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This study examines whether library school students learn the necessary competencies that health sciences libraries desire for entry-level positions by working at an academic health sciences library. After a review of literature covering competencies in the library field, the relevant professional competencies are identified from an analysis of a position description document kit published by the Medical Library Association, while the students' skills are determined through interviews with former graduate research assistants and field experience students. These two analyses are compared with each other to determine the overlap of competencies desired and competencies gained.

Headings:

Library School Students

Medical Librarianship

Librarians – Job Descriptions

Core Competencies

HELPING LIBRARY AND INFORMATION SCIENCE STUDENTS GAIN PROFESSIONAL COMPETENCIES: A QUALITATIVE STUDY OF AN ACADEMIC HEALTH SCIENCES LIBRARY'S GRADUATE ASSISTANT PROGRAM

by
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A Master's paper submitted to the faculty
of the School of Information and Library Science
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in partial fulfillment of the requirements
for the degree of Master of Science in
Library Science.

Chapel Hill, North Carolina

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Approved by

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Stephanie W. Haas

This Master's Paper is dedicated to

My Wife,

Linda Ann Wendling,

Without whom none of this would have been possible.

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Introduction

Employers seek to hire information professionals who have specific sets of competencies which match their position descriptions, and professional organizations aid their members by detailing information related to desired competencies. Internships, graduate assistantships, field work, and other part-time jobs are judged to be important for graduate students in library school to augment their coursework and to help them gain practical experience. Do these positions provide library and information science (LIS) students with the competencies that are preferred by employers in their field? This study examines this question by looking at former LIS students who worked at one academic health sciences library.

The Health Sciences Library (HSL) at the University of North Carolina at Chapel Hill takes full advantage of sharing the campus with UNC's School of Information and Library Science (SILS). SILS encourages its students to undertake internships, volunteer positions, or various other field work to gain necessary experience in the librarianship field, as regular coursework is often not enough for students to be competitive for entry-level librarian jobs (Reeves and Hahn, 2010). The HSL has offered multiple assistantships for graduate students in various departments for the past twenty years, as well as hosting field experiences for course credit. Do these programs help students acquire many of the librarianship field's required and preferred competencies for entry-level positions?

The field of information and library science, as well as SILS and the HSL specifically, would benefit from a qualitative comparison of core competencies gained by students working at the HSL with the existing literature and other job description research. This study will use data collected from interviews with SILS alumni who were either employed at the HSL as graduate assistants or who completed field experiences for course credit there. The data will be compared to analysis of a recent document kit the Medical Library Association published, which details preferred and required competencies for jobs in academic health sciences libraries and hospital libraries.

This paper will first describe the sorts of competencies that are typically called for in all types of academic libraries. Then, an analysis of the Medical Library Association's 2012 dockit, *Position Descriptions in Health Science Libraries: Traditional and Emerging Roles*, will is presented. The methods section will explain the process of conducting interviews with the former SILS students who worked at or had field experiences at the Health Sciences Library. Finally, comparison analysis findings will be presented.

Relevant Background

A literature review was completed in order to understand what sort of qualities and skills employers desire in new librarians. The qualifications for many different types of librarians were surveyed, including children's librarians, catalogers, reference librarians, music librarians, archivists, technical services librarians, administrative positions, and public services staff.

As librarians are constantly disseminating information to those around them, the ability to communicate in a clear manner rightfully sits atop every competencies list. Reference services have changed greatly during the past decade through advances in technology, different user expectations, and the addition of more online and distance learning. In light of these changes, Saunders (2012) shows that new facets of interpersonal and written communication skills are now important, such as communicating quickly through online chat or making sure webpages are composed at a low reading level. According to Hodge and Spoor (2012), communication and customer service skills are more important to hiring committees than a commitment to the librarian profession.

High in the list of desired skills are ones related to computer hardware, computer software, and other technical areas such as database functions and website design. More public librarians are now called upon to "help patrons with their computer problems" (Adkins and Esser, 2004), and music librarians must have "a grasp of technological trends" (Clark, 2013). Hall-Ellis' (2005) review of job postings shows that catalogers should remain current with technological changes in the field. Letarte et al.'s (2002 survey of cataloging and reference department heads reveals some of the most desired competencies are the understanding of database design and the ability to evaluate information retrieval systems.

Those working in digital libraries must "constantly evaluate their access and preservation practices" (Tzoc and Millard, 2011), given how fast technology in that area changes. According to them, the top three skills categories for digital librarians are web design and web standards, programming in specific languages, and digital collection

management. As far back as 1997, Woodsworth declared that the most critical competences for new librarians are technical ones, including familiarity with "presentation software; technology relating to web-based instruction; HTML and aspects of web page management; SGML and other web standards; and Windows, networked environments, and the Internet."

Besides "hard skills" or technical competencies, libraries also want graduates with "soft skills" or "Emotional Intelligence" (EI). Among these are cognitive skills such as creative thinking, critical and analytical thinking, data synthesis, and decision-making. Promis' (2008) search of college and research libraries job advertisements shows that while EI was not officially mentioned in any postings, its associated language was. The review by Reeves and Hahn (2010) of entry-level positions posted in LIS publications, job banks, and email lists demonstrates that a service orientation and the ability to collaborate with librarians and non-librarians alike is extraordinarily valuable. Reeves and Hahn conclude by voicing doubt that employers' most required competencies can actually be taught in graduate school coursework, pointing out that a robust work experience program while in graduate school is paramount to new librarians' success in landing their first job.

In this study's context, "experience" is not professional knowledge that a librarian would gain after graduate school but practice and skills acquired while still in school. "Competency" remains one of the most difficult management terms to define; this study will follow Dreyfus and Dreyfus' (1980) nomenclature: "Competence comes only after considerable experience actually coping with real situations in which the student notes or an instructor points out recurrent meaningful component patterns." In other words,

competence is the ability to properly and meaningfully address complicated workplace situations using knowledge gained over time in similar situations.

The Medical Library Association (MLA) is an organization with roughly 3,600 members in the field of health sciences information. According to its strategic plan, the MLA "fosters excellence in the professional practice and leadership of health sciences libraries and information professionals…throughout the world" (MLA 2010). The MLA also guides LIS schools and students in curriculum planning and provides career services for both employers and applicants. One part of these services is a collection of traditional and emerging position descriptions from academic health sciences and hospital libraries, which are gathered and published every four or five years. *Position Descriptions in Health Science Libraries: Traditional and Emerging Roles* was released in 2012, and it contains 153 recent position descriptions from 33 institutions across the United States. The positions include titles like information sciences librarian, clinical informationist, special projects librarian, biosciences librarian, archivist, emerging technologies librarian, and many others. Each position is described by required and preferred competencies. This document kit helps students and experienced professionals alike understand what competencies are being called for in health sciences information environments across the country.

In summary, the literature shows that communication skills and customer service are the most important competencies in any job for new librarians. It is also important for them to remain familiar with, if not well-versed in, the changing technological trends in digital collection management, presentation software, and web design. New librarians should be ready to collaborate with others both in and out of their field, using cognitive

skills like analytical thinking and data synthesis to help make decisions. These competencies generally cannot be gained through coursework.

It is imperative that students go through some sort of work experience program in order to achieve the level of competence that employers desire for entry-level positions. The UNC Health Sciences Library offers many such avenues for learning job skills. Did students who worked there gain some of, if not all, the necessary competencies for their first jobs after graduating from SILS? Does the training offered by the HSL match what other health sciences and hospital libraries require from their new professionals? Future SILS students should understand the types of experience which they will be able to access by working at the HSL.

Methods

Two separate analyses will be completed to help determine if students who graduated from SILS gained the competencies that were required by their first job through work experience. The first is a content analysis of the 2012 document kit from the MLA, showing the competencies most preferred by employers. This will be compared with a second analysis of experiences gained by students who worked in the UNC Health Sciences Library, as identified through interviews. Interviewing was the chosen methodology because it is one of the best ways to acquire qualitative data from a small group of research subjects (Patton, 1990).

Document Analysis

Because I wanted to match the competencies from the MLA document kit more closely with the jobs that students would qualify for once they graduated, I separated the entry-level positions from the rest of the list of position descriptions. I defined "entry-level positions" as those that require no previous experience (30 entries) and those that require 1-2 years of experience (6 entries). For the latter group, students generally use the experience they gained in graduate school as professional experience when applying to jobs.

For each position, I listed its official title, institution, and its associated competencies, with each individual competency on its own line; see Table 1 for an example.

Table 1: Example of Position Analysis

Job Title	*Institution*	*Competencies*
Clinical Informationist	Emory University	MLS/MIS with educational background in biomedical sciences
		Knowledge of current developments in clinical/nursing informatics
		Experience with technologies and their instructional application
		Interest/skills in electronic resources
		Easy collaboration inside/outside the library
		Independent and team worker
		Excellent oral/written communication and interpersonal skills

Only the bulleted competencies were examined here; no information was drawn from the description prose or any other source. After all the relevant information was extracted from each position, I clustered similar competencies together into specific categories, and then grouped those categories together under five general headings based on shared

characteristics, whose prevalence emerged from my coding. For example, I deemed "ability in information technology & social media," "aptitude in use of technology," and "excellent computer skills" to be very similar to one another, referring to technology skills.

Interviews

Study participants were composed of two separate groups of people. Both graduate research assistants and students who completed field experiences at the Health Sciences Library were included. Field experiences are a way for SILS students "to meet personal learning objectives and to gain professional experience in an information organization while receiving class credit," according to the SILS website. These experiences last for one semester, and students design them around a desire to either learn new skills or expand their knowledge of a familiar information setting.

The HSL provided a list of former SILS students who had been employed there as graduate research assistants. A total of 55 names were provided, though only 31 email addresses were associated with the names. Three people were excluded from the study altogether because they were still UNC students as of the spring semester of 2014. All 28 people remaining were sent a recruitment email, asking them to participate in a Skype interview.

The second group was comprised of students who had completed field experiences at the HS; this list was compiled by SILS. Because their names and contact information are protected by the Family Educational Rights and Privacy Act, SILS staff agreed to act as a proxy and sent the recruitment email themselves. If an alumnus responded back to the author, that was taken as their consent to participate in the study

and to be interviewed. Twelve former students had completed field experiences at the HSL within the last five years, and they all received the same recruitment email that was sent to the former research assistants. The recruitment email sent to all possible participants is found in Appendix B.

With both groups of people, the maximum number of interviews possible was 40. After the initial email and one follow-up contact, fourteen people responded and eleven interviews were scheduled. Participants did not receive any compensation for responding, and they were free to withdraw from the interview process at any time. Written consent was obtained in the form of their first response to the recruitment email. In addition, permission to record was asked at the beginning of each interview: transcription was necessary to clearly analyze all available data. All information was taken anonymously, and no identifying characteristics are included in the following report.

All participants were asked the same questions, though additional queries were sometimes required to clarify certain answers. Questions were derived from the need to understand what competencies were learned and developed through the participants' experience at the HSL, as well as what skills were shared between the person's position at the HSL and first job after graduation from SILS. A copy of the interview guide can be found in Appendix A.

Video interviews were conducted via Skype, and recordings of each interview were made through use of a phone application. Recordings were uploaded to Dropbox and then downloaded to a secure personal computer; the phone and Dropbox records were deleted immediately after. The interviews were then transcribed, and all identifying information was stripped from the data. The transcriptions allowed the interviews to be

analyzed in a similar manner to the MLA document kit. Each task, duty, or project mentioned by a participant was entered into a spreadsheet and then matched with an associated general and specific competency category from the document kit analysis. There were 70 competencies documented in this manner.

Results

Medical Library Association Document Kit Analysis

There were five general categories: education, experience, knowledge, personal, and skills, and each general category had 4-8 specific sub-categories (see Table 2).

Table 2: Dockit Analysis

General Category	*Specific Categories (number of mentions)*
Education (6 specific categories)	MLS/equivalent (34), MLS and subject experience (1), MLS-specific (1), subject degree (9), subject degree and library experience (2), subject experience (3)
Experience (4 specific categories)	Area (54), general (24), supervisory (8), tool or software (21)
Knowledge (4 specific categories)	Area (25), theory (2), tool or software (23), trends (10)
Personal (8 specific categories)	Attitude (17), cognitive (13), communication (37), customer service (7), ethics (6), professional development (11), teamwork (28), working skills (20)
Skills (7 specific categories)	Cognitive (2), management (3), project management (9), reference (8), supervisory (1), teaching (4), technology (14)

The numbers next to each specific category denote how many individual competency entries were associated with them. A total of 397 competencies were documented and separated in this manner.

The five most frequently mentioned categories of competencies (see Table 3) were area expertise, personal communication skills, teamwork, area knowledge, and general experience. The requirement of a Master of Library Science or a Master of Information Science degree was discounted, as everyone graduating from SILS or any other LIS school would gain one of those by default. Otherwise, the MLS degree, or equivalent, would have been third on the list of wanted competencies.

Table 3: Most Frequently Mentioned Competencies, MLA Document Kit

General Category	*Specific Category*	*Examples of Individual Entries*
Experience	Area	Experience with IT, database searching, the Internet, and library trends; health reference experience; experience analyzing collections, budgets, and workflows; teaching experience
Personal	Communication	Excellent interpersonal and communication skills; excellent oral and written communication skills
Personal	Teamwork	Independent and team worker; ability to work effectively with a diverse population; easy collaboration inside and outside the library
Knowledge	Area	Knowledge of health information resources; knowledge of standard medical library practice; familiarity with budgets
Experience	General	Academic medical library experience; experience in academic, government, or special library; 1-2 years professional experience

The competencies listed least frequently were an MLS with subject expertise, supervisory skills, an MLS with a specific concentration, a subject degree and library experience, and knowledge of theory (see Table 4). Interestingly, the University of Utah preferred candidates to have a sense of humor in only four of its five entry-level librarian positions. They were the only university to mention that particular attribute.

Table 4: Least Frequently Mentioned Competencies, MLA Document Kit		
General Category	*Specific Category*	*Examples of Individual Entries*
Education	MLS & Subject Expertise	MLS/MIS with educational background in biological/biomedical sciences
Education	MLS & Concentration	MLS with concentration in archives or administration
Skills	Supervisory	Ability to manage and train staff
Education	Subject Degree & Library Experience	Nursing/public health graduate degree with library experience; any master's degree plus 2 years professional archival experience
Knowledge	Theory	Knowledge of archival theory; knowledge of acquisitions principles, processes, and systems

This analysis shows that employers of entry-level health science librarians prize well-rounded candidates with a mixture of interpersonal skills and general expertise and knowledge of health sciences resources. However, the bar is not set so high that advanced subject degrees or personnel management experience is required or even preferred in the majority of cases. Emotional Intelligence examples, such as cognitive abilities and personal attitude, rank within the top ten desired competencies. These findings do support Reeves and Hahn's notion that simply a Master's of Library Science is insufficient to qualify graduates for many librarian positions. Work experience, like that gained at UNC's Health Science Library, is necessary. While not strictly an assessment of the HSL, the following interview analysis will show which competencies can be gained by graduate students who either work at or complete field experiences at the HSL and how well they match the competencies described in the Medical Library Association's document kit.

Interview Findings

Eleven interviews were scheduled out of forty initial contacts, for a response rate of 27.5%; the average length of the interviews was 11 minutes. Of these, three of the participants conducted field experiences in the HSL, seven worked as graduate research assistants, and one did both. All participants had been placed in the User Services department, which contains all personnel and services that are directed towards patrons, including the reference and circulation desk, information consultations, and the vast majority of the librarians. One participant had a joint assistantship in both User Services and Special Collections. Nine were female and two were male. After graduation, one was hired by a medical data consulting company, one started as a hospital librarian, and the other nine began their careers as academic librarians. Seven of these were academic health sciences librarians, and one of the remaining two librarians mentioned working heavily with health information resources, though not officially as a medical librarian.

The participants started at the HSL desiring very similar skills and knowledge. Most expressed the desire to gain general health sciences library experience or familiarity with the general collection. Four knew that their reference and instruction skills needed improvement. Four others wanted to concentrate on technical areas like databases, cataloging, and programming and markup languages. All of them managed to match their HSL projects and tasks to their desired skills.

These eleven participants provided excellent examples of the breadth of experience that can be gained by working in the Health Sciences Library. In addition, many of them shared similar work experiences and gained the same competencies. Four of the participants worked on NC Health Info (NCHI), which is a website

(http://www.nchealthinfo.org) run by the HSL that disseminates consumer health information to a wide range of populations and also includes an exhaustive database of medical and health services in the state of North Carolina. NCHI utilizes a custom metadata structure within the database to help track and edit resources that are displayed to the public; the database includes over 9,000 individual entries at this time. Research assistants supported the project by cataloging websites for inclusion in the database, analyzing the metadata, and providing web development support to the entire site.

Seven of the participants mentioned creating online subject guides, either through LibGuides or the system the HSL used prior to that. These guides covered a variety of topics, including pharmacy education resources, library and information skills for allied health students, clinical laboratory science research, evidence-based dentistry, how to access the journal collection, social work research, and international pediatrics. The participants said that they learned best practices for presenting health information to their target audience by generating these guides.

In addition to working with the LibGuides system, many participants learned technical skills at the HSL. Participant #3 found her experience to be very helpful:

> "They taught me HTML, which was incredibly useful. I was able to start programming, and I ended up learning ColdFusion, and they sent me out for some sort of Microsoft database certification program."

Participant #4 also gained practice with HTML and ColdFusion, and Participant #8 tried her hand with web development support to NCHI. Reference management software, such as RefWorks and Endnote, were popular platforms to learn: three others also mentioned that those systems were new to them.

Four participants were able to expand their teaching skills through helping students and HSL staff. Participant #1 said that she "trained new staff on online chat," and Participant #2 also wanted to improve in this area:

> "Another thing I worked on a lot was my teaching skills, because when I came to the HSL, I was personable, but I didn't have a lot of experience actually teaching short classes…I became one of the RefWorks people, so I did a lot of work on RefWorks resources. I had reoccurring teaching projects, like Project Uplift. That was a thing where high school students from all over North Carolina were chosen to come to UNC and do pre-orientation to what college is like and what careers are open to you. I taught the library course for that, for two years."

Participant #9 "taught the general RefWorks and PubMed courses" and helped another HSL librarian run "contracted [online] courses for the state of North Carolina library."

Of course, there were also experiences that were unique to each participant. Participant #1 co-authored a paper published in *Public Services Quarterly*, and Participant #11 presented a poster at a university conference, furthering their professional development skills. Participant #1 also helped with a space renovation project at the HSL, moving journals and books and creating new learning spaces. Participant #4 worked on interlibrary loans, and Participant #2 cataloged resources in Special Collections. Participant #6 "became involved in a systematic review" and "ended up learning a new database for that, Embase, a big, nasty, crunchy database that you don't often use." Participant #10 used some of her time to network with "a bunch of other folks that were in the IT department, and they ended up being a part of my systems analysis project later in the semester, so it was really good to have those connections."

All the participants were vocal in their appreciation for their experiences at the HSL, and all of them said that their positions at the HSL directly or indirectly related to the first job which they found after graduating from SILS. Participant #5 said that her

post-graduate fellowship was "related in terms of health sciences librarianship," though there was no overlap in job duties between that and the HSL. According to Participant #11:

> "The HSL at UNC is a great place for SILS students to get a chance to work in. In my experience, and every SILS student I know who has worked there, they found it to be extremely beneficial. They're very nurturing and very keen on getting students to have practical experience….And it's just a fantastic place to work."

Participant #6 mentioned that "the systematic review that I helped construct…is, in fact, the reason that I got this [current] job." Participant #4's web development skills were "the big thing for the job I had then…Those skills are still in short supply." For Participant #2,

> "everything I do practically every day, I learned at HSL. My current job, I'm a reference librarian for a nursing school, and everything I learned at HSL I immediately applied here. That doesn't mean that what I learned in school wasn't important, because it allows me to approach problems in a specific way, but day-to-day, everything I do in my job is related to what I learned at the HSL."

Participant #10's metadata experience "was the really critical part, because it was the first time I had worked with metadata and learned how to make it work," and it allowed her to get a more challenging job at a company where she applied after graduation. Participant #8's position as a metadata and cataloging librarian "definitely relates" to the duties she had at the HSL and really believes that the skills she developed there helped her land the job.

Comparison of Competency Mentions

Participant #1 mentioned the most competencies with 10, while Participant #5 mentioned 3, the fewest. Graduate research assistants gained an average of 7 competencies during their time at the HSL, and students who completed field experiences there gained an average of 5.

Table 5: Numbers of Competencies		
Position	*Numbers of Competencies Mentioned*	*Average per Position*
Graduate Assistant	10, 9, 8, 8, 7, 6, 4, and 4	7
Field Experience	6, 6, 5, and 3	5

This tally suggests that students gain more competencies from long-term graduate assistant positions, though field experiences are still valuable as a way to learn competencies.

The competency categories that were mentioned most frequently in the interviews were experience with tools or software, area experience, area knowledge, teaching skills, and reference skills (see Table 6).

Table 6: Most Frequently Mentioned Competencies, Interviews		
General Category	*Specific Category (Number of Mentions)*	*Examples of Individual Entries*
Experience	Tool or Software (21)	Created subject guides; beta tested LibGuides; HTML; ColdFusion web development; RefWorks
Experience	Area (14)	Trained staff on online chat; interlibrary loan; medical databases; health sciences resources
Knowledge	Area (10)	MeSH terms; health sciences metadata; cataloging websites for NCHI; statistical techniques for journal usage
Skills	Teaching (7)	Developed online teaching modules; taught library course for university program; taught RefWorks to students
Skills	Reference (6)	Health information consultations; reference desk; medical database consultations

Specific categories which were documented the fewest number of times were knowledge of tools or software, teamwork, communication, cognitive skills, and project management skills.

Comparing the interview competency analysis to the MLA document kit analysis demonstrates where the two overlap. Table 7 shows every general and specific category associated with this study and the number of times each category combination was mentioned in both analyses.

Table 7: Comparison of Competency Mentions

General Category	*Specific Category*	*Entries in MLA Document Kit*	*Entries in Interview Analysis*
Education	MLS or equivalent	34	0
	MLS and subject expertise	1	0
	MLS—specific	1	0
	Subject degree	9	0
	Subject degree and library experience	2	0
	Subject expertise	3	0
Experience	Area	54	14
	General	24	2
	Supervisory	8	0
	Tool or software	21	21
Knowledge	Area	25	10
	Theory	2	0
	Tool or software	23	1
	Trends	10	0
Personal	Attitude	17	0
	Cognitive	13	1
	Communication	37	1
	Customer service	7	0
	Ethics	6	0
	Professional development	11	2
	Teamwork	28	1
	Working skills	20	0
Skills	Cognitive	2	0
	Management	4	0
	Project management	8	0
	Reference	8	6
	Supervisory	1	0
	Teaching	4	7
	Technology	14	2

There is marginal overlap between the most frequently mentioned competencies in entry-level librarian positions and the competencies which were mentioned most often in the interviews: area experience and area knowledge are found in both top five lists. The biggest notable gap can be observed in the "Education—MLS" category, though the category was earlier deemed meaningless for the purpose of this study. In addition, the MLS is not something that can be gained through a graduate assistantship or field experience. Other gaps include "Personal—communication," "Personal—teamwork," "General—experience," and "Personal—working skills." While communication and teamwork were only explicitly mentioned by one participant, it can be inferred that most of the projects, duties, and tasks the participants completed required some measure of communication, teamwork, and organizational ability, especially for the participants who taught short classes or participated in group projects. In addition, anyone who worked on the reference desk or created subject guides had to communicate information clearly.

When teamwork and communication are included in the interview analysis' top competencies, the overlap increases to four categories. The only areas which do not match are "Experience—general" from the MLA document kit and "Experience—tool or software" from the interview findings. Once again, it can be inferred that every student working in the HSL did receive general experience in an academic health sciences library environment, which was the main description of that particular general and specific category combination, even if only two participants explicitly mentioned it. With that in mind, "Experience—general" replaces "Experience—tool or software" in the top interview competencies. Table 8 then shows that the top competencies from each analysis match exactly.

Table 8: Document Kit and Interview Competencies Comparison, Corrected			
MLA Document Kit		**Interviews**	
General Category	*Specific Category*	*General Category*	*Specific Category*
Experience	General	Experience	General
Experience	Area	Experience	Area
Knowledge	Area	Knowledge	Area
Personal	Communication	Personal	Communication
Personal	Teamwork	Personal	Teamwork

Discussion and Conclusion

These analyses show that the UNC Health Sciences Library is a very valuable place for students to work, especially if they plan to begin their careers after graduation in a health sciences library environment. Unsurprisingly, graduate research assistants seem to learn slightly more in their longer-term positions than students who complete semester-long field experiences there. However, all students placed in the User Services Department learn competencies which are desired by health sciences libraries across the country and their respective entry-level positions.

This study was limited by the small number of respondents to the initial and follow-up recruitment emails, as well as reliance on a single type of academic library. Future research in this area could address these limitations by including more interviews with a bigger pool of students from a wider selection of libraries, not just a health sciences library. In addition, interviews with the students' supervisors at the libraries could be completed to add an additional perspective to the study. By comparing supervisor perceptions and work plans with student experiences, a better awareness of competencies—and where and how to get them—can be achieved.

The Health Sciences Library at UNC Chapel Hill has hosted many students from the UNC School of Information and Library Science for field experiences and as graduate

research assistants. After graduating from SILS, these students have gone on to a variety of jobs, though most of them begin their careers as academic health sciences librarians or other areas related to the medical field. A review of relevant literature and an examination of the Medical Library Association's position description document kit revealed the core competencies that are desired by the field of librarianship. Interviews conducted with SILS students who worked at the HSL show what duties and projects they completed. The resulting analysis and comparison confirm that those students who work at the HSL definitely gain the competencies that are preferred by health sciences libraries.

Appendix A – Interview Guide

All interviews will hold as closely as possible to this script of questions. It may be necessary to ask additional minor questions to clarify certain answers from participants. Interviews are expected to last 15-30 minutes. Participants can choose not to answer questions and may stop the interview at any time without penalty. I will request permission to record the interview before I ask the first question.

1) How long did you work at the Health Sciences Library?

2) In what department(s) and location(s) did you work?

Did you have one or more than one supervisor?

3) Why did you want to work at the HSL?

What did you want to learn?

Were there skills that you wanted to develop?

Were you able to suggest projects to work on that allowed you to develop a new skill set?

4) What tasks, duties, and projects did you work on?

Did you have specific, long-term projects that lasted a semester or more?

Did you have routine or regular duties outside of any long-term projects?

What new processes, tools, software, and/or skills did you learn at the HSL?

5) What was your first job after graduating from SILS?

6) How did/does the job relate to the duties you performed at the HSL?

7) Do you believe that the skills you developed at the HSL helped you land the job?

8) Based on these other questions, is there anything else you would like me to know?

Thank you very much, that concludes the interview.

Appendix B – Recruitment Email

Hello! My name is John Mark Bojanski, and I am a second-year graduate student at UNC's School of Information and Library Science. I am writing my master's paper on the topic of entry-level competencies for new librarians and how well UNC's Health Science Library is preparing its graduate assistants for their first job. You have been identified as a former SILS student who either worked at the HSL as a graduate assistant or completed a field experience there. I would like to invite you to an interview via Skype for my student.

Participants will be asked to schedule an interview where a series of questions will be asked regarding their time at the HSL, in order to gain a better understanding of the types of tasks that were done and what skills were learned. I anticipate that the interview will take between 15-30 minutes of your time. Your participation in this study is voluntary, and you may choose not to participate or to stop participating at any time without penalty. You will not receive any compensation, but your participation will help SILS students understand which skills and competencies are most desired by the field of librarianship and which ones can be learned through working at the HSL.

The information in the study records will be kept confidential to the full extent allowed by law. Data will be stored securely on my personal computer, which is protected by a complicated username and password. None of your information will be stored in the cloud (Google Drive, Dropbox, etc.) or on portable flash drives. No reference will be made in oral or written reports which could like you to the study. Answers given will be anonymous and there is no risk that you will be linked to your answers once the study is completed.

If you consent to be part of my study, please respond back to me at [redacted] with “STUDY INTEREST” in the email subject line. If you have questions that you would like answered before you consent, please respond with “STUDY QUESTIONS” in the subject line instead. You will not be asked to sign a form indicating your consent, the email response will suffice for that.

If you are interested or if you have more questions, please email me. Thanks very much!

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