Librarians Nomination - Chair of the 2019 Educators of School Librarians Section E-Learn Conference Outstanding Research Paper Award, 2017 University of North Texas Honored Faculty Member, 2015 Provost Commendation for the UNT Thank a Teacher Program, 2013-2015, 2017
Xin Wang	International Conference on Chinese Digital Publishing and Digital Libraries Best Presentation Award, 2016
Hsia-Ching Chang	The 13th International Conference on Knowledge Management (ICKM 2017) Best Paper Award The 11th International Conference on Knowledge Management (ICKM 2015) Osaka Prefecture University President Award

Oksana L. Zavalina	University of North Texas Faculty Development Leave, 2018 Office of Research and Economic Development, University of North Texas Junior Faculty Summer Research Fellowship

Standard III.3.1

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 school has policies to recruit and retain faculty from diverse backgrounds.

The DIS and the College of Information adhere to university policies and procedures concerning personnel at all levels. The University of North Texas is committed to increasing the diversity of personnel. The DIS has been actively searching for applicants from diverse backgrounds especially those from underrepresented groups. The Office of Equal Opportunity and Access at UNT (https://edo.unt.edu/equal-opportunity) provides training and assistance for each search and has search policies for governing the procedure of advertising, recruitment, and interviewing for academic searches. The UNT policy ensures all advertising for academic positions carries appropriate language to encourage applicants with diverse backgrounds.

Faculty Searches

In order to attract applicants for faculty positions from diverse backgrounds, the DIS advertises the position in related professional journals, conferences, and websites. Multicultural faculty, especially faculty from underrepresented groups in other institutions, are contacted for suggestions. Letters of invitation to apply are sent to identifiable African Americans, Hispanics, female candidates, and other culturally diverse potential applicants.

Diversity Among Faculty

The UNT/DIS continues to be one of the most diverse academic departments on the UNT campus. The department has a long tradition of having members of underrepresented populations on its faculty. In 2019, out of 22 full-time faculty members, the ethnic composition was 11 White, three African American, one Hispanic, and seven Asian. Since 2013, four Asian American professors have joined the faculty. Currently, the ethnic composition of the faculty is three African Americans (of whom one is a Regents Professor Emeritus and two are tenured Associate Professors), one Hispanic (who is now a Regents Professor, after Dr. Guillermo Oyarce retired in September 2019 as an Associate Professor), and seven Asians (three Full Professors, one Associate Professor, two Assistant Professors, and one Senior Lecturer). These proportions make the DIS faculty the most diverse faculty among all major academic units at the University.

The diversity of the DIS faculty is comparable or more representative than faculty at all LIS programs reporting to ALISE. The DIS faculty is diverse, comprised of White, Hispanic, Asian, African American, or international educators from Russia and Jordan. The percentage of faculty members at all LIS programs reporting to ALISE for the ethnic groups comprising the UNT/DIS faculty is much smaller. Table III.10

illustrates the comparison of the DIS faculty to all LIS faculties. The number of ethnic minorities that are on the DIS faculty totals 11 out of 22 faculty members for a proportion of 50.0%, as shown in Table III.10.

Table: III.10 Ethnicity and Rank of Current Full-time Faculty as Compared to All LIS Faculty – DIS/ALISE

Rank	Hispanic:	Asian or Pacific Islander	Black or African American	White	International:	Total
Deans & Directors	0/1	1/6	0/2	0/43	0/0	1/59
Professors	1/5	3/30	0/6	3/151	0/2	7/220
Associate Professor	0/11	1/30	3/15	3/181	0/2	7/346
Assistant Professor	0/12	2/39	0/19	1/146	1/21	4/271
Lecturer	0/2	1/8	0/1	3/86	0/3	4/117
Total LIS (N = 22)/ ALISE (N = 1054)	1/32	7/148	3/48	10/640	1/28	22/1054
Percentage (%)	4.5/3	31.8/14	13.6/4.5	45.5/60.7	4.5/2.7	

Gender Composition and Multicultural Background of Faculty

The gender composition back in 2013 was 12 female and 8 male faculty members. Currently, in 2019, the composition is 14 female and 8 male professors. The faculty includes one fluent speaker of Spanish, six Chinese, one Korean, one Ukrainian, and one Arabic.

Recognition of Minority Faculty

The DIS is the home of the Hazel Harvey Peace Professorship in Children's Library Services. In 2004, the University's School of Library and Information Sciences (now called the DIS) raised $350,000 for an endowed professorship to honor Fort Worth resident Hazel Harvey Peace, a longtime educator and advocate of children's literacy. In 2019, DIS Associate Professor Dr. Yvonne Chandler and a DIS alumna and former lecturer Dr. Michele Villagran were the co-authors of a publication that has been awarded the 2019 Joseph L. Andrews Legal Literature Award by the American Association of Law Libraries (AALL). Regents Professor Dr. Ana Cleveland was the recipient of the 2018 Marcia C. Noyes Award, the highest

honor that the Medical Library Association confers. Faculty members receiving national and campus awards are listed in Table III.9.

Explicit and equitable faculty personnel policies and procedures are published, accessible, and implemented.

All guidelines and policies on faculty review are published online and have been made available to faculty since the beginning of their employment. The detailed information on tenure and promotion policies, documents, and forms can be found at the university faculty success website at: http://facultysuccess.unt.edu/tenure-and-promotion. These policies and procedures are available and promoted within the DIS, COI, and UNT as part of the normative institutional documentation. Appropriate archived copies of the latest versions of these documents are accessible and maintained by appropriate organizational mechanisms. This body of policies and procedures are reviewed in appropriate cycles to ensure their relevance. The Department's Bylaws provide the structure wherein changes can be made. In 2017 and 2018, new departmental tenure and promotion guidelines were approved and adopted by the DIS faculty and recognized by the Office of the Provost.

Standard III.4.1

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

The faculty are recognized experts in the areas in which they teach (Appendix 18 DIS Faculty Expertise and Research Areas). They are competent in teaching students in the Master's program, as indicated in student SPOT evaluations (see Table II.6 in Curriculum) and the SPOT scores in the UNT faculty information system at: https://facultyinfo.unt.edu/). As mentioned in Standard II: Curriculum, on average, SPOT scores for all faculty, faculty adjuncts, and teaching fellows are 4.22 (out of 5) for the overall summative rating and 5.47 (out of 7) for the Challenge and Engagement Index, with an average response rate of 56.5%.

Faculty have knowledge of technology as it relates to the content of their designated teaching areas as well as with respect to its use in instruction. With regard to the use of technology in teaching, faculty have access to the infrastructure developed to support distant learning courses and to instructional technology staff who can aid them in its effective use. The UNT Center for Learning, Experimentation, Application and Research (CLEAR) (https://clear.unt.edu/) provides necessary support for teaching excellence.

There is a strong emphasis on quality of teaching by the University. Moreover, the State of Texas requires the evaluation of teaching. The UNT Student Evaluation of Teaching survey (SETE) was created in 2008. The SETE system was used to take student evaluations for each course at the end of each semester. It was intended to produce valid scores for measuring teaching effectiveness on a scale that crosses all course sections at UNT. All instructors were required to use the SETE system as a tool for student feedback on instruction before a new system was developed in 2015. Faculty, staff, and related administrators in the University, COI, and DIS could access the evaluation results online. In 2015, UNT implemented a new student evaluation system, Student Perceptions of Teaching (SPOT). All instructors are required to use the SPOT system as a tool for student feedback on instruction.

SPOT is the student evaluation system for UNT, implemented in Summer 2015, to comply with the state of Texas House Bill 2504. Developed and offered by the University of Washington (IASystem®), this proven

system offers online administration options, as well as evaluation forms that support different pedagogical formats (e.g., large lecture, online, studio). This system also offers many benefits to obtain an overall assessment of the course and instructor. Below are just a few of the highlights of the system:

- Offers 15 different forms to provide feedback on specific aspects of each course type;
- Allows faculty members to add their own questions;
- Allows custom form capability;
- Includes FOUR summative global questions to allow cross-class and cross-instructor comparisons;
- Reports are available within three days after grades are posted; and
- Intuitive interface which sends students a direct link to their evaluations for each class.

SPOT reports are available via the Faculty Portal at https://sso.unt.edu. Beginning in Fall 2016, UNT began to make teaching evaluation scores available on the Faculty Information Systems (FIS).

Standard III.4.2

and active participation in relevant organizations.

The qualifications of each faculty member include…active participation in appropriate organizations

The DIS faculty are active in a variety of local, state, and national and international professional associations related to teaching and research fields. Current faculty CVs (Appendix 17) demonstrate the interdisciplinary character of this participation and their professional activities.

Full-time DIS faculty members are active in the American Library Association (including a wide variety of divisions and round tables; e.g., Associate Professor Dr. Daniella Smith is a member of the ALA Council), American Society for Information Science and Technology, Association for Library and Information Science Education, International Federation of Library Associations (IFLA), Medical Library Association, American Association of Law Libraries, and Special Libraries Association. Other associations in which one or more faculty members participate include: American Medical Informatics Association, Association for Computing Machinery, International Society for Knowledge Organization, Association of Internet Researchers, IEEE, International Communication Association, International Foundation for Multi-Agent Systems, International Reading Association, Children's Literature Association, and the National Reading Conference.

Many of the DIS faculty are active members of international professional associations. Dr. Suliman Hawamdeh, the former department chair, is a well-known expert in the field of knowledge management and an active member in the International Council on Knowledge Management (ICKM). Dr. Barbara Schultz-Jones and Dr. Ana Cleveland are active members of IFLA. Dr. Barbara Schultz-Jones is active in the International Association of School Librarianship (IASL), and the DIS is co-sponsoring the 2020 IASL Annual Conference in Denton, Texas, in June 2020.

Faculty members are also active participants in state and local organizations and hold leadership positions at the highest levels. Table III.11 lists the organizations in which the DIS faculty are actively participating. Many of the faculty members served leadership positions. For example, Yvonne Chandler was the President Elect of the Texas Library Association for 2013 – 2014.

Table III.11 Faculty Services in Professional Organizations

Faculty Name	Services in Professional Organizations
Jeff M. Allen	Academy of Human Resource Development
	University Council for Workforce and Human Resource Education
	Association for Career and Technical Education Research
	Academy for Career and Technical Teacher Education
	Knowledge and Information Professional Association
Bobbie Bushman	Youth Services Manager
	Interlibrary Loan Librarian
	Reference Librarian
Yvonne J. Chandler	American Association of Law Libraries
	Beta Phi Mu International Library Honor Society
	Dallas Association of Law Librarians
	Southwestern Association of Law Libraries
	Special Libraries Association - National Association and Texas Chapter
	Texas Library Association
	Texas Association of Law Libraries
	American Library Association
	Association of Library and Information Science Education
Hsia-Ching Chang	American Society for Information Science and Technology
	Association for Library and Information Science Education
	Association for Computing Machinery
	Association for Information Systems
	Data Science Association
Jiangping Chen	American Society for Information Science & Technology The American Library Association Association for Machine Translation in the Americas Association for Library and Information Science Education Texas Library Association Association for Computing Machinery ACM Special Interest Group on Information Retrieval The Association for Computational Linguistics
Ana D. Cleveland	National Library of Medicine
	National Network of Libraries of Medicine
	American Medical Informatics Association
	Medical Library Association

	South Central Chapter/MLA
	American Library Association
	Association for Library and Information Science Education
	SALALM
	REFORMA
	American Society for Information Science
	Texas Library Association
	Metroplex Council of Health Sciences Librarians
	World Conference on Continuing Education for Library and Information Professions
	Pi Lambda Theta
Junhua Ding	Information and Software Technology
	IEEE TSMC-A
	IEEE TSMC-B
	IEEE TSMC-C
	ACM SAC (SE track)
Yunfei Du	Association for College and Research Libraries
	American Library Association
	American Society for Information Science and Technology
	Texas Library Association
Lawrence M. Enoch	Special Library Association
	Texas Library Association
	Faculty Representative
	Beta Phi Mu faculty representative
Suliman Hawamdeh	Knowledge and Information Professional Association
	Information and Knowledge Management Society
	Oklahoma Library Association
	American Library Association
	American Society for Information Science and Technology
	Institute of Information Scientists
	ACM
Jeonghyun (Annie) Kim	American Society for Information Science and Technology
	Association for Library and Information Science Education
	Association of Internet Researchers
	ASIS&T SIG USE
	ASIS&T SIG ED

Tricia Kuon	Texas Library Association Advocacy & Legislation Committee
John L. Marino	American Library Association
	Association for Information Science and Technology
	American Association of School Librarians
	Association for Library and Information Science Education
	Texas Library Association
	Washington Library Association
	International Society for Technology in Education
Shawne D. Miksa	American Library Association
	Association of Library and Information Science Education
	American Society of Information Science & Technology
	International Society of Knowledge Organization
	Journal of Library Metadata
	Texas Center for Digital Knowledge
	Texas Library Association
	Library Technology Now
	Metadata Education and Research Information Center
William E. Moen	American Society for Information Science and Technology
	Association for Computational Machinery
	Association for Library and Information Science Education
	American Library Association
	IEEE Computer Society
	Internet Society
Brian C. O'Connor	Document Academy
Guillermo A. Oyarce	American Society for Information Science & Technology
	International Conference of Knowledge Management
Jodi Philbrick	Association for Library and Information Science Education
	Beta Phi Mu Honor Society
	HealthLINE
	Medical Library Association
	South Central Chapter of the Medical Library Association
	Texas Library Association
Barbara A. Schultz-Jones	American Association of School Librarians
	American Educational Research Association
	American Library Association
	Association for Library and Information Science Education

	Association for Information Science and Technology
	iSchools Organization
	International Association of School Librarianship
	International Federation of Library Associations
	Texas Library Association
Daniella L. Smith	American Association of School Librarians
	Association for Library and Information Science Education
	American Library Association
	Texas Library Association
	Young Adult Library Services Association
	Association for Library Services to Children
	International Association of School Librarians
	Society for Information Technology & Teacher Education
Xin Wang	Association or Information Science and Technology
	American Library and Information Science Education
	American Medical Informatics Association
	Health Information and Management Society
	Texas Library Association
Maurice B. Wheeler	American Library Association
	Midwest Archives Association
	Texas Library Association
	Music Library Association
	National Opera Association
Oksana L. Zavalina	Association for Library Collections and Technical Services
	Association for Library and Information Science Education
	Texas Library Association
	Association for Information Science and Technology
	American Library Association
	Ukrainian Library Association

Standard III.5

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

The University of North Texas is a major research university and all of the DIS tenure-track faculty members are actively engaged in research and publication. In the area of research, the DIS faculty continue to be awarded significant external funding, increasing the department's contribution to the knowledge base in the faculty members' area of specialization and scholarship.

The sustained record of accomplishments of faculty is available on the DIS website (https://informationscience.unt.edu/) and in the UNT Faculty Profile System (https://facultyinfo.unt.edu/). The details of that sustained record of accomplishments in the areas of publication, conference presentations, panels, and other scholarly productivity by the DIS faculty since 2013 can be found in Table III.9.

Grant Funding

The DIS faculty have been successful in competing for major grants from a variety of federal agencies and foundations. Table III.7 provides a listing by funding agency of other significant projects for which the DIS faculty have been principal investigators or co-principal investigators since 2013.

The DIS faculty members assisted in securing nearly $6.55 million dollars in external funding for UNT during this seven-year period (Table III.6, Appendix 23: DIS Sponsored Projects External Funding Activities) through 43 submitted and 12 funded proposals.

Intramural Research Funding

Several DIS faculty members, especially new faculty members, have received intramural funding offered by the Office of Research and Contracts Administration (OGCA) and others to fund research, scholarly and creative projects (Table III.7). These grants provide funding to stimulate and aid the initiation of research for junior faculty, seed money to develop pilot-data, and/or conduct preliminary research that shows a high potential for attracting and maintaining support from external funding agencies, Summer salary, or research and scholarly activities for which extramural funding is not available.

Standard III.6.1

The faculty hold advanced degrees from a variety of academic institutions.

The DIS faculty hold advanced degrees from various institutions and as the faculty expands, that variety increases. As a result of new hires and the introduction of new areas of expertise to supplement the department's traditional strengths in core areas of library and information science the faculty profile of the DIS faculty has continued to become more multidisciplinary. New courses and programs have been introduced to the MS program and have enhanced interdisciplinary and historical linkages across the campus. The diverse list of the DIS faculty's advanced degrees and granting institutions can be found in Table III.12.

Table III.12 Current DIS Faculty

Faculty Member	Highest Degree Earned	Year Granted	Institution Granting Degree	Field of Study
Jeff Allen	PhD	1994	Pennsylvania State University	Vocational Industrial Education
Yvonne Chandler	PhD	1995	University of Michigan	Information Studies
Jiangping Chen	PhD	2003	Syracuse University	Information Transfer
Ana Cleveland	PhD	1976	Case Western Reserve University	Information Science
Junhua Ding	PhD	2004	Florida International University	Computer Science
Yunfei Du	PhD	2003	University of North Texas	Information Science
Larry Enoch	PhD	1992	University of North Texas	Library Science
Sarah Evans	PhD	2017	University of Washington	Learning Sciences
Suliman Hawamdeh	PhD	1989	University of Sheffield	Information Studies
Lingzi Hong	PhD	2019	University of Maryland	Data Science
Jeonghyun Kim	PhD	2006	Rutgers University	Library and Information Studies
Tricia Kuon	PhD	2000	University of Wyoming	Curriculum and Instruction
Shawne Miksa	PhD	2002	Florida State University	Library and Information Studies
William Moen	PhD	1998	Syracuse University	Information Transfer
Brian O'Connor	PhD	1984	University of California, Berkeley	Representation of Moving Image Documents
Guillermo Oyarce	PhD	2000	University of North Texas	Information Science
Jodi Philbrick	PhD	2012	University of North Texas	Information Science
Barbara Schultz-Jones	PhD	2007	University of North Texas	Information Science
Daniella Smith	PhD	2009	Florida State University	Library and Information Studies
Xin Wang	PhD	2012	University of Missouri	Library and Information Science
Maurice Wheeler	PhD	1994	University of Pittsburgh	Library Science
Oksana Zavalina	PhD	2010	University of Illinois at Urbana-Champaign	Library and Information Science

Standard III.6.2

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.

Diversity of Backgrounds

As a result of new hires and the introduction of new areas of expertise to supplement the Department's traditional strengths in core areas of library and information science, the faculty profile of the DIS faculty has continued to become more multidisciplinary. Details of faculty services to professional organizations can be found in Table III.11, as well in their resumes in Appendix 17: Faculty Curriculum Vitae.

Ability to Conduct Research in the Field

As faculty in a major research university, all full-time DIS faculty members actively engage in research and publication. Strengths and areas of specialization for the DIS faculty are identified on the DIS website (https://informationscience.unt.edu/) and are listed in the UNT Faculty Profile System (https://facultyinfo.unt.edu/). Details of the number of publications, presentations, panels, and other scholarly productivity by the DIS faculty since 2013 can be found in faculty resumes in Appendix 17: Faculty Curriculum Vitae and Table III.8.

Specialized Knowledge Covering Program Content

The DIS faculty possesses specialized knowledge covering the Department's academic program of studies. Faculty knowledge and expertise continue to support and enhance previously recognized successful programs in youth services, school, law, public and medical libraries, and information systems. New hires of faculty specializing in data science have enhanced curricular offerings in data science, and IMLS funding assisted in expanding the Department's digital libraries curriculum. External grant funding has supported curricular expansion in digital curation, preservation and digital content management. Details of the DIS faculty areas of specialty can be found in Appendix 18: DIS Faculty Expertise and Research Areas.

Faculty demonstration of skill in academic planning and assessment, substantial and pertinent body of relevant experience, interaction with faculty of other disciplines, and maintenance of close and continuing liaison with the field.

All DIS faculty members are involved in faculty governance in the Department, which includes academic planning and evaluation. Each year the department uses the DIS Strategic and Working Plan (Appendix 2) developed by the faculty as the annual guide. On a personal level, updating and improvement of courses is on-going. The improvement is enhanced by the connections each faculty member has in the field as a result of their teaching, research, and professional service.

The DIS faculty hold leadership roles and participate in many collaborative projects across the University with faculty and staff from other disciplines. The participation of faculty in university-wide activities demonstrates the variety of specialized knowledge, skills, and experience of the DIS faculty and the significance of their presence across campus. The DIS faculty have served on Ph.D. dissertation committees in other departments in the University. They are involved in University governance and interact with faculty of other disciplines at the University level, serving on a wide variety of University committees.

Maintaining "close and continuing liaison with the field" is accomplished through teaching, research, and professional service. Considering the faculty as a whole, "the field" encompasses not only the various types of libraries, but also areas of curricular emphasis, such as health informatics and data curation, as well as

various employment sectors. Faculty have close connections with school libraries (Schultz-Jones, Evans, Marino*, Kuon, and Smith), public libraries (Wheeler), academic libraries (Du), medical libraries (Cleveland), law libraries (Chandler), government agencies (Moen), digital libraries (Chen, Moen, and Kim), the cataloging and classification community (Miksa and Zavalina), and IT application areas, such as databases, data science, or data and text mining (Chen, Ding, and Hong), and information behavior (Kim and Chang).

The faculty nurtures an intellectual environment that enhances the accomplishment of program objectives.

Faculty are involved in a variety of activities that engage students and faculty colleagues in both theoretical and practical issues relevant to the program and to the profession. Faculty assume leadership roles and participate in interdisciplinary activities exemplified by a series of colloquia offered for master's and doctoral students throughout each academic year. Students respond favorably to these colloquia and they often lead to students collaborating with faculty in research and publishing. Their service has been awarded by the University and the LIS profession. For example, the UNT ASIS&T student chapter was awarded the UNT Eagle Award in 2019 (https://www.asist.org/2019/01/28/eagle-award/) and, in 2018, the ASIS&T Student Chapter of the Year Award (https://informationscience.unt.edu/phd-student-ana-roeschley-talks-about-mirs-serving-president-unt-asist-student-chapter). The DIS encourages and supports faculty and student attendance at professional conferences and also engages faculty, staff, and students in activities related to hosting professional conferences. The UNT Multidiscipline Information Science Symposium (MIRS) hosted by the College of Information began in 2015 and is now held annually. In 2017, the DIS supported attendance at the International Conference on Knowledge Management (ICKM) conference held in Fort Worth, Texas. The department regularly supports and encourages faculty and student participation in state, regional, national, and international conferences, such as the Texas Library Association (TLA), the American Library Association (ALA), the Association of Library and Information Science Education (ALISE), the Association of Information Science and Technology (ASIST), and the International Association of School Librarianship (IASL).

Standard III.7

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.

The teaching load for full-time tenured or tenure-track faculty was changed from 3/2 to 2/2. Faculty used to teach three courses in the Fall and two courses in the Spring, or vice versa, but now faculty teach two courses each semester. This change was implemented in 2015. It allows faculty to increase their research time and have more time to advise students. The full-time faculty can teach in the Summer or during the Maymester for additional compensation (Maymester is five weeks or ten weeks). According to UNT policy, faculty can only teach in the Summer the same number of courses allowed to teach during a regular semester. In this case, no more than two courses. For new faculty, the teaching load is one course for the first semester and two for the second semester. This is to help new faculty hires to develop courses and focus on establishing their research agenda. The workload increases to a normal teaching load (2/2) in the second year. The teaching workload is negotiated with the department Chair and course reduction may occur if a faculty member has certain administrative assignments. In addition, faculty are eligible to apply for developmental leave according to university guidelines.

The department Chair is responsible for teaching assignments and matching competencies and interests to curricular needs. The department Chair coordinates course scheduling in consultation with each faculty member taking into account the number of courses offered and the size of the faculty. In recent years, the department employed a number of teaching fellows in addition to the adjuncts who have taught for the department on a regular basis over several years. Teaching fellows are Ph.D. candidates who worked in the department for several years as teaching assistants. These students are mentored by the faculty and acquired expertise in the areas they are assigned to teach. Many of our adjuncts provide rich and specialized expertise, providing an assurance of quality and continuity. Appendix 19: Courses Taught by Adjunct Faculty illustrates courses taught by adjunct faculty. Full-time faculty carry a substantial portion of the teaching load in the Fall and Spring semesters, both on-campus and online. As in Summer, most tenured faculty are engaged in research and limited to teaching two classes. The bulk of the courses offered in the Summer are taught by adjuncts and teaching fellows. Some of the faculty members are also expected to teach courses at the Ph.D. and undergraduate level.

Appendix 24: Teaching Contributions of Full-Time Faculty illustrates the contribution of full-time faculty to teaching courses in each of the MS enrollment options. Supervision of practicums, independent studies, and theses is an important role of the full-time faculty over and above their regular course load. Faculty teaching the practicum in the school library are given one course reduction due to the large number of students taking the course every semester.

Since the last accreditation visit in 2013, the DIS has made a number of changes to support faculty workload in order to assist their efforts to conduct research and write publications. Enrollment size, fair distribution of workloads and the demands of online teaching and advising require continual resource allocation in order to retain an energetic, involved, and enthusiastic faculty via systematic planning each year.

Standard III.8

Procedures are established for systematic evaluation of all faculty; evaluation considers accomplishment and innovation in the areas of teaching, research, and service.

The Department has established internal policies and guidelines for annual faculty merit evaluation (Appendix 22: Personnel Affairs Guidelines and Policy) as well as tenure and promotion (https://informationscience.unt.edu/departmental-policies). The guidelines take into consideration UNT policy on faculty evaluation and the COA general guidelines on accreditation. The annual merit reviews are carried out by the Personnel Affairs Committee (PAC). The Retention, Promotion, and Tenure Committee (RPTC) conducts third, fourth, and fifth year evaluations as well as the tenure and promotion and tenure reviews.

For junior faculty, the new annual review procedures require that the Department provides regular and systematic feedback in the three areas of research, teaching, and service as they work toward promotion and tenure review.

Within applicable institutional policies, faculty, students, and others are involved in the evaluation process.

The PAC conducts the annual evaluations of full-time faculty regarding teaching, research, and service. SPOT results from students are usually reported as part of the evidence for faculty evaluation. Adjunct

faculty are evaluated by the Chair based on their teaching performance through SPOT and feedback from the advisor who frequently interact with students.

Each faculty member must submit details of their work in the areas of teaching, research, and service over the previous three calendar years. The actual evaluations of faculty performance take place early in the Spring semester of each year. Each faculty member evaluates every other faculty member according to separate rubrics to evaluate teaching, research, and service that are defined in the Annual Performance Evaluation Guide. In conducting the evaluations, the PAC considers two main bodies of evidence:

- Materials submitted by the faculty member: current curriculum vitae, summary report of activities in the previous three calendar years, and personal statement about activities in the previous calendar year; and
- Materials filed in the Chair's office: University semester workload reports, student evaluations of course and instructor, and previous documents related to annual evaluations, promotion, and tenure.

Faculty teaching load and student evaluation scores are uploaded by the University to the Faculty Information System (https://facultyinfo.unt.edu/) and are available to the Chair and PAC members. Untenured faculty are considered junior faculty. For junior faculty, there is an established third year review procedure to provide more detailed feedback on progress toward tenure. DIS maintains a specialized committee to focus on this particular faculty group, the Retention, Promotion, and Tenure Committee (RPTC). This committee has established a third year review procedure to provide each junior faculty member with a more detailed individualized feedback on their progress toward tenure. The annual PAC review and the third year RPTC review provide regular and systematic feedback to junior faculty as they work toward their actual promotion and tenure review.

The evaluations resulting from the PAC and RPTC are submitted to the Department Chair, who uses them independently evaluating each faculty member. The Chair prepares and sends a summary evaluation to each faculty member. The PAC and the Chair's evaluations are uploaded to a central information system at the University and also kept on the shared drive of the Department.

Student evaluations of teaching are an integral part of all levels of review. Although students do not participate directly in the faculty annual evaluation process, they do contribute in terms of their evaluations of courses and instructors every semester. The DIS places a high priority on effective teaching, and students' course evaluations are seriously considered in evaluations of the faculty.

III.9 The program has explicit, documented evidence of its ongoing decision-making processes and the data to substantiate the evaluation of the faculty.

The UNT requires regular evaluation of each faculty member in accordance with published criteria regardless of contractual or tenure status. In accordance with UNT Policy 06.007 Academic Workload and Merit Evaluation of Faculty (https://policy.unt.edu/policy/06-007), the UNT/DIS faculty evaluation criteria have been continuously revised each year to meet the changes of academic needs. The Personnel Affairs Committee (PAC) draft the annual evaluation criteria and will send the evaluation criteria out in January of each year, then faculty conduct peer reviews in February, and evaluation scores and results are forwarded to the Department Chair. Faculty annual evaluation results are stored at the secured website under each faculty directory. A sample of faculty evaluation letters from the DIS Interim Chair, Dr. Yunfei Du, as well as PAC and RPC materials, is available upon request to review according to UNT institutional policy on disclosure of personnel information.

After 2017, a new flow chart of annual evaluation using the Faculty Information System (FIS) has been adopted at the University level, and all evidence and supporting documents are available in the FIS system. In addition, both the UNT and DIS tenure and promotion guidelines were revised in 2017 and were approved by the Office of the Provost (https://informationscience.unt.edu/departmental-policies).

III.10 The program demonstrates how the results of the evaluation of faculty are systematically used to improve the program and to plan for the future.

Each of the DIS faculty is required to meet with the Department Chair before or at the beginning of each academic year and discuss their workload on teaching, research expectations, and service, based on faculty evaluation results and personal development goals. The faculty workload are available in the DIS office upon request. In the following year, faculty workload is then used as a factor on score calculations for faculty merit-based evaluation.

Since 2018, the Chair meets with each faculty to discuss the PAC and Chair's evaluation of the faculty to understand faculty concerns and to provide guidance on future work near the end of the Spring semester. The Dean also meets with each faculty individually to provide his guidance.

These interactions, especially the feedback on the faculty evaluation, help the Department to update its annual strategic and working plan and tasks, and to request budgets and new faculty or staff lines according to the needs of the Department and the faculty. For example, a graduate student assistant is assigned to each program director to help them analyze and manage the programs. Faculty are encouraged to exchange research ideas and teaching tips at department council meetings.

To help faculty use the new learning system and improve the student learning experience, in October 2018, the DIS hosted a faculty retreat focusing on the CANVAS Learning Management System and online course design, featuring Dr. Whitney Kilgore, Co-Founder and Chief Academic Officer at iDesign, as well as Ms. Marilu Vargas, Instructional Consultant from UNT's Center for Learning, Experimentation, Application, and Research (CLEAR). Since March 2019, Dr. Yunfei Du serves as the College Representative for the UNT Division of Digital Strategy and Innovation, and is the liaison in the university effort to lead in the areas of educational technology, online and blended initiatives, and digital learning research serving students and faculty both on-campus and at a distance. Under the initiatives from the UNT Digital Strategy unit, the DIS is participating in the next level of online course redesign initiatives, such as the "new intake process" for full course design or the "course in a box" redesign.

As a result of faculty evaluation, the DIS changed its tenure and promotion criteria to reflect campus-wide efforts to maintain and improve the Tier 1 research university status. More journal publications and research grants were added to the requirements for faculty tenure and promotion documents that were approved by faculty in 2017 (https://informationscience.unt.edu/departmental-policies). Lecturers were supported by the DIS with the same amount of professional development funding as tenure/tenure-track faculty. Two lecturers (Bobby Bushman and Michele Villagran) built their academic credentials at the University and recently accepted tenure-track positions in other ALA-accredited library schools. From 2013 to 2019, all promotion and tenure cases from the DIS were approved. There have not been any cases of anyone being terminated as the result of this process. Therefore, the process seems effective.

STANDARD IV: STUDENTS

INTRODUCTION

The mission of the University of North Texas (UNT) states, *"our caring and creative community prepares students for careers in a rapidly changing world."* The goal of the Department of Information Science (DIS) master's degree program is *"to prepare students for careers as information professionals in a variety of roles and settings"* (https://informationscience.unt.edu/mission). Students are at the core of the DIS's operations, curriculum, and services.

The UNT DIS program has a well-established recruitment, admission, retention, financial aid, career services, and other academic and administrative policies and procedures for its students. The diverse student body fosters a learning environment aligned with the DIS program's mission, goals, and objectives.

Students can easily access program information, policies, and financial services on the University's and the Department's websites. The DIS has two standing faculty committees for student admission and scholarship affairs. An admission staff was hired in 2019 for master's student admissions. Students at the DIS are able to develop a degree plan based on their interests. They are also provided with equal opportunities as are other UNT students with regard to advising and student services. The following sections address how the program continues to meet the Students Standard.

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 Department of Information Science Bylaws (https://informationscience.unt.edu/departmental-policies) define the operations of the Department. In general, the DIS policies and procedures are formulated in the following ways:

- By consensus of the faculty as a whole, after discussion and review in meetings, such as monthly council meetings, the Board of Advisors annual meeting, and other meetings.
- In standing or *ad hoc* committees and then, if faculty consensus is required, issues are brought to the Faculty-Student Council meeting for a vote to adopt. An example of this is the periodic core review that is conducted by the standing Curriculum Committee, which reviews each core course and identifies areas that need to be changed, improved, or incorporated, and said changes are, in the Faculty-Student Council meetings, proposed to the faculty as a whole for discussion and vote.
- Reflective of and adopted as a result of the University or state mandates, and are implemented at various levels within the Department. An example of the former is the revision of the scholarships and awards processes by the Scholarship and Awards Committee, in order to bring them in line with University practice, and to make the process easier for students. An example of the latter is the on-going revision of course syllabi to meet state public disclosure requirements, which are:
    (1) A brief description of each major course requirement, including each major assignment and examination;
    (2) The learning objectives for the course;
    (3) A general description of the subject matter of each lecture or discussion; and
    (4) Lists of any required or recommended readings.

Further, all instructors must:

A. Prepare a comprehensive syllabus for each credit-bearing course (excluding exempted courses); and
B. Make available a paper or electronic copy of the course syllabus on the first class day (and thereafter), for all students enrolled in their course, and provide a paper or electronic copy to the departmental designee during the first week of the semester.

The DIS Program Mission, Goals, and Objectives

The DIS vision, mission, goals, and objectives (https://informationscience.unt.edu/mission) comprise the foundation for the operations of the Department and guide the formulation of its academic and administrative policies.

Mission

The Department of Information Science provides and supports resources, research, and services for education and leadership to the information science community and prepares information professionals of the highest quality to serve dynamic roles in the state, the nation, and the world.

Goals

The goals of the Department are to:

- Prepare information professionals who demonstrate excellence in leadership, service, research, and education in a technology-driven environment;
- Advance and contribute to leading-edge research, scholarship, and advancement activities toward the University's Tier One status;
- Maintain a healthy enrollment, student retention, and a supportive and flexible learning environment to accommodate students' individual backgrounds, needs, and aspirations; and
- Contribute to professional, academic, and public interests through alumni engagement, faculty and staff development, continuing education, and disciplinary leadership.

The six objectives of the Master of Science with a major in either Information Science or Library Science are described in Standard I.1 and presented on the Department's mission statement page: https://informationscience.unt.edu/mission, and in Table II.1, which is presented on page 28 of Standard II: Curriculum.

The Department aims to educate students who will become productive members of the library and information community worldwide, from the North Texas area, from the state of Texas, and from other states and countries. Admission, academic, and other policies are intended to ensure that potential students, current students, and graduates have open and equitable access to all information, opportunities, and assistance offered by the Department in its efforts to fulfill its mission and program objectives.

Recruitment

Master's program student recruitment is under the overall direction of the Department Chair and involves the faculty, as a whole, supported by key staff members.

The Department has students that fall under, and are recruited in, a number of different categories, such as:

- Local full-time
- Commuting
- Texas residents beyond the DFW area
- Out of state (cohort or independent)
- International

The DIS encourages faculty to actively recruit qualified students at regional and national professional conferences and through their connections with schools, libraries, and associations. The recruitment process is on-going and multifaceted and aimed at procuring viable, productive high-quality students who will contribute to the profession. For example, cohort coordinators hold on-site and online information sessions in which they meet and get to know prospective students. This often provides an opportunity to assess the student's level of commitment, interest in the profession, and ability to successfully undertake the program. Cohort coordinators are regular full-time faculty members who operate from the Denton campus or, in some cases, adjunct faculty who live at the site of the cohort. The latter generally work under the guidance of a full-time faculty member. In the case of full-time faculty, serving as a cohort coordinator is considered "beyond workload" and is compensated with a task payment. In the case of adjuncts, their salary is their compensation. Cohort coordinator duties include, but are not limited to:

- Recruiting, advising, and progress tracking of students
- Promotion of cohort via events, online social media channels, and advertising
- Teaching core courses at the cohort site, and scheduling other classes either on-site or online

A complete list of cohorts active in the review period and related information can be found in Appendix 26. Sample recruiting materials will be available on-site.

The Department faculty have procured a number of grants specifically aimed at the recruitment of students. For example, the Library Education for the American Pacific; A Project to Strengthen Libraries in the US-Affiliated Pacific Islands (LEAP II) grant was awarded by the Institute of Museum and Library Services in 2015. The grant was for $499,991 and was a part of the Laura Bush 21st Century Librarian Program in partnership with Brigham Young University - Hawaii. This grant enabled the Department to recruit students from the US-Affiliated Pacific Islands.

The strategies detailed above have resulted in a large and diverse student body, as described on pages 105-109.

Admission

Following UNT admission policy (https://policy.unt.edu/policy/07-011), the Department's admissions process and policy (https://informationscience.unt.edu/admission-process) assesses the potential for high quality students by requiring a minimum 3.0 GPA on undergraduate work, a resume, a statement of purpose, and two letters of reference from each applicant. While these processes do not guarantee high quality students will be admitted, the admissions criteria greatly enhances the likelihood of admitting successful quality students. In addition, the admissions process allows for the consideration of applicants

who do not meet the GPA minimum but excel in other aspects of the application and show outstanding promise for careers as information professionals. The Admissions and Student Affairs Committee is the review body for this determination. The admissions process is detailed in Standard IV.3 below.

Retention

The University recognizes that student retention is a critical aspect of overall university success, and the university has put into place a number of resources to encourage and help departments and faculty to develop programs and policies to facilitate student retention (https://www.unt.edu/story/roadmap-retention), as per the UNT Provost. At the Department level, the DIS faculty and COI advisors work closely to identify and help students who are struggling in their coursework so that they can complete their studies. The Advising Policy and Procedures (Appendix 27: DIS Policies and Guidelines) specified the expectations for advisors to *"Support students in the need to develop physical and mental well-being," "to help students connect with financial resources,"* and *"to inform students of the importance of graduation checks"* (Appendix 27, page 17).

Student retention is enhanced by the high level of communication in online courses that builds on the experience of meeting classmates and faculty in person at the institutes; the presence, in many cases, of a cohort coordinator; and the opportunity to form student associations. Based on a data analysis of 2013-2017 student retention, the average retention rate within a year after the students were admitted is 87.55% for the MS in Information Science and 82.03% for the MS in Library Science. Most of the DIS students graduate within three years (see Table IV.1).

Table IV.1 Percent of Students Graduating in three Years or Less

Year	Students	Graduates	% Graduating
2013	535	374	83%
2014	498	312	81%
2015	655	247	78%
2016	755	333	84%
2017	771	329	92%*
2018	677	396	90%*
2019			

Notes: *The relatively higher rates of three-year graduates in 2017/2018 may be explained by an influx of F1 students with two-year visas

Financial Aid

While many of the DIS financial aid policies are governed by the University and state practice, the Department actively seeks to maximize opportunities to help students with financial aid.

One example is the Tuition Assistance Award (TAA) which was a recruitment tool that was available to new students during the first half of this review period. The award was used as an incentive to enroll at the UNT. The program was very successful and was available to all DIS students. Applicants came from all of the categories mentioned above, and many students indicated that the award contributed to the decision to enroll at the University. The award was phased out as a result of the restructuring of university regulations as to how Out of State Teaching Fee (OSTF) money could be utilized. As of 2019, there are no plans to

revive or replace the award. Standard V: Administration includes a discussion of OSTF and the implications of its restructuring.

The Department provides many opportunities for students to supplement their income through employment with the department. The DIS students are employed as Teaching Assistants (TAs), Research Assistants (RAs), and in hourly wage positions. The first two provide benefits above and beyond salary, such as insurance and faculty parking privileges. In many cases, the students need not be residents of Denton or even Texas to be so employed. Many TAs and RAs work remotely, thus opening opportunities to all DIS students regardless of type or location.

Another benefit to employment with the Department is the Tuition Benefit Program Award. This program is funded by the Toulouse Graduate School and can be used to assist students with tuition. Students are provided between three to six credit hours of tuition assistance as well as an employment waiver that waives out-of-state tuition for those that reside outside of the state of Texas (https://tgs.unt.edu/new-current-students/tuition-benefit-program).

The Department also seeks to meet student financial needs by actively pursuing scholarship endowments and gifts (see IV.2).

The program has policies to recruit and retain students who reflect the diversity of North America's communities

One of the objectives of the Department's master's program is:

> *"to demonstrate knowledge and skills related to the roles and impacts of information policies, practices, and information itself on diverse populations, including underserved groups, in a rapidly changing technological and global information society."*

This objective translates to more than awareness-raising through coursework. It underscores the Department's commitment to increase the diversity of students and, ultimately, of information professionals who can best serve diverse populations. The Department does not have a written plan for recruiting diverse populations. However, it is one of the most diverse among accredited LIS programs. Diverse Issues in Higher Education has published the top 100 Diverse Degree-producing programs for 2018 (based on 2015-16 data). Out of the 100 universities surveyed, our DIS ranked second for total minority graduates in Library Science, second for Hispanic graduates in Library Science, sixth for African American graduates in Library Science, and sixth for Asian American graduates in Library Science. The Department recognizes that this does not obviate the need for a written plan and policies. These will be developed and implemented.

The most effective method of recruiting and retaining students who reflect the diversity of North American communities is to reduce the impact of distance through online recruiting via cohort information sessions, advertising, technology-based distributed learning, scholarships, conferences, and off-campus course delivery.

The Department strives to recruit individuals from groups that are underserved in terms of both cultural/ethnic diversity and distance. The Department's active use information technologies, such as social media tools, an informative department website, live online information sessions, and online mailing lists, help in removing distance barriers.

However, recruiting is not limited to online methods. Other face-to-face programs are conducted. One such program is called “All School Days” which, in addition to social engagement, provide exposure to individuals in the profession, and access to a faculty member. The Houston program has annual All School Days, as do some of the cohorts. The most recent (October 26, 2019) Houston All School Day, themed “What Have I Done with My DIS Degree?”, enlisted six DIS alumni and was attended on-site by 26 and online by 25 students and prospective students. Speakers discussed non-traditional library careers in market research, business, training, information entrepreneurship, and medical informatics. Other examples of All School Days include, but are not limited to:

- The Maine, New Hampshire, and Vermont cohort held an All School Day at the Manchester City Library where a panel of practitioners spoke about their positions.
- The Virginias cohort held an All School Day on finding and getting a job.
- The Greater Los Angeles cohort held a Resume and Interviewing Workshop.

The Department routinely sends faculty and staff out into the community to recruit potential applicants. For example, in the School Certification Program, faculty members are in contact with school districts and regional service centers across the state of Texas on a regular basis. Faculty members often travel to specific locations to talk to groups of possible applicants about the program and the admissions process. If faculty cannot travel, they can join groups of school district personnel and teachers through Skype or Zoom sessions in which information about all of the possible degrees in the College of Information is shared in a conversation online. Department policy dictates that faculty and staff work in the DIS booths at national and state conferences, such as the American Library Association Annual Conference and the Texas Library Association Conference, which facilitates contact with alumni and the recruitment of new applicants.

As the program has become more distributed, so have the students. In Fall 2018, students came from at least seven other states and 14 other countries or territories. Table IV.2 and Table IV.3 show this breakout.

Table IV.2 Fall 2018 Enrollment by Country

Country	MS-IS	MS-LS	Total
Bangladesh	1	0	1
China	3	0	3
Columbia	0	1	1
Ghana	1	0	1
India	30	0	30
Iran (Islamic Republic of)	0	1	1
Jordan	1	0	1
Korea (Republic of)	0	1	1
Kuwait	2	0	2
Mexico	0	2	2
Nepal	4	0	4
Pakistan	2	0	2
Saudi Arabia	1	0	1
Taiwan	0	1	1

United States	127	499	626
Total	**172**	**505**	**677**

Table IV.3 Fall 2018 Enrollment by State of Residence

State	MS-IS	MS-LS	Total
Arkansas	0	1	
California	0	1	
Kentucky	0	1	
Louisiana	0	2	
Minnesota	0	1	
New York	0	1	
Texas	135	484	626
Undetermined*			51
Total	**135**	**491**	**677**

Notes: *May include students residing in New England, Virginia, West Virginia, Utah, and other locations. May also include students that did not indicate a state of residence.

Some students are recruited by special programs. For example, in Summer 2016, a cohort of 15 students from the US-Affiliated Pacific Islands (USAPI) began earning a master's degree from the DIS. The Library Education for the US-Affiliated Pacific (LEAP II) program is funded by the Institute of Museum and Library Services.

Enrollment continues to benefit from distributed learning. The use of technology is an integral part of the Department's efforts to recruit diverse students. For students enrolled in remote cohorts, the Department has a policy to provide "institutes" for its three core courses which involve one to three days face-to-face classes at the beginning of each semester. These institutes are held at remote sites, such as Houston, El Paso, New Hampshire, Los Angeles, Richmond, and others. The institutes generally seat between 20 and 120 students, depending on the class and semester, and provide the students with an overview of the respective classes and learning materials, as well as an opportunity for students to meet, greet, and get to know each other. For these institutes, the balance of the semester takes place online subsequent to the meeting. Because of the blended format nature of the program, there is no clear-cut distinction between "online" and "on-site" students as the mix and proportion of online classes and on-site classes varies from student to student depending on their interests and location.

Off-campus delivery of other courses continues to be a mainstay of the program. Beyond the core courses, faculty members travel to many locations to put a human touch on distributed learning by recruiting and teaching students face-to-face. The Department has successfully built communities of students in several locations:

- Dallas: Some 6.8 million people live within 60 miles of the Denton campus in what is called the Dallas/Fort Worth (DFW) Metroplex. This population is a significant source of students, many of whom commute north to Denton from various cities in the area.
- Houston: Since 1991, the DIS has delivered the master's program to the Houston area. Houston students can choose from many courses in face-to-face, online, or blended formats. The core

courses are offered in institute mode in Houston every semester except Summer. INFO 5200 is offered in the Fall semesters, and INFO 5000 and INFO 5600 in the Spring semesters.

- The Department also offers (or offered) courses in Hawaii, West Virginia, California, Montana, Arkansas, Maine, New Hampshire, Vermont, Utah, and various remote cities in Texas, such as Lubbock, El Paso, and San Antonio.

Appendix 26: DIS Cohorts and Program Information provides detailed information about each of the off-site programs and cohorts. The Houston program, for example, has a graduate library assistant who assists the Houston program coordinator with recruiting, event planning, advising, and other functions.

In 2019, the DIS faculty began discussing the feasibility and merits of extending courses and functions to UNT's new Frisco campus, which is a satellite campus located in Frisco, Texas, some 25 miles East of the main campus. The offering of MS-LS and MS-IS courses at the Frisco campus has been approved by the University.

In Spring 2019, the Department partook in a university-wide Wintermester (holiday break) pilot to evaluate the feasibility of online-only Wintermester classes. Four courses including one core course were offered in an intense three-week online only format which involved considerable online interaction with the students enrolled. The pilot was considered to be very successful by the University and the Department will offer classes during the Spring 2020 Wintermester as well.

As done previously, programs and opportunities are advertised in professional and scholarly journals, in booths at professional conferences, and in the Department's own sources (see Information and Communication below).

One of the main social events coordinated by the DIS and LISSA, are the highly popular All School Days (see the announcement about the Fall 2019 All School Day on the LISSA site at: https://unt.campuslabs.com/engage/organization/lisstudentassociation). All School Days are held in Denton and Houston, which combine recruiting, advising, and opportunities to network with practitioners.

Reputation and word-of-mouth communication contribute substantially to the Department's continued recruiting success. Prospective, current, and past students meet at the Department's booths and alumni reunions at several professional conferences, most notably those of the Texas Library Association (TLA).

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 Department maintains a supportive and flexible learning environment to accommodate students' individual backgrounds, needs, and aspirations by recruiting students from all walks of life, gender, ethnicity, and so on from all parts of the country, and all levels of matriculation, whether full- or part-time. The Department has significant enrollment in various ethnicities.

Table IV.4 presents the numbers of master's students by gender beginning in 2013. At the master's level, the total enrollment of degree and non-degree students fluctuated through 2019. However, the gender ratio has remained fairly consistent, between 78% and 83.7% female through the 2013-2019 period. This represents a relative increase (roughly 5%) in the percentage of male students since the last accreditation period.

Table IV.4 Enrollment by Gender

MS				
Year	Male	Female	Total	% Female
2013	87	448	535	83.7%
2014	91	407	498	81.7%
2015	144	511	655	78.0%
2016	168	607	775	78.3%
2017	167	604	771	78.8%
2018	130	547	677	80.7%
2019				

Table IV.5 contains enrollment data by race and ethnicity for master's-level students beginning in 2006. The data indicate that the total number of students across all non-white categories has remained relatively stable at about 35%. The increase in international students in 2016/2017 is due to an influx of students from India who were enrolled in various UNT Engineering programs, who saw the MS-IS program as a natural follow-on to their particular areas of interest. The subsequent decrease in Indian students can be attributed to their preference for and transfer into the new Data Science program, as shown in Table IV.6.

Table IV.5 Enrollment of Master's level Students by Race and Ethnicity, 2013-2018

Year	AI	AP	B	H	W	I	NA Other	Total	Non-white Total	Non-white Percentage	Non-white Percentage (Less International)
2013	6	23	26	116	347	8	9	535	171	31.96%	32.44%
2014	6	15	26	103	338	5	5	498	150	30.12%	30.42%
2015	6	16	42	133	422	31	5	655	197	30.07%	31.57%
2016	8	20	41	166	439	95	6	775	235	30.32%	34.55%
2017	12	25	35	157	435	95	12	771	229	29.70%	33.87%
2018	9	22	33	135	428	42	8	677	199	29.39%	31.33%

Notes: AI = American Indian; AP = Asian/Pacific Islander; B = Black; H = Hispanic; W = White; I = International; NA = Not Available.

Table IV.6 Shift of International Students Towards the Data Science Program

	Fall 2017	Spring 2018	Summer 2018	Fall 2018	Spring 2019	Summer 2019
MS-IS	78	63	13	30	25	9
Data Science	0	8	0	29	55	35
Total	78	71	13	59	80	44

Overall, the percentage of non-white student population remains steady. If international students are counted in the overall student body, it appears that the percentage of non-whites decreases through the period. However, this does not take into account the surge of international students beginning in 2016. If international students are factored out of the total student body, the percentage of non-white trends upwards until 2018, when there was a general downward trend in all categories.

Standard IV.2.1

Current, accurate, and easily accessible information about the program is available to students and the general public.

Accurate and up-to-date information is provided to the students and the public through the Department's website (http://informationscience.unt.edu), the Facebook page (www.facebook.com/untcoi), the DIS Newsfeed on the College of Information website (https://ci.unt.edu), the UNT Graduate Catalog (http://catalog.unt.edu/index.php?catoid=21), the UNT *North Texan* publication (https://northtexan.unt.edu), and promotional materials. These information sources are coordinated through the College of Information Dean's office and the DIS Chair's office, both of which have marketing and communications staff.

Policies and procedures exist within the Department and within the University to govern the material on the website, and the processes in place related to each aspect. For example, state law requires specific online public disclosure of information on faculty, and conformation to state requirements is enforced both at the University level and the Department's office of the Chair. On the DIS website, faculty information is available at: https://informationscience.unt.edu/faculty. The website is reviewed on an on-going basis by the Chair's office.

IV.2.2 This information includes announcements 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.

Program Goals and Objectives

The DIS homepage links to:

- The vision, mission, goals, and objectives statements for the Department as a whole and for its programs and certificates (https://informationscience.unt.edu/mission)

- A message from the Chair (https://informationscience.unt.edu/welcome-chair)

Description of Curricula

Descriptions of the curricula are available through the UNT Graduate Catalog (http://catalog.unt.edu/), the UNT EIS system, and on the DIS website. The first two are governed by UNT policies and procedures, and the last by the on-going review by DIS faculty, the Chair' office, and respective committees. Comprehensive descriptions of the Department's curricula and degree programs are also listed (https://informationscience.unt.edu/programs).

Information on Faculty

On the College of Information website, https://ci.unt.edu/welcome-college-information, a wealth of information is provided about the faculty of the college. There is a directory including names and email addresses for each faculty member. There are some tools for the faculty to use such as a link to travel grants. There is also a link to faculty research (https://informationscience.unt.edu/faculty-research-area). Each of the Department's full-time faculty members has an informational web page (https://informationscience.unt.edu/faculty) that lists their respective credentials, interests, contact information, and a link to their UNT profile page, which in turn lists teaching, vitae, and other information about the specific faculty member.

Admission Requirements

Admissions requirements and information are available on the Admissions and Advising page (https://informationscience.unt.edu/admissions-and-advising). Most of the forms that students need to apply, request courses, and pursue other degree plan-related functions are available as links on the site. The admissions process is governed by DIS Policy and Procedure manual (Appendix 27: DIS Policies and Guidelines), in compliance with UNT Graduate School policy.

The DIS has email addresses and a toll-free telephone number for its central office. The DIS listserv, IS-Announce, is the official channel for posting information about upcoming events, job opportunities, new courses, and so on. The listserv had more than 1,000 subscribers in Spring 2019.

Financial Aid

The DIS offers a number of financial incentives which are geared toward the needs of the student body. While some incentives are available to the student body as a whole, others are focused on specific groups or regional areas. There is no overall departmental policy or document targeted at financial aid, but each awarding body has its own policy and procedures which are incorporated into the overall departmental policy and procedure manual which will be available on-site. All such policies within the Department are in compliance with the University, state, and federal regulations, and are documented in the DIS Policy and Procedure manual (Appendix 14: DIS Policies and Guidelines). Information on financial aid and related topics is available on the Financial Aid page of the DIS webpage (https://informationscience.unt.edu/financial-assistance). This section of the website is under revision with the intent of streamlining the application process.

In some cases, the DIS partners with outside funding agencies in order to provide incentives to targeted groups. For example, the LEAP program was funded by the Institute for Museum and Library Services (IMLS). In addition, the University and the DIS provide a large number of scholarships and assistantships.

The DIS has a Scholarship and Awards Committee that consists of three faculty members. The committee formulates and recommends policies in the areas of financial assistance, honors, and awards. The committee reviews applications for scholarships sponsored by the Department and its donors and solicits nominations for student award competitions.

Endowed and departmental scholarships and the Lis and Phil Turner Writing Award are awarded on an annual basis. Dates for applications are posted on the Department website. The committee receives scholarship applications via a web-based application process. The committee meets to review the applicants and formulate a recommendation to the Department Chair for award. The Chair then approves the recommendation or, in the case of departmental scholarships, modifies and funds the recommendation.

The committee oversees the awarding of endowed scholarships named for individuals. Currently 19 named/endowed scholarships are available to DIS master's students. These are awarded on an annual basis. The criteria for awards varies from scholarship to scholarship, but in general awards are based on GPA and other academic merit considerations. The scholarships are awarded based on the recommendations of the Scholarship and Awards Committee.

Each year the committee invites students to join the Beta Phi MU national honor society, and inducts promising students who uphold the ideals of the organization. She or he must have a commitment to scholarship by being a student in good standing and by graduating with a 3.75 GPA or higher. The recipient ideally has a commitment to service to others and exhibits strong leadership characteristics. Finally, the recipient must be committed to continued learning and must be representative of the DIS student body. The inductees are invited by the Scholarship and Awards Committee and the Beta Phi Mu faculty member with input from the faculty.

The College of Information students are frequently recognized during the UNT Honors Day (see https://studentaffairs.unt.edu/honors-day). In addition, students who make professional contributions and are exceptional scholars are frequently honored by the DIS. Achievements are featured on the Department's website which posts student achievements, such as:

- Participation in state/national professional association conferences
- Publications in professional conference proceedings and journals
- Awards and honors from the DIS, the University, and the profession, such as inclusion in the ALA Spectrum Scholars program and the university-wide Honors Day

Scholarships, awards, and Beta Phi Mu invitations are summarized in Table IV.7.

Criteria for Evaluating Student Performance

It is a Texas law that up-to-date undergraduate syllabi containing learning outcomes and grading, as well as evaluation criteria are required and posted in a public place on the UNT website, on the Faculty Information System (https://facultyinfo.unt.edu/). The DIS generally complies with UNT's Course Syllabi Requirements 06.049 (DIS Policy and Procedure manual), however, at this time, grading criteria are not posted on the DIS website.

Students are evaluated at every stage, from coursework through professional employment. Major indicators are:

- Grades earned in courses
- Professionalism of projects completed in courses and the practicum
- Successful completion of the End of Program exam

- Completion of all requirements for graduation
- Obtaining professional employment

Table IV.7 Scholarships, Awards, and Beta Phi Mu Invitations

Year	Scholarships Awarded*	Turner Paper Awards**	Beta Phi Mu Invitations***	Outstanding Student Awards****	Notes
2019	49	1	78	11	Significant number of bogus and incomplete applications
2018	72	4	89	13	
2017	70	1	94	13	
2016	70		55		
2015	42			8	
2014	38	1		7	First year for revised marketing and application process
2013	19			7	First year for the DIS Excellence Scholarship (only 20 applicants)

Notes: *The number of scholarships awarded is based on:
- The number of complete and qualified applicants;
- The amount of funding generated by the endowed account; and
- The amount of funding available for the DIS Excellence Scholarship.

**The number of awards is based on the number of papers nominated by the DIS faculty.
***The number of invitees is based on 25% of all students with graduate GPAs of 3.75 or higher.
****The number of awards varies depending on the number of active cohorts.

Some indicators apply to many but not all students, such as:

- Participation in student organizations and on faculty committees
- Participation in state/national professional association conferences
- Publications in professional conference proceedings and journals
- Awards and honors from the DIS, the University, and the profession, such as inclusion in the ALA Spectrum Scholars program and the university-wide Honors Day

The DIS follows the UNT grading system, which uses the letters A, B, C, D, F, P, NP, I, PR, W, and Z (https://registrar.unt.edu/grades/understand-your-grade-report). At the graduate level, no semester credit hours and no grade points are allowed for grades D, F, I, NP, P, or W. The letter Z is used to indicate a grade was not properly received and/or recorded for a course.

The DIS faculty understands the importance of merging theory and practice. Therefore, students also must present evidence of relevant experience by meeting a field experience requirement. The DIS maintains a database of practicum sites (https://informationscience.unt.edu/available-practicum-sites). This requirement may be satisfied through appropriate prior experience as approved by the faculty or through a

practicum or internship. Students without prior experience may be required to take INFO 5090: Practicum and Field Study, which does not count towards fulfilling the 36 hours of graduate credit required for the degree.

The End of Program assessment is under continuous review. For students who took their first class prior to Fall 2019, two options are available – an End of Program exam or, as an alternative, two extra courses: INFO 5970: Advanced Topics Seminar I and INFO 5980: Advanced Topics Seminar II, which are taught as organized courses offered in the regular (Fall, Spring, and Summer) semesters. These two courses are taken in addition to the already required 36 hours of graduate credit and the practicum requirement (see Table IV.8 for number of students enrolled in alternative assessment classes).

Table IV.8 Students Enrolled in Alternative End of Program Assessment Classes

	Fall 16	Spring 17	Summer 17	Fall 17	Spring 18	Summer 18	Fall 18	Spring 19	Summer 19
INFO 5970	9	8	0**	10	11	4	5	3	11
INFO 5980	0*	6	0**	2	8	4	6	2	3

Notes: *No students enrolled for this, as INFO 5970 is a prerequisite and this was the first semester either class was offered; **No students enrolled in this semester.

Students in the program begin their academic careers with three core courses (see Curriculum Section, Standard II.1). The competencies included in these courses are tested in the EOP examination which every student must take. The EOP examination is the culminating academic event for all students. Students participate in the EOP examination during the last semester of their graduate program in order to meet the examination requirement of the Toulouse Graduate School.

The EOP examination is designed to give students the opportunity to demonstrate their ability to organize and synthesize knowledge as developed throughout their academic program, and to defend positions on current issues in library and information science, and the larger, dynamic information environment.

Students must prepare formal answers to three essay questions designed to synthesize knowledge from their coursework and educational experience. The exam is conducted in the EOP examination (INFO 5900) canvas course site over seven days. The EOP examination calendar may be accessed online at https://informationscience.unt.edu/end-program-exam-calendar.

Each essay question is evaluated and graded on a PASS/FAIL basis by two faculty members with expertise related to the question's subject matter. All essays are numbered and evaluated without knowledge of student identities. Students must receive a passing grade on all three essays in order to pass the exam. Students who receive an unsatisfactory grade on one or more essays will not pass the EOP examination. Students who do not pass the EOP examination may re-take the EOP examination only once.

The DIS EOP Committee maintains statistics on students taking and passing the End of Program exam. The percent of students passing the exam is fairly consistent through the review period.

The Department tracks students who opt for the extra classes in lieu of the EOP exam. The number of students who chose this option with INFO 5970 fluctuates from semester to semester. The number who

enroll in the second class, INFO 5980, is somewhat less, as some students opt to take the End of Program exam even after completing the first class.

For students who took their first class as of and after Fall 2019, an ePortfolio will be required as the terminal evaluation/Capstone project. The final format of the ePortfolio is under development as of Fall 2019, but overall is being designed in the context of ALA's Core Competences. See Appendix 12: ePortfolio Development.

Assistance with Placement, and Other Policies and Procedures

The UNT Career Center (https://studentaffairs.unt.edu/career-center) provides job information and counseling, and has a staff member assigned to the College of Information. Career Center services include, but are not limited to:

- Business, engineering, and all-majors job fairs
- Career service appointment
- Virtual networking and workshop events
- Class presentations

Table IV.9 summarizes the DIS student interactions with the UNT Career Center.

Table IV.9 Information Science Students Utilization of UNT Career Services

	2017	2018	2019
Number of DIS utilizations	32	90	72

One way the College helps with job placement for graduates is through advertising available job opportunities, which are updated regularly, on the website at: https://ci.unt.edu/job-opportunities. The Department has a mailing list (is-announce@lists.unt.edu) that announces job-related information to all students subscribed in the program. Subscribing information is available at the DIS website at: https://informationscience.unt.edu/student-organizations.

Additional Communication Channels: News and Announcements

Contact information is provided throughout the DIS website for inquiries about admission and advising, as well as general contact information for faculty, staff, the Board of Advisors, and the Alumni Society.

The Department's homepage features news and announcements and a link to an events calendar. Postings of news items and calendar events is guided by the College of Information Content Creation Policy for Posting to COI News and Calendar. These information sources are coordinated through the College of Information Dean's office and the DIS Chair's office, both of which have marketing and communications staff.

The Department's website also has a news feed, to which the College of Information marketing and external affairs staff post stories and news items on a regular basis (more often than quarterly). Stories and news items are submitted to the marketing staff by faculty, staff, students, and alumni, and the marketing staff accept or reject, and edit those submissions. The marketing staff also proactively solicits material at faculty meetings, via email requests, and so on. Those items that are published can be accessed on both the

Department's website (https://informationscience.unt.edu) and the COI website. Faculty and student academic and research achievements are publicized through:

- The DIS website news section
- The College of Information website news section

Information about the Department programs are available through the University's website (http://www.unt.edu), in the Graduate Catalog and semester schedule (also in print), and in the UNT online course database, MyUNT (http://my.unt.edu).

The Department of Information Science website is under on-going evaluation, redesign, and improvement in accordance with UNT's University Relations Marketing and Communications (URCM) suggestions and approval, and in response to user needs and suggestions. For example, in 2014, the Scholarship and Financial Aid section of the website was overhauled, including the implementation of a web-based application procedure. The Department and College are currently working to have the DIS scholarship application process integrated with the University's universal application system. Content for the website is developed by various stakeholders who work with the College of Information web developer to ensure that content is timely, accurate, and relevant. For example, the Scholarship and Awards Committee creates all content related to scholarships and awards, and works with the developer to expose that content.

IV 2.3 The program demonstrates that it has procedures to support these policies.

The policies on recruitment, enrollment, retention, financial aid, and others have been followed by the Department to support the program's mission, goals, and objectives. The data presented in this standard demonstrate that these policies are well supported. The program description at the beginning of IV.1 provides general procedures for supporting these policies.

- The Faculty-Student Council meetings discuss and approve student-related policies;
- Student-related policies and businesses are taken care of by two faculty standing committees: the Admission and Student Affairs Committee and the Scholarship Committee;
- The faculty and staff are trained to use the DIS policy manual, which describes these policies to process admission data or to help students.

More descriptions will be presented in this study to demonstrate that the DIS has procedures to support student-related policies.

Standard IV. 3

Standards for admission are applied consistently. Students admitted to a 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 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 a program, a program's goals and objectives, and the career objectives of the individual. Within the framework of institutional policy and programs, the admission policy for a program ensures that applicants

possess sufficient interest, aptitude, and qualifications to enable successful completion of a program and subsequent contribution to the field

The DIS Master's Student Admission Process

The master's program application procedures and admission standards conform to those of the UNT Toulouse Graduate School and are clearly stated on the Department of Information Science (DIS) website. The DIS admissions follows a two-step approach in which prospective students must apply to the Toulouse Graduate School for admission to the University as a graduate student. For admission to the Toulouse Graduate School, student transcripts must show that the student has earned a bachelor's degree from a regionally accredited institution and earned a grade point average meeting one of the following requirements: a 3.0 or higher GPA on an earned undergraduate degree, or a 3.0 GPA on the last 60 hours of an undergraduate degree, or a 3.5 GPA on a completed master's degree.

A prospective student must be admitted first by the Toulouse Graduate School and then by the DIS. In cases where applications have been denied by the admissions officer and then appealed, or in special situations, the Student Affairs Committee makes the DIS admission decision. The committee reviews petitions for admission for students who fail to meet DIS admission requirements. The committee reviews the student's documentation and offers recommendations for admission based on admission guidelines.

In addition to transcripts, the DIS requires a statement-of-purpose essay, a resume of both academic and professional careers, honors, and awards, and two recommendations. The DIS no longer requires entrance exams as an admission criterion. Applicants' backgrounds, essays, and recommendations are used to help assess their ability to succeed in the program and contribute to the field.

An applicant who is denied admission because of a low GPA may be admitted to a leveling program:

- Students with a 2.9-2.99 cumulative, or on the last 60 hours, GPA can be conditionally admitted to the master's program with the understanding that they need to earn As or Bs in their first four INFO courses in order to remain in the program.

- Students with a 2.6-2.89 cumulative, or on the last 60 hours, GPA can provisionally enroll in four undergraduate INFO courses. If they earn As or Bs in all four courses, they can be admitted to the master's program.

Students that do not meet the graduate school's minimum GPA requirement may appeal to the Department and, in doing so, are guided through that procedure by the DIS admissions staff. The Student Affairs Committee consists of: three faculty members and one student. The committee formulates and recommends policies in the areas of admission, financial assistance, academic progress, discipline, honors, and awards, as well as student welfare in general. As part of its charge, the Student Affairs Committee meets as needed to evaluate admission appeals and renders a final verdict to the DIS admissions staff.

For current admission criteria, see the Department of Information Science Master's Admission Checklist (https://informationscience.unt.edu/admission-process) and the UNT Toulouse School of Graduate Studies admission procedures page (https://tgs.unt.edu/future-students/graduate-admissions). The Toulouse Graduate School statement on compliance with HB 1641 can be accessed at: http://www.tsgs.unt.edu/hb1641.htm.

The application acceptance rates of the Department are displayed in Table IV.10. The rigorous admissions process enables the DIS to enroll quality students who are poised to become change agents within the field. Most of the DIS students graduate within three years (see Table IV.1). Table IV.1 should not be taken

as an indication of two common measures of program effectiveness, student retention and graduation rates, because it does not account for the number of non-degree students (e.g., School Library Certification) or students still pursuing coursework. The progress of students through the program is affected by many factors, including the school's criteria for admission, rigor of coursework, quality of advising, state budget cuts in libraries, and students' own personal situations.

Table IV.10 DIS MS Application Acceptance Rates

Year Applied	Accepted	Not Accepted	Total	% Accepted
2013	445	99	544	82%
2014	545	84	629	87%
2015	768	137	905	85%
2016	717	223	940	76%
2017	569	207	776	73%
2018	612	234	846	73%
2019 (6 months)	324	189	513	63%

Standard IV.4

Students construct coherent programs of study that allow individual needs, goals, and aspirations to be met within the context of program requirements established by the program.

As presented in the self-study on Standard II.3 (*"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 DIS curriculum provides opportunities for students to construct coherent Programs of Study (POS). This cannot be achieved without a sophisticated mechanism on student advising.

Advising support is available to assist students in developing their coherent degree plan (Appendix 28: Advising Process). This ample support begins during the admission process. Upon entering the program, students receive a welcome letter with advising information that includes both their faculty advisor's contact information and the Advising Office's contact information. It includes information about registration and scheduling an advising appointment. During advising appointments, professional advisors review the registration process with students. Students are assigned academic advisors based on their geographic location, interests, and field of study. Any faculty member can advise students following the General POS; since 2019, a faculty advisor is assigned to students in the General POS. For the more specialized POS, faculty members who have appropriate expertise are usually the advisors. If the student is in a cohort or in the Houston program, the respective coordinators are assigned as advisors. Students may change advisors by completing and filing out a simple request form. The COI advising staff advises most general studies and school library certification students. School library certification students also have an advising cohort area in the UNT course management system (currently Canvas, previously Blackboard). Advisors track

student progress via the student's university record and review their transcripts in the UNT system. All advisors receive appropriate FERPA and system training.

Students are required to work closely with their advisors each semester to select courses for the next semester and, by the time they have completed their first 12 credit hours of coursework, to develop their complete degree plans. Students register for courses (INFO 5900 or INFO 5910)[1] upon consulting with their academic advisors and, when doing so, need to obtain a formal approval for enrolling into Special Problems courses (see Table IV.11 for the number of students enrolled in Special Problems).

Table IV.11 Students Enrolled in Special Problems Courses, 2013-2019

YEAR	Number of Students
2013	32
2014	46
2015	52
2016	55
2017	51
2018	37
Spring 2019	15

In order to maintain the tradition of personal and individualized advising, the faculty have successfully addressed a number of challenges stemming from the significant increases in enrollment, distributed learning, and complexity of master's program options. These challenges and the means of addressing each are:

- Students are active at all hours in many locations and faculty must be available to respond to their advising needs. While faculty continue to meet advisees in their offices, many meet outside their scheduled office hours by appointment and/or communicate with advisees primarily by email, telephone, or in an online meeting in Zoom, Skype, etc.

- Around 500 students begin the master's program each academic year. Initial advising for the core courses, or the nine credit hours that most students take first, is conducted by the COI Advising Office.

- Students following the School Librarianship POS make up a significant portion of the enrollment, 28.2%, in Fall 2019. The COI advising team provides full-time advising via email or telephone about state certification requirements and POS requirements. They also handle the mentors, mentoring, and state testing for school library certification students. A Certification Cohort "Class" is also available on the UNT course management system (previously Blackboard and now Canvas) for the

[1] There is no difference between these courses. Two courses are used for the convenience of scheduling by the advising office.

dissemination of information and answering questions related to school library certification.

- A majority of the DIS students live more than 50 miles from Denton and are pursuing their studies part-time. The traditional "drop in" advising method is not suitable for these students. The program employs a geographically-based distance learning approach to provide students with specialized attention and a sense of small group identity. For example, faculty members who serve as primary representatives to the cohort programs usually serve as advisors to these students unless the students choose to change advisors to one of the POS faculty. The distance program advisors typically visit their sites several times during the program to meet with students in person, conduct face-to-face advising, and hold general information sessions.

In their responses to the End of Program (EOP) survey administered in 2013-2019, between 60% and 76% of students, strongly agreed and agreed that their official advisor provided useful guidance in selecting appropriate courses. In addition, between 54% and 69% of students strongly agreed and agreed that faculty and staff other than their official advisor provided useful guidance in selecting appropriate courses. Here are some typical student comments on advising taken from the EOP questionnaire:

- *"Advising has been the best I have ever had. Kudos."* [Summer 2014 EOP]
- *"An excellent advisor and friendly and attentive, which really put me at ease when I was confused or anxious."* [Fall 2014 EOP]
- *"The advising team (of nonofficial advisors) were amazing and answered all of my questions."* [Spring 2017 EOP]
- *"I appreciate how willing the advising staff was to help me meet certification requirements for different states […] and how helpful advisers were in getting answers to questions quickly!"* [Summer 2017 EOP]
- *"The advising process for me was always fantastic and satisfactory. For the most part, it was always also most easily achieved thanks in part because I tended to communicate with one advisor, and she and I first met for my first initial appointment. I think face-to-face appointments are necessary or phone calls because the more that can be communicated within a meeting the better, especially in order to avoid misunderstandings. I also suggested [to] the advising team to let students know about their own ability to look up classes, such as the online portal with class descriptions. Additionally, the importance of people looking at their degree plan every semester should be stressed, and even the attempt to plan semesters somewhat ahead."* [2018 EOP]
- *"My advisors were always attentive and responsive."* [2019 EOP]

However, the advising process is not infallible and, in addition to positive feedback such as the comments above, we received a number of negative comments in the open-ended questions on the EOP questionnaire. Common themes among the negative comments are lack of communication and lack of knowing exactly who one's advisor is, as well as dissatisfaction with course selection. The chief form of communication between student and faculty is email (between 43% to 50%, n = 1,864) and the Blackboard (now Canvas) online learning platform (between 42% to 48%, n = 1,864). While very accessible, these methods are not always successful in connecting students with faculty and advisors. However, when asked if they received "useful guidance in selecting appropriate courses" or "satisfactory career guidance" or "faculty and staff were available for information discussion", most students agreed or strongly agreed to EOP question 19 (Appendix 4: EOP Evaluation and Results 2013-2019).

The Assistant Director of the College of Information Advising Office has a Master of Science in Library Science from the University of North Texas and has worked in the College of Information for the last ten years. Other COI advising staff are also well qualified as advisors and admissions specialists. One has a

Master's in Counseling from Texas A&M Corpus Christi and has over seven years of advising experience. Another has a Bachelor of Science degree in Psychology from Texas Woman's University and is currently working toward a Master of Science in Educational Psychology with a focus on Higher Education; this person has worked in higher education for four-and-half years, and has a total of five years of experience working in libraries.

The COI advising and faculty advisors provide some career counseling, but also regularly direct students to career resources, such as library associations, the UNT Career Center, and so on.

The innovative approaches to advising and the curriculum support as described for Standard II.3 ensure that students construct coherent Programs of Study that allow individual needs, goals, and aspirations to be met within the context of program requirements established by the Department.

Standard IV.4.2

Students receive systematic, multifaceted evaluation of their achievements. Students have access to continuing opportunities for guidance, counseling, and placement assistance

Students are regularly advised and counseled by either the COI Advising Office, faculty advisors, or both. Table IV.12 indicates that in any given year during this review period a majority of students felt they had received satisfactory formal counseling and guidance. In addition, many of the cohorts and programs use Blackboard (now Canvas) to set up online venues where cohort and program coordinators can interact with and counsel students on a scheduled or *ad hoc* basis.

Table IV.12 "My official advisor provided useful guidance in selecting appropriate courses"

Scale	2013	2014	2015	2016	2017	2018	2019
Strongly Agree	37%	38%	32%	26%	23%	23%	23%
Agree	39%	37%	35%	35%	37%	42%	43%
Neither	13%	13%	15%	18%	18%	15%	12%
Disagree	5%	7%	10%	14%	13%	14%	185
Strongly Disagree	6%	6%	8%	8%	9%	6%	4%

With regard to **placement**, the UNT Division of Student Affairs Career Center has a comprehensive program to help students from all departments with job searches, job preparation, and placement. Department students are referred there as per policy. In support of this, faculty regularly support students in their efforts by raising awareness of open jobs, writing letters of reference and recommendation, working to link practicum sites with qualified students, and so forth. Job advertisements are regularly posted to the IS listserv, LISSA Facebook sites, and other social media. The division of student affairs does not track actual placements. More information on services offered and student use of the Career Center can be found in Standard IV.2.

Beginning in Fall 2019, the Department is implementing, for students who take their first class in that semester and all subsequent students, a mandatory ePortfolio as their Capstone experience and as a means of providing systematic evaluation. Students are required to begin their ePortfolio their first semester of enrollment. Each semester the student's ePortfolio will be reviewed and the student will receive appropriate feedback. The End of Program standing committee is being reconstituted to facilitate this review process.

Through the semester by semester review of each ePortfolio, students will receive continual guidance and counseling with respect to their progress, achievements, and performance. In addition to serving as the student's Capstone experience, the ePortfolio will serve as a primary means of providing the student with an organized online portfolio for the purpose of job seeking and professional presentation. This process is detailed in Appendix 12: ePortfolio Development.

Standard IV.5

The program provides an environment that fosters student participation in the definition and determination of the total learning experience.

The department enthusiastically promotes student participation in their own learning experience via a number of means:

- By encouraging membership and involvement in professional organizations, such as the American Library Association (ALA), Texas Library Association (TLA), and Special Libraries Association (SLA).
- By providing a wide range of Programs of Study (POS) within the master's program. Students, with input from their faculty advisor, are able to tailor their experience to their own particular interests within the repertoire of classes taught. The student's chosen POS and an advisor are matched on admission, but students can change POS at any time. However, changing the POS may require additional coursework for the completion of the degree. (Standard II. Table II.19 gives a breakdown of the number of students per POS during the review period.)
- By engaging students in departmental decision making via membership on Department committees.
- By engaging students in research projects.
- By providing opportunities for students to select (with instructor approval) and work on topics and issues of their own interest. For example:
    - In INFO 5200: Introduction to Information Organization, students spend the semester creating an information organization system and a database based on a collection of books or objects of the student's choice.
    - In INFO 5600: Information Access and Knowledge Inquiry, students, working in groups, spend the semester creating an instructional information service on a topic of their choice. The service is designed for a clientele of their choice.
    - In INFO 5365: Health Sciences Information Management, students explore a topic of interest of their choice in greater depth in the area of health sciences information management, in the process of which they conduct a literature review and use critical thinking skills.
    - In INFO 5080: Research Methods and Analysis, students conduct a research project in which they work in teams and select a public library to test a hypothesis regarding whether the library serves the demographics of its service area.

- In INFO 5000: Information and Knowledge Professions, students do a leadership project in which they propose, plan, implement, and evaluate activities in an organization that enhances their leadership abilities.
- Also in INFO 5000: Information and Knowledge Professions, students choose a library or information agency and interview the management regarding an ethical dilemma that they have faced and how it was resolved.

Standard IV.5.1

Participate in the formulation, modification, and implementation of policies affecting academic and student affairs

The Department encourages students to participate in departmental governance via student representation on departmental committees. The importance of such participation is reflected in the Department's goal to:

> "*Prepare information professionals who demonstrate excellence in leadership, service, research, education in a technology-driven environment"*

and in the master's program objective to:

> *"Understand the importance of professional development, continuing education, and participation in professional organizations".*

The DIS policy provides for active student participation in most aspects of Department planning and activities. The Department benefits from student participation in governance in terms of critical input on policies and procedures from its chief constituency. The views and opinions of student representatives are sought out and valued by the faculty.

The LISSA president traditionally serves as the student representative to the Faculty-Student Council meetings. During the entirety of the review period, the LISSA president or proxy has been present and has provided LISSA reports at the majority of the Faculty-Student Council meetings. Officers and members of LISSA and other student organizations are given opportunities to serve on the DIS standing committees, such as the EOP Assessment Committee, Curriculum Committee, External Affairs and Physical Resources Committee, and Student Affairs Committee.

Students are asked on the EOP survey if they are encouraged to participate on Department committees. (The results from this question are in Table IV.13.) The Department needs student input to improve its programs. However, involving students in policy making bodies at the DIS is particularly challenging for two reasons. First, there is a finite number of appointed seats on committees and in organizations, and that number does not vary as enrollment fluctuates. Second, the remote/out-of-state nature makes it difficult for students to attend meetings and participate in discussions. This can be improved, as the online meeting system is getting easier to use. Among items under consideration to ameliorate this situation are the investigation of concepts such as regular "town halls" and/or a Department-specific student senate.

Table IV.13 "I had opportunities to serve on policy making bodies while at DIS"

Scale	2013	2014	2015	2016	2017	2018	2019
Strongly Agree	5%	8%	2%	9%	6%	8%	8%
Agree	22%	20%	13%	19%	19%	20%	24%
Neither	44%	49%	44%	16%	45%	40%	42%
Disagree	21%	19%	31%	21%	20%	23%	20%
Strongly Disagree	7%	5%	9%	5%	10%	9%	5%

Standard IV.5.2

Participate in research;

Faculty and graduate students pursue research in diverse areas of the library and information science fields. Research interests include information and communication theory; human information needs, seeking, searching, evaluation, and use behaviors; development of information resources and services for specific populations; technology-based social networking in corporate and cultural environments; competency-based learning in the information professions; management and leadership of libraries and information agencies; roles of school library media specialists in instructional delivery; storytelling; scientific and scholarly communication; bibliometrics; human-computer interaction; information systems design, analysis, and evaluation; information retrieval including specializations in cross-language, digital image, and multimedia retrieval; technology standards development and application; digital libraries; institutional repositories; metadata and organization of networked resources; philosophy and theories of information organization including information representation and classification; digital information management including bibliographic control and preservation; distributed learning and technologies; automated library systems; medical informatics, legal informatics, and information resources and services in corporate and government fields; text and data mining; competitive intelligence; information policy and ethics; and information technology issues of privacy and security.

In the 2018 End of Program survey, 86% of the 386 respondents indicated a good or excellent response to the question "Does the department provide opportunity to participate in teaching, research, and service activities that contribute to the advancement of the library and information science field?" This level of positive response has been consistent throughout the evaluation period.

The Department offers a number of courses with research components, including but not limited to:

- INFO 5080: Research Methods and Analysis
- INFO 5900: Special Problems
- INFO 5910: Special Problems

The second two classes listed are independent study classes that a student can work with a faculty on specific research topics that the student and the faculty are interested in. Table IV.14 summarizes the number of master's students enrolled in each course for the period 2016-2019.

Table IV.14 Students Taking courses Where Research is Involved

Year	5080	5900	5910	Total
2016	55	25	1	81
2017	65	15		80
2018	64	22	1	87
2019 (Spring/Summer only)	34	12		46

The DIS employs master's students as salaried research assistants (each assigned to assist a faculty member) as often as possible. The number of students so employed fluctuates at any given time based on the amount of research conducted by faculty, number of applicants, and budget considerations. Table IV.15 summarizes the number of students so engaged.

Table IV.15 Number of Research Assistants

Semester/Year	# of research assistants
Fall 2014	3
2015	4
2016	8
2017	0
2018	4
2019	3

Students are also engaged in short term research projects initiated by faculty. For example, in Spring 2019, eleven of our master's students collaborated with Dr. John Marino on his COI-funded grant to explore barriers to diversity in school library collections. In addition, three other faculty members engaged a total of five other students in grant-funded research. Appendix 10 lists the publications that faculty and students co-authored in 2013-2019.

Standard IV.5.3

Receive academic and career advisement and consultation;

The DIS utilizes the College of Information Advising Office, which supports all master's students in the Department of Information Science. Each master's student is assigned an advisor that helps the student design a career path and identify the academic program that is appropriate for that student. Advisors serve as contact points for any questions students may have about enrollment, financial aid and scholarships, admissions requirements, registration, professional organizations, university services, and academic policies. Advising services are available via phone, email, or on a walk-in/appointment basis.

In addition, remote cohort students receive face-to-face advising on an on-going basis from the cohort coordinator or designee. Cohort coordinators are regular full-time faculty members who operate from the

Denton campus or, in some cases, adjunct faculty who live at the site of the cohort. The latter generally work under the guidance of a full-time faculty member. In the case of full-time faculty serving as a cohort coordinator, it is considered "beyond workload" and the faculty is compensated with a task payment. In the case of adjuncts, their salary is their compensation.

While much advising takes place on an *ad hoc* basis as needed by students, formal advising sessions are frequently scheduled in conjunction with institutes, All School Days, and other group events. In addition, many of the cohort programs maintain dedicated communication sites through which students communicate with each other, and with the cohort coordinator on issues, such as advising and course and POS selections. For example, the Houston program maintains its own Facebook page, which the Houston cohort coordinator uses as a primary means of information dissemination. Similarly, the Virginias cohort has used Blackboard to set up a site that facilitates this kind of communication among its constituents. See Standard IV.4 for more details on this topic.

The Department takes a proactive role in the placement of graduates. In addition to the Department's online postings of job announcements, faculty members continually identify positions for DIS graduates and actively help graduates find employment. For example, in Spring 2019, a local business contacted the DIS in hopes of finding a master's student to aid in organizing and providing electronic access to their collection of materials. One student obtained an interview, prepared a presentation, and secured employment by emulating the approach to information organization and system design taught in INFO 5200. Students also help one another; for example, the Library and Information Science Student Association (LISSA) and student chapters of professional organizations offer resume writing, interview, and job search workshops and online seminars. The master's program practical experience requirement, along with events, such as student and alumni reunions at conferences, provide networking opportunities that can lead to job offers.

Advising and assistance in furthering the professional aspirations of the DIS students does not end with graduation. All faculty and the departmental Advising Office maintain an open door policy, welcoming continuing interaction with alumni as both employees and employers.

The UNT Career Center (https://studentaffairs.unt.edu/career-center) is another source for career advising and placement. The center offers a variety of services to our students as discussed in IV.2. These services include assistance with writing resumes and cover letters, interview coaching, and job search strategy workshops. In addition, frequent posts about job opportunities are sent to our student mailing list: is-announce@lists.unt.edu. Our students are also able to search for employment opportunities on the UNT Career Center website (https://careercenter.unt.edu/).

Table IV.16 "Career guidance was satisfactory"

Scale	2013	2014	2015	2016	2017	2018	2019
Strongly Agree	17%	15%	19%	22%	17%	23%	21%
Agree	47%	39%	39%	38%	42%	40%	42%
Neither	25%	24%	28%	25%	27%	24%	21%
Disagree	7%	8%	10%	10%	11%	9%	13%
Strongly Disagree	4%	4%	3%	4%	3%	4%	4%

Table IV.17 Percentage of Students Employed in the LIS Field

2013	2014	2015	2016	2017	2018	2019
77%	76%	83%	78%	79%	75%	82%

One short term goal of the DIS and the College of Information Advising Office is the improvement of the assessment method currently in use, which is an exit survey for students that take the End of Program examination. This survey does not make a distinction between faculty and professional, staff advisors, so it is difficult to determine the effectiveness of advising for the program, when it is generally not apparent which advising staff or advisor is referenced in specific feedback.

Standard IV.5.4

Receive support services as needed;

The UNT Division of Student Affairs (https://studentaffairs.unt.edu/) has worked to develop support services for students. In addition to the more traditional support services, such as financial aid, housing, placement, career counseling, and others, the UNT Division of Student Affairs provides students with many non-classroom training and support opportunities. These are offered either as open access or recurring events and are usually available through the student's UNT portal. These services include, but are not limited to:

- Mandatory alcohol awareness training for all new students under the age of 21
- Mandatory sexual assault training for all students
- One-on-one tutoring
- Financial literacy
- Peer mentoring
- Counseling
- Substance abuse assistance

Standard IV.5.5

Form student organizations;

One purpose of promoting student participation in student and professional organizations is to help students begin building professional networks. When asked on the EOP questionnaire in 2018 whether they participate in networking activities for personal and professional growth, leadership, collaboration, policy development, and change management, 86% of the 389 respondents indicated a "good" to "excellent" level of participation (Table IV.18).

Table IV.18 Respondents rating "Ability to participate in networking activities" as "good" to "excellent"

	2013	2014	2015	2016	2017	2018	2019
Respondents	365	295	236	225	325	389	
Good/Excellent	88%	90%	87%	85%	85%	86%	

The central student organization is the Library and Information Sciences Student Association (LISSA: https://unt.campuslabs.com/engage/organization/lisstudentassociation), to which students at all degree levels can join. LISSA plans and organizes extracurricular educational, recreational, and fundraising activities, and serves as a focal point for discussion of student concerns. LISSA involves online students in their events by using online meeting tools. LISSA officers are elected annually by the student body.

Extracurricular Activities

LISSA has cohort chapters that host and sponsor local group activities. The Virginias cohort has had an active LISSA chapter and conducted a number of virtual meetings and a few meetings on-site. As examples, they hosted "Career Sampler" and "Finding and Getting a Job" events, both of which had various panelists. The Denton, Greater Los Angeles, and Houston LISSA chapters, working with their respective cohort and program coordinators, host at least one annual All School Days at each site. Further, in order to enhance the students' experience, alumni of the Houston program are invited to network with current students in the program. As examples of Houston area student participation:

- The September 29, 2018, Houston All School Day, sponsored by the UNT DIS Houston program (topic: "Six different kinds of librarians will be talking about 'Getting the Job You Want'") was attended by 116 students.
- The March 18, 2019, virtual happy hour "Q&A with Brian and Sheila" sponsored by the UNT DIS Houston program (event for students and alumni) was attended by 107 students and alumni.
- The October 26, 2019, "What did I do with my degree?" talk at the Houston All School Day was attended by 51 students and alumni.

An example of the UNT LISSA event list can be found at: https://unt.campuslabs.com/engage/organization/lisstudentassociation.

Each of the cohorts and programs, and in some cases student groups, are active in extracurricular social media forums which include Facebook, Twitter, Evite, and Blackboard/Canvas. As an example of how these are used, the Houston LISSA group uses Facebook (https://www.facebook.com/HoustonLISSA/) and a blog to announce group activities, post job notices, plan socials, and share photos of group activities.

The UNT LISSA chapter as well as cohort chapters encourage its members to become active in professional organizations including ALA, TLA, SLA, ASIS&T, and others. Each chapter has a faculty liaison and the Department is active in supporting chapter activities, venues, and events. Each LISSA chapter is formally affiliated with the American Library Association.

Participation in student organizations enhances the student's sense of belonging to the DIS community and helps them to develop leadership skills, as well as build networks and loyalties that continue after graduation.

Standard IV.5.6

Participate in professional organizations.

The DIS has a very active ASIS&T student chapter with both master's and Ph.D. members. Hosting regional and international conferences on our campuses in Denton, Texas, has allowed for students to showcase their current research, while becoming familiar with the peer review process and receiving constructive feedback from seasoned faculty members. In 2018, our student chapter was awarded the ASIS&T Student

Chapter of the Year Award. In selecting the UNT ASIS&T student chapter for the award, the jury considered the chapter's membership, activities, communications, financial and administrative management, and contributions to ASIS&T as well as the broader information science community. The student chapter of ASSI&T has organized more than 20 non-meeting events since Summer 2017. These include, but are not limited to: an ASIS&T chapter social, a welcome breakfast for the new doctoral cohort, a dissertation workshop with the University Reader, a welcome back lunch for the start of the Spring semester, a workshop on using twarc for Twitter scraping, a welcome back brown bag with desserts in Fall of 2018, a software carpentry collaboration with UNT Libraries, a board game night collaboration with LISSA, and other events.

The ASIS&T (https://www.asist.org/) Awards and Honors Committee was impressed by the variety and quality of chapter activities, including the Multidisciplinary Information Research Symposium in 2018 that attracted more than 80 attendees (Appendix 9: MIRS 2019 Report). The success of this event has galvanized chapter members and other students who attended the event and many pledged to get involved with future chapter events. The chapter uses every opportunity to collaborate with the faculty, staff, and other organizations in order to increase its value for its members. ASIS&T social media links include:

- https://community.asist.org/home
- https://www.facebook.com/asist.org/
- https://www.linkedin.com/company/association-for-information-science-and-technology-inc

The DIS students are regular recipients of prestigious professional awards. Examples of awards include:

- The Mid-Atlantic Library Alliance Scholarship
- The Montana Library Association Scholarship (1 winner in 2018)
- The ALA Spectrum Scholarship (1 winner in 2019, 1 winner in 2018, 2 winners in 2017)
- The TLA Student of the Month (1 winner in 2017)
- ALA internships
- The ALA David H. Clift Scholarship (1 winner in 2013, 1 winner in 2018)
- The ALA Emerging Leadership

The DIS students aid in staffing recruiting booths at TLA and other professional conferences, while other students are frequent visitors to the booth. At the 2017 TLA Conference, for example, two students co-crewed the booth with a faculty member, where documentation was collected on 12 student visitors, and many others of the 645 booth visitors indicated they were current or former students.

Standard IV.6

The program applies the results of evaluation of student achievement to program development.

Evaluation of students is intimately connected to evaluation and development of the master's program. The Department applies data and observations of student achievement along with feedback from students, graduates, and employers to improving the program.

The quality of individual courses, course delivery, and the curriculum in general is improved through attention to student performance in courses, responses to course evaluation (SPOT) and on-site institute surveys, and success in completing the End of Program examination. Since 2008, analysis of the DIS End of Program examination results serves as a basis for master's program reports to the Southern Association of Colleges and Schools (SACS) (see Table IV.19).

Table IV.19 Historic EOP Pass/Fails

Semester	Total Takes	Passes	Fails	% Passed
Fall 2014	86	82	4	95.3%
Spring 2015	89	86	3	96.6%
Summer 2015	85	81	4	95.3%
Fall 2015	93	88	5	94.6%
Spring 2016	84	79	5	94%
Summer 2016	86	79	7	92%
Fall 2016	89	86	3	97%
Spring 2017	117	104	13	92%
Summer 2017	130	124	6	95.3%

An Example of Applying Evaluation Results to Program Development

When faculty noticed that students were routinely failing the school library certification exam on the first try because many students were taking the test before they were ready, it became apparent that modifications needed to be made to help students to succeed on the first try in taking the test. The test is expensive and there is a waiting period after a failure before a student can re-test which can result in a lost job or failure to be qualified for a job.

Modifications included the process whereby students would all take an official practice exam in the course they take before the practicum. The official practice exam is considered to be a good indicator of success on the actual certification exam as most students who pass the practice exam also pass the certification exam. If students failed the official practice exam, when they enter the practicum course, they are required to go through a study module that helps them to prepare for the test. At the end of the study module, students must take the practice exam again. If students pass the practice exam this time, they are cleared to sign up to take the certification test. (Previously, students could sign up for the certification test without being cleared. This practice resulted in many students taking the test before they were ready to take it.). If students fail the practice exam a second time, there is a second study module they must complete. After completion, students are cleared to take the certification exam.

Any student who fails the actual certification exam is required to email the practicum coordinator. The student and the practicum coordinator work together to develop a specific study plan for the student to meet their individual needs.

A recent example of modifying a program based on student achievement was in the school library certification program's practicum course. Although students participate in a 160-hour practicum, spread over the course of their studies, they take the actual practicum course as their last certification course. In order to work as a school librarian in Texas, the students must be certified through the State Board for Educator Certification. One of the requirements of this certification is to pass a School Librarian certification

test. Because certification is essential to become a school librarian, the school library certification program at the University requires that the students pass the certification exam in order to pass the practicum course which also must be passed to graduate.

Overall, students are satisfied with the program and their experience. Analysis of responses on the End of Program survey (Table IV.20) showed that more than 95% of our students are satisfied with the program.

Table IV.20 Percent of Graduates Satisfied with the MS Degree Program

	2019*	2018	2017	2016	2015	2014	2013
Number of Survey Participants	112	384	321	227	237	208	267
Very Satisfied	56%	53%	50%	57%	56%	58%	57%
Reasonably Satisfied	37%	35%	36%	32%	28%	33%	34%
Somewhat Satisfied	6%	9%	11%	9%	11%	6%	8%
Total	99%	97%	97%	98%	95%	97%	99%

Notes: *Spring 2019 data only

Standard IV.6.2

Procedures are established for systematic evaluation of the extent to which a program's academic and administrative policies and activities regarding students are accomplishing its objectives.

The extent to which program objectives are met is regularly assessed by the systematic analysis of the student achievements based on the EOP examination data. This analysis has been conducted once a year during the period 2008-2011 and increased to every semester starting in 2012. The questions for the EOP examination are selected by the EOP Committee to represent the three major student learning outcomes:

- **Management/Leadership** - Students will be able to describe and/or propose valid solutions to typical organizational problems in their professional areas by demonstrating skills in management and leadership.
- **Information Organization/Systems** - Students demonstrate knowledge in information organization and presentation as well as systems for organizing information and facilitating information access by describing and/or proposing valid solutions to typical professional problems in these areas.
- **Information Access/Resources** - Students demonstrate knowledge in information access and information resources by describing and/or proposing valid solutions to typical professional problems in these areas. These correlate well with the program objectives (https://informationscience.unt.edu/mission).

Table IV.21 presents the relationship between the DIS MS program objectives and the program-level SLOs.

Table IV.21 Program Objectives Mapped to SLOs

Program Objectives	SLOs
The roles and impacts of information policies, practices, and information itself on diverse populations, including underserved groups, in a rapidly changing technological and global information society.	Management/Leadership Information Organization/Systems Information Access/Resources
The design and implementation of conceptual and technological systems and services to facilitate the discovery, identification, selection, acquisition, organization and description, storage and retrieval, preservation, dissemination, management, and use of recordable information and knowledge in any format for effective access.	Information Organization/Systems Information Access/Resources
The study of human information behavior in order to develop and implement information systems and services that meet user needs related to information and knowledge creation, communication, discovery, identification, selection, retrieval, analysis, interpretation, evaluation, synthesis, management, and use.	Management/Leadership Information Organization/Systems Information Access/Resources
The effective use of communication and networking for personal and professional growth, leadership, collaboration, policy development, and change management.	Management/Leadership
Teaching, research, and service, including interdisciplinary activities that contribute to the advancement of the field.	Management/Leadership
The philosophy, principles, and legal and ethical responsibilities of the field.	Management/Leadership Information Access/Resources

As part of the evaluation process, answers to the EOP examination questions are each rated by two faculty members on a one to five scale (Table IV.23) for each of the three SACS standards – completeness, accuracy, and quality of writing and reference. These ratings are then aggregated and quantitatively analyzed to determine if the student learning outcome criterion is met (see Table IV.22 for average SACS scores). Table IV.23 presents the rubric for the SACS scores. The SACS scores demonstrated that, on average, students achieved nearly very good performance.

Table IV.22 Average SACs Scores

Areas	2013	2014	2015	2016	2017	2018	2019
Completeness of Answer	4.0	4.0	4.1	3.8	3.8	3.8	3.7
Accuracy of Answer	4.1	4.1	4.1	3.9	3.8	3.8	3.8
Quality of Writing and References	3.8	3.9	3.9	3.8	3.6	3.6	3.6

Table IV.23 Rubric for the SACs Scores

Areas	5	4	3	2	1
Completeness of Answer	The answer addressed all components of the question completely.	The answer addressed all components of the question but more details could have been provided.	The answer addressed most of the components of the question adequately but the details were insufficient.	The answer addressed only part of the question.	The answer barely addressed the question.
Accuracy of Answer	The answer was completely accurate and all details were relevant to the question.	The answer was accurate, however, some of the details were irrelevant to the question.	The answer was mostly accurate but there were some factual mistakes.	The answer had a lot of inaccuracies and some of the details were irrelevant.	The answer was mostly inaccurate and the details were mostly irrelevant.
Quality of Writing and References	The answer was well written and concise. The answer was supported by at least six references that were complete, relevant, and in total accordance to APA style.	The answer was well written and concise. The answer was presented with at least four to five references. The references had some slight irrelevance or minor APA style mistakes.	The answer was sufficiently well written and mostly concise. The references used could have been more relevant or there were some major APA style mistakes.	The answer was not well written or concise. The references were somewhat irrelevant or there were not enough used or there were numerous APA style mistakes.	The answer was poorly written and was not concise. References were seldom cited to support the answer.

The Department uses three other instruments, the Recent Graduate Survey (Appendix 5), Employer Survey (Appendix 6), and the Alumni Survey (Appendix 7) to evaluate the degree to which the program's academic and administrative policies and activities regarding students are accomplishing its objectives. These are available online and are administered online. The recent revision of the master's program mission, vision, goals, and objectives included a consideration of the results of these evaluations. Similar to the EOP examination, these instruments are applied and evaluated every semester.

Various program committees in the Department meet to review program practices and initiate changes based on conversations with students and suggestions made by students on course evaluations. For

instance, in the School Library Certification Program, when students complained that the electronic portfolio requirements were unclear, the faculty got together and designed a new plan to focus on making the ePortfolio requirements more specific and to remind students in each course what could or should be added to the portfolio from the coursework. As another example, when course reviews for the core courses frequently stated that multi-day institutes were a burden on students, the curriculum committee, in conjunction with the core course coordinators and the faculty as a whole, decided to reduce the number of teaching days at each institute.

The three cumulative instruments solicit input from the three key constituencies most directly affected by the program: students, graduates, and employers. The faculty discuss the results when appropriate in faculty meetings, retreats, and committee meetings. In addition to the students who serve on the Faculty-Student Council and its committees, members of the department's staff, Board of Advisors, and Alumni Society are asked to provide feedback on critical changes to the mission, vision, goals, and objectives and to program content, policies, or procedures.

Standard IV.6.3

Within applicable institutional policies, faculty, students, staff, and others are involved in the evaluation process.

Faculty are involved in evaluating student achievements. Faculty are involved in nominating the outstanding students for UNT Honors Day. The Scholarship Committee solicits faculty nominations for the Beta Phi Mu honor society. Two letters of recommendation from faculty or employers are required in order for an endowed scholarship application to be considered complete.

Beginning with the Fall 2019 semester, the ePortfolio will be used as an on-going evaluation of student progress. Student ePortfolios will be reviewed each semester with consideration toward quality of student contributions to their own ePortfolio in terms of meeting ALA Core Competencies, Student Learning Outcomes, and toward overall progress towards the completion of the ePortfolio. The results of the reviews will be used to determine if the program is meeting its goals and objectives in terms of both program and SLOs, to indicate deficiencies that need to be remediated, and to improve student preparation for graduation. Appendix 12: ePortfolio Development contains detailed descriptions of the ePortfolio, including how it will be evaluated, how it relates to Student Learning Outcomes, and how students will be tracked.

Students are actively involved in the evaluation process. The Department regularly collects and analyses feedback from the students about the program quality through the EOP questionnaire administered to the students in their final semester in the program.

Students are also encouraged to participate in faculty candidate interviews. Student feedback on the faculty candidates is taken into account in hiring decisions.

As part of the DIS Strategic and Working Plan process, the DIS faculty and staff will continue to review student-oriented academic and administrative policies and procedures to ensure that the DIS mission, vision, goals, and objectives are being met. The faculty will investigate additional methods for increasing student input in the process.

In addition, members of the Department's staff, Board of Advisors, and Alumni Society are asked to provide feedback on critical changes to the mission, vision, goals, and objectives and to program content, policies, or procedures at Department council meetings, BOA meetings, or through surveys.

Another important group that contributes to program evaluation is employers of recent program graduates. The employers are asked to complete a survey indicating how the graduates perform according to the program objectives. The most recent Employer Survey was administered in Fall 2018.

The Department applies data and observations of student achievement along with feedback from students, graduates, and employers to improve the program.

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.

As evidence of the on-going decision processes regarding evaluating student learning, the DIS keeps a record of all committee meetings including discussion and resolution of all pertinent decisions. These include:

- Monthly Faculty-Student Council meetings
- Some standing committees may have minutes in addition to their reports that are included in the council meeting minutes

One recent decision documented in these meetings is the discussion of and subsequent adoption of an ePortfolio (Appendix 34) as the sole means of Capstone experience for the MS-LS students.

The Department has on-going processes for evaluating student learning. These include, but are not limited to:

- Completion of courses in a degree plan
- Completion of courses required for a POS
- Course grade and GPA criteria
- Course grading rubrics
- EOP grade and SACS data
- End of Program and other surveys
- Student Perspectives on Teaching (SPOT) course evaluations

The completion of courses in a degree plan and successful fulfillment of the requirements of a POS are an indication that, by the consensus of the instructors involved, the student has demonstrated sufficient learning. The Department has stated requirements in terms of course grades and overall graduating GPA. Students are required to pass each of the core courses with a grade of B or better, and the overall final GPA, including those three core course grades, must be 3.0 or higher. Regular evaluation of student progress on degree plans takes place in the Advising Office, and in advising with cohort and program coordinators.

Many courses have a grading rubric for some or all of their assignments. For example, INFO 5200: Introduction to Information Organization uses a "grading document" that indicates specific expectations for

students writing the course's major semester paper, and ensures that any of the instructors engaged in teaching that course grade with the same philosophy and that those instructors have the same learning expectations of their respective students.

The final grade (pass or fail) of a student's End of Program exam and the SACS data associated with that grade can also be taken as an assessment of student learning outcomes. Various surveys, especially the student End of Program survey, which is mandatory, are mined on a semester basis for information that indicates success and shortcomings of student learning. See below for more information on SACS.

SPOT evaluations and informal student feedback are used by individual instructors to gauge learning success or shortcomings of their classes. For example, several years ago a consistent theme in the SPOT evaluations and student feedback for INFO 5200: Introduction to Information Organization was that the database software used in the class was too difficult to download and install, and was a significant stressor and distraction from the actual class material. The solution was to find a simpler, easier to use platform which allowed the student to concentrate on actual class material.

The DIS collects data from students with regard to their learning experience and the learning outcomes of the program. This is primarily done through an End of Program survey which is a mandatory component of the End of Program assessment. The survey collects data in the form of open-ended and closed-ended questions, and rating scales.

Student Evaluation of Program Objectives

Students are asked to evaluate the program objectives based on five provided responses. Each of the five provided responses is given a value from five, the highest, to one, the lowest. The mean is then calculated by determining how many responses were provided for each category using their predefined value. The results indicate that students' perceptions of the program requirements and success of these requirements in meeting their needs has been favorable (see Table IV.24 for student evaluation of program objectives). Survey results also demonstrate that most graduating students are satisfied with their DIS program experience (see Table IV.20 earlier).

Table IV.24 Student Evaluation of Program Objectives

Please rate your ability to perform the following tasks/skills as a result of completing the program	2013 (n=368)	2014 (n=297)	2015 (n=238)	2016 (n=227)	2017 (n=325)	2018 (n=388)	Trend
1. Remain flexible and have the overall ability to manage change effectively in a technology-driven and knowledge-based environment.	95%	96%	93%	93%	94%	95%	Steady
2. Collaborate, interact with, and understand the needs of diverse populations in a technological and global information society.	94%	95%	93%	94%	94%	94%	Steady

3. Understand human information behavior in order to design and implement information systems and services that meet user needs.	91%	89%	87%	92%	92%	90%	Steady
4. Effectively evaluate, synthesize, and present information for client/user use.	95%	95%	92%	92%	95%	93%	Steady
5. Develop and implement conceptual and technological systems and structures for the organization of information in any format for effective access.	75%	74%	78%	76%	80%	82%	Up
6. Plan, manage, and/or implement information systems in a networked environment for the creation, organization, and dissemination of information.	77%	77%	83%	86%	83%	86%	Up
7. Demonstrate the communication skills necessary for personal and professional growth, leadership, interaction, and collaboration in appropriate professional contexts.	92%	94%	94%	91%	94%	95%	Up
8. Participate in teaching, research, and service activities that contribute to the advancement of the library and information science field.	86%	86%	85%	87%	85%	86%	Steady
9. Understand the importance of professional development, continuing education, and participation in professional organizations.	95%	97%	93%	94%	94%	97%	Steady
10. Participate in networking activities for personal and professional growth, leadership, collaboration,	88%	90%	87%	85%	85%	86%	Steady

policy development, and change management.							
11. Understand and uphold the philosophies, principles, and legal and ethical responsibilities of the library and information science field.	96%	97%	94%	95%	96%	96%	Steady
12. Demonstrate additional knowledge and competencies appropriate to my individual interests, specializations, and career goals.	95%	95%	93%	94%	95%	94%	Steady
13. Relate the methodologies and content of other disciplines to the information field, and understand the contribution of the information field to other disciplines.	91%	91%	87%	93%	92%	91%	Steady

Notes: Percentages equal an accumulation of "good" and "excellent" ratings. "N" equals the maximum number of respondents. In some cases, slightly fewer than "N" answered a question. "Steady" equates to a decrease or increase of less than 3% from 2013 to 2018. The same survey indicates that, as a whole, students are satisfied with the program, with "very satisfied" being the largest percentage for each of the years 2013-2019.

For university accreditation, SACS requires each degree program to demonstrate that it (a) has learning outcomes, (b) assesses the extent to which it achieves these outcomes, and (c) makes improvements based on these assessments (see https://institutionalresearch.unt.edu). SACS requires documentation of data-driven decisions.

For the DIS master's program, the primary assessment tool for SACS data is the EOP exam. Each exam answer is evaluated using three criteria (completeness, accuracy, writing/references) on a five-point scale. The detailed grading rubric was developed as per the Office of Institutional Research and Effectiveness (IR&E)'s recommendation.

Students do ***not*** see the weights and they are not linked to their grades. These data are analyzed after the EOP exam is conducted.

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.

There are several examples to demonstrate that the DIS used the evaluation results to improve the program.

The program increased the number of advisors to enhance student advising. The COI Advising Office has increased its number of advisors from two full-time staff in 2013 to five full-time staff in 2018.

The Department hired a new admission staff in 2019 to process master's program admissions so that student applications can be processed in a timely manner. Admissions was originally part of the responsibilities of the Advising Office.

The ePortfolio development that has been mentioned in multiple places in this study is another example of improving the program based on student learning outcomes. Beginning in Fall 2019, students who are enrolled in their first semester of coursework begin preparing an electronic portfolio as a Capstone project. The project is designed to give students a place to establish an extensive online resume tracking what they learn in their studies, mastery of key concepts and curriculum associated with their education and future career, philosophical beliefs about learning, and reflections on learning. It is also designed as a mechanism by which student learning outcomes can be measured. See Appendix 12: ePortfolio Development for further information.

STANDARD V: ADMINISTRATION, FINANCES, and RESOURCES

INTRODUCTION

Organizations are dynamic and undergo changes over time. The University of North Texas (UNT) has experienced a number of major developments at both university, college, and department levels during FY 2013 to FY 2019, the period for this Self Study. At the university level, Dr. Neal Smatresk joined UNT as the new president, beginning February 3, 2014. Under his leadership, the University of North Texas is now ranked among the nation's 130 top-tier research universities, according to the 2018 Carnegie Classification of Institutions of Higher Education™. Jennifer Evans-Cowley began as provost and vice president for academic affairs July 1, 2017.

In the College of Information (COI), the founding dean, Dr. Herman L. Totten, retired August 14, 2015. A national search for a permanent dean was successful. Dr. Kinshuk from Athabasca University in Canada was appointed as dean effective August 15, 2016. Dr. Kinshuk brings great leadership and experience rich in online education. He continues to support the Department of Information Science in developing new courses and resources to meet the needs of both our on-site and distance learning programs. The college also added a new unit; the Linguistics program which moved from the College of Arts and Sciences as an independent program unit in 2014 and subsequently became a department in 2016. The department offers a bachelor's degree and two master's degrees.

At the Department level, the first significant development was the departmental name change. The faculty, in consultation with students, the Board of Advisors, and alumni, voted unanimously to change the department name from the Department of Library and Information Sciences to the Department of Information Science (DIS) in 2016. The name change represents the diversity of programs in the department and helps better prepare students to meet the challenges of both traditional and emerging areas in the information and knowledge professions. Dr. Suliman Hawamdeh, who had served as department chair since 2010, returned to the faculty as a full professor in January 2018. Dr. Yunfei Du served as the interim department chair from January 16 to November 11, 2018. The Dean appointed Dr. Jiangping Chen as the Department Chair on November 12, 2018.

This section describes the changes and evaluates the extent to which the Department has adjusted its administrative and financial support to meet its changing needs in conformance with the COA Standard.

Standard V.1.1

The program is an integral yet distinctive academic unit within the institution.

The Department of Information Science (DIS) (https://informationscience.unt.edu), which offers the ALA-accredited Master of Science (MS) in either Library Science or Information Science, is one of three units in the UNT's College of Information (COI) (https://ci.unt.edu). The COI was created in 2008 as the result of a consolidation between two academic units: the School of Library and Information Sciences and the Department of Learning Technologies. The Linguistics program joined the College of Information in 2014 (https://ci.unt.edu/about-college-information). Appendix 29 is the University's Organizational Chart from the Office of the Provost for 2018-2019.

The UNT is governed by a Board of Regents and is the flagship university of the UNT System (https://www.untsystem.edu). Chancellor Lesa Roe serves as the chief executive officer of the UNT System.

The university has a President, Dr. Neal Smatresk, who serves as the chief operating officer. The chief academic officer of the university is the Provost, Dr. Jennifer Evans-Cowley, who is also the Vice President for Academic Affairs. The UNT has the Carnegie Classification R1: Doctoral Universities – Very high research activity. UNT is located within the Dallas/Fort Worth metroplex and currently serves nearly 40,000 students.

The DIS Chair, Dr. Jiangping Chen, serves as the chief academic officer of the Department and its programs. She reports to the COI Dean, Dr. Kinshuk. The governance of all academic units and their academic programs are guided primarily by the UNT policy manual (http://www.unt.edu/policy/) and the UNT Catalog (http://catalog.unt.edu).

Currently, the Department offers five degree programs:

- The ALA-accredited Master of Science, with majors in Library Science and Information Science;
- The Bachelor of Science with a major in Information Science and Applied Technologies;
- The Bachelor of Science in Data Science;
- The Master of Science in Data Science; and
- The Ph.D. in Information Science.

The two majors in the ALA-accredited Master of Science program share the same core courses and are differentiated by their own major core courses in the form of guided electives. Appendix 14: Master Program Articulation provides detailed information about the Master of Science and the two majors.

Standard V.1.2

As such, it has the administrative infrastructure, financial support, and resources to ensure that its goals and objectives can be accomplished.

Administrative Infrastructure

The Department Chair is the administrative head of the Master of Science program and the chief executive officer of the department. The DIS Bylaws (https://informationscience.unt.edu/departmental-policies/) document the structure of the department, including descriptions of all standing committees, and outlines how the department operates. The bylaws define and make distinctions between administrative and faculty roles, and provides guidance on the function of the Faculty-Student Council and all standing committees. It specifies the standing committee structure of the department, including the methods for appointing committee members, and the *ad hoc* committees appointed by the Chair based on the needs of the department.

The Department has the Faculty-Student Council as its policy- and decision-making body. It meets monthly during the academic year. The chair may call special meetings of the council if deemed necessary. The council provides oversight or input in all aspects of the department, including curriculum, faculty hiring, promotion and tenure, and graduation of students. The DIS Executive Committee serves in an advisory capacity to the chair and typically meets monthly during the academic year, scheduling called meetings as necessary. This committee, which consists of one elected faculty member per rank, provides faculty input when the Faculty-Student Council cannot be assembled, especially during the Summer.

Financial Support

The Department receives salary and some operating funds from the university and also has other revenues to support its faculty, staff, and students. See Section V.6 below for details about the financial aspects of the department.

Resources

The University also provides university-wide resources – physical, academic, administrative, and others. See Sections V.9-V.12 for details. Campus resources are listed at: http://catalog.unt.edu/content.php?catoid=20&navoid=2124, and academic resources for faculty can be found at: https://vpaa.unt.edu/resources/faculty. For example, the UNT Libraries (https://library.unt.edu), classrooms (https://classroomsupport.unt.edu), and conference facilities (https://studentaffairs.unt.edu/university-union, https://studentaffairs.unt.edu/coliseum-and-gateway-center/gateway-center) are available to faculty, students, or departments for use.

Standard V.1.3

Its autonomy is sufficient to assure that the intellectual content of its program,

The Department is an autonomous unit within the College of Information, especially in areas that address the program structure, program requirements, programs of study, graduate certificates, addition or deletion of courses, and so on. The IS Curriculum Committee reviews and discusses proposed changes to the program content and makes recommendations to the Faculty-Student Council within the general guidelines of both the college and university. The Faculty-Student Council votes on all recommendations related to the intellectual content of the department's programs, reflecting the department's autonomy in this area.

the selection and promotion of its faculty,

Once a faculty position is approved by the Office of the Provost, the chair appoints an *ad hoc* search committee. The university provides a platform (https://facultyjobs.unt.edu) that allows applicants to submit their applications online. The search committee works with the chair to develop the position description, conducts interviews, and invites selected candidates to campus for interviews with the faculty, staff, and students. Faculty vote on candidates and the recommendations for hire are submitted to the chair, then the dean, and finally to the provost for approval.

The DIS Bylaws contain details about the two committees integrally involved with faculty affairs: the Reappointment, Promotion, and Tenure Committee and the Personnel Affairs Committee. The Reappointment, Promotion, and Tenure Committee is made up of the tenured faculty in the department and operates within the general guidelines of the university (http://policy.unt.edu/policy/15-0-1/) for faculty reappointment, promotion, and tenure, and the department guidelines for faculty reappointment, promotion, and tenure (https://informationscience.unt.edu/departmental-policies/). The committee prepares for the Department Chair a recommendation concerning each non-tenured faculty member who is completing a probationary period, each non-tenured faculty member who is applying for tenure, and each faculty member who is applying for promotion. The committee informs all faculty about Department, College, and University policies, regulations, procedures, deadlines, and other matters related to promotion and tenure.

The Personnel Affairs Committee (PAC) comprises all tenured and non-tenured faculty. A primary responsibility of the tenured faculty members of the committee is to conduct annual performance reviews of faculty for the purposes of continuing appointments, promotions, tenure, and terminations, and then make

recommendations to the Department Chair. The committee informs all faculty members about Department and University policies, regulations, procedures, deadlines, and other matters related to faculty affairs.

The Toulouse Graduate School (https://tgs.unt.edu/toulouse-graduate-school/) grants all graduate degrees at the university. The DIS is a standing member of the Graduate Council (https://facultysenate.unt.edu/graduate-council-0/) and participates fully in policy-making activities for graduate education at the university level.

Activities of the Graduate Council include conducting reviews and approving new graduate courses and programs; reviewing and approving all units' individual criteria for membership on the Graduate Faculty; and setting minimum standards for admissions, academic progress, and graduation.

and the selection of its students are determined by the program within the general guidelines of the institution.

Students applying for admission for a DIS graduate program must also apply to the Toulouse Graduate School. The Toulouse Graduate School oversees graduate program development and collaborates with departments on the recruitment, admission, and enrollment services provided to the university's 6,700 graduate students.

At the department level, the Admissions and Student Affairs Committee oversees admission to the Master of Science program, handles appeal cases, and reviews conditional admission. The Scholarships and Financial Awards Committee manages scholarships and financial aid, as well as activities closely connected to admission, enrollment, and retention of students.

The chair is also a member of the Chair Academy (https://vpaa.unt.edu/events/chair-academy-meeting). The Chair Academy is a forum where department chairs get the opportunity to meet and get updates from the university on various matters. The DIS chair also serves on the Chairs Council, an executive committee that oversees the Chair Academy activities and negotiates with the university administration about various issues affecting the duties of the department chairs.

Standard V.1.4

The parent institution provides both administrative support and the resources needed for the attainment of program objectives.

The University and the College of Information has provided the DIS with resources that have allowed it to sustain existing programs and to develop new programs. This has been done by sustaining the historically-based budget (for which the starting figure each year is determined largely by the starting figure of the previous year). The university instigated in 1999 and 2001 two revenue-sharing policies (DLFM and OSTF) that guaranteed that a significant portion of the revenue earned by the department will return to the department. Beyond the revenue-sharing, the university continues to support students in the cohorts in the form of general scholarships. See the section Standard V.6.1. below for more information about these two revenue-sharing policies.

The different types of university support, along with the revenue generated from the OSTF and DLFM revenue sharing systems, are used to directly support instructional delivery and administrative tasks in order to address program objectives.

Standard V.2.1

The program's faculty, staff, and students have the same opportunity for representation on the institution's advisory or policy-making bodies as do those of comparable units throughout the institution.

It is standard practice at the University to include one representative from each academic unit when standing or *ad hoc* university committees or task forces are created (https://vpaa.unt.edu/provost/committees/, https://facultysenate.unt.edu/2016-2019-voting-groups/). Examples of recent DIS faculty membership on university committees include: Graduate Council; Information Resources Council; Faculty Senate; Reappointment, Promotion, and Tenure; and Evaluation of Teaching. Faculty members' participation on these committees, and many others, provides opportunities for the department to maintain a high degree of visibility across the campus. The following are examples of faculty membership and service at the university level:

Dr. Jiangping Chen

Vice President for Research and Innovation Search Committee, 2018-2019
University Faculty Research Committee, 2016-2018
Chair Academy, 2018-present

Dr. Ana Cleveland

Faculty Grievance Committee, 2018
Budget Oversight Group, 2017
Faculty Development Leave Committee, 2017
Administrator Evaluation Committee, 2015-2016
Women's Faculty Network Steering Committee, 2014-present

Dr. Yunfei Du

Digital Strategy Advisory Committee, 2019-present
Faculty Credentialing Review Committee, 2017-present
Steering Committee, Center for Learning Enhancement, Assessment and Redesign Steering Committee, 2007-2018
Phi Kappa Phi Advisory Board, 2016-2017
Mentor, Faculty Network, 2016-2018
China Advisory Council, 2014-present
Faculty Senate Budget Committee, 2012-2014

Dr. Shawne Miksa

COACHE Steering Committee, 2018-present
University Library Committee, 2014-present

Dr. William Moen

Fellow, Texas Center for Digital Knowledge, 2001-2015

Dr. Guillermo Oyarce

University Curriculum Committee, 2014-2017

Dr. Barbara Schultz-Jones

Educator Preparation Council, 2015-present
Global Affairs Committee, 2011-2015
Global Affairs Sub-Committee for Study Abroad, 2011-2015
International Education Committee, 2010-2011
Research Opportunity Grant (ROP) Review Panel, 2009
Teacher Education Council, Member, 2008-2015

Dr. Maurice Wheeler

Provost's Search Committee for COI Dean, 2015-2016

Dr. Daniella Smith

President's Award Committee, 2018-present
Smart Campus Design Thinking Meeting, 2017
Committee on the Status of People of Color, 2012-present
Committee Member, ISS Ph.D. Program Admission Committee, 2014

Dr. Jeonghyun Kim

Faculty Award Committee, 2016-2018
Mentoring Grant and Award Selection Committee, 2016-2018
Faculty Mentor Committee, 2016-2018

Dr. Jeff Allen

Regent Professor Selection Committee, 2016-present

Dr. Jodi Philbrick

Cross-Disciplinary Mentoring Group, 2018-present
Faculty Senate, 2017-present
Faculty Senate Faculty Salary Study Committee, 2014-2017
Women's Faculty Network Leadership Team, 2016-present

Dr. Oksana Zavalina

Faculty Senate, Fall 2013-2016
UNT Graduate Council COI representative, 2016-2018

The DIS faculty also have equal opportunities to participate on COI committees based on its bylaws: https://ci.unt.edu/about-us. Many faculty have served on various COI committees. For example, Dr. Jodi Philbrick served on the COI *ad hoc* Bylaws Committee (2016) and the Staff Operations Committee (2016); Dr. Daniella Smith served on the COI Strategic Plan Task Force (2015), the Staff Operations Committee (2014-present), and as Chair of the COI RPT Committee (2016-2017); and Dr. Yvonne Chandler served on the COI Budget Oversight Group (2017), the Administrative Evaluation Committee (2015-2016), the Academic Affairs Committee (2015-2016), and the RTP Committee (2013-2015).

Standard V.2.2

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.

The Department in its current incarnation, and previously as the School of Library and Information Sciences, has had a long history of active engagement in campus activities and with other academic units.

By reason of their positions, the College Dean and the Department Chair have highly visible involvement on university councils. The Dean is a member of the Dean's Council and the Chair is a member of the Chair Academy. The Chair Academy is a forum where department chairs get the opportunity to meet and get updates from the university on various matters.

Appointments on these bodies allows department and college leadership to develop relationships with their peers across campus and to participate in and help shape outcomes that directly impact faculty and student participation across the university and in the department.

Within the college, the department can take advantage of opportunities for collaboration and interaction with sister departments: 1) Learning Technologies and 2) Linguistics. In addition, being located at Discovery Park presents opportunities for engagements with other complementary departments, such as computer science, information technology, and electrical engineering. For example, the DIS faculty served as search committee members for other departments and work with faculty members from other departments on research projects and grants.

The relationships established through these activities have resulted in many opportunities for faculty and students to participate in interdisciplinary research projects and teaching. Appendix 10: Selected Faculty-Student Co-Authored Publications shows selected examples of faculty and student joint publications. Some of the research proposals and awards listed in Appendix 23: DIS Sponsored Projects External Funding Activities demonstrate collaborative projects between the DIS faculty and faculty in other UNT departments.

Standard V.2.3

Decisions regarding funding and resource allocation for the program are made on the same basis as for comparable academic units within the institution.

The University provides each college and other units with a budget from centrally pooled funds. The four sources of these central funds are state dedicated revenue, state appropriations, designated student tuition, and Higher Education Funds (HEF). State dedicated revenue and appropriations are used solely for salary and payroll; designated tuition is used for salary and M&O expenditures; and HEF monies are used for construction and controlled equipment. HEF monies are allocated on a yearly basis as departments submit their annual requests, while the other sources tend to be stable and on-going. Increases to the base budget can be made during the annual budget hearings described below. Other funding sources the Department receives are from student fees, gifts and donations, and indirect recovery from grants.

Central funds are provided to the college, and the dean determines where to allocate the resources. Resource allocation within the College of Information is primarily determined by student enrollment and credit hour production, but is also granted based upon strategic needs for program growth. This is the same process across the entire university.

Annual Budget Process

Each Spring, the college dean asks the department chairs and other unit heads to consult with faculty/staff and submit their individual area's needs for faculty, staff, equipment, and so on. The dean then reviews all requests and ranks them in order of need and/or strategic importance to the college as a whole. The combined requests are submitted to the provost, and a budget hearing is then set with the provost to discuss the requests. The President's Cabinet deliberates and makes final decisions on new resource allocations among all colleges and other non-academic units, which the Board of Regents approves prior to the start of the fiscal year.

The college holds bi-weekly executive meetings at which the dean, associate deans, directors of the college service units, and the chairs discuss important issues including resource allocation for each academic unit. The department has the opportunity to request resources as needed by the program.

The chair is consulted when the college determines its budget application to the university. The chair usually discusses this with the Executive Committee prior to providing her feedback to the college.

This process is the shared practice of the University when determining funding and resource allocation for all academic units within the institution.

Standard V.3

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.

The administrative head of the Master of Science program is also the chair of the department. As with other units at UNT, the Chair serves as the chief academic officer for all programs in DIS and as the chief operating officer for the management of the department and its programs. Department chairs report to a college or school dean, and this is also the case for the DIS and the COI.

The Provost Office website specifies the responsibilities of the department chairs (https://vpaa.unt.edu/chairs/roles/responsibilities). It states that chairs are responsible for the daily operation of the department, in consultation and collaboration with the dean, provost, departmental faculty, and the university administrative team, as appropriate.

The former chair, Dr. Suliman Hawamdeh, was hired in August 2010 as Professor and Chair of DIS through a national search. He earned a Ph.D. from the University of Sheffield iSchool in 1988. Dr. Hawamdeh is a well-known authority in the field of knowledge management. He founded the International Conference on Knowledge Management which was held in 2017 in the Dallas/Fort Worth area, is the founding Editor-in-Chief of the *Journal of Information Knowledge Management*, and the author of several books in the area of knowledge management, data analytics, and information science. In his role as department chair, he supported the development of students, graduates, and alumni and facilitated their participation in local, national, and international professional organizations. He hosted workshops and seminars that connected students with leaders from the industry, nonprofit organizations, local government, and police force. He was the founding president of the Knowledge and Information Professional Association (KIPA) which continues to be a vehicle for connecting students with the industry and community.

During Dr. Hawamdeh's service as the department chair, DIS expanded presence and program offerings beyond Denton and North Texas to include Houston, San Antonio, El Paso, Lubbock, Amarillo, Virginia, West Virginia, New Hampshire, Vermont, Maine, Greater Los Angeles, Northern California, Nevada, Arkansas, and New Mexico. Dr. Hawamdeh founded the Master of Science in Data Science, directed the Ph.D. program and established the concentrations in the Ph.D. program. During his tenure, the department name was changed from Department of Library and Information Sciences to the Department of Information Science to better reflect the diversity of programs in the department. He served as a CO-PI on an NSF grant in collaboration with College of Engineering and College of Business. The grant formed the basis for starting the concentration in cybersecurity in the department. During his tenure, the Department was successful in continuously securing research and instructional grant funding from IMLS.

The current chair, Dr. Jiangping Chen, earned a Ph.D. in Information Transfer in 2003 from Syracuse University, an MS in Information Science from the Library of Chinese Academy of Sciences in 1995, and a BS in Information Science from the Wuhan University in China. She started her faculty career in 2004 as an assistant professor, received tenure in 2010, and was promoted to full professor in 2017.

Dr. Chen's curriculum vitae (located at: http://coolt.lis.unt.edu/homepage/CV/JiangpingChen-v46.1.pdf) reflects a strong commitment to the field, to developing new courses to keep current with changes in the field, and to conducting funded research to inform the courses she teaches.

Dr. Chen developed and taught graduate and undergraduate level courses in Introduction to Information Science, Digital Libraries, Information Architecture, Multilingual Information Access, Data Modeling, and Web Database Systems. Many of these courses have been offered face-to-face and via the Internet. Additionally, she is the director of the Digital Content Management Graduate Academic Certificate at UNT.

During her tenure at UNT, Dr. Chen has published more than 60 research papers in these areas in top journals and academic conferences. Dr. Chen established the Intelligent Information Access Lab (http://txcdk-iia.unt.edu/IIA/) at UNT. Contributing to the decisions for her tenure and promotions is the funded research awards she has received. Her research has been supported by the Institute of Museum and Library Services (IMLS), the National Science Foundation (NSF), the Association of American Publishers, and UNT. These awards began in 2005 and continue to the present time. Dr. Chen's research and publication activities reflect her deep engagement with students and other faculty members. Her students' curriculum vitae have been helped substantially because of her many co-authored articles and conference papers.

Dr. Chen was the Editor-in-Chief of *The Electronic Library* (TEL: http://www.emeraldinsight.com/journal/el), an international peer reviewed journal for the application of technology in information environments from 2013 to 2019. She is an active member of the American Society for Information Science & Technology (ASIS&T), the American Library Association (ALA), the Library and Information Technology Association (LITA), and the ACM Special Interest Group on Information Retrieval (SIGIR). She received the Recognition of Service Award from the Association for Computing Machinery (ACM) because of her successful organization of the 18th ACM/IEEE Joint Conference on Digital Libraries (JCDL) in June 2018.

Her interest and expertise areas are critical in the evolving nature of library and information studies and the education of graduate students with knowledge, skills, and abilities for professional practice in the information and knowledge professions. From her arrival at the University in January 2004, she has had a smooth path through the ranks of assistant to associate professor and to earning full professorship in September 2017.

Through her experiences as a faculty member, current chair Dr. Chen developed managerial, organizational, and financial competencies that provide a suitable foundation for the leadership and management responsibilities of a department and as the administrative program head for the accredited Master of Science degree program.

Dr. Chen has had 30 years of experience in teaching and research in library science, information science, and the new discipline of data science. Prior to the chair position, she had led her research lab working on federally-funded research projects for six years. She gained significant leadership experience through the organization of JCDL 2018.

In Fall 2018, Dr. Chen was nominated by the Dean as one of the Leadership Fellows who participated in the trainings provided by the Office of the Provost (https://vpaa.unt.edu/fs/resources/pro-dev/lf/). She was also funded by the Provost's office to attend the 2019 Academic Chairpersons Conference (https://conferences.k-state.edu/academicchairpersons/) in Houston to learn more about management and leadership skills.

The dean's annual evaluation of Dr. Chen demonstrated that she is a qualified administrator who can lead the department to achieve its mission, goals, and objectives. The dean's evaluation of the DIS chair is available upon request.

Standard V.4.1

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;

The former chair, Dr. Suliman Hawamdeh, the interim chair, Dr. Yunfei Du, and the current chair, Dr. Jiangping Chen, closely follow the responsibilities as outlined in the UNT Office of the Provost document at: https://vpaa.unt.edu/chairs/roles/responsibilities/ and the DIS Bylaws (https://informationscience.unt.edu/departmental-policies/) to manage daily operations of the department and the DIS programs. They all made great efforts to establish an intellectual environment for the health of the department, the professional growth of people, and the quality of the programs. For example, faculty, staff, and students are offered opportunities to communicate with the Chair at council meetings, retreats, and through personal communications; every standing and *ad hoc* committee can report and present at the council meeting; and the department's Strategic and Working Plans (Appendix 2: DIS Strategic and Working Plans 2013-2019) were collectively developed and reviewed through the systematic planning process (Appendix 3: DIS Systematic Planning Process).

The dean of the College of Information appointed Dr. Jiangping Chen to the position of chair of the Department of Information Science in Fall 2018. The department faculty supported her appointment and the decision by the Dean. Dr. Chen assumed the responsibilities of that position and chaired her first meeting of the department's Faculty-Student Council on December 4, 2018. As a candidate for the position, Dr. Chen made a presentation to the department faculty and staff that described her vision and leadership approach (for a copy of the presentation, see Appendix 30: Chair Position Presentation).

Dr. Chen's Vision and Leadership Approach presentation discussed her SWOT analysis for the department and its programs (Bachelor of Science, Master of Science, and Ph.D.) discussing both the strengths and weaknesses of the program and the department.

Her vision for the department and the programs through which that vision will be realized is: *Globally recognized excellence in preparing leading information professionals, advancing knowledge, and serving the professions.*

She presented concerns and opportunities in the SWOT analysis and identified short-term goals needing immediate attention, but she also presented a set of robust and ambitious long-term goals to realize her vision, including the following:

- Being a top ranked program
- Producing and promoting influential faculty and graduates
- Making significant contributions to the disciplines of library science, information science, and data science
- Being a significant contributor to UNT's tier one research university status

The UNT Provost defined the role (https://vpaa.unt.edu/chairs/roles/overview) and responsibilities of a department chair (https://vpaa.unt.edu/chairs/roles/responsibilities). The overview statement provides a broad description:

A department chair serves both as a faculty member and an academic administrator, providing leadership and management to the department/division consistent with the university mission and goals. Chairs also engage in teaching and scholarship as determined by the overall distribution of their workload. This document addresses general responsibilities, appointment terms, workload distributions, compensation guidelines, and evaluation procedures for chairs.

A chair's general responsibilities fall into these categories:

- Department's daily operation
- Faculty and staff development
- Curricular responsibilities
- Student affairs
- Management and administrative responsibilities

The program's administrative head at the University is not only an academic administrator but is also an educator and scholar/researcher.

Based on her Vision and Leadership Approach presentation, and under the assumption that Dr. Chen will adopt and act on the ideas presented, there is strong reason to believe that the environment she nurtures will positively support Section V.4.

Standard V.4.2

that environment also encourages faculty and student interaction with other academic units and promotes the socialization of students into the field.

The DIS encourages faculty and students to interact with other academic units for their personal and professional growth. For example, events and activities that may be interesting to the DIS faculty and students are forwarded to them by the Department Chair. Faculty members collaborate with faculty from other departments on research projects and publications. Many externally funded projects involving department faculty members are collaborations with faculty members at the University or other organizations (for the complete list of projects, see Appendix 23: DIS Sponsored Projects External Funding Activities). Faculty and students from other academic units are invited to attend IS research meetings (https://informationscience.unt.edu/research-meetings/) and sponsored conferences, such as the Multidisciplinary Information Research Symposium (MIRS) (see Appendix 9: 2019 MIRS Report for a description and summary of the 2019 symposium). Residential and distance students alike take full advantage of opportunities that enable them to engage with professionals in the field, such as colloquia and financial support to attend conferences.

The increasing number of nonresidential students has prompted an expansion of efforts to engage these students in the "life" of the department. Most of the events that LISSA organizes (https://unt.campuslabs.com/engage/organization/lisstudentassociation/) can be participated with online by students.

Standard V.5.1

The program's administrative and other staff support the administrative head and faculty in the performance of their responsibilities.

Since the formation of the College of Information and the establishment of the Department of Library and Information Sciences within the college (and its renaming to the Department of Information Science), various administrative changes and restructuring have occurred. These changes have resulted in changes in the number and responsibilities of department staff positions. Some responsibilities have been centralized at the college level while others have been devolved onto the department. In this section, we describe important staff changes and how these changes continue to improve the support of the administrative head, the faculty, and the fulfillment of the program's mission, goals, and objectives.

College Staff

Decisions by the present dean, as well as previous deans, tries to provide centralized support to all departments where economies of scale can be enhanced. All departments have need for similar services and support. Services and support provided by the college involve robust interaction between department and college staff. While college-level staff provide services and support in several prominent areas to all college departments, department staff see these resources supplementing and complementing the work of department staff in support of the department's operations and programs:

- Advising: The College of Information Advising Office (COI-Advising) and its staff of five advisors and counselors provide advising to all students in the department master's and bachelor's programs. Doctoral student advising is carried out by the Department, primarily by the Associate Director of the Information Science Ph.D. program and department faculty. COI-Advising works with the master's students to develop degree plans, to do semester advising, and help arrange and approve the students' practicum experiences as required by the degree plan. Department faculty members actively engage in advising master's students in programs of study/concentrations in the degree programs. Mentoring and career path discussions occur with the department faculty members. See also the information in Standard IV.4: Students that addresses advising of students.
- Finances: The College Financial Officer is the principal financial advisor to the Dean and also provides direction to department chairs and administrative coordinators in budget preparation, procurement, and compliance. The Department Chair and the department's HR and administrative coordinator are the department staff who primarily interact with the College Financial Officer.
- Research: The College Associate Dean for Research and Development and the Senior Research Analyst - Grant Writer/Pre-Award Administrator provide assistance to department faculty members in developing ideas and proposals to secure external funding for research and curriculum projects. The Senior Research Analyst assists in reviewing calls for proposals, developing project budgets, and interacting with the University's Office of Research and Innovation. Department faculty members work directly with these college staff members and staff in the Office of Research and Innovation in the entire process of preparing and submitting proposals and in post-award responsibilities.
- Website Development and Maintenance: The College Web Content Manager offers technical support regarding college- and department-level website development, design, functionality, and compliance with university, state, and federal requirements for website accessibility. A collaboration with the department's marketing specialist ensures that website information is current, pages are edited as needed, and recommendations for improvements are proposed to the Department Chair. Department staff members have responsibilities for content development and maintenance of the department website. Additional information about website accessibility and maintenance is in Standard V.12.2 below.
- Information Technology Support. ?

Department Staff

Because of the on-going and evolving balancing of responsibilities between the college and the department, the number of department staff has changed during the Self Study period. Table V.1 summarizes the department staff positions (numbers and titles) since 2013.

Table V.1 DIS Staff Size and Positions, 2013-2019

Year	Number of Staff	Position Titles
2013	4	Academic Professional II Program Project Coordinator - Web Institute Coordinator Administrative Coordinator II - Assistant to the Department Chair Admin Specialist
2014	7	Administrative Specialist IIS PhD Coordinator Academic Professional II Administrative Specialist Administrative Coordinator II - Assistant to the Chair Assistant Director of Department Marketing Admin Specialist - HR Coordinator
2015	6	Administrative Coordinator II - Assistant to the Chair Academic Professional II Director of Marketing & Events Marketing Specialist II IIS PhD Coordinator Admin Specialist - HR Coordinator
2016	6	Administrative Coordinator II - Assistant to the Chair Director of Marketing & Events Data and Career Services Specialist Marketing Specialist II IIS PhD Coordinator Admin Specialist - HR Coordinator
2017	8	Administrative Coordinator II - Assistant to the Chair Instructional Design Consultant Director of Marketing Data and Career Services Specialist Senior Administrative Specialist Marketing Specialist IIS PhD Coordinator Admin Specialist - HR Coordinator
2018	8	Administrative Coordinator II - Assistant to the Chair Instructional Design Consultant Director of Marketing Data and Career Services Specialist Senior Administrative Specialist Marketing Specialist II - Marketing Specialist Senior Administrative Specialist - IIS PhD Coordinator Admin Specialist - HR Coordinator

2019	8	Administrative Coordinator II - Department Coordinator Assistant Director of Marketing Marketing Coordinator Student & Program Specialist - Graduate Admissions Officer Senior Administrative Specialist - IIS PhD Coordinator Assistant to the Chair Administrative Specialist - HR Coordinator Student and Program Coordinator - Data and Career Services Specialist

Appendix 31: DIS Staff Job Descriptions provides position descriptions/purposes and details about the areas of responsibility and primary tasks associated with those responsibilities. Included in the document are the performance standards for each position; these standards provide specific information about the position's interaction with the administrative head, faculty, and students in support of the mission, goals, and objectives.

As an example of the continuing evolution of department staff and responsibilities is the recently established position of Student & Program Specialist - Graduate Admissions Officer. Given the enrollment size of the Master of Science in Information Science (MS-IS) or Library Science (MS-LS) program, the Student & Program Specialist focuses entirely on student recruitment and admissions for this degree program. A key responsibility is interacting with prospective and new students, with this performance standard representing the expectations to:

- Evaluate applications and recommend admissions in a timely and accurate manner.
- Interview applicants to obtain information about interests, aptitudes, and abilities.
- Compose and review degree plan worksheets for potential students.

Support of the Administrative Head

All of the current staff support – to varying degrees – the administrative head (i.e., the Department Chair), but we highlight the following positions that work closely on a daily basis with the Chair:

- Assistant to the Chair: Key tasks fall under the general responsibility of assisting the Chair, and include, as examples: scheduling, coordinating, communicating, and carrying out special projects for the Chair. The position also engages with the faculty on a wide range of departmental operations.
- Data and Career Services Specialist: Key tasks of this position that support the Chair include, for example: course scheduling, verifying adjunct teaching assignments, coordinating, and administering data related to COA, ALISE, and SACS, and posting job announcements to the DIS student mailing list.
- Director of Marketing: This position has a broad range of responsibilities for purchasing, event planning, marketing the department and its programs, and alumni relations. These efforts require a critical interface to the Department Chair.
- HR Coordinator: This position has major responsibilities for any and all human resources transactions for full- and part-time employees including faculty, staff, adjunct faculty, salaried teaching assistants, research assistants, service assistants, and hourly student employees. Close communication with the Chair is an essential component of the work of this position.

Support of Faculty and Students

Many of the current staff have specific responsibilities to serve students and department faculty. Appendix 31: DIS Staff Job Descriptions provides all the details, but the following highlight some examples of such responsibilities to students and faculty members:

- Assistant Director of Department Marketing: A critical responsibility in support of the program's off-site cohorts is: *Plan, manage, and supervise the logistics related to on-site institutes including establishing the on-site location, ordering food, processing requisitions, reviewing contracts, shipping necessary supplies and materials, and following up on payments*. This relieves faculty members of all the organizational issues for the on-site institutes and ensures students have appropriate venues and support for their intense learning experiences at these institutes.

- Administrative Specialist: With the large number of student employees, this department position processes and tracks all HR transactions concerning salaried and hourly student employees.

- Student and Program Coordinator - Data and Career Services Specialist: The work of this position directly touches students and faculty members. The position is responsible for all aspects of course scheduling for the department and, by necessity, coordinates the course scheduling-related tasks with the department faculty. The position also has had major responsibilities, in conjunction with the department's standing Faculty Committee, for the end of program assessment, including the examination, the website for the end of program processes, and to collect and enter end of program data for university accreditation purposes.

This is just a sample of the work of the department staff and their integral roles in support of students, faculty, and program operations.

Student Assistants in the Department

In addition to the full-time department and college staff members discussed above and their essential contributions to the department's operations, programs, and achievement of goals and objectives, we must also include one more component of the support infrastructure for the department.

The department hires on average 34 students each regular semester in the following roles established by the university:

- Teaching fellows: *Have direct student contact in a formal instructional setting and are charged with primary responsibility for teaching a course for credit under the direct supervision of a faculty member or chair, receiving regular in-service training and planned and periodic evaluations. Teaching fellows are listed as the instructor of record who have the responsibility for teaching*.
- Teaching assistants: *Graduate students who do not have primary responsibility for teaching a course for credit, but they perform under the instructor's direct supervision and provide general assistance to the instructional process, such as grading, tutoring, etc. Teaching assistants may not be listed as the instructor of record.*
- Research assistants: *Research assistants are graduate students who are engaged in research activities under the direction and supervision of a principal investigator or faculty working on research.*
- Graduate services assistant: *Graduate students whose responsibilities are administrative in nature or consist of other activities that do not generally fit within the TF, TA, or RA job responsibilities, but contribute to the overall academic progress or professional development of the student.* For example, program directors usually have assigned a graduate services assistant by the Chair.

The department may employ students in each of these categories every semester, but by far the majority of student employees are hired as teaching assistants. The Chair allocates and assigns department-, college-, and university-funded assistants to individual faculty and staff members based on need for teaching, special projects, and various initiatives. Faculty members and staff members serve as supervisors of the student assistants. All student employees contribute to the department's benefit for its operations and programs. Teaching assistants, however, provide much needed and valuable service in the delivery of instruction to the students in the Master of Science degree program. They benefit by receiving salaries and wages, and the possibility of tuition benefits to offset the cost of their education. A less tangible but important consequence from employing students is their presence in the department and the opportunities that emerge from engaging with other student employees and faculty members.

Faculty members with external funding (e.g., grants and contracts) hire students to work as research assistants and those faculty members have responsibilities for training the research assistants in the responsible conduct of research and provide all supervision of the students.

Standard V.5.2

The staff contributes to the fulfillment of the program's mission, goals, and objectives.

Staff and the Mission, Goals, and Objectives

The responses to Standard I in this report described the department's goals and the Master of Science program objectives. Department staff, as well as college-level staff, discussed in the first part of this section, have critical roles to play in actualizing the goals and objectives.

Many of the key result areas/tasks listed in the staff position descriptions (see Appendix 31: DIS Staff Job Descriptions) connect directly or indirectly to the achievement of the department goals and program objectives. Some focus more on students, some on faculty, some on alumni, and some on operations, but combined there is a cogent level of support for the goals and objectives. Here are examples of some of the key result areas/tasks:

- Manage all aspects of course scheduling
- Coordinate course scheduling-related tasks with DIS faculty, COI advising staff, and the Registrar's Office
- Coordinate career services
- Cohorts support and on-site institutes coordination
- Plan, manage, and supervise the logistics related to on-site institutes
- Assist and coordinate LISSA (Library and Information Science Student Association) activities
- Communicate with graduate students on the employment procedure with DIS
- Assist students who are inquiring about employment with the DIS
- Work with master's and Ph.D. Admin Coordinators on students' eligibility for tuition
- Benefits program
- Complete course fees for the DIS, as requested
- Coordinate recruitment events for DIS programs, including physical arrangements, promotions, etc.
- Follow up with faculty to ensure their needs are met for conferences/events and their individual programs
- Develop, edit, and update marketing materials: press releases, promotional flyers, event invitations, and various print and digital ads, etc.
- Assist with updating the DIS website and posting news and events

- Process student admissions
- Interact with prospective and new students
- Identify problems and analyze causes; take or recommend actions after evaluating alternative solutions; follow-up to ensure problems are corrected; and generate alternative solutions when solving problems

These are but a sample of the responsibilities and tasks of department staff and their support of the operations and programs in the department.

Standard V.5.3

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.

Initially established in 1985, the DIS Bylaws (https://informationscience.unt.edu/sites/default/files/is_bylaws_approved-sept6-2019.pdf) have been continually revised and provide the framework for decision making in the department.

As specified in the bylaws, the chief arena for decision making, including any revisions in the decision-making processes, is the Faculty-Student Council meetings. Department-level decisions are informed and guided by the work conducted by faculty committees. Faculty-Student Council members include all full-time faculty in the department who hold regular and continuing appointments, faculty who hold administrative appointments, retired faculty teaching part-time, full-time temporary, or visiting faculty, and elected student representatives (traditionally, the president of LISSA). Priorities are established through the DIS Strategic and Working Plans, 2013-2019 (see Appendix 2: DIS Strategic and Working Plans 2013-2019), which include the charge for the various committees in the departments. Committees bring issues that require decision making to the Faculty-Student Council after consultation with the Chair. The Chair is also assisted by the Executive Committee that advises the chair on various departmental business issues.

Standard V.6

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 parent institution in the case of the Department of Information Science includes the University and the College, since funds are allocated from the University to the College, which then allocates funds to the Department. With that in mind, it is useful to indicate the many significant changes at the university and college administration levels during the fiscal years 2013 through 2019 (i.e., the period covered by this Self Study). At the university level:

- President V. Lane Rawlins resigned in 2014
- President Neal J. Smatresk assumed the presidency in 2014
- Provost Warren Burggren resigned in 2015
- Provost Finley Graves served from 2015 to 2017
- Provost Jennifer Evans-Cowley began as provost July 1, 2017

Leadership changes also occurred within the College:

- Dean Herman L. Totten resigned in 2015
- Two interim Deans served between 2015 and 2016
- Dean Kinshuk began as dean August 15, 2016

These changes provide context for some of the changes in the financial situation of the department.

We respond to this section of Standard V by presenting first a summary view of revenues to the Department and expenses of the Department for all of its academic programs and operations. Following that are more detailed presentations of the revenues received by the Department and of the expenses incurred by the Department. The final section interprets the financial data in the context of this section of Standard V.

Summary of Revenues and Expenses by Fiscal Year

All funds to the Department are allocated or distributed by the University to the College, which in turns distributes funds to its departments. The University provides each college with a centrally-funded budget, and the colleges then allocate those resources across their various units. Enrollment is a large factor in this budget as salaries for faculty, staff, graduate students, and adjunct faculty are the primary source of funding the College receives from the University. Areas of strategic importance or areas targeted for growth are also a factor in how the funding is allocated.

There are several categories of funds that serve as revenue to the Department. Table V.2 presents the categories of revenue (information provided by the College Financial Officer). Table V.3 presents the revenue amounts for each category for each of the fiscal years 2013-2019. Table V.4 summarizes the total grant awards received for proposals submitted by department faculty members participating as principal investigator or co-principal investigator. We separate the grant awards from other revenues above since the management of these funds and associated expenses are managed centrally by the University. We present these in the context of revenues since some of the grant funds flow to faculty members and students.

Table V.2 Categories of Revenues Received by DIS

Revenue Source	Description
UNT/COI	Funding from the UNT/COI, mostly for payroll. University funds from the state pay: 1) salaries and wages to many of the department's faculty members, staff, graduate students, and part-time faculty, and 2) funds for maintenance and operations (M&O).
Distributed Learning Funding Model (DLFM)	Tuition paid by students that is returned to the department.
Out-of-State Teaching Fee (OSTF)	Fees paid by non-resident students taking online courses.
Endowment	Revenue coming from endowments. This does not include the principal, only the quarterly earnings that the department may use. Includes scholarships and endowed professorships.
Donations	Donations from individuals or businesses, mostly for scholarships.
Course Fees	Fees charged to students for taking courses in the department or college. The money is to support instruction.
IDC	The portion of indirect cost (F&A) from grants that is returned to the department for use in support of research.

Revenue Source	Description
Other	Miscellaneous revenue not easily identified or occurs so infrequently that it did not warrant a category of its own. Includes student payments and other cash deposits that did not have detail in the UNT Financial Information System.
Federal Grants & Contracts	Funds resulting from grant proposals in which department faculty members participated. Totals funds requested are reported for the proposals and total funds received are reported for the awards; this indicates the contribution of the department to the UNT research enterprise. Actual amount returned to the department is based on percent involvement listed in the proposal and award of the department faculty member(s).

Table V.3 Revenues Received by the DIS, FY 2013-2019

Source	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	TOTAL
UNT/COI	$1,835,214	$1,834,820	$1,880,816	$1,510,448	$2,007,007	$2,250,094	$2,367,733	$13,686,132
DLFM	$922,642	$862,115	$893,733	$883,685	$1,059,016	$715,588	$752,479	$6,089,258
OSTF	$1,194,658	$1,101,591	$1,040,169	$1,405,724	$1,258,816	$816,584	$689,956	$7,507,498
Endowment	$39,665	$42,362	$44,408	$35,895	$99,410	$156,153	$107,450	$525,344
Donations	$800	$11,855	$4,335	$2,035	$19,290	$5,699	$4,861	$48,875
Course Fees	$50,849	$11,736	$5,737	$97,714	$33,580	$329,384	$408,467	$937,467
IDC	$438	$6,163	$12,430	$8,619	$1,640	$2,143	$3,839	$35,272
Other	$18,942	$4,959	$4,015	$2,500	$7,550	$95,056	$10,806	$143,828
Total During Period	$4,063,208	$3,863,758	$3,885,643	$3,946,620	$4,486,309	$4,370,701	$4,345,591	$28,973,674

Based on Table V.3, OSTF has dropped significantly in FY2018. This was partly due to the funding model changing so that the department receives 52% of the revenue versus 83%. This change was implemented in FY2018. Further, the OSTF revenue is directly tied to the number of credit hours taken by online, non-Texas students. Any fluctuation in those enrollments will result in changing amounts.

Table V.3 also showed that the revenue on DLFM dropped since FY2018. This is also due to the funding model change so that the department receives 52% of the revenue versus 83%. This change was implemented in FY2018.

The course fees, on the other hand, have been increasing tremendously since FY2018. The University provides an option for programs to collect course fees from students to cover expenses that are necessary for delivery of the course. These can include supplies, teaching support, royalty payments, and other categories that are directly related to the provision of instruction. In FY2016, the university changed models for course fee collection. In the previous model, units could collect fees on a course section basis (fees

could be assessed by courses, or even specific sections of a course). Beginning in FY2016, course fees were moved to a single fee charged at the college level. Each unit within a college puts in an annual funding request, and the final fee charged to students is calculated based on the total expected expenses. The increase in fee revenue and usage allow the Department to pay for all salaried teaching assistants, the funding of which had been previously spread among several different sources. Prior to FY2016, teaching assistant costs were not allowed on the course fee. This has resulted in slightly higher fees for the students, although the college is mindful of this fact when setting the yearly fee. The current fee is $10.08 per credit hour.

Table V.4 Grants Received by the DIS, FY 2013-2019

Source	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	TOTAL
Grants/Contracts	$3,443,016	$590,039	$982,581	$1,049,599	$0.00	$12,189	$475,461	**$6,552,885**

There are wide variance over the years in grant awards, including the $0.00 amount in awards in FY2017. Grant proposals submitted declined dramatically from a high in FY2015 in the following three years:

- FY2015 $5,646,045.00
- FY2016 $71,519.00
- FY2017 $419,999.73
- FY2018 $2,778,557.58

The effects of the grant proposals (in number and in amount) during FY2016-FY2017 was a primary reason for the variance in award amounts in FY2018 through FY2019:

- FY2016 $1,049,599.00
- FY2017 $0.00
- FY2018 $12,189.00
- FY2019 (YTD, through June) $475,461.00

Department Revenues to Support Operation and Programs

University & College Funds for Payroll and M&O

For the parent institution support, the university provides a budget to the college, which it then splits among the departments. This is usually M&O or payroll money from general tuition funds or money for payroll on state funds. According to the College Financial Officer, the department's support has all been in state payroll funding for faculty, staff, graduate students, and adjuncts.

Two Categories of Tuition- or Fee-based Funds: DLFM and OSTF

The department has historically received valuable revenue from two of the main instructional activities of the faculty:

- Distributed Learning Funding Model (DLFM): Developing online courses and marketing them to students in the state of Texas who live more than 50 miles from Denton and who otherwise might not attend UNT courses. This generates additional tuition and headcount.
- Out-of-State Teaching Fees (OSTF): Recruiting and providing the Master of Science degree to cohorts outside of Texas. These efforts are done on a contract basis and do not count for state of Texas formula funding for tuition nor headcount for the program.

Until FY2018, 83% of the OSTF fees and DLFM tuition generated by the department were returned to the college. Beginning in FY2018, the university and college made significant changes regarding the percent of these funds distributed to the department. Now, the department receives 52% of these funds returned to the college, with the college retaining 31%. The university continues to retain 17% of the generated funds for overhead.

Information from the College Financial Officer indicates that most of the staff positions in the department are funded from these sources.

Endowment

As of 5/31/2019, the department had more than 25 endowments with a corpus comprising a total of $6,032,687. Revenues from these endowments vary as a function of market performance and changes in the corpus amounts. Table V.3 presents the revenue from the department endowments during the study period.

Donations

Donations come primarily from individuals and some businesses. Annual revenue in this category varies, sometimes dramatically, from year to year. Table V.3 presents the revenue from donations to the department during the study period. The major increases in two periods resulted from single five-digit donations in each year.

Instructional/Course Fees

These fees are paid by students as part of the cost of taking specific courses. There are strict constraints on the use of these fees. The fees vary by course; they can, and often do, change annually. In FY2016, the university allowed funding teaching assistants from course fees, and thus the dramatic increase in revenues from these fees in recent years. Table V.3 presents the revenue from course fees to the department during the study period.

Other Revenues

This category of revenues serves to catch one-time and miscellaneous deposits to the department that are not well detailed in UNT's financial reporting system. The major increase in FY2018 is the result of a faculty member moving into the department with a center he was responsible for. Table V.3 presents total miscellaneous revenues to the department during the study period.

Federal Grants and Contracts

During the fiscal years 2013 through 2019 (i.e., the period covered by this Self Study) department faculty actively engaged in securing external grant funding to support research, teaching, scholarships, and curriculum development. Faculty members collaborated with faculty at UNT – within the college and across campus – and also in projects involving the UNT Libraries, and with external partners.

Grant funds and paying expenses are managed centrally at the university level. External funding for projects, no matter the type, typically provide funding for student research assistants, increasing institutional capacity for teaching and research, and extending the opportunities for distant students to earn their Master of Science degrees through our outreach efforts. Funds recovered as indirect costs, also known as F&A, are distributed directly to faculty, departments, and colleges. Section (F&A) Costs Recovered from Awarded Grants below lists the details.

The first page of Appendix 23 presents a summary table of total funds requested in grant proposals submitted for which department faculty members served as principal or co-principal investigator. Subsequent pages in Appendix 23, starting on page 2, contain the details including the names, funding agencies, titles of proposals, and budgeted amounts for each grant proposal submitted.

The grant funding environment continually increases in its competitiveness, and the awards and amounts resulting from the proposals submitted show wide variance during the study period. Starting on page 6 in Appendix 23 is presented a summary of the **total amount of grant awards** received during the study period. Following the summary table, pages 6 to 9 contain the details including the names, funding agencies, titles of proposals, and award amounts for each grant.

When proposals involved multiple department faculty members, researchers from other department(s) and colleges, and, in some cases, researchers from other institutions and organizations, the total award was allocated to these entities on an agreed upon percentage based on level of effort described in the original proposal. These numbers reflect the contributions of department faculty in securing total external funding to the university.

Indirect (F&A) Costs Recovered from Awarded Grants

The total amount of recovered indirect costs (IDC, F&A) from a specific grant is based on: 1) the negotiated rate with the funding agency for the percent of IDC that can be charged to the grant; and 2) the types of grant expenses that can be subject to IDC. At the UNT, 32.5% of the total IDC recovered typically is distributed as follows:

- To the College/Dean: 10%
- Department: 12.5%
- Principal Investigators: 10% (shared among all the PIs)

At the UNT, recovered IDC are to be used, whether by principal investigator, chair, or dean for activities that support the research enterprise.

Department Expenses in Support of Operation and Programs

Reporting expenses for this study period is challenging because of a major enterprise overhaul to the financial information system. The change occurred during fiscal year 2016, with the actual change over to the new system occurring on February 28-March 1, 2016. This note was provided by the College Financial Officer:

UNT completely updated the university chart of accounts and reporting structure effective 3/1, which was halfway through the fiscal year. The change in accounting systems not only changed how university units reported finances, but also new restrictions were put in place to address deficiencies in the previous financial management system and processes. The Department of Information Science had been able to offset salary expenses in the state/centrally allocated funds with DLFM and OSTF revenue. After the change, this kind of transfer was no longer possible. The department staff/administration were used to doing

those transactions and were likely not aware of the change; no one else caught this problem until after the fiscal year ended.

The following information is based on the data provided by the College Financial Officer.

By far, the largest category of expenses for the department covers salaries and wages for all of the people who carry out the department's work and responsibilities in instruction, research, and service. The College of Information and its Financial Officer are responsible for preparing detailed financial reports for the department and units and bodies external to the department. The categories of expenses presented below are used in the reports to the department for the college financial officer.

Faculty (Full-time) Salary

Standard III discusses the department faculty and presents information on changes in the faculty during the study period. Such changes affect the yearly expenses across the years. These expenses support full-time tenure system faculty and lecturers. According to the College Financial Officer:

> *The large increase in FY17 is due to the department paying back the Provost for overspending in the wrong fund in FY16. In addition one faculty position was vacant in FY 2016 and 2017, and an existing UNT faculty member move from another department to IS in FY18.*

Part-Time Faculty (including Teaching Fellows) Salary

Part-time instructors including adjunct faculty and teaching fellows supplement and complement the department's full-time faculty to deliver instruction to our students. Teaching fellows are graduate students who teach at the appropriate levels per university requirements. Table V.5, the Part-Time Faculty category includes expenses for hiring both adjunct faculty and teaching fellows. They are hired as needed based on full-time faculty workload and course offerings.

Table V.5 Expenses Incurred by the DIS, FY 2013-2019

Source	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	Total
Faculty Salary	$1,837,861	$1,863,159	$1,857,034	$1,770,220	$2,598,376	$2,113,790	$2,271,640	**$14,312,080**
Part-Time Faculty	$856,347	$786,758	$967,237	$1,099,611	$1,344,453	$1,167,309	$1,114,873	**$7,336,588**
Staff Salary	$296,331	$298,499	$278,482	$299,223	$315,223	$325,028	$259,123	**$2,071,909**
Other Payroll Cost	$467,586	$237,919	$270,142	$231,251	$376,046	$352,225	$439,295	**$2,374,464**
M&O	$278,394	$478,799	$502,516	$423,035	$439,020	$394,608	$301,726	**$2,818,098**
Scholarships	$92,085	$38,463	$148,500	$465,638	$248,188	$129,018	$67,830	**$1,189,722**
Total During Period	$3,828,604	$3,703,597	$4,023,911	$4,288,978	$5,321,306	$4,481,978	$4,454,487	**$30,102,861**

Staff Salary

In Standard V, Section 5, we presented information about department staff including the changes in number of positions and their associated responsibilities. Table V.5, Staff Salary, includes expenses for all department staff members.

Hourly and Other Payroll Costs

This information is from the College Financial Officer along with notes to clarify what these expenses are and how they reflect changes in what accounts certain costs were paid from.

> *The uptick in payroll cost is mostly from DLFM funded positions. The department used to transfer OSTF and DLFM revenue into the state payroll fund where payroll costs were covered by the university, but this can no longer happen in the new system (no mixing of state and other funds). Adjuncts and grad students had to be moved to the source of OSTF and DLFM, and so there was a new cost.*

Table V.5 includes expenses for Other Payroll Costs.

Scholarships

Table V.5 line 7 presents funds distributed to students in the form of scholarships during the study period. During this period, the Department provided $1,189,722 scholarship to students. Table IV.7 lists the scholarships awarded to students as of 2-13-2019. Standard IV.2.2 described how scholarships have been awarded. There is a big drop in scholarships since FY2018 because the Department is no longer offering the Tuition Assistance Award (TAA). The number of TAAs given out was increased in FY2016 and discontinued after FY2017. The scholarships awarded to students from FY2018 forward are only those from endowed and gift accounts. Students also benefit from other sources of funding, such as Tuition Benefit Program administered by University.

Interpreting the Financial Data

In this final section, we analyze and interpret the financial data presented in the context of this section of Standard V. We begin with a broad comparison of revenues and expenses.

Table V.3 presents the fiscal year totals of revenues and Table V.5 presents the fiscal year totals of expenses. In the early years of the study period, total revenues covered total expenses. The major deficits in FY2016 and FY2017 likely reflect a variety of changes in how funds were reported in the new financial information system and changes to the percent of DLFM and OSTF available to the department.

As indicated earlier, DLFM and OSTF revenues are generated by work of the department and its faculty to provide courses to students more than 50 miles distance from UNT in Denton and to out-of-state student cohorts. To gain a better sense of the contribution of the parent institution (university and college in this case), we can look at the UNT/COI revenues per fiscal year and their contribution to salary and M&O that the state funds are intended for.

Revenue data from the UNT and COI in Table V.3 came from the College Financial Officer, as did the numbers for salary and M&O. From these, we can calculate the percent contribution to these expense categories from the parent institution.

Table V.6 shows that revenues from the UNT/COI have primarily covered full-time faculty salaries in the first years of the study period, yet in recent years those have not kept pace with increases in those

expenses. The changes in percent of parent (UNT/COI) contribution are summarized in the last row of Table V.6.

Table V.6 Percent Contribution of Parent Institution to the DIS Salaries and M&O Expenses

Revenue	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	Total
UNT/COI Total Expenses	**$1,835,214**	**$1,834,820**	**$1,880,816**	**$1,510,448**	**$2,007,007**	**$2,250,094**	**$2,367,733**	**$11,318,399**
Faculty Salary	$1,837,861	$1,863,159	$1,857,034	$1,770,220	$2,598,376	$2,113,790	$2,271,640	**$14,312,080**
Part-Time Faculty	$856,347	$786,758	$967,237	$1,099,611	$1,344,453	$1,167,309	$1,114,873	**$7,226,588**
Staff Salary	$296,331	$298,499	$278,482	$299,223	$315,223	$325,028	$259,123	**$2,071,909**
Other Payroll Cost	$467,586	$237,919	$270,142	$231,251	$376,046	$352,225	$439,295	**$2,374,464**
M&O	$278,394	$478,799	$502,516	$423,035	$439,020	$394,608	$301,726	**$2,818,098**
Expense Totals	**$3,736,519**	**$3,665,134**	**$3,875,411**	**$3,823,340**	**$5,073,118**	**$4,352,960**	**$4,386,657**	**$28,913,139**
% Parent Contribution	**49%**	**50%**	**49%**	**40%**	**40%**	**52%**	**54%**	**47%**

The table also makes apparent the critical function revenues from DLFM, OSTF, and courses fees have played in covering department expenses.

Standard V.7.1

Compensation for the program's faculty and other staff is equitably established according to their education, experience, responsibilities, and accomplishments and…

The compensation program at UNT provides flexible, competitive pay practices that encourage employee career development, reward job performance, and attract and retain qualified employees. Department policies and procedures for the employees in the DIS are the same as those of other UNT academic units. However, methods for establishing the compensation for each specific category of employee may differ.

Department Chair. Compensation is established by the dean, who also determines all raises of the administrative unit head, faculty, and staff. Department chairs across the university receive augmentation determined by the size of the unit and calculated based on the number of full-time faculty in the department. In 2018/2019, the augmentation was $600/month or $7,200 per year (https://vpaa.unt.edu/sites/default/files/legacy/provost/budget_procedures_manual_web.pdf).

Staff. Compensation is guided by regulations set by the UNT Office of Human Resources. Each staff position has a description and a classification with an accompanying salary range. The university provides for periodic raise pools, which are usually merit-based, although some raises have been across the board. Such merit decisions for the staff are made by the chair and the dean. The university may periodically provide salary funds for market adjustments for specific positions.

Faculty. The Office of the Provost monitors and manages salaries to support recruitment and retention of teaching and research faculty members (tenure system as well as lecturers). The starting salary for each faculty member is negotiated with the dean, with approval by the provost. All salary increases for faculty members are determined based on merit and/or equity (e.g., market adjustments). Each year, the department's Personnel Affairs Committee and the chair evaluate each faculty member's performance on a rolling three-year window. This evaluation provides a comprehensive evidentiary base for evaluative decisions related to merit. The dean uses these results in an advisory capacity when distributing merit increases. See Standard III.8 for details on annual faculty evaluations. Table V.7 shows average salary increases for full-time faculty across all ranks and staffs.

Table V.7 Faculty/Staff Salary Increase by Year

AY	FY13	FY14	FY15	FY16	FY17	FY18	FY19
Faculty (%)	3.50%	2.90%	1%	2.60%	2.90%	2.50%	1.40%
Faculty (Amount)	$51,283.00	$48,701.00	$16,414.90	$40,101.66	$49,462.36	$33.697.75	$27,316.24
Staff (%)		1.50%	1.10%	2.60%	4.90%	1.90%	2.30%
Staff (Amount)		$4,636.05	$4,215.96	$8,890.50	$14,117.20	6,405.12	3,925.97

There is occasionally an additional pool of funds that the dean and/or the provost can distribute to address special cases, such as market adjustment or excellence. For instance, in Fall 2017, the university conducted a detailed salary study (https://vpaa.unt.edu/sites/default/files/documents/2018/executive_summary.pdf) using data from the College and University Professional Association for Human Resources. This study showed that the UNT faculty salaries are in an appropriate market range when compared with average salaries among similar universities. However, to address the faculty members who are both meritorious and experience significant pay inequity, the university allocated about $310,000 to fill salary market gaps.

The salaries of the DIS faculty and the Chair are within the range of salaries of other professional education units at UNT. The DIS faculty salaries compare favorably at the assistant and associate professor levels to similarly ranked faculty in the departments in the College of Merchandising, Hospitality, and Tourism and the Department of Criminal Justice in the College of Health and Public Service. They are lower, however, than similarly ranked faculty in the College of Engineering. At the full professor rank, the DIS faculty salaries were higher than those in Criminal Justice, but lower than those in Journalism, the College of Business, and the College of Engineering. Average faculty salaries and ranges for 2018-2019 are shown in Table V.8.

Table V.8 2018-2019 DIS Faculty Salary Data

Rank	Number at Rank	Average Salary	Salary Range
Full-time Lecturer	5	$60,542.72	$53,529.96-$70,516.35
Assistant Professor	2	$67,326.56	$65,000.04-$69,653.07
Associate Professor	8	$85,990.95	$74,228.67-$112,139.40
Professor	5	$123,421.97	$101,895.60-$144.177.24

According to the 2017-2018 Faculty Salary Survey for Four-Year Colleges and Universities by Discipline, Rank, and Tenure Status conducted by the College and University Professional Association for Human Resources (CUPA-HR) (https://www.higheredjobs.com/salary/salaryDisplay.cfm?SurveyID=46), the average salaries of tenure system library science faculty members in four-year colleges were $60,509, $69,963, and $82,084, respectively, for assistant, associate, and full professors. Therefore, the DIS faculty salaries are competitive across the US.

Standard V.7.2

Compensation…is sufficient to attract, support, and retain personnel needed to attain program goals and objectives.

In the last seven years, the Department has conducted searches for six tenure system faculty positions and filled five of these positions. The curriculum areas covered by these hires included information security and information systems, school librarianship, youth librarianship, and data science. The department also conducted searches and filled five full-time lecturer positions. During the same time period, three tenure system faculty members retired. One tenure system faculty member and two full-time faculty members resigned to join other institutions. In FY2013 and by the end of FY2019, the Department had the following number of faculty members:

- Full professors: 2013 - 3, 2019 - 7
- Associate professors: 2013 - 9, 2019 - 8
- Assistant professors: 2013 - 5, 2019 - 3
- Lecturers: 2013 - 3, 2019 - 4

The discussion in Section V.7.1 provides evidence about the levels of compensation of department administrators, faculty, and staff and the comparability with similar programs at the University. Section V.6 provides information about the funding generated or received by the department in addition to the funding from the parent institution.

Standard V.8.1

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.

The UNT Office of Research and Innovation (ORI) provides a range of intramural grants and awards to support faculty work that can lead to new opportunities for externally funded research or to support faculty research where external funds are rare:

- Small Grants
- Research Seed Grants (RSGs)
- Scholarly and Creative Activity (SCA) Awards
- Research and Creativity Awards (RCA)
- Decker Scholar Awards

(For additional information, see https://research.unt.edu/faculty-resources/funding/ored-supported-funding.)

Within the college, the dean has a program of competitive Research Seed Grants, also with the objective of securing external funds for faculty research. Recent recipients include Drs. Hsia-Ching Chang (2017, 2018) and John Marino (2018).

Since 2014, the Chair has had a program of Faculty Summer Research Grants. These are available on a competitive basis for tenure system faculty members to fund collaboration with information science Ph.D. students. Several of the DIS faculty members actively participated in research projects with doctoral students through this program including: Drs. Hsia-Ching Chang (2015, 2017, 2019), Jiangping Chen (2017), Yunfei Du (2014), Jeonghyun Kim (2014, 2015, 2017), Guillermo Oyarce (2014), Daniella Smith (2015, 2017), and Oksana Zavalina (2014, 2015, 2016, 2017, 2019).

The department allocates an annual amount to each faculty member to support professional development. The chair determines the annual amount based on the availability of funds. In FY2019, allocation amounts were as follows: $2,500 for tenure system faculty, $2,000 for lecturers, and $1,000 for postdoc and visiting faculty. To supplement travel funds made available by individual units, the UNT Office of the Provost provides supplemental professional travel funds to the College of Information to support faculty scholarly and professional activities.

Faculty development leaves at the University are authorized for the general purpose of increasing the value of the recipients' sustained contribution to the university. Faculty members on nine-month appointments are granted leave for one long semester at full salary or for two consecutive long semesters, which may be separated by the Summer terms, at one-half (½) salary. The DIS faculty has equal access to development leaves. For example, Dr. O'Connor had a development leave in Fall 2018 and Dr. Kim has her development leave approved for Spring 2020.

Standard V.8.2

Student financial aid from the parent institution is available on the same basis as in comparable units of the institution.

The DIS master's students have successfully competed for various graduate fellowships (https://tgs.unt.edu/graduate-student-support-services) offered by the Toulouse Graduate School. These awards, and other support offered by UNT Student Financial Aid and Scholarships Office, are available to the DIS students on the same basis as students from other units.

The Department provides limited travel support of up to $500 to select students who are in good academic standing (https://informationscience.unt.edu/student-travel-support). These travel grants are offered to support the costs of travel to conferences, seminars, workshops, and professional meetings that are relevant to their degree and course of study. With a match from the student's department or college on a one-to-one basis, the Toulouse Graduate School offers students travel grants (https://tgs.unt.edu/new-current-students/travel-grants) to support the costs of travel to professional meetings. Eligible graduate students may apply for a maximum of $500 upon receiving the travel fund from a department (for a maximum total of $1,000). For example, the Department has provided $9,972.51 in FY2017, $8,135.22 in FY2018, and $10,977.00 in FY2019 for supporting student travel.

The University of North Texas Student Financial Aid and Scholarships (SFAS) administers a variety of scholarships funded by the university and donors who support the University. To compete for such scholarships, students need to submit the General Scholarship Application annually. The College of Information also offers two scholarships – the Nancy Murdock Scholarship and the Sarah K. Wiant Law Librarianship Award – to the DIS master's students.

Standard V.9.1

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 mission statement of the Department emphasizes that the department *"prepares graduates of the highest quality to serve dynamic roles in the state, the nation, and the world"* and *"to serve in dynamic roles in a changing world"* (see Standard I for more details on goals and objectives). The faculty believes that the accomplishment of the DIS's mission and all its goals and objectives are contingent on adequate physical and technological resources and facilities.

The University has been making continuous improvement in providing physical and technological resources for its academic units. Departments can apply for physical and technological resources through the UNT and the UNT System sites. As mentioned in V.1, university resources, such as the UNT Libraries (https://library.unt.edu/), classrooms (https://classroomsupport.unt.edu/), and conference facilities (https://studentaffairs.unt.edu/university-union, https://studentaffairs.unt.edu/coliseum-and-gateway-center/gateway-center) are available to faculty, students, or departments for use in the areas of teaching, research, and service. Furthermore, the UNT Center for Learning Experimentation, Application, and Research (CLEAR) (https://clear.unt.edu) provides services ranging from instructional design and multimedia production to faculty development and digital marketing to Learning Management System management and classroom technology, and is a one-stop shop for online and innovative education.

Standard V.9.2

The program provides support services for teaching and learning regardless of instructional delivery modality.

The University provides a variety of services to support teaching and learning for DIS students. For example, the University Information Technology (UIT, https://it.unt.edu) department provides campus computing services that support instruction, research, and student learning. As part of the UIT, Instructional IT Services (IITS) directly supports student and faculty teaching and learning success through its online fixed space and mobile testing services, its classroom computer desktop provisioning and maintenance, and its continued support of traditional assessment and survey needs (https://it.unt.edu/iits). In addition to the services directly supported by the UIT, computer services also are available from the University Libraries (https://library.unt.edu/services/), Classroom Support Services (https://classroomsupport.unt.edu), and Student Computer Labs (https://computerlabs.unt.edu).

The mission of the university's Learning Center (https://learningcenter.unt.edu) is to "*provide programs that enhance learning and facilitate academic excellence for all UNT students".* These programs include a tutoring program, online tutoring, individualized academic counseling, resource referrals, study skill classes, speed reading classes, and a supplemental instructional program. The center offers specific resources for graduate students (https://learningcenter.unt.edu/graduatestudentservices/). The UNT also has a Writing Center providing graduate student tutoring and has a physical location at Discovery Park for the convenience of residential students (https://writingcenter.unt.edu/graduate-tutoring/). Students can meet with Writing Center tutors to help with their course papers, publications, and a thesis. The center also offers online tutoring through the University's Zoom portal, where students can share and mark their papers with a tutor while chatting live.

In addition to services to support academic achievements, the UNT offers other services focused on student well-being. These include the Student Health and Wellness Center (https://studentaffairs.unt.edu/student-health-and-wellness-center/) and the Office of Disability Access (https://disability.unt.edu). The Student Health and Wellness Center is an on campus medical clinic for UNT students and offers ADD/ADHD help, allergy injections, first aid supplies, health screenings, a full service clinical laboratory, massage therapy services, optometry, pharmacy, psychiatric help, radiographic exams, transgender health, travel medicine, a dental office, and walk-in STD testing. Online students can call for medical guidance. The mission of the Office of Disability Access is to "*prevent discrimination on the basis of disability as mandated by the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 as amended*". The office provides appropriate accommodations for students with disabilities and includes psychiatric services, deaf/hearing services, vision services, physical and medical condition services, learning disabilities, and ADD/ADHD services.

Standard V.10.1

Physical facilities provide a functional learning environment for students and faculty;

Section V.9 discussed physical and technological resources to meet program goals and objectives. This section provides more details about specific facilities – within and outside department space – supporting student learning and faculty teaching in the Master of Science degree program.

Physical Facilities at UNT's Discovery Park

The University's Discovery Park is the largest research park in the North Texas region. Located in Denton, Texas, it comprises nearly 300 acres of space and buildings dedicated to the sciences, technology, information, and engineering. It is located five miles North of the UNT main campus and is home to a large facility (609,550 gross square feet; i.e., the entirety of the building – sum of all areas, on all floors/areas of the building measured from the exterior walls including circulation areas, stairwells, elevators, walkways, etc.; and 341,823 assignable square feet; i.e., the sum of the areas in the building that are available for assignment to an occupant or for a specific use, such as classrooms, labs, offices, etc.).

This building provides space for two colleges, the College of Engineering and the College of Information along with lab space, classrooms, information technology support services, and other UNT and UNT system support units.

The College of Information has two areas on the second floor of Discovery Park. The dean's office and suite houses the dean, the two associate deans, the college budget officer, and other college-level support staff. The offices are adjacent to the space occupied by the Department of Information Science. In addition to the dean's office and suite, the college Advising Office has its own space for its staff and for students seeking advising and other information. Associated with college space is the Computing for Arts and Sciences office (https://itservices.cas.unt.edu) that "*champions, builds, and applies technology to advance education and research*", and provides direct technology and software support to the departments in the college.

Section V.9.2 noted that the university manages more than 15 student computer labs, and one (Room B205) is associated with the College of Information (https://computerlabs.unt.edu/location-labs). Any student with a valid UNT ID card may use the lab. In this computing lab, students can access software, such as Microsoft Office 2010, Adobe Creative Suite 5 Web Premium Edition, SPSS, MatLab, and Visual Studio 2010, as well as printers (monochrome and color) and scanners.

The Discovery Park Library is located on the first floor, almost directly under the college and department space (see Figure V.1). More information about the library is presented in Section V11.1 below.

Figure V.1 Floor Plan of Discovery Park

DISCOVERY PARK

BUILDING # 190

03-2014

	Departments	Area(SF)
10211	Classrooms	5,480.0
10212	Classroom Service	33.0
110220	Ctr for Learn Exp Applic & Res	420.0
120300	CAS-Info Technology Services	2,291.0
12910	Telecommunications	2,601.0
12910	Telecommunications	0.0
12911	Data Communications	402.0
12911	Data Communications	0.0
130100	Engineering-Dean's Off	2,924.0
130300	Biomedical Engineering	8,695.0
130310	Computer Science & Engineering	41,016.0
130320	Electrical Engineering	16,654.0
130340	Mechanical & Energy Engineer	2,840.0
133100	Information-Dean's Off	2,631.0
133200	Information-Advis & Admiss	1,758.0
133240	Information-Tech Svc Group	303.0
133310	Information Science	5,160.0
133320	Linguistics	941.0
152034	Zone Maintenance	294.0
163000	Auxiliary Services-Gen	333.0
925000	IT Shared Services	35,729.0
BLDG	Building Space	

PARTIAL SECOND FLOOR PLAN - WING E

Department Facilities for Administration, Faculty, and Staff at Discovery Park

The Department has approximately 7,000 square feet of space for faculty and staff offices, labs, meeting rooms, and workrooms. Specifically, space allocated to the DIS includes 43 individual rooms: two conference rooms; 31 faculty and staff offices; six office service rooms (typically workrooms or breakrooms); and four research laboratories. The smallest room is a research/non-class laboratory (E292C, 88 square feet), and the largest room is the conference room (E297L, 580 square feet). The average size of faculty and staff offices is approximately 105 square feet. Each conference room occupies approximately 413 square feet, each office service room is approximately 341 square feet, and each research laboratory is approximately 147 square feet (see Table V.9).

Table V.9 DIS Space Type Analysis

Space Type Code	Space Type	Number of Rooms	%	Mean (Sq. Ft.)
350	Conference Room	2	4.7%	413.50
310	Office – Faculty and Staff	31	72.0%	105.42
315	Office Service	6	14.0%	341
250	Research/Non-Class Laboratory	4	9.3%	147
	Total	43	100.0%	1,006.92

With the growth of the university's student enrollment, almost all departments are short of faculty offices, student laboratories, or research spaces. The university publishes standards for office sizes (https://vpaa.unt.edu/sites/default/files/IMCE/inserts/sab0047/office_size_standards.pdf), which are determined based on the Texas Higher Education Coordinating Board standards, Texas universities, peer institutions, and space allocation best practices and trends within higher education. The college and the university are working to allocate more student and research spaces to the department.

Classroom Space for IS Face-to-Face Classes and Web/on-site Institute Classes

Over the past seven years, Discovery Park has increased in the number of classrooms available. In 2019, there are now 16 classrooms with a total capacity of 657 seats available to support teaching and learning activities. The smallest room provides 12 seats and the largest room provides 130 seats.

The university also has facilities for the DIS on campus Web Institute (also called the *on-site institute*) course meetings. The one most frequently used in recent years is Room 255 in the Eagle Student Service Center, which is located on UNT's main campus. This is an auditorium-style classroom that seats 317 people (https://classroomsupport.unt.edu/rooms/eagle-student-services-center-255).

Facilities for Off-campus Web Institute Course Meetings

The department offers the Master of Science program to out-of-state students as well as cohorts of students in various parts of Texas. Cohort students begin their studies with the three core courses using the Web Institute format (Appendix 33: Scholarship and Endowment Accounts).

The Web Institutes are face-to-face learning experiences that use classroom facilities at the local sites to deliver the courses. For example, we collaborate with the University of Houston for the Houston Web Institute. The institute is held in the Elizabeth D. Rockwell Pavilion (https://libraries.uh.edu/spaces/edr-pavilion/), which is in the University of Houston's MD Anderson Library. This facility has the latest computing and audio systems for class presentations, lectures, and student engagement. Web Institute classes in other off-site locations are held in similar library classrooms or in hotel conference rooms.

In addition to the cohort in Houston, the department also has a cohort in El Paso, Texas. In Fall 2019, the Web Institute for the El Paso cohort was held at the El Paso Public Library.

In recent semesters, Web Institutes have been held for cohorts in Virginia/West Virginia, Nevada/Utah, and California. Most classes at these cohort sites have 30 or fewer students. Appendix 26: DIS Cohorts and Program Information provides historical information about each of the cohorts including the name of the cohort, geographical areas covered, years offered with enrollment numbers, program and activities, and names of partners. Houston is an exception where the Web Institute core courses may have up to 100 students attending. For example, in Fall 2019, the Web Institute for the Utah cohort was held at the Hampton Inn & Suites in Orem, Utah. In Spring 2019 and Summer 2019, the Web Institute for the Virginias cohort was held at the Virginia Commonwealth University.

For all cohort locations, teaching and learning facilities meet or exceed facilities available on campus at the University. For example, technology usually includes computers, Internet access, a digital projector, and a PA system that includes one or more wireless microphones (see Table V.10 for the details of each location).

Table V.10 Web/On-Site Institute Locations and Classroom Facilities

Location	Classroom Location	High-Speed Internet	Audio/ PA System	Projector	Link to the Classroom Page
Denton	Eagle Student Service Center, UNT	Available	Available	Available	https://classroomsupport.unt.edu/rooms/eagle-student-services-center-255
Houston	Elizabeth D. Rockwell Pavilion, University of Houston	Available	Available	Available	https://classroomsupport.unt.edu/rooms/eagle-student-services-center-255
Virginias Web Institute	Virginia Commonwealth University Library	Available	Available	Available	
Northern California	Four Points by Sheraton San Francisco Bay Bridge, 1603 Powell St, Emeryville, CA 94608	Available	Available	Available	

Nevada/ Utah	Hampton Inn & Suites by Hilton, 851 West 1250 South, Orem, UT 84058	Available	Available	Available	
El Paso	El Paso Public Library, 501 N. Oregon St, El Paso, TX 79901	Available	Available	Available	
ME/NH/VT cohort	Manchester City Library	Available	Available	Available	https://www.manchester.lib.nh.us/

UNT's Learning Management System and IS Online Courses

Starting in Spring 2019, Canvas (https://canvas.unt.edu) replaced Blackboard as UNT's enterprise learning management system. Supported by the Center for Learning Experimentation, Application, and Research (CLEAR, https://clear.unt.edu), Canvas provides the web-based platform for course sites for online, blended, and face-to-face courses. Canvas has improved instructors' work efficiencies and interaction with students substantially. For instance, all conversations between instructors and students can be routed to the user's UNT email address. Communication can take place directly in the user's personal email but copies will still reside in the Canvas inbox. Also, Canvas provides an effective mobile version that allows instructors and students to chat and hold online synchronous meetings via its mobile apps. Finally, Canvas has integrated many third-party applications, such as Foliotek, an ePortfolio platform for student use.

Standard V.10.2

Physical facilities…enhance the opportunities for research, teaching, service, consultation, and communication;

Discovery Park Space for Meetings Involving Multiple Faculty Members, Teaching Assistants, and Students

The department has two conference rooms: IS Faculty Room (E297L) and IS Multipurpose Conference Room (E298N). Faculty and teaching assistants or research assistants can reserve and have meetings in these two conference rooms. Teaching assistants have individual workspaces outside each faculty member's office. This configuration enhances communications between teaching assistants and their faculty supervisors, among the teaching assistants, and between teaching assistants and students. Students, faculty, and staff can hold meetings in the Discovery Park classrooms (as available and with reservation). Larger meetings can be held in the Agora common area in the Department of Learning Technologies and in the large conference and classroom spaces that are shared by all tenants of the Discovery Park complex.

Facilities on the UNT's Main Campus

Event facilities available on the University's main campus include the Gateway Center and the University Union. The Gateway Center (https://studentaffairs.unt.edu/coliseum-and-gateway-center/gateway-center/)

is a 28,000 square foot, multi-level facility located at the entrance to campus. Gateway services include meeting rooms, outdoor spaces, and an extensive banquet facility. The ground floor of the Gateway Center has large meeting rooms that can be used for class meetings, or other events involving students, faculty, staff, alumni, and guests. The University Union (https://studentaffairs.unt.edu/university-union/), completely rebuilt and expanded in 2015, is another important facility that can support DIS meetings and conference events. Also located in the Union are student support services including the Dean of Students, Student Legal Services, Student Government Association, Multicultural Center, and others.

Standard V 10.3

…and promote efficient and effective administration of the school's program, regardless of the forms or location of delivery.

The physical facilities discussed above, including the UNT resources, the DIS conference rooms, the dean's conference room (E290D), and the meeting space in the College Advising Office can all be used by the Dean, the Department Chair, and staff for administrative purposes. Each UNT employee including faculty, staff, and student assistants can access the Zoom system (https://unt.zoom.us) for online meetings and discussions. The Department Chair also uses PBWorks (http://www.pbworks.com) and the Microsoft 365 system for team collaboration, file sharing, and other activities for the program.

Standard V.11.1

Instructional and research facilities and services for meeting the needs of students and faculty include access to information resources and services,

UNT's Learning Management System and its Role in the DIS Online and Blended Courses

As mentioned earlier, the department's primary means for delivering curriculum materials and multimedia resources for instructional purposes is Canvas, UNT's enterprise learning management system. It is a feature-rich system for managing online and blended courses. Canvas provides a stable and secure environment that supports interaction between instructors and students, and among students. All types of instructional media from basic text to video are available to students on demand when they are ready to view it. The functionality of the Canvas suite of software also allows faculty to transition all course-related media from semester to semester at the click of a button. Canvas enhances the student learning experience with a corresponding reduction in faculty effort to keep all course materials in one place. Links to library resources for course reserves and assigned readings can be embedded in Canvas pages.

Other Technologies in Support of the DIS Teaching and Research

Canvas integrates many other tools and applications to support online teaching and learning. For instance, the online conference tool (Zoom) can be embedded in the Canvas classroom and can support synchronous online meetings with multiple users, while also having the ability to archive the meeting for future reference. Zoom also provides automatic transcriptions for recorded videos to enhance accessibility for visually impaired students.

Foliotek is an ePortfolio application that is integrated into Canvas for use by the University students. The department has chosen to migrate to an ePortfolio application to present student achievement of core knowledge, skills, and abilities. Students can also use Foliotek to prepare and publish curriculum vitae and resumes.

Panopto is a lecture capture application also integrated into Canvas. It can record class lectures (audio, video, and capture of what is displayed on the teaching computer's monitor), and instructors can record tutorials and other class support materials for later student use.

The University Information Technology group manages the Virtual Statistic Lab that offers access to statistics, analytics, and modeling software packages for academic use (https://it.unt.edu/virtual-lab/). These applications are hosted on the University servers and presented virtually to on or off campus users. Students and faculty can use research software, such as Nvivo 12, SAS, RStudio, SPSS Statistics 25, and many more applications.

The DIS faculty members teach and employ many different software applications into their courses. Appendix 34: Examples of Using Software and Technologies in Courses lists approximately 100 applications used in core and elective courses. For instance, for the core course INFO 5000: Introduction to the Information and Knowledge Professions, students are taught to use Nvivo to capture online job descriptions automatically and also use this software to analyze texts to identify hidden patterns and trends in job descriptions. Other software packages and applications taught and most often used in DIS courses include: Python, NLTK, Drupal, MySQL, MS Access, Omeka, Windows MovieMaker, and more.

The UNT Libraries, their Facilities, Resources, and Services

The University of North Texas Libraries (https://library.unt.edu) includes four separate library locations and each has its own physical spaces, special functions, and services. Descriptions of each follow below.

Willis Library

Willis Library is the main library building and is centrally located on the University's main campus. Willis Library provides various types of study space as well as 24-hour computing. Its collection provides vital support for the learning and teaching of the arts and sciences. Subject librarians of Willis Library work as liaisons with departments to provide instruction and in-depth reference services for each department's students and faculty members. Willis also houses an instruction lab, the Government Documents Depository Library, Archives, Rare Books and Texana Collections, Microforms, the Music Library, and the Digital Libraries Division.

The Music Library (https://library.unt.edu/music/) is located on the fourth floor of Willis Library. It is one of the largest academic music libraries in the nation and serves the College of Music and researchers from around the world with its collection of scores, books, music periodicals, and sound recordings.

The UNT's Digital Libraries Division (https://library.unt.edu/digital-libraries/) leads efforts to develop innovative digital services and collections in collaboration with scholars, University departments, partner institutions, and other external stakeholders. It provides a premier infrastructure to support the scholarly and research endeavors of our faculty, staff, and students. The division has received numerous grants that support state-of-the-art equipment and research on the preservation of digitized materials.

Media Library

The Media Library is located in Chilton Hall on the main campus (https://library.unt.edu/media/). This library houses the non-print audiovisual collections including films in a variety of formats (DVD, VHS, streaming media, laser disc, etc.), audio books, video games, computer software, filmstrips, and slides.

Discovery Park Library

The Discovery Park Library is located at the UNT's Discovery Park location (https://library.unt.edu/discovery-park/). This library mainly provides College of Information and College of Engineering with high quality services and resources. A new feature is a satellite of the Nest that contain VR ready gaming PCs and a tabletop gaming collection. It houses collections in engineering, information and library science, computing and information technology, and learning technologies. The Discovery Park Library offers a circulating book collection, physical and virtual reference, laptop checkout, public computers, and student study areas. This library loans out various learning tools, such as batteries, calculators, math tools, headphones, phone chargers, and laptop chargers.

Library Annex

The Library Annex, while not a library location, is a critical component of the UNT Libraries. It is located West of the main campus (https://library.unt.edu/annex/) and houses the Collection Management Division that includes the departments of Collection Assessment, Collection Development, and Cataloging and Metadata. In addition, it contains a remote storage area that houses research materials and parts of the circulating collections in a controlled environment.

Information About the Library's Digital Resources, Databases, etc.

The UNT Libraries system provides a variety of electronic resources for students and faculty. These resources include single databases, database packages, single e-journals, e-journal packages, and e-book collections. The UNT Libraries provide access to over 1,600 journals (over 400 online) that support the library and information science program.

Off campus access to subscription-based online resources is available via a proxy server, which provides nearly seamless access. These subscription resources are accessible from both the Libraries' catalog system as well as through the Libraries' website.

Library Holdings for Library and Information Science

The collection that supports the DIS programs is very broad and interdisciplinary. Below we distinguish between subjects of primary, secondary, and tertiary importance to this collection. The UNT Libraries provides access to 100,634 titles supporting library and information sciences, excluding e-journals (details covered below), the vast majority (99%) of which are monographs. Monograph formats include both print and e-book (75% and 25%, respectively). The few non-book and non-journal titles include theses and dissertations (369), databases (37), manuscripts (34), and online media (24).

The UNT Libraries system provides a variety of electronic resources for students and faculty. These resources include single databases, database packages, single e-journals, e-journal packages, and e-book collections.

Off campus access to subscription-based online resources is available via a proxy server, which provides nearly seamless access. These subscription resources are accessible from both the library catalog system as well as through the UNT Libraries website.

Evaluation of the Library and Information Science Collection

The UNT Libraries Collection Development department reviewed the library and information science collection in the Fall semester of 2018. A primary objective of this evaluation was to identify areas for improvement. Strengths of this collection include heavily-used e-book and e-journal collections and a large

number of offerings across all item types. The age of this collection varies by the subject areas covered. Overall, 55.5% of all materials, both print and electronic, in the collection were published prior to 2000, and 44.5% were published after 1999. The subset of the collection covering information and computer sciences contains newer resources; the vast majority of resources on these subjects (81%) were published after 1990 (see Table V.11 and Table V.12 for detailed information).

Table V.11 UNT Librariers' Collection on Information & Computer Sciences

Publication Year	# of Titles
Unknown	1.14%
Pre-1980	24.01%
1980-1989	12.84%
1990-1999	17.51%
2000-2009	24.27%
2010-present	20.23%

Table V.12 Size of Library and Information Sciences Monographs Collections

Division	Number of E-books by Sub-topic	E-books as Percentage of Sub-topic Collection
Library Science	3,724	10.5%
Information and Computer Sciences	18,476	44%
Education	2,792	14%
Management	4,230	34%
Social Sciences	231	24%

Electronic Journals

The UNT Libraries provide access to 5,859 online serials in subjects specific to library and information science. The largest subjects represented in the library and information science e-journals collection are computer science, theory and practice of education, and library and information science.

Electronic Resources

The UNT Libraries provides access to the three major literature databases in the field: ProQuest's Library & Information Science Abstracts (LISA) and EBSCO's Library & Information Science Source (LISS) and

Library, Information Science & Technology Abstracts (LISTA). Other key databases or reference resources that are relevant to the field of library and information science include:

- Cabell's Directory of Publishing Opportunities
- UlrichsWeb Global Serials Directory
- ARBA American Reference Books Annual
- Children's Literature Comprehensive Database
- Classification Web - Library of Congress and Dewey Decimal classification resource

Standard V11.2

Instructional and research facilities and services for meeting the needs of students and faculty include…computer and other information technologies,

Computer and Information Technologies - ITSS & CAS Support

In the Department of Information Science, there is a high-performance workstation room which provides digital and color printing services for faculty and teaching assistants. There are 106 computers/laptops provided to faculty and teaching assistants to use in their office or remotely.

The UNT System's IT Shared Services (ITSS) (https://itss.untsystem.edu/content/service-catalog/) is located on the same floor as the DIS at Discovery Park. ITSS reports to the chancellor and provides very scalable, highly redundant, cost effective, and physically secured virtual servers and storage infrastructure. On the main campus, ITSS operates a 7,158 square foot data center in the General Academic Building (GAB). The data center contains a 150-ton chiller along with dual 300 kVA UPS lithium batteries that are each supported by a generator. The GAB data center data are replicated and/or backed-up to the secondary data center, which is located four miles away at Discovery Park. The Discovery Park data center is 1,700 square feet with 25 tons of cooling and 150 kVA UPS system supported by a generator. Both facilities are physically secured/operated and are monitored 24 hours a day from the Network Operations Center, which is always staffed with two IT personnel. The infrastructure within both data centers are enterprise class and have redundancy to address hardware failures along with supporting a virtual environment (including point-in-time snapshotting and virtual machine migration).

As of May 2019, the Computing for Arts + Sciences (CAS, https://itservices.cas.unt.edu) group now provides technology support for the department (and the college). CAS reports to the College of Sciences and employs 22 full-time and 64 student employees to deliver its services to the following academic units; College of Information, College of Liberal Arts & Social Sciences, the College of Science, and the Mayborn School of Journalism. CAS provides multiple services and levels of help (front line and system administration) for email (2,676 accounts), file storage, print (296 networked printers), desktop/laptop (1,867 computers), servers (110), web (178) and social media, and software (270 titles) for 2,317 faculty/staff. To help the more than 21,000 students succeed in their scholarly efforts, we maintain 1,837 computers across 86 campus rooms along with 270 software titles.

The CAS has helped researchers with many types of collaborations (e.g., public, private, education, corporation, multi-discipline, grants, and contracts), equipment integrations, along with data types, management, and compliance (e.g., private data repository for closed grants). None of the CAS servers have been compromised (as managed by CAS and monitored by ITSS, where UNT IT Security resides) and have never had a data breach above the individual user level.

The CAS provides over 200 software packages for faculty, staff, and students (see a list of available software at: https://itservices.cas.unt.edu/services/software/inventory/). Some frequently used software for DIS includes: Adobe Dreamweaver CC 2017, Adobe Flash Player, Adobe In-Design, IBM SPSS Statistics 24, Imovie10.0.9, R Studio, SAS, and so on.

Standard V.11.3

Instructional and research facilities and services for meeting the needs of students and faculty include…accommodations for independent study, and

The department has the IS Multipurpose Conference Room (E298N) where students can meet, study, read professional literature, eat, and take class breaks. This lounge is equipped with kitchen facilities. Student lounges are also available in other buildings, including the University Union (https://studentaffairs.unt.edu/university-union) and Willis Library. The open architecture of the Discovery Park campus provides abundant open space for student use including tables for group work, chairs, and benches. This open space is equipped with a variety of accommodations for studying and relaxing.

Libraries, computer labs, the University Union, and other campus facilities are open and available to students during day, night, and weekend hours. Student computing needs are addressed by more than 15 student computer labs in ten buildings across the main UNT campus and at the Discovery Park campus (see https://computerlabs.unt.edu/location-labs/ for all student computer labs in different departmental buildings). The student computer lab in Willis Library is open 24 hours a day, seven days a week. The student computer lab associated with the College of Information is open weekdays only and provides specialized equipment and software for individual student and team project use. The student computer lab in Sycamore Hall on the main campus serves as an adaptive lab for students with special needs. The adaptive lab provides specialized software, hardware, and height-adjustable tables for disabled students. Series software, such as Jaws and Magic, are installed on the lab computers for visually impaired student use, as well as the hardware called Braille Embosser which can print materials in braille.

Standard V.11.4

Instructional and research facilities and services for meeting the needs of students and faculty include…media production facilities.

Media Production Facilities

Several media production facilities are available in the department to support curriculum requirements of courses. A few faculty members maintain hardware and software for their own media production needs, including streaming video.

Several university support services (e.g., Center for Learning Experimentation, Application, and Research [CLEAR], Multimedia Development Lab, and Classroom Support Services) provide access to audiovisual and graphics resources and media production equipment. CLEAR offers a full range of free media production services to the University faculty for online and blended course creation and enhancement. CLEAR's media production unit has the ability to record audio voice overs, shoot video and photography, create motion graphics, and edit video. Faculty also can check out equipment from CLEAR to record student presentations or for developing course materials including the following: tripod, digital camera, microphone, digital voice recorder, digital audio recorder, and BeachTek (see more details at: https://clear.unt.edu/services/production/equipment-checkout).

Standard V.12.1

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.

Different units of the UNT work collaboratively to provide comprehensive services to both local and distant DIS students. The university and the department provide on campus and off campus students with access to a full range of support staff and services, regardless of venue: the main campus in Denton, at a site off campus, or anywhere in the world via distributed learning. The most important types of support come through the department, the University Libraries, and university and college computing services.

IT Services

The University's Information Technology (UIT) provides students and staff with a wide range of hardware and software resources, training, consulting, and information services. It offers training for software applications including communications, management systems, statistical analysis, web development, online searching, and programming. Additional details can be seen in the discussion of the support of Computing for Arts + Sciences (CAS) above in Section V11.2.

General UNT Libraries' Services

The UNT Libraries offer a full range of services, including reference, interlibrary loan, document delivery, and bibliographic instruction. The department enjoys a particularly close relationship with the Discovery Park Library that benefits both students and faculty in enhancing the professional education of future librarians.

In addition, a library liaison subject librarian is assigned to work with one or more departments to provide more customized services based on the nature of a subject. Generally, the liaisons assist the departments in selecting and ordering library materials for their subject areas. The DIS faculty, students, and staff can request material purchases through the liaison or by using an online form. The subject librarian for us is Mr. Greg Hardin. From January 2017 to the present, Mr. Hardin conducted 54 sessions (either classes or workshops) with an average of 38 attendees (the lowest attendance was two and the highest 105). With regard to reference questions, from January 2017 to the present, Mr. Hardin answered 324 questions (296 of them being research-related) from mostly graduate students (257) and some faculty (42). Most questions are in the 16- to 30-minute (121) or 31- to 60-minute (120) range.

Since the DIS is located at the Discovery Park location, the Discovery Park Library is dedicated to provide the most convenient services to the DIS and also provide the professional education of future librarians. For example, during past years, the Discovery Park Library often employed both DIS master's and doctoral students as GLAs (graduate library assistants) to work 20 hours per week at the reference desk. In this manner, the Discovery Park Library is training future librarians, as well as providing high quality reference services.

Meanwhile, our master's level and doctoral level students are also often offered employment opportunities such as graduate library assistantships at Willis Library. The program is open to full-time graduate students who are then assigned jobs, such as reference services, bibliographic instruction, digitization, database maintenance, and cataloging.

The UNT Libraries Support for Distant Students

The UNT Libraries provides a variety of distance learning services including, for example: TexShare cards, document delivery and interlibrary loan, RefWorks, and an Ask Us! service. TexShare is the resource sharing program among Texas academic and public libraries. Students can borrow materials from other participating Texas libraries by submitting online request forms. Students can renew library materials online by logging into their own account. Online students can borrow books from the UNT Libraries. If the materials are UNT-owned, they are generally processed and delivered within 48 hours. Books are delivered through USPS priority mail at no cost to the student borrower and typically arrive within one to three business days. Articles and book chapters are delivered electronically.

E-reserve service: The UNT Libraries has an e-reserve service through which it puts electronic documents on reserve that can be accessed without traveling to a UNT campus. The instructor can supply a password to access copyright protected materials (see https://library.unt.edu/services/course-reserves/ for more details on UNT Libraries' entire reserve system). All reserve materials can be found in the reserves area of the library catalog (https://iii.library.unt.edu/search/r/).

The COI general access computer lab is open 80 hours per week and is staffed by student lab attendants. The lab attendants are well trained to assist UNT students with equipment and software available in the laboratory.

Previously, technical support for faculty and staff computers was provided by the College of Information Technology Support Group (CITSG), which includes two full-time staff and two part-time assistants. This group was responsible for hosting the DIS faculty and staff shared storage resources as well as hosting and maintaining the DIS website. They also assisted the DIS faculty, staff, and student network users in acquiring, setting up, and using teaching and research applications; overseeing security systems; and accessing the UNT enterprise information systems services. From May 2019 on, the CAS (Computing for Arts + Sciences) group has replaced CITSG to provide technology support to the DIS (see more description about CAS at V.11.2 above).

Additional Support for Distant Students and Coordination of Cohorts

The department has a long tradition of establishing cohorts in locations around the country. For example, we established several cohorts on the East and West coasts as well as in the New Mexico and El Paso areas. Communication and coordination of activities is critical to the DIS. To ensure the success of meeting the needs of students in these cohorts, the DIS makes a great effort to work with the students in the cohorts and with the sites hosting the cohort Web Institutes and courses for successful student learning experiences.

Communication and coordination of activities with distant sites is critical to the success of the distributed learning program. Off campus sites are carefully chosen to provide adequate technology support. The department has made an extra effort to work with personnel in all of the off campus sites to ensure that the needs of DIS students and faculty are met fully and reliably.

Since Spring 1998, a full-time employee, the Web Institute Coordinator, makes facilities and other arrangements for core course institutes at remote sites and serves as a central point of contact for incoming institute students. The college's Academic Counselor is another key contact person for new students enrolling in core courses.

The DIS hires a teaching assistant and/or local coordinator for remote sites to organize student and alumni events, promote the program at local conferences, and encourage students who are new to the program.

Each remote site has technical staff present for support during face-to-face class meetings, including on weekends, especially for the Web Institutes. The department builds relationships with local staff that continue from year to year.

In addition to the UNT Libraries services available to all DIS students, the department makes every effort to ensure that students in off campus locations have access to adequate library services.

- Students in remote sites have borrowing privileges at host site libraries. Reserve materials for LIS courses are also made available at these libraries.
- Off campus sites are chosen and carefully vetted to ensure adequate technology support.
- In addition to computer labs, each classroom has projection and video equipment and wireless Internet access.
- Through the TexShare systems, students in Texas have borrowing privileges at numerous libraries throughout the state.
- The UNT Libraries provide a full range of electronic services for distributed learning students.

Interlibrary loan (ILL) borrowing requests are another means of providing access to all students, including distant students. Ideally, the UNT Libraries would like to see moderate (neither particularly high nor very low) utilization of ILL services compared to usage of the UNT Libraries' locally-accessible collections. The number of ILL requests for material in the Library and Information Sciences subject grew from FY2013 through FY2015, but then dropped precipitously in FY2017 and FY2018. This follows the general trend of all ILL requests at UNT. This suggests that the information needs of those with interests in library and information science are being met by the UNT Libraries' collection, with interlibrary loans filling the gaps as needed. Generally, about 60% of library and information science-related ILL requests have been for articles and 40% for books.

CLEAR Office Support

The University's Center for Learning Experimentation, Application, and Research (CLEAR) is the unit that is dedicated to develop online distributed learning. This unit offers support to assist faculty in the creation, design, implementation, and assessment of distributed learning courses. CLEAR sponsors seminars and workshops throughout the school year to provide cogent learning opportunities for the faculty and teaching assistants. With the transition in learning management systems from Blackboard to Canvas, CLEAR arranged a series of online and face-to-face workshops to support faculty during this time.

General reference assistance is available via telephone by calling a local or toll-free number that reaches general reference at Willis Library. From there, users may be transferred to the Discovery Park Library. Email and online chat services are provided through the electronic reference system. Email reference is available 24 hours a day, with questions answered within 48 hours.

Standard V.12.2

These services are delivered by knowledgeable staff, convenient, accessible to people with disabilities, and are available when needed.

Assistive Technologies to Improve Student Access to Learning

The UNT's Office of Disability Access (ODA) provides guidelines for students and faculty regarding disability-related requirements. This office is located in Sage Hall on the main campus. Service provided by the ODA include: test center, interpreting services, Communication Access Real time Translation (CART)

services, alternative formats conversation lab, assistive technology, and accessible classroom furniture. Each semester, ODA sends a letter to the faculty member if a student filed the ODA application through their office. Faculty members follow the guidance from ODA to provide various types of accommodation.

The department offers a major online presence via the departmental website (https://informationscience.unt.edu). As a primary resource providing users with information about the department and its programs, there was a high priority to ensure the website improves accessibility for users with disabilities. A college-level web content manager oversees the continuing upgrades by the university to ensure the college and department websites meet or exceed most university, state, and federal guidelines, policies, and coding standards for creating accessible websites. For example, the current website template is under the control of UNT's University Relations, Communications & Marketing group, which is working on new design aspects to address current color contrast issues for people with color blindness. As another example, each COI department has a site maintainer, and the web content manager has trained the three site maintainers to review specific areas and components of the web pages under their control (e.g., image descriptions using alt-text, table descriptions, and proper use of headers). UNT has recently hired a new Chief Compliance Officer who, with his staff, will address a number of areas of concern (e.g., hiring a website accessibility coordinator, current publishing and accessibility policies, and contracting with a vendor for a solution in conducting audit scans of websites).

The UNT Libraries strive to maintain reasonable accommodations for users with disabilities. It provides accessible tables, carrels, and computers available on each floor of Willis and on the main floors of the Eagle Commons Library, Media Library, and Discovery Park Library. The Media Library viewing carrels are wheelchair accessible and a private viewing room is available for patrons with special viewing needs. Designated librarians offer specialized research services for disabled students. The UNT Libraries 24 Commons (https://library.unt.edu/24-commons/) maintains reasonable accommodations for patrons with disabilities.

Standard V.13.1

The program's systematic planning and evaluation process includes review of its administrative policies, its fiscal and support policies, and its resource requirements.

The current DIS Strategic and Working Plan contains a section devoted to this Standard that focuses on tasks for administration, finances, and resources. As described in Appendix 2: DIS Strategic and Working Plans are reviewed and revised annually to reflect feedback from the DIS stakeholders. Annually, the DIS conducts a day-long retreat to go over and update the DIS working plan item by item. This annual update serves to guide the activities of the DIS Resources and Facilities Committee in setting its priorities for the year.

The major administrative policies include the Bylaws, Faculty Promotion and Tenure Policies, Advising Policy & Procedures, Curriculum-related Matters and Procedures, and others which are periodically reviewed. For example, the latest revision of the DIS Bylaws was conducted in September 2019. The new version at: https://informationscience.unt.edu/departmental-policies was approved on September 6, 2019.

The department's faculty standing committee on resources and facilities includes representatives from the COI Technology Services Group and a university librarian as an *ex officio* member. The committee is charged with soliciting input from all faculty members concerning suggestions to improve the physical and technological resources of the department. Final decisions are made by the Faculty-Student Council.

The DIS engages in a continuous process for assessing hardware and software and updating as needed and when funding is available.

Standard V.13.2

The program regularly reviews the adequacy of access to physical resources and facilities for the delivery of face-to-face instructions and access to the technologies and support services for the delivery of online education.

As mentioned earlier and indicated in the systematic planning process (Appendix 3: DIS Systematic Planning Process), the department conducts surveys of recent graduates to assess different aspects of the program, including the adequacy of access to physical resources, facilities, online technologies, and support services.

For example, the End of Program survey has seven questions (questions 12 to 18) that assess the adequacy of access to the physical resources and facilities, technologies, and support services. The analysis of these survey results for the period 2013-2019, presented in Appendix 4: EOP Evaluation and Results 2013-2019, indicates that most students (80% or above) agree that the program provides adequate access to physical resources and facilities, technologies, and support services for their studies.

Standard V.13.3

Within applicable institutional policies, faculty, staff, students, and others are involved in the evaluation process.

The DIS faculty, staff, and students are involved in the evaluation of the adequacy of access to physical resources and facilities, technologies, and support services. Students are involved through the EOP surveys. Faculty and staff can provide feedback as related to administration, physical resources, technologies, and support services through the university's annual evaluation of administrators, monthly department council meetings, and regular meetings with the dean and the chair. The Dean meets with every faculty in the department at least once per semester. The Chair holds biweekly staff meetings to discuss departmental daily operations. She also holds weekly meetings with the College Advising Office, course scheduling staff, and human resource staff to understand student feedback and to discuss course scheduling and other course-related issues.

Standard 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 university conducts annual evaluations of administrators, including president, provost, deans, associate deans, and department chairs. Faculty and staff are encouraged to take the survey to evaluate the administrators at university, college, and department levels. The evaluation results are publically available at the university's faculty senate website (https://facultysenate.unt.edu/evaluation-administrators-effectiveness/). The dean also conducts evaluations of the chairs in the college. The evaluation results are distributed to the individuals being evaluated for improvement. These results can be provided upon request.

As mentioned earlier, the DIS EOP surveys (see Appendix 4: EOP Evaluation and Results 2013-2019) collects data from students to understand their satisfaction of resources for their studies.

Other evidence includes the DIS Strategic and Working Plans (see Appendix 2: DIS Strategic and Working Plans, 2013-2019) where tasks assigned to the Resource and Facilities Committee and others on evaluation of adequacy of resources for the program's teaching, research, and services.

The DIS council meeting minutes records all important activities and decisions made. For example, budget-related issues and progress regarding new physical resources are usually reported by the chair.

Standard 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.

Evaluation results for administration, finances, and resources are used to improve the program and plan for the future, as indicated in Appendix 3: DIS Systematic Planning Process. Specifically, the results will be considered when:

- the department develops the Strategic and Working Plan for the next five years,
- the Chair and the Executive Committee work on the budget for the next fiscal year, and
- when the Chair has meetings with the dean, the provost, and directors of other UNT units.

For example, several staff raised the issue that the DIS workspace needs to be renovated and faculty asked for more lab space for graduate students. The DIS Strategic and Working Plans 2013-2019 (Appendix 2) has added these items to the task list and have requested that the Chair request more space from the dean.

Conclusion and Improvement Plans

This Self Study presents evidence that the Master's Program with the majors in Information Science and Library Science at the Department of Information Science, College of Information, University of North Texas complies with ALA's Standards for Accreditation.

When preparing this Self Study, the Department identifies issues that could be further improved, which are described in the remaining texts of this document.

Standard I: Systematic Planning

- Review and revise Program-level Student Learning Outcomes

  Our current program-level SLOs are measured partly by the End of Program (EOP) experience. We will review these SLOs to make sure they are appropriately measured with the new ePortfolio assessment approach.

Standard II: Curriculum

- Align professional competencies with other specialized coursework

  We will start with a number of courses such as:
  - INFO 5200 (core course covers the general ALA guidelines),
  - INFO 5208 (covered by the School Library program competency mappings),
  - INFO 5240 records management (developed and taught by adjuncts, we currently have no idea what competencies are covered).

  Then, with more data, time, and experience, we can expand to all other DIS courses.

- Review and revise the policy and strategy for course addition, deletion, and course review.

Standard III: Faculty

- Revise DIS Faculty Teaching Handbook

  Current DIS Faculty Teaching Handbook (Appendix 16) was revised in 2015-2016. It needs to be updated to accommodate the change of the University, the College, the Department, and the Program.

- Provide and improve mentorship to full-time and part-time faculty

Standard IV: Students

- Develop student retention policy

  The University has a number of strategies and measures on student retention. The Department will discuss and develop a policy to guide its student retention efforts.

- Establish student town hall meeting at least once a year

  We don't have town hall meeting for all students. We plan to experiment a town hall meeting in 2020-2021.

- Enhance career counseling for students

  We plan to work more closely with University career service on student career counseling.

- Improve student advising based on student feedback

  Student comments on the advising process will be collected and analyzed to improve both the admissions and advising processes as well as communication between advisor and students.

- Establish a policy to recruit diverse students

Standard V: Administration, Finances, and Resources

- Request to hire more faculty to improve full-time faculty and student ratio

  We will continue to request new faculty lines and aggressively recruit full-time faculty for the Department.