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ABSTRACT
The information world has been in a continuous state of flux, affecting what skills and competencies an information professional needs. Therefore, school curricula have to be able to cover today’s needs and also be adaptive enough to accommodate tomorrow’s needs. This poster represents phase I and phase II of a research project conducted by the School of Library and Information Science (SLIS) of the University of South Carolina. This research aims to understand which skills are important and why from the information professionals’ perspective. In order to garner insight into what information skills and competencies are currently expected from library and information science (LIS) program graduates, the authors conducted a University of South Carolina SLIS employer survey and semi-structured interviews with selected employers. The results revealed that knowledge of telecommunications and networking, as well as network security are among the most important areas of expertise. Additionally, soft skills, such as teamwork, project management, and time management were viewed as important, too.

Keywords
Information and communication technologies, employment trends, technical proficiencies, LIS education, LIS job qualifications.

BACKGROUND
In the aftermath of the longest economic recession in the nation’s history, LIS program graduates are rightfully concerned with securing employment upon finishing school. The challenge for employers is to pick and choose among a multitude of soon-to-be professionals those who are deemed the right fit and can enrich the field with diverse educational, cultural, and personal backgrounds. Because of this, Ard et al. offer an optimistic take on the recruitment problem in the profession (Ard et al., 2006). Recently, professional scholarship has produced a number of publications aimed to define and develop the skills that might give an information professional a competitive edge over his/her fellow job seekers. While there is a general agreement in the literature regarding the core theoretical foundation LIS graduates should master, there is much less unanimity as to what practical skills newly-minted information professionals are required or expected to have in order to succeed in the chosen area of the profession. This mixed methods research is intended to lessen the gap in the existing knowledge by soliciting and analyzing authentic feedback from seasoned LIS professionals well-versed in skill evaluation and other nuances of the hiring process.

LITERATURE REVIEW
Brine and Feather (2002) assert that identifying those skills is critical for making appropriate adjustments to LIS curricula. In their research, communication, technical proficiencies, and problem-solving aptitude figure as the fundamental skills all LIS graduates are supposed to have by the conclusion of their respective programs (Brine & Feather, 2002). Brine and Feather also group the desired skill sets into units of knowledge, such as information resources, information service and organization management, information systems, as well as policy and the broader social dimensions of information work.
Technology is one area where the demand for skilled professionals has been particularly evident for a number of years. Papp (1998) claims that “students and faculty alike are aware of the insatiable demand for skilled workers with a strong background in technology” (p. 39). The notion of library technology competencies has indeed been explored by many authors, among them Deyrup & Delozier, 2001, Thompson, 2007, and Scripps-Hoekstra, Carroll, & Fotis, 2014. Rapid technological advancements bring about certain changes in the employment landscape, which dictates that students not only possess the desired skills but also be able to efficiently use information technology tools and proficiencies.

Soft skills are also seen as vital for LIS graduates, in particular communication skills and organizational competencies (Gonzalez, 2010), passion for learning, risk-taking ability, public service orientation, and independence in decision-making (Lussky, 2008). Gonzalez (2010) further asserts that in the current global marketplace new generations of librarians must be knowledgeable about diverse cultures in order to provide the highest quality of services. The research conducted by Al-Qallaf & Mika (2013) also emphasizes that diversity of applicants is of paramount importance for today’s employers who are interested in attracting minority candidates to better serve the needs of a diverse society.

Furthermore, several sources (Martz & Cata, 2008, Kinkus, 2007) elaborate on the impact of planning and project management skills on the employability of new information professionals. Based on the content analysis of project management-related position announcements, Kinkus (2007) concludes that project management is and will remain an important aspect of library management. Therefore, improving one’s managerial skills is necessary for LIS graduates to secure a job in a fast-changing information environment.

Overall, the literature reveals the need for a multi-skill approach to educating LIS students. This approach stresses the development of core competencies (technological, behavioral, organizational, management, institutional) to enhance the employability of LIS program graduates in the tight economic conditions of our time.

METHODS
The authors chose a mixed methods approach to collect the data for this study. In phase I of the project which was completed in the fall of 2011, the participants were identified from two sources. First, senior SLIS faculty recommended several people serving on the Special Library Association. Second, a SLIS employer survey was administered to select employers who provided contact information and said they would be willing to share more information about their hiring practices via semi-structured interviews. In total, 17 employers were surveyed and 10 of them agreed to have a phone interview with the researchers. The participants were seasoned professionals with minimum eight years of expertise in the information field (maximum thirty-seven years) with different types of expertise from traditional library to information technology (IT) positions to information science positions. The size of the companies they worked for ranged from 50 to 20,000. The domains were diversified too. Media, law, research, IT are to name a few. Although most of the companies have offices worldwide, all of the participants are working in the United States, from South Carolina to California.

The interview questions focused on such areas of employee skills as soft skills (communication, teamwork, etc.); general technical skills (telecommunications and networking; website development, databases, etc.); basic business skills (finance, law, etc.); and information specific skills (information search and analysis, knowledge management, etc.).

The interviews were audio recorded and transcribed. Multiple researchers from SLIS analyzed and coded the data to identify the themes that are important in the field according to the information professionals.

Phase II of the project took place in the summer 2014. The researchers used recommendations from senior SLIS faculty to select fourteen additional participants for phase II of the research which was completed in August 2014. The purpose of phase II was to monitor the trends and potential changes in LIS employer expectations over time. All of the participants were USC SLIS graduates with significant experience in the LIS field and were employed in a variety of leadership position in academic and public libraries nationwide. The majority of the participants agreed to supply their responses in writing, and one respondent was interviewed over the phone.

RESULTS
In essence, the results from both phases of the project confirmed the literature review findings. First, soft skills were deemed extremely important by all respondents, regardless of their specialty. The interviews and the surveys revealed that soft skills for MLS graduates at times can even take precedence over the primary skill set required by the job. The respondents unanimously agreed on the need to hire well-rounded candidates with strong communication and critical thinking skills. Six respondents mentioned the ability to work well with all kinds of groups and “build consensus.” Interestingly enough, reciprocal leadership was mentioned several times as a characteristic desired of newcomers to an organization, which implies the use of feedback techniques, superior listening skills and emotional control. Finally, the soft skill that went as a thread across all interviews and surveys was creativity and the ability to think outside the box, something that one of the interviewees, dean of an academic library, defined as “entrepreneurial spirit.” In terms of employee characteristics, it means willingness to take risks and be inventive, as well as demonstrated potential to work both on emerging technologies and on traditional projects. The
latter, or learning aptitude, can best be determined by asking candidates how they feel about working on projects outside the advertised job description of the position they are interviewing for, according to that particular respondent.

Second, the participants claimed that technology skills were highly important for all employees, and those skills varied depending on the size of the library and the particular occupation. Larger organizations tend to require proficiency with major network security issues, and “the more hardcore programming things,” as one respondent put it. Solo librarians, on the other hand, are expected to manage “the whole life cycle of information, from acquisition all the way to deaccessioning.” Although most respondents indicated they were not directly involved in hiring the actual information technologies, in their leadership positions, they were invariably looking for people who are able to keep learning and adapting as technology changes. Also, one respondent found it helpful for librarians to have strong knowledge management, database management, website knowledge of any kind, web based applications commonly used, graphic design, commonly used tools like google drive, google forms, video and screen casting technology, social media and writing for the web. Participants in the two phases of this research study revealed certain challenges in conjunction with the technology skills expected from employees. Based on the codified responses, it became obvious that the further an information professional is removed from the hands-on work, the more he or she is removed from the technology as it changes. As a manager, one is put in a difficult situation to stay current and understand the technologies used across an organization.

Additionally, the research demonstrated that basic business skills, such as an understanding of budgeting, vendor relations, organizational workflow, or principles of strategic planning were viewed as indispensable for new comers in the field of information management. In the words of another participant, “librarians, [particularly] special librarians should see themselves as business people” whose primary job is to facilitate access to information. The respondents noted that successful employees must possess sharp management skills and creativity but, above all, act as a “collaborator in problem solving” and an attentive listener to the user. Above all, the top managerial requirement for newly-minted information professionals seemed to be related to time management. Those skills were deemed crucial in situations where “there is simply not enough time to manage daily work, plan major projects, stay up with the industry trends and also do the professional development work and training to be current.”

Finally, the project participants described information analysis and searching capabilities as vital skills desired on today’s job market. Two respondents mentioned knowledge management skills and expertise in copyright and intellectual property issues as preferred qualifications sought by their organizations.

Overall, the study participants portrayed the information professional as an ethical leader, independent thinker, and dedicated service provider whose job “requires a broad mix of critical and creative thinking, writing, management and business process.” As one of the interviewees put it, present-day information professionals are expected to possess a high level of accountability, adaptability, customer focus, developing talent, and drive for excellence.

LIMITATIONS
There are several limitations that need to be acknowledged in relation to this study. One pertains to its scope as only thirty-one employers were reached to collect the data for the current research project. While the findings are important in the context of the USC SLIS program of study, it is understood that a significantly larger sample is required for the study to produce any generalizable results that could be definitively applicable to other LIS programs or regions. Apart from a larger sample, a study of employers’ perspective inevitably invites further investigations to evaluate a broad range of LIS curricula concerning the teaching of the identified skills from the students’ point of view. Specifically, the following questions merit consideration in future research: Do graduating LIS students feel well prepared for different job challenges they are about to face? Are they aware of these challenges? Do they miss some preliminaries during their studies that could make them more equipped to cope with the rigors of the current job market? What can LIS programs do to adapt and develop curricula which prepare students for their future jobs in the best way possible, especially concerning the relevant soft skills?

CONCLUSION
This research describes a study conducted to collect feedback from alumni of the University of South Carolina SLIS holding various positions in information-intensive industries. The study intended to determine what skills employers would like to see in current and future job applicants. Based on the data collected throughout the two interrelated series of surveys and phone interviews, the study concluded that in today’s user-centered age interpersonal and foundational skills equal in importance the more specific job-related ‘non-people’ skills. This research will have implications for information science curricula by providing an impetus to assess how the education LIS students receive prepares them to lead the way in developing innovative information technologies and techniques to ensure equal access to information for all.

ACKNOWLEDGMENTS
The authors would like to extend sincere gratitude to Arsev Aydinoğlu, now-NASA Postdoctoral Program Fellow, for his contributions to the study design, data collection, and general assistance throughout this research.
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