Developing professional identity in LIS?

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Identity is the core of who we are as individuals. It shapes how we present ourselves, our expectations of how we interact with others and their treatment of us, and forms the basis of what we believe are our capabilities and potential. Identity is not limited to individuals, but also includes groups, such as clubs, organizations, and professions. In fact, identification within a profession is an essential rite of passage, which often follows the completion of an educational degree or an intensive training program, both of which have a strong influence on the construction and shape of the individual's professional identity. While in MLIS programs, like many undergraduate programs, students develop a sense of community, which is reinforced through internships, work experiences and membership in professional organizations. The context of a community is key to the development of professional. Interdisciplinary fields, such as library and information science, use these communities to share information across disciplines and develop academic norms. LIS educators help to develop this identity through course work and interactions with students. As a result, LIS educators need to understand their role and how their teaching contributes to the profession holistically rather than focus on individual positions or roles.

Keywords: Professional identity, LIS education, community, MLIS programs

1. Introduction

A recent editorial in a LIS publication questioned the value of the MLIS degree. It was said that courses for a "... MLS amount to generalities about cultivating principles and finding information and organizing materials" [1, p. 8]. While discussion on the editorial was both positive and negative, many respondents questioned why the degree was required for entry level positions within the LIS profession. This is not the first article to question the value of an MLIS. Yet, the ideas discussed lead to questions about professional identity within the LIS environment, at what point, how this identity is developed and what influences in MLIS programs may have on identity development.

Identity is the core of who we are as individuals. It shapes how we present ourselves, our expectations of how we interact with others and their treatment of us, and forms the basis of what we believe are our capabilities and potential. Complicating this idea is the fact that identity is a fluid concept that changes through experiences and learning and that most people have "many identities as they identify

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with different forms of collectivity (e.g. workplace, professional, and non-working forms)" [2, p. 171]. Hence, it is important to remember that identity is not limited to individuals, but also includes groups, such as clubs, organizations, and professions. In fact, identification within a profession is an essential rite of passage, which often follows the completion of an educational degree or an intensive training program, both of which have a strong influence on the construction and shape of the individual's professional identity.

Professional identification cannot happen without consideration of individual identity. "Professional identity is a constant negotiation of recognition between professional and other societal actors, and one's self" [2, p. 171]. As with individual identity, professional identity is also a dynamic concept that shifts in response to institutional and social changes. Generally in LIS, a graduate degree or education with specialized training is expected before an individual becomes a LIS professional. Hence, a significant part of entering the LIS professions is the formal education in the values of the profession, and training in the essential skills. This process is intended to teach individuals to "accept the legitimacy of [LIS] institutions [and] to embrace its self assumed obligation to collect the cultural and intellectual authority that external experts [have] identified as socially valuable" [3, p. 385]. Once properly educated and prepared to enter the profession, our individual identity remains an essential contributor to our professional identity. We become more aware of our own individual identity as we are trying to shape our professional identity. As LIS educators, we need to be more aware of our impact on identity formation and consider how the content we teach fits into the LIS professions holistically rather than focusing on specific roles or positions.

The process of professional identity formation is enhanced as individuals encounter others who may share views and values, but who are different in some way from themselves. In this interaction of differences, an individual's own "racial, gender, age, or socioeconomic group membership become salient because those who are different from us see us in terms of our group identifications, just as we see them in terms of theirs" [4, p. 43]. In other words, our introduction and inclusion into a profession through education and through interaction with other professionals has a strong influence on how an individual's identification of the profession and identity within the profession is shaped and defined.

1.1. Professions and professional identity

Perhaps before we go further in our discussion of identity within a profession, we should first define the concept of a profession. What constitutes a profession can be viewed in several ways, usually depending on one's experience, vocation, and position within society. A simple definition describes "the profession is a group of people who perform a set of activities which provide them with the major source of their subsistence – activities which are called 'work' rather than 'leisure' and 'vocation' rather than 'avocation'... [and] are considered to be useful and productive" [5,

p. 71]. Professionals are expected to perform "for society a set of services in a disinterested way" in return for a "certain amount of prestige and autonomy" [6, p. 14]. Additionally, a profession should have unique skills and practices, the capacity for decision making and judgments relative to the profession, an established process of "growing new knowledge from context of practice," and an oversight mechanism developed by the community of education and practice [6, p. 14]. The traditional examples of this definition of professions include medicine, law, and the ministry, all of which share a few common characteristics. Each requires specialized training to introduce members to "...a basic body of abstract knowledge and the ideal of service" [7, p. 6]. Completion of the education is seen as an "indicator of knowledge and practical competence" [8, p. 80]. All three also have an established set of professional ethics each member is expected to follow. This, in turn, helps to create a philosophy, or standard of behavior for members of the profession. Finally, in each of the 'traditional' professions, the work is pursued in the interest of helping others, providing service for others, not for the gratification of one's self [9]. While this traditional view is widely accepted, there are other essential contributors to professional status, including concepts such as licensure and certifications. However, perhaps one of the most important characteristics of a profession is that a profession is distinct from other occupations in that it has been given the "right to control its own work" [5, p. 71]. This control is "deliberately granted...including the exclusive right to determine who can legitimately do [the] work and how the work should be done" [5, p. 72]. To put it another way, professions are granted power by society to establish, educate, and monitor their members because the work is valued by society, yet cannot be completed by every member of society. Hence, while the professions may be autonomous, they are formed and shaped through "dynamic interrelationship with between institutions and associated discourses, including the discursive activity of professionals" and depend on the larger society for recognition of status and the value of services offered [2, p. 170]. "Practicing professions are the links between a civilization and its daily life and as such must...be in some sense joined to everyday life and the average man" [5, p. 74]. In other words, professionals act as mediator between the 'average' man and the body of knowledge developed and maintained by the profession. It is in this role the professional identification becomes so important. Titles and job descriptions are used by those outside of the profession to identify those most likely to be able to assist and mediate between the everyday and the professional body of knowledge.

Information is central to the education, practice, and theoretical base of the LIS professions. As part of their responsibilities, LIS professionals often act as mediators between society and the vast store of available information. These practices are carried out within LIS institutions, where information is created, acquitted, curated, displayed, accessed, and preserved. Yet, very few, if any, LIS professionals take on all of these responsibilities.

For this reason, it is clear that it is not enough to simply be seen as an LIS professional, but rather essential that LIS professionals select specializations to highlight

their roles within the information professions. In LIS there are a variety of identifications and titles. Depending on the professional's focus, he or she may be called an information professional, a reference librarian, a researcher, a technology specialist, a library administrator, or a teacher-librarian. These different 'labels' or 'representations' are assigned, in part, to help communicate the responsibilities, roles, and activities included as part of the professional position [10]. The selection of a professional title is influenced by many factors. Educational programs influence the potential jobs [11], which then contributes to one's professional identity. An individual's perception of the professional title is shaped by his or her personal investment in attaining it and the level of recognition and prestige attached. "How one perceives that [a] job title fits one's own image of the position, and its worth may cause one to ignore it or to choose another label deemed more fitting and accurate" [10, p. 356]. This begs the question at what point does an individual select a particular title associated with his or her professional identity?

1.2. MLIS students

The education or training for professional positions may help to shape one's professional identity, or at least influence the process. As a profession, LIS requires specialized training in the form of a Master's of Library and Information Science (MLIS). While pursuing a MLIS degree, students develop a professional identity that will influence the choices and decisions they make in their professional lives. "Formal education plays an important role in an individual's consciously recognizing additions to [his or her] abilities" [10, p. 357]. These identities will impact the future of the profession.

As with most professions, there is a "tension in the LIS community between the academic role and professional role (or identity) of the program." [12, p. 271] This tension, while potentially frustrating, can also help MLIS student to question and consider their desired professional identity as they learn to navigate between theory in the classroom and practical experience, which may include library/archival experience, internships or practicums.

1.3. Community of practice

While not the only pathway to joining a professional community, in MLIS programs, like many graduate programs, students develop a sense of community, which is reinforced through internships, work experiences and membership in professional organizations. The context of a community is key to the development of professional. Communities of Practice (CoP) are defined as "a learning, negotiation, meaning, and identity space" in which "participants interact and generate standards and relations through community consensus, besides creating and sharing common resources" [13, pp. 742–743]. Participation in these communities provides many opportunities to transfer knowledge among professionals and those working towards professional

status. Successful CoP have several shared characteristics, including voluntary participation, distributed leadership, accessibility, and shared identity [14]. The shared identity provides a basis from which to build trust within the community [14], which influences the levels of participation and sharing for members of CoPs [15].

CoPs exist in both online and offline forms, providing a forum for MLIS students taking classes on campus, at a distance, and at other regional sites to share information and experiences. These networks may also expand to include LIS faculty, alumni, and friends to form a network of peers that shares information and experiences [16]. Not only do these communities create a format to share best practices and resources between members, they also generate new knowledge both online and face-to-face [16]. All communities have several shared characteristics: the recognition of other participants; the ability to interact within the environment; a common purpose; normative behavior; the emergence of a hierarchy; and a common meeting place whether online or face-to-face [17]. These communities provide information resources, emotional resources, and identity support, all of which are benefits for members of a community of practice [18]. Part of this process is developed when students begin taking classes and working together on specific projects. When students obtain professional positions, virtual communities of practice are often their only links to the greater community of scholars in a particular field.

Interdisciplinary fields, such as library and information science, use these CoPs to share information across disciplines and develop academic norms. Professional development and learning is often facilitated by CoPs because members act as "one of the most important sources of expertise and advice for librarians" [19]. The community creates the norms and standards for collaboration and aids paradigm development. These outcomes or benefits of the community reinforce its goals, purpose and norms in providing access to community knowledge [20]. This knowledge, in turn, helps to define expectations and status to professional positions and the assignment of titles; possible influences in the development of professional identity.

1.4. LIS professional identity

LIS organizations also encourage professional identity development by adopting specific values and norms for students and professionals. There is no standard definition of an LIS professional. However, the American Library Association (ALA) does provide a list of eight core competencies expected of any "person graduating from an ALA-accredited masters' program" [21]. These competencies stress the knowledge of and ability to employ skills related to "the foundations of the profession, information resources, the organization of recorded knowledge and information, technological knowledge and skills, reference and user services, research, continuing education and lifelong learning, and administration and management" [21]. Yet, in the same document, ALA clearly states that LIS professionals working in certain areas "will need to possess specialized knowledge beyond" [21] the core competencies.

As a result, there are definitions that describe the work of specific types of information professionals, such as academic librarians, information specialists, and records managers, but many LIS organization do not specifically define what an information professional is. For example, ASIST describes the integration of information sciences and technology, but does not identify what that means to be a professional. How a LIS professional is defined in reference resources, in professional literature and by professional organizations develop a narrative that can be used by members to explain what they do and why they do it. Yet, the narrative does not provide a concise definition for simple professional identification.

Turning to ODLIS, the *Online Dictionary of Library and Information Science*, a librarian is defined as:

> A professionally trained person responsible for the care of a library and its contents, including the selection, processing, and organization of materials and the delivery of information, instruction, and loan services to meet the needs of its users (to see examples, try a keyword search on the term in Google Images). In the online environment, the role of the librarian is to manage and mediate access to information that may exist only in electronic form.
> In the United States, the title is reserved for persons who have been awarded the M.L.S. or M.L.I.S. degree, or certified as professionals by a state agency. Also refers to the person responsible for the overall administration of a library or library system, synonymous in this sense with library director. Classified by functional specialization (acquisitions librarian, cataloger, instruction librarian, reference librarian, serials librarian, systems librarian, etc.), librarians in the United States are organized in the American Library Association (ALA) and its affiliates and the Special Libraries Association (SLA). Compare with support staff [22].

The dictionary holds no corresponding definition for an information professional, although there is a definition for an "information broker," a freelance provider of information [22]. LIS literature has discussed the development of professionalism in libraries and its impact on the profession [7]. While definitions of a LIS professionals have expanded to include administration and leadership roles for LIS environments, professional titles have evolved from librarian to include "records manager, archivist, information manager or, more recently, knowledge manager," many of which have been introduced from other information contexts [23, p. 181]. The definition of what a librarian or information professional is expanding in the literature to include additional contexts, but professional organizations, with the exception of the Special Libraries Association and LIS resources have narrow definitions of what a professional is.

A review of LIS professional organization websites found six organizations that defined a professional: the American Library Association (ALA), the Society of American Archivists (SAA), the Special Libraries Association (SLA), the Association of College & Research Libraries (ACRL), the American Association of Law Librarians (AALL), and ARLIS, the Art Libraries Society of North America. The

majority of sites define LIS professionals by education requirements and job titles or responsibilities; this includes the ASIST supported web site, InfoProfessionals.org, which discusses job titles, job descriptions and educational requirements [24]. The most detailed definition comes from the Special Libraries Association (SLA). SLA defines an information professional ("IP") "as strategically using information in his/her job to advance the mission of the organization. The IP accomplishes this through the development, deployment, and management of information resources and services. The IP harnesses technology as a critical tool to accomplish goals. IPs include, but are not limited to librarians, knowledge managers, chief information officers, web developers, information brokers, and consultants" [25]. More recent research has shown that while LIS professionals may define their identity based on position, they are also influences by the degrees available through their masters' program [11]. However, the results only reported on the titles provided by participants, not how these identifications were defined.

2. Objective of the study

This paper aims to explore the definitions MLIS students are developing during their studies through shared values developed in a Community of Practice. Specifically, considers the following research questions:

– How do MLIS students define a LIS professional?
– To what extent does prior work experience in a LIS environment influence how MLIS students define a LIS professional?

3. Methods

For convenience, a pilot study was launched at Simmons College School of Library and Information Science (Simmons) and at University of Alabama School of Library and Information Studies (UA SLIS) to identify how graduate students in MLIS programs define LIS professionals. Given the diversity of ALA accredited and non-accredited programs, students have the option of pursuing a general library science program or specialties in information science, administration, school, library or academic libraries, knowledge management, and archives, to name a few. Both institutions provide their own views on LIS professionals.

At Simmons, the mission, vision and goals of the MLIS program provide an overview of potential professional positions and responsibilities of information professionals. Specifically, the program goals state that "[g]raduates will possess a broad understanding of library and information science in a rapidly changing society, while beginning to develop some specialization related to management; information and knowledge organization; information production, distribution, dissemination, retrieval, and use; information systems, services, and ethics; networks; and publishing.

Within the context of the Program Goals, the School educates students for careers in:

- Libraries and information centers in academic, public, school media, and corporate/special settings;
- Archives management in academic, public, corporate, and independent historical society settings;
- The information services industries (which include bibliographic utilities, companies providing fee based access to information sources, firms offering contracted research or technical assistance to individual or information centers, and companies involved in the design, development, and marketing of tools for information handling);
- Information systems support (for the student with pre-existing computing experience or academic preparation, this includes working with software/hardware applications such as basic network operations, providing technical support and training, Web management, developing documentation or training tools, and programming); and Knowledge and information resources management (which includes identifying, organizing, and managing the internal and external sources necessary to help an institution or organization conduct its business)." [26]

Simmons's goal statement provides a wide range of possibilities for each student to consider when selecting their educational goals, as well as while they develop their identity within LIS.

In a similar fashion, UA SLIS MLIS program does not provide an outright definition, but they do describe the qualities that they have decided are necessary in an information professional. The student manual compiled for the 2009–2010 period describes these ideals to students before they begin learning them through the program. "Through the Master of Library and Information Studies program, [UA SLIS] prepares the next generation of library and information professionals. Students gain proficiency with information organization and services and also utilize and develop the exciting new array of information literacy and technology tools. More importantly, this new generation of professionals acquires the ability to manage both information and technology, along with enacting this skill in leadership roles. In short, our MLIS graduates continue the tradition of exceptional service for which the profession is known [27].

Within this context, the research tries to determine how students identify within LIS and the concepts that help to influence and shape this identification.

In 2012, questionnaires composed primarily of closed ended multiple choice questions and open-ended questions were developed for Simmons students and revised for UA SLIS students. The initial questionnaire was sent online to Simmons students in August 2012. Simmons has a larger pool of potential respondents than UA SLIS, 720 students for the former and 265 students for the latter for better questionnaire testing.

The overall response rate for Simmons was 32.6%, which we consider to be satisfactory given that the survey was carried out by means of an Internet survey, and

participation was self-selected. In total, 230 students responded out of the 729 students enrolled according to 2012 ALISE Statistics [28]. Some respondents did not answer all the questions. The questionnaire covered 17 questions and numerous open-ended questions. One hundred and eighty-six respondents completed the questionnaire. Based on those numbers of completed surveys the response rate is 25.5 percent, because students self selected and the survey contained many open-ended questions, the percent completed was identified as acceptable.

The majority of respondents were 25–35 years old (55.1%), and 89.1% of respondents were female. Simmons GSLIS student body is 80.4% female according to ALISE statistics [26]. Seventy-six percent of the sample had worked or volunteered in a library or archive.

Open ended responses from Simmons student responses were used to develop multiple choice and multiple answer responses for the questionnaire, which was then sent to MLIS students at UA SLIS. The questionnaire was emailed to students via the slis-s mailing list.

The overall response rate for UA SLIS was 42.6%, which we consider to be satisfactory given that the survey was carried out by means of an Internet survey, and participation was self-selected. In total, 113 students responded out of the 265 students enrolled according to 2012 ALISE Statistics [28]. Some respondents did not answer all the questions. The questionnaire covered 17 questions. One hundred and one respondents completed the questionnaire. Based on those numbers of completed surveys the response rate is 38.1 percent, which was an improvement over Simmons completion rates.

The plurality of UA SLIS respondents were 25–35 years old (46%), and 83.3% of respondents were female According to ALISE statistics, 78.5% of the students in UA SLIS SLIS program are female) [28]. Eighty-five percent of the sample had worked or volunteered in a library or archive.

At both sites, students were asked the open ended question: What is your personal definition of an LIS professional? The participants were not given a word limit and encourage to fully define and explain the concept. Grounded theory was used to analyze the answers as it allowed the researchers to "discover basic social processes which are contained within the basic social structures which people have created as a means of survival" [29, p. 5]. After analyzing the data, categories were developed from student responses to the question. The responses were coded by the three researchers with the following categories:

- Information services: Mentions users or information needs
- Organization of information: Making information accessible, organizing information, preservation
- Services & Organization: Mentions aspects of information services and organization of information
- Information technology: Specifically discusses technology requirements
- Education Requirements: Training or degree or education
- Professional Values: ALA ethics, freedom of speech

Table 1
Student definitions by category ($n = 337$)

	UA SLIS	Simmons	Totals
Information services	42	40	82
Organization of information	15	25	40
Services & organization	8	9	17
Circular	3	22	25
Educational requirements	14	21	35
Position	5	16	21
Professional values	2	5	7
Information technology	0	3	3
Undefined	3	4	7

– Circular: Defines using information professional
– Position: Defines using position or place (librarian, archivist, person who works
  in a library)
– Practical/Applied Skills: Identifies specific skills needed to be an information
  professional (searching)
– Undefined: Unable to define, unsure

Coders were sent a spreadsheet of all coding for clarification and comments. Disagreements were resolved using a "majority" decision rule. For questions with no agreement, a code was randomly selected. Average pairwise percent agreement for the coding was 94.9%. Since percent agreement may overestimate true intercoder agreement, the Krippendorff alpha was also identified. The Krippendorff alpha is used to identify the reliability of the coding. Data is considered reliable with an $\alpha \geqslant$ 0.800, data with $0.800 > \alpha \geqslant 0.667$ may be used to draw tentative conclusions, and data whose agreement measures $\alpha < 0.667$ is not considered reliable [30]. While the Krippendorff alpha for this coding is not statistically significant at 0.43, the number of categories that could be applied may be a factor [31]. For example, none of the responses were coded Practical/Applied Skill, but the category was chosen multiple times by coders. The coding was done by two LIS faculty members and one master's student. The different perspectives and experiences may have impacted coding.

4. Findings

A majority of students from both institutions identified a particular professional position of interest prior to starting a MLIS, sixty-seven percent from UA SLIS (67%) and sixty-four percent from Simmons (64%). These students may have begun developing a professional identity prior to course work, which may change or evolve as they proceed through their coursework.

While both schools require courses in the organization of information and information services, definitions of an information professional at both institutions were most frequently coded as related to Information Services. Fifty-eight percent of responses were defined by Information Services (35%), Organization of Information

Table 2
Student definition categories by institution

	UA SLIS ($n = 92$)	Simmons ($n = 145$)
Circular	3%	15%
Educational requirements	15%	14%
Information services	46%	28%
Information technology	0%	2%
Organization of information	16%	17%
Position	5%	11%
Professional values	2%	3%
Services & organization	9%	6%
Undefined	3%	3%

(17%) or both Services & Organization (7%). The responses from Simmons were categorized more frequently as Organization of Information (17%) and Services & Organization (6%). Despite a stronger focus in the organization of information at Simmons, the percentage responses at UA SLIS were similar. More students at UA SLIS defined an information professional in terms of information services. The information sources and services course at UA SLIS is required, as it is at Simmons. The authors routinely teach the required course at their separate institutions. At this time, it is unclear whether students were biased by an author or if the traditional LIS focus of UA SLIS program appeals to students specifically interested in information services. The data categorized as either Organization of Information or Services & Organization were similar at 18% and 9% respectively. This may be due to the number of students who had completed or were currently taking the Organization of Information course at UA SLIS (90.5%).

Fifteen percent of responses were categorized as Educational Requirements. The definitions identified the need for a MLIS or specific knowledge for a professional position. More than ten percent of definitions were circular, and defined an information professional as a professional working with information. Nine percent of responses defined a LIS professional as someone who works in a library or archives or as a librarian or archivist. Students were asked how many credit hours they had completed and were actively enrolled. The circular and place (someone who works in a library) definitions were reviewed to see how many courses students had completed in a program. It was anticipated that the majority of the answers would be from students new to the programs. The lack of experience would correlate to the vague definitions. This was not the case, the responses came from students with a variety of credit hours completed and no patterns emerged.

When comparing the two institutions, there were some differences in how they defined information professionals, which may be due to a few important differences in the student bodies. At UA SLIS, 46% of the participants were part of an online cohort. Students at this institution were more likely to identify with a role, which may be due, in part, to current work experience in libraries or other LIS institutions. At Simmons, the participants were almost all part of a face to face program and a higher percentage defined information profession through a specific position, which

may be based on a highly ranked specialized program offered as part of the MLIS degree. Participants at Simmons also provided a higher percentage of circular definitions (15%) than at UA SLIS. Again; this may be the result of a specialized program within a strong generalist LIS program. Additionally, while both schools have a required introductory or foundational course, the timeline for completion varied. At Simmons, students were required to take the course in their first semester, while at UA SLIS, students could take the course at any time during their program. As a result, participants, depending on their progress in the program, may have still been learning about the professional overall and deciding on a certain path or specialization.

It is important to note that despite the differences, there is a strong amount of agreement between the two programs. In this research, online and face to face students seem to have similar ideas regarding the concept of information professional. Hence, as LIS educators, we need to recognize that the content may be more influential than the format of a course and in order to meet the changing needs of the LIS professions, LIS educators need to identify what an LIS professional is and not just rely on role descriptions.

5. Discussion and limitations

The majority of student definitions of an LIS professional focus on assisting users find information and organizing the information for future use. These aspects of a professional are associated and appear to relate to courses taught in LIS core curriculum. That organization and services appear in student definitions suggests that students are developing a common set of values through the core. Ironically, these same aspects are missing from the definitions espoused by professional organizations.

By enrolling in a LIS program, students should understand that there is an educational requirement for LIS work. More than 70% of respondents worked in a library or information setting prior enrolling in a LIS program. This prior experience as a page, volunteer, intern, student worker or staff member may lead MLIS students to equate the degree with a professional position.

This focus on position is mirrored in the definitions of a professional from LIS organizations. Coding categories were mapped to the definitions of a professional from ALA, SLA, SAA, ACRL, AALL and ARLIS. Five of the six organizations identified an information professional as someone working within a specific context, such as a library or archive or in a specific position, a librarian or an archivist.

The data collected has a strong North American focus. The participants were pursuing MLIS degrees as part of the requirement to be a LIS professional. This is not a universal pathway to professional positions in LIS world wide and there may be other factors that influence identity development that are a part of other programs.

The data was collected at LIS programs where the researchers are or were full time faculty. This may have created a bias in how students answered the survey based having taken a required course with either researcher. However, the survey participants were self selected and assured of anonymity, which may have helped to counter the bias. Additionally, neither researcher discussed the survey with students while it was active.

The pilot study collected definitions of a LIS professional from two of the fifty-two MLIS granting institutions currently accredited by the American Library Association in the United States. The survey responses include definitions from students taking classes on main campuses, satellite and online who take classes part-time and full-time. The student participants, however, were self-selected, and their answers may not be generalizable to either program. Both UA SLIS and Simmons have a strong tradition of educating students for careers in libraries and archival institutions. This focus on "library" centered education may impact the results as well.

6. Conclusion

When do students find their professional identity? Through work experience or individual interest, students chose to pursue a MLIS degree with some expectation of the type of work they would be doing, but there does not appear to be a correlation between student definitions of a LIS professional and the types of positions that hold student interest. The lack of a general definition for an information professional from professional organizations may be a disservice to the profession. Individuals unfamiliar with traditional LIS environments or with specific positions identified as LIS may not realize the opportunities afforded to the MLIS. In addition, organizations that need individuals with LIS practical and theoretical knowledge may not identify their needs as in terms used by professional organizations.

As LIS educators, we need to appreciate our contributions to identity formation. In MLIS programs, educators provide theoretical content to act as a knowledge base when graduates enter their professional roles. However, LIS educators also need to recognize how our courses contribute to a holistic understanding of the LIS professions and how we can encourage students to develop professional identity based on their interests and skills.

While this research is North American focused and the results are not generalizable to the larger LIS profession, it may be possible to identify parallel or similar experiences in other LIS programs and in other geographic regions.

References

[1] M. Kelly, Can we talk about the MLS? *Libr J* **138**(8) (2013), 8.
[2] S. Wise, Working to think otherwise: Tracing ethos in information professionals' reflections on learning and practice, *Aus Acad & Resrch Libr* **43**(3) (2012), 169–188.

[3]   W. Wiegand, The socialization of library and information science students: Reflections on a century of formal education for librarianship, *Libr Trnds* **49**(1) (1986), 383–399.

[4]   K.K. Smith and D.N. Berg, Paradoxes of group life: Understanding conflict, paralysis, and movement in group dynamics. San Francisco: Jossey-Bass, 1992.

[5]   E. Freidson, Professional of medicine: A study of the sociology of applied knowledge. Chicago: University of Chicago Press, 1988.

[6]   H. Gardner and L.S. Shulman, The professions in American: Crucial but fragile, *Daedalus* **134**(3) (2005), 13–18.

[7]   R.M. Harris, Librarianship: The erosion of a woman's profession. Norwood, NJ: Ablex Publishing Corporation, 1992.

[8]   K. Wilson and E. Halpin, Convergence and professional identity in the academic library, *Journal of Librship and Info Sci* **38**(2) (2006), 79–91.

[9]   J. Preer, "Louder please": Using historical research to foster professional identity in LIS students, *Libr & the Cult Rec* **41**(4) (2006), 487–496.

[10] C. Oen and M. Cooper, Professional identity and the information professional, *JASIST* **39**(5) (1988), 355–357.

[11] G.M. Marshall, V.W. Marshall, J.C. Morgan, D. Barreau, B.B. Moran, P. Solomon, S. Rathbun-Grubb and C.A. Thompson, Where are they now? Results of a career survey of library and information science graduates, *Libr Trnds* **58**(2) (2009), 141–154.

[12] A. Dillon, What it means to be an ischool, *J Educ LIS* **53**(4) (2012), 267–273.

[13] A. Barragan-Ocana, A. Quijano-Solis, G. Vegas-Diaz and B. Sanchez-Lara, Communities of practice: A focus from complex systems, *Intl J Cmplx Sys* **41**(7) (2012), 741–755.

[14] K. Ho, S. Jarvis-Selinger, C.D. Norman, L.C. Li, Olantunbosun, C. Cressman and A. Nguyen, Electronic communities of practice: Guidelines from a project, *J Cont Ed Hlth Prof* **30**(2) (2010), 139–143.

[15] L. Wang and H. Zhong, Study on the trust model for knowledge transfer, *Intl J u- and e- Serv, Sci, and Tech* **7**(1) (2014), 285–294.

[16] P. Hildreth and C. Kimble, eds, Knowledge networks: Innovation through communities of practice. Hershey, PA: Idea Publishing Group; 2004.

[17] C. Haythornthwaite, M.M. Kazmer, J. Robins and S. Shoemaker, Community development among distance learners: Temporal and technological dimensions. *J Comp Med Comm [Internet]*. 2000 [cited 12 December 2015]; **6**(1). Available from: http://onlinelibrary.wiley.com/doi/10.1111/j.1083-6101.2000.tb00114.x/abstract.

[18] T. Finholt and L.S. Sproull, Electronic groups at work, *Org Sci* **1**(1) (1991), 41–64.

[19] E. Bilodeau and P. Carson, The role of communities of practice in the professional education of academic librarians, *Educ Info* **31**(1/2) (2014), 25–51.

[20] J. Eberle, K. Stegmann and F. Fischer, Legitimate peripheral participation in communities of practice: Participation support structures for newcomers in faculty student councils, *J Lrn Sci* **23** (2014), 216–244.

[21] ALA's core competencies of librarianship [Internet]. Chicago: American Library Association. [cited 2015, December 12]. Available from: http://www.ala.org/educationcareers/sites/ala.org.educationcareers/files/content/careers/corecomp/corecompetences/finalcorecompstat09.pdf.

[22] J.M. Reitz, ODLIS online dictionary for library and information science [Internet], 2013. [cited 12 December 2015]. Available from: http://www.abc-clio.com/ODLIS/odlis_about.aspx, 2013.

[23] J.J. Raju and C.C. Arsenault, First-level LIS education and training: A comparison between South Africa and Canada, *Ed Info* **25**(3/4) (2007), 179–193.

[24] Information Professionals [Internet]. [Place unknown] Informationprofessionals.org; 2012 [cited 12 December 2015]. Available from: http://infoprofessionals.org/.

[25] E. Abels, R. Jones, J. Latham, D. Magnoni and J.G. Marshall, Competencies for information professionals of the 21st century, 2004.

[26] Overview: Mission, vision, & objectives [Internet]. Boston: SLIS. [cited 2015, December 12]. Available from: http://www.simmons.edu/academics/schools/school-of-library-and-information-science/about/mission-vision-objectives.

[27] F. Hudson and J. Land, Slis student handbook: 2009-2011[Internet]. Informally published manuscript, School of Library and Information Science, University of Alabama School of Library and Information Studies, Tuscaloosa, AL. 2009 [cited 12 December 2015]. Available from: http://www.rperkins.slis.ua.edu/wordpress/files/handbook.pdf.

[28] D. Wallace, ed., ALISE Library and Information Science Education Statistical Report 2012. Chicago: Association for Library and Information Science Education, 2012.

[29] A. Lowe, An explanation of grounded theory, *Swed Sch Econ Bus Admin Work Papers* **331** (1996), 1–18.

[30] K. Krippendorff, Reliability in content analysis some common misconceptions and recommendations, *Hum Comm Rsch* **30**(3) (2004), 411.

[31] K. Krippendorff, Agreement and information in the reliability of coding, *Comm Mths & Meas* **5**(2) (2011), 93–112.