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Kafi D. Kumasi

Wayne State University, ak4901@wayne.edu

Renee Franklin Hill

Syracuse University

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Are We There Yet? Results of a Gap Analysis to Measure LIS Students' Prior Knowledge and Actual Learning of Cultural Competence Concepts

Kafi Kumasi

School of Library and Information Studies, 535 Science and Engineering Library, Wayne State University, Detroit, MI, 48202. Email: Ak4901@wayne.edu

Renee Franklin Hill

School of Information Studies, 312 Hinds Hall, Syracuse University, Syracuse, NY, 13244. Email: refrankl@syr.edu

This paper reports on the preliminary results from a pilot study conducted to examine library and information science (LIS) students' perceptions of their level of preparation for becoming culturally competent LIS professionals. Students participated in an electronic survey, which contained a Likert scale measuring three areas of cultural competence: self-awareness, education, and interaction. A gap analysis technique was employed to detect discrepancies between students' prior knowledge and actual learning relative to cultural competence. This article discusses student-reported gaps in knowledge for the section of the questionnaire on "Education." Students indicated that all of the concepts introduced in this section were important to learn but their level of knowledge gained varied from no or low levels to moderate levels of actual learning.

Keywords: cultural competence, diversity, gap analysis, library service, library education, multicultural

Library and Information Science (LIS) professionals are increasingly called upon to serve individuals from diverse cultural, ethnic and linguistic backgrounds. In order to provide culturally sensitive library and information services, those entering the field must be taught about the histories, backgrounds, and literacy practices of various user communities. This paper reports on a study designed to allow LIS students an opportunity to reflect on the level to which their LIS coursework has prepared them to become culturally competent library practitioners. The overarching research question this study seeks to address is: *How well do LIS students feel they are prepared—through their LIS courses—to become culturally competent practitioners who can understand and serve the needs of culturally diverse library communities?*

The related sub-questions for this study are:

What, if any, discrepancies or gaps exist between how students describe/rate

- a. Their *prior knowledge* and their level of *knowledge/experience gained* for a particular aspect of cultural competence?
- b. The *importance of learning* and the level of *knowledge/experience gained* for a particular aspect of cultural competence?

Through this study, we hope to provide baseline data that LIS faculty can use to begin to assess the LIS curriculum and their teaching in terms of cultural competence preparation.

Literature Review

As a service-oriented profession, the LIS field has dedicated considerable scholarship and material resources to preparing a workforce that can meet the needs

of increasingly diverse user communities. These efforts normally fall under the broad discourse of “diversity” and “multiculturalism.” Although these two terms indirectly relate to this study, the focus of this inquiry is preparing culturally competent LIS professionals through LIS education. “Cultural competence” is typically seen as a sub-genre of scholarship on diversity and multicultural issues. As such, the literature review in the following section begins by exploring diversity and multicultural discourses within LIS. The subsequent section examines the more specific literature on cultural competence in LIS.

Diversity and Multicultural Scholarship in LIS

The demographic composition of the U.S. population is changing rapidly and as a result there has been a steady stream of diversity and multicultural scholarship and outreach initiatives launched in the LIS field and beyond (Balderrama, 2000). In the broad context of LIS, the focus of these initiatives centers on better preparing workers to serve in culturally diverse library communities. In the specific context of LIS schools, there is a burgeoning body of work that touts the value and importance of integrating diversity and multicultural issues into the LIS curriculum (see e.g. Abdullahi, 2007; Henninger & Hurlbert, 2006; Kim & Sin, 2008). This body of work reflects a basic understanding that having a more balanced representation of students from diverse cultural backgrounds will increase the likelihood that future librarians will provide services that reflect deeper cultural, linguistic, and racial understanding (Gorman, 2004; Winston & Walstad, 2006).

Demographically speaking, there is a cultural mismatch between the LIS student body and professional workforce and the wider U.S. population. The majority of LIS students and professionals are middle aged, white, English speaking females. Meanwhile, the nation’s communities

have become increasingly non-white and multilingual (Lance, 2005). As a result, a default goal for many diversity initiatives in LIS educational scholarship is to help the majority white LIS student and professional communities to build cultural sensibilities and to develop strategies for serving minority communities (Overall, 2010).

Ironically, whiteness as a racial and cultural signifier with its own privileged assumptions, worldviews, and lived experiences rarely enters into diversity discourses in education (Haviland, 2008). It would seem that the study of whiteness would be an integral facet of diversity scholarship in LIS, given the racial demographics of the workforce. However, discussions of whiteness and institutional racism are virtually absent in LIS literature. To help understand why this is so, Honma (2005) interrogates the epistemological foundations of LIS and articulates two significant issues, which he describes as “unacknowledged whiteness” and the superficiality of “celebratory multiculturalism” (p. 3). In the first case, Honma draws reference to the public library’s role in the Americanization project and its complicity in assimilating a variety of ethnic groups into citizenship. The irony about this moment in library history is that this Americanization project did not extend to people of color, who could not reasonably be considered white. In spite of this proactive role in the “shaping of a white citizenry” (p. 6) the field of LIS, according to Honma, has refused to keep up with ongoing discussions of race, choosing instead to substitute the less controversial discourses of diversity and multiculturalism which inadequately represent the racial discrepancies within the field (p.3).

This call for the acknowledgment of whiteness and the normativity it implies is echoed by Pawley (2006) in her exposition on race and multiculturalism in the LIS curriculum. She contends that the use of the term multiculturalism in LIS facilitated a systematic avoidance of the “R word” which remains “not only understudied, but

also poorly understood” (p. 151). Pawley further states:

Few LIS classes include race in their titles and while some researchers—especially library historians—have indeed put race and ethnicity at the center of their research agendas, they are generally small in number. A search for “race” in the titles indexed in the online database Library Literature and Information Science confirms the suspicion that the LIS community avoids overt discussion of race, while embracing multiculturalism and diversity (p. 151).

In order to avoid the kind of benign pluralistic approach to diversity that Honma (2005) and Pawley (2006) warn against, it is essential to articulate the conceptual underpinnings and goals of various diversity research initiatives. To that end, Jaeger and Franklin’s (2007) presentation of the “virtuous circle” provided a conceptual framework that illustrated the positive effect increased faculty and student diversity would likely have on creating more inclusive library services. Additionally, Overall (2009) provides a conceptual overview of what cultural competence entails in the context of LIS research and practice. The next section looks more closely at Overall’s work, which informed the design of the survey instrument used in this study.

Cultural Competence and LIS Scholarship

Overall has produced the most recent and in-depth scholarship on cultural competence in the context of LIS. Overall (2009) describes cultural competence in relation to LIS as:

The ability to recognize the significance of culture in one’s own life and in the lives of others; and to come to know and respect diverse cultural backgrounds and characteristics through interaction with individuals from diverse linguistic, cultural, and socioeconomic groups; and to fully integrate

the culture of diverse groups into services, work, and institutions in order to enhance the lives of both those being served by the library profession and those engaged in service (p. 190).

In the article, competence is defined as abilities (rather than behaviors) developed over time, which demonstrate a high degree of knowledge and understanding. Overall offers a three-part framework for understanding cultural competence: self-awareness, education, and interaction. Self-awareness has to do with recognizing the significance of culture in one’s own life and in the lives of others. Education has to do with fully integrating the culture of diverse groups into services, work, and institutions in order to enhance the lives of both those being served by the library profession and those engaged in service. Finally, interaction deals with knowing and respecting diverse cultural backgrounds and characteristics through interaction with individuals from diverse linguistic, cultural, and socioeconomic groups.

The author points to low library usage across historically underrepresented communities as one of the core reasons for needing cultural competence among LIS professionals. However, she goes beyond citing low usage statistics and begins to critique the way knowledge itself is constructed in the LIS field as problematic for some minority communities. The author argues that because the LIS field is grounded in objectivist notions of knowledge and behaviorist notions of learning that it can inadvertently overlook or marginalize the epistemologies embodied in some minority communities.

This critique has also been levied by other LIS scholars, who have argued that information literacy—which is the heart of library and information curricula—is rooted in a positivist view of learning that divorces information problems from their social and political context (Kapitzke, 2003). Furthermore, Kumasi-Johnson (2007) uses the context of in school library

instruction to illustrate the problems with mainstream approaches to information literacy instruction in the school library context stating that “a student may identify a seemingly mundane, noncritical information problem such as ‘how to build a garden’ and never be challenged to investigate important social issues such as who can build a garden and who cannot” (p. 43).

In general, LIS literature has made significant strides towards including marginalized perspectives on diversity and to articulate what it means to be culturally competent. The time is ripe to expand the conversation even further and to conduct empirical studies that capture various elements of culturally sensitive library service and teaching practices. This study is one small effort toward this end and will potentially help bridge the divide between theory and practice that often stagnates diversity discourses in LIS.

Methods

Instrumentation

The researchers developed a web-based survey instrument that was designed to collect information about the extent to which LIS students felt that their programs have prepared them to effectively serve library patrons from a variety of cultural backgrounds. Prior to distributing the survey, the researchers pre-tested the survey on students and colleagues at their universities. The questionnaires were approved by the institutional review boards at both universities and contained informed consent and language that allowed participants to end their survey participation.

The survey instrument itself was modeled after LibQUAL+®, which is an instrument designed to measure library service quality. LibQUAL+® itself was modeled after SERVQUAL, a pioneer instrument used frequently in the private sector to measure customer satisfaction (Crossno, et. al, 2001). Whereas the LibQual+® survey asks users to reflect on

the quality of library service, this study asks students to reflect on the levels of education they receive in terms of cultural competence preparation. Although other studies have implemented cultural competence instruments to evaluate students’ cultural knowledge and abilities, these studies did not measure the kinds of learning outcomes and abilities that correlate to LIS practice (see e.g. Brathwaite & Majumdar, 2006).

What attracted us to the design of the LibQUAL+® instrument was its ability to utilize the gap analysis technique to interpret the results. A gap analysis involves using surveys to help detect discrepancies between customer expectations of an organization and that organizations ability to deliver on those expectations (Eldridge, 2004). At its core are two questions: “Where are we?” and “Where do we want to be?” In the context of libraries, the gap analysis has been used to help libraries answer the questions: “What are the service quality issues identified by our users as most important?” and “Which of these services are in need of most attention?” (Cook, Heath, & Thompson, 2001).

Similarly, the gap analysis technique can be translated into the context of LIS education to help answer the questions: “What aspects of cultural competence do students identify as being most important to learn in their LIS coursework?” and “To what extent do students feel that the important concepts to learn are being taught?” We found the gap measurement model to be intuitively appealing because the scores on a given item are interpreted using different ratings of the same item. For example, in the 41 item LibQUAL+® participants respond to the 41 service criteria by rating each criterion with regard to:

- The *minimum* level of service that is deemed acceptable
- The *perceived* level of service seen as being offered
- The *desired* level of service (Thompson, Cook, & Heath, 2000, p.166)

Likewise, the cultural competence instrument features a side-by-side matrix design giving students the ability to rate each of the 16 items with regard to

- Their level of *prior knowledge* about a particular aspect of cultural competence;
- Their determination of the *importance of learning* a particular aspect of cultural competence in LIS courses;
- Their level of *knowledge/experience gained* regarding a particular aspect of cultural competence through their LIS courses.

Unlike the 41 item LibQUAL+® instrument, the cultural competence instrument contains only 16 core items. These items were grouped into one of three areas of cultural competence outlined previously in Overall’s work including self-awareness, education, and interaction (see appendix A for sample survey). A more in-depth comparison of the features of the LibQUAL+® survey that were translated into the cultural competence instrument is described in Table 1.

Participants

During the Fall 2010 semester, the researchers conducted the web-based cultural competence survey simultaneously at their respective ALA-accredited institutions. The survey questionnaires were

sent to LIS students who were currently enrolled and who had earned at least 15 credits. This credit hour criterion was put in place to ensure that students would have completed at least one semester of classes and be able to adequately evaluate their learning experiences in their program.

Wayne State University Profile

Wayne State University is Michigan’s only urban research university, located in the heart of Detroit’s University Cultural Center. The Wayne State University School of Library and Information Science (SLIS) enrolls approximately 600 students. The School offers certificates in traditional areas of librarianship including public, academic, school, and archives. Recently, the school established a certificate in urban librarianship, as part of a broader mission of WSU and the school to play a role in the revitalization of Detroit. The urban library certificate can assist this goal by preparing library and information professionals who understand and can effectively serve the literacy needs of the culturally diverse communities in and beyond Detroit.

Syracuse University Profile

Syracuse University is a large, private university located in central New York State. In addition to offering a bachelor’s degree in Information Management and

Table 1: Comparison of Survey Instruments.

LibQUAL+® Instrument	Cultural Competence Instrument
Measures library users’ perceptions and expectations of library service quality	Measures library students’ perceptions, learning expectations, and actual learning experiences around cultural competence
Employs a gap analysis technique	Employs a gap analysis technique
Uses a Likert-Scale Measurement	Uses a Likert-Scale Measurement
Nationally-normed based on data compiled from over 10, 000 respondents from multiple libraries	Pilot study based on data from two institutions totaling less than 200 respondents combined.
Allows for peer comparisons about library service being provided nationally	Allows for single-institution benchmarking helping establish goals and direction for curriculum development.

Technology, its School of Information Studies (iSchool) enrolls approximately 650 master's students in its Library and Information Science program (which includes the option for a School Media specialization). Students earning master's degrees in LIS are exposed to coursework and experiential learning that emphasizes information provision to diverse user groups.

Data Analysis

Determining the Gaps

Building on the LibQUAL+® instrument and analytical framework, the gap scores for this study are calculated using a formula that calculates the difference between *prior knowledge* and *knowledge/experience gained* and between the *importance of learning* and *knowledge/experience gained* responses. We focused our preliminary analysis on the scores from the former formula, which yielded what we have termed knowledge gaps.

A *knowledge gap* is an indicator of the extent to which faculty are teaching students more than they already know about a given aspect of cultural competence. It is calculated by subtracting the "prior knowledge" score from the "knowledge gained" score on any given question for each student respondent. A negative knowledge gap score indicates that students perceive that the amount of knowledge they've gained is below their prior knowledge on a given aspect of cultural competence.

Study participants were instructed to rank their responses using a seven point Likert scale where one participant indicated no/low knowledge or level of importance; four indicated moderate level of knowledge or importance; seven indicated high level of prior or gained knowledge or importance of learning a particular aspect of cultural competence. It is important to note that the knowledge gaps were calculated using the mode, or highest frequency, of a Likert scale number reported for each

item by the largest number of students. This approach gave us the opportunity to look at overarching trends across the students' responses as a preliminary analysis rather than attempt to interpret individual scores for each item. Consequently, we used the highest frequency of students who indicated the same Likert score (e.g. 7) to calculate the knowledge gaps. This paper discusses the knowledge gaps that students reported for the education section of the questionnaire.

Findings and Discussion

Participant Demographics

A total of 672 students were determined eligible to participate in the survey at both institutions and were sent links to the online questionnaire; 151 students submitted questionnaires¹ yielding a response rate of 22%.

Approximately 84% of the respondents were female and 15% percent were male; two respondents (representing less than two percent of all participants) chose not to answer this item. In terms of race/ethnicity, about 84% of the respondents identified as White, 8.5% as African American, and 0.5% as Asian/Pacific Islander, American Indian or Alaskan Native. The remaining participants either chose not to reveal their ethnic background or chose the option "Other."

Summary of Responses

The survey instrument was designed to cause respondents to reflect on the depth of their self-awareness, education (or knowledge), and personal interactions before and after entering an LIS master's program. Specifically, students were asked to respond to items with respect to (1) how much they knew about specific cultural

¹Because of Institutional Review Board mandates at both universities to include "opt-out" language for participants, the researchers accepted and analyzed questionnaires in which respondents did not answer all items; this resulted in variances in the number of responses for each questionnaire section.

competence elements before entering their LIS program, (2) how important it was for them to learn about certain aspects of cultural competence during their LIS programs, and (3) the knowledge they gained through their LIS coursework that would allow them to be culturally competent library practitioners.

The education section of the questionnaire contains items that present students with a range of concepts related to the provision of culturally responsive library service to which they may have been exposed in their LIS programs. We focus our analysis on this section of the survey questionnaire because doing so is most instructive for the kind of content that LIS educators could or should incorporate into the curriculum.

Knowledge Gaps

Knowledge gaps were determined by calculating the frequency scores in the specified questionnaire area. As mentioned previously, a knowledge gap is a measure of how students compare what they knew about specific cultural competence concepts before entering their LIS program with their knowledge level at the time they completed the survey after having been exposed to multiple semesters of coursework. Scores of 0 to 7 indicate that knowledge level remained the same or increased. Scores of -1 to -7 indicate that a student's prior knowledge or experience exceeded what they had actually learned in their coursework. Table 2 provides a representation of the data for the knowl-

Table 2: Knowledge Gaps
Gap Scores for Cultural Competence: Education Area.

Topic/Item no.	Knowledge Gained (KG) Level Chosen Most Frequently	Prior Knowledge (PK) Level Chosen Most Frequently	Gap = KG - PK
EDUCATION			
Item 1—Understanding of the term 'literacy' including cognitive and socio-cultural perspectives.	4	4	0
Item 2—Knowledge of the cultural differences among ethnic populations in the U.S.	3	4	-1
Item 3—Familiarity with the history of library service to individuals from various cultures.	4	1	3
Item 4*—Recognition of how individuals from various cultures access information.	4	1/3	3/1
Item 5—Recognition of barriers to information access and use that may exist for individuals from various cultures.	4	4	0
Item 6—Collection development strategies that reflect the information wants and needs of individuals from various cultures.	5	1	4
Item 7—Recognition of the role libraries play in providing outreach and specialized services to various cultural groups in the U.S.	4	4	0
Item 8—Considering the impact that recruiting library professionals from various cultural backgrounds has on library service.	5	1	4

*Indicates items that resulted in a mode of more than one number.

edge gaps for the Education section of the questionnaire.

This section of the survey includes eight items that contain statements, which students rated according to their prior knowledge, the importance of learning the concept presented, and the knowledge they gained about the concept through their courses. The knowledge gaps in the area of education had a range of variance.

In examining the knowledge gaps for education, students rated their prior knowledge of the concepts in the education section between low (a score of 1) to moderate (a score of 4) on the Likert scale. These relatively low to average self-ratings are understandable when one considers that the respondents were all matriculating in LIS programs in which they presumably enrolled in order to become introduced to or better educated about library issues. To further explain the knowledge gaps in this section, it is helpful to group the scores and examine them by the statements in each item.

No or Low Knowledge Gain

The one item that resulted in the majority of respondents rating their prior knowledge as superior to what they were taught was item 2. This item instructed participants to reflect on their “knowledge of the cultural differences among ethnic populations in the U.S.” Even though the majority of students ($n = 45$) rated their prior knowledge as moderate (a score of 4), they rated what they learned in their courses as slightly less than moderate (a score of 3) resulting in a gap score of -1 . In this instance, students did not have exposure to this particular concept to the extent that it increased their knowledge level.

The items with statements for which the majority of respondents indicated that they had the same amount of knowledge before and after entering an LIS programs were items 1, 5, and 7:

- Understanding of the term ‘literacy’

including cognitive and socio-cultural perspectives;

- Recognition of barriers to information access and use that may exist for individuals from various cultures; and
- Recognition of the role libraries play in providing outreach and specialized services to various cultural groups in the U.S.

In all three items, the majority of students ($n = 44, 47, \text{ and } 33$ respectively) rated themselves as having a moderate level of prior knowledge (a score of 4) and also determined that they had exactly the same level of knowledge following the coursework they had completed at the time they participated in the survey, resulting in a gap score of 0.

Knowledge Increase

Two items (6 and 8) called for respondents to consider their level of knowledge about

- Collection development strategies that reflect the information wants and needs of individuals from various cultures and
- Considering the impact that recruiting library professionals from various cultural backgrounds has on library service.

For these items, respondents ($n = 37$ and 39) most frequently rated their prior knowledge level as low (a score of 1) and the knowledge they gained as just above moderate (a score of 5).

Items 3 and 4 which asked respondents to rate their

- Familiarity with the history of library service to individuals from various cultures
- Recognition of how individuals from various cultures access information.

Students most frequently rated their prior knowledge level for item 3 as low (a score of 1) and the knowledge they gained as moderate (a score of 4) resulting in gap

scores of 3, or slightly less than moderate. The frequency scores for prior knowledge were tied in item 3 with the same number of respondents indicating a prior knowledge ranking of 1 in the education section ($n = 38$) as those who rated their prior knowledge as just below moderate (a score of 3).

To contextualize the overall picture presented by the scores discussed above, it is important to note that the majority of the study participants rated each of the items in the education section as highly important to learn (a score of 7). Thus, it is concerning that the highest knowledge gap score that was received for this section was 4 (moderate) and that in many instances students' coursework and class interactions did not help them to learn more or was less than what they already had been exposed to.

While course objectives and instructors vary widely, it is not unreasonable to expect that students will learn a great deal more than they knew when they entered the class. No amount of coursework can substitute for actual experience, but it is the theoretical knowledge delivered via classroom interactions that help to prepare students to become competent practitioners ready to serve patrons with varying information needs.

Recommendations for Future Research and Action

This pilot test represents a first step in creating an instrument that effectively assesses LIS students' cultural competence levels. The data collection process and study findings point to several areas for additional research and action. Future research possibilities include:

1. Testing the validity of the cultural competence data collection instrument by conducting ancillary analyses of the existing data set including tests for random responding, degrees of aberrance, and overall integrity of the data.

2. Conducting the survey at more ALA-accredited institutions once the data collection instrument has been validated and refined.
3. Conducting an analysis of standard deviations for the responses across all three areas of the survey. The results would help paint a picture of the intra-individual response variability. Relatively small differences would help identify the standard deviations for the three sets of ratings for the aggregate dataset.
4. Surveying library employers to examine their satisfaction with the level of cultural competence their employees have upon entry into the field.

Potential actions that might be taken as a result of the research:

1. LIS program administrators could create a curriculum map that consists of the 16 items on the survey instrument. Doing so will serve as a guide to help instructors effectively insert cultural competence concepts into their courses.
2. LIS faculty and administrators can create a correlational document that contains cultural competence learning outcomes for all classes in the MLIS degree.
3. LIS programs can use findings to craft certificate programs that focus on cultural competence education.

Conclusion

LIS programs share a common goal of educating information professionals who are equipped to serve patrons from a variety of educational, social, ethnic backgrounds. This pilot study helped to uncover how prepared two groups of LIS students feel they are being equipped to deliver the kind of culturally responsive library services that faculty, employers, and community stakeholders desire.

The results of this study suggest that

there is a need to better infuse cultural competence learning objectives into the LIS curriculum. While students reported experiencing some minimal increases in their knowledge about various areas of cultural competence, this study clearly showed faculty and students would benefit from having a more deliberate and streamlined set of cultural competence curriculum standards so that student learning outcomes can improve and be measured more concretely. A beginning step toward this end might be for LIS faculty and administration to have preliminary conversations about how well they think their programs are currently teaching the cultural competence concepts presented in this study. Such conversations can lead to the kind of strategic planning and curriculum alignment that would help push cultural competence education beyond rhetoric and into action.

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APPENDIX A: Cultural Competence Survey Items

Explanation: Please note that the term “culture” (and variations of the term) is used throughout the questionnaire. For the purposes of this study, culture is defined as “The belief systems and value orientations held by various individuals that influence customs, norms, practices, and social institutions.”

This survey is being conducted to collect your personal opinions related to issues of culture; there are no right or wrong answers.

Section I. SELF AWARENESS

This section of the questionnaire con-

tains items related to your level of personal awareness about general cultural issues.

Please read each statement below then select a number in EACH column. (1) In the first column, select the number that best describes your level of knowledge, understanding, and/or experience PRIOR to beginning the LIS program. (2) In the second column select the number that best describes the level of IMPORTANCE that you assign to developing knowledge, understanding, and/or experience in this area through your LIS education. (3) In the third column, select the number that best describes the level of knowledge, understanding, and/or experience you have GAINED as a result of being enrolled in LIS courses.

	Prior Knowledge	Importance of Learning	Knowledge Gained
1 Awareness of ways that my culture has shaped my life.	1 (No or low level)	1 (No or low level)	1 (No or low level)
	2	2	2
	3	3	3
	4 (Moderate level)	4 (Moderate level)	4 (Moderate level)
	5	5	5
	6	6	6
	7 (High level)	7 (High level)	7 (High level)
2 Awareness of cultural differences that may exist between myself and others.	1 (No or low level)	1 (No or low level)	1 (No or low level)
	2	2	2
	3	3	3
	4 (Moderate level)	4 (Moderate level)	4 (Moderate level)
	5	5	5
	6	6	6
	7 (High level)	7 (High level)	7 (High level)
3 Awareness of ways that my cultural beliefs impact my understanding of individuals from other cultures.	1 (No or low level)	1 (No or low level)	1 (No or low level)
	2	2	2
	3	3	3
	4 (Moderate level)	4 (Moderate level)	4 (Moderate level)
	5	5	5
	6	6	6
	7 (High level)	7 (High level)	7 (High level)
4 Awareness of ways to provide library service to patrons from various cultural backgrounds (for example race, ethnicity, socioeconomic status, and/or sexual orientation).	1 (No or low level)	1 (No or low level)	1 (No or low level)
	2	2	2
	3	3	3
	4 (Moderate level)	4 (Moderate level)	4 (Moderate level)
	5	5	5
	6	6	6
	7 (High level)	7 (High level)	7 (High level)

Section II. EDUCATION

This section of the questionnaire contains items that ask you to indicate your level of understanding about terms and concepts related to providing service to patrons of various cultural backgrounds.

Please read each statement below then select a number in EACH column. (1) In the first column, select the number that best describes your level of knowledge,

understanding, and/or experience PRIOR to beginning the LIS program. (2) In the second column select the number that best describes the level of IMPORTANCE that you assign to developing knowledge, understanding, and/or experience in this area through your LIS education. (3) In the third column, select the number that best describes the level of knowledge, understanding, and/or experience you have GAINED as a result of being enrolled in LIS courses.

	Prior Knowledge	Importance of Learning	Knowledge Gained
1 Understanding of the term 'literacy' including cognitive and sociocultural perspectives.	1 (No or low level)	1 (No or low level)	1 (No or low level)
	2	2	2
	3	3	3
	4 (Moderate level)	4 (Moderate level)	4 (Moderate level)
	5	5	5
	6	6	6
	7 (High level)	7 (High level)	7 (High level)
2 Knowledge of the cultural differences among ethnic populations in the U.S.	1 (No or low level)	1 (No or low level)	1 (No or low level)
	2	2	2
	3	3	3
	4 (Moderate level)	4 (Moderate level)	4 (Moderate level)
	5	5	5
	6	6	6
	7 (High level)	7 (High level)	7 (High level)
3 Familiarity with the history of library service to individuals from various cultures.	1 (No or low level)	1 (No or low level)	1 (No or low level)
	2	2	2
	3	3	3
	4 (Moderate level)	4 (Moderate level)	4 (Moderate level)
	5	5	5
	6	6	6
	7 (High level)	7 (High level)	7 (High level)
4 Recognition of how individuals from various cultures access information.	1 (No or low level)	1 (No or low level)	1 (No or low level)
	2	2	2
	3	3	3
	4 (Moderate level)	4 (Moderate level)	4 (Moderate level)
	5	5	5
	6	6	6
	7 (High level)	7 (High level)	7 (High level)
5 Recognition of barriers to information access and use that may exist for individuals from various cultures.	1 (No or low level)	1 (No or low level)	1 (No or low level)
	2	2	2
	3	3	3
	4 (Moderate level)	4 (Moderate level)	4 (Moderate level)
	5	5	5
	6	6	6
	7 (High level)	7 (High level)	7 (High level)

	Prior Knowledge	Importance of Learning	Knowledge Gained
6 Collection development strategies that reflect the information wants and needs of individuals from various cultures.	1 (No or low level)	1 (No or low level)	1 (No or low level)
	2	2	2
	3	3	3
	4 (Moderate level)	4 (Moderate level)	4 (Moderate level)
	5	5	5
	6	6	6
	7 (High level)	7 (High level)	7 (High level)
7 Recognition of the role libraries play in providing outreach and specialized services to various cultural groups in the U.S.	1 (No or low level)	1 (No or low level)	1 (No or low level)
	2	2	2
	3	3	3
	4 (Moderate level)	4 (Moderate level)	4 (Moderate level)
	5	5	5
	6	6	6
	7 (High level)	7 (High level)	7 (High level)
8 Considering the impact that recruiting library professionals from various cultural backgrounds has on library service.	1 (No or low level)	1 (No or low level)	1 (No or low level)
	2	2	2
	3	3	3
	4 (Moderate level)	4 (Moderate level)	4 (Moderate level)
	5	5	5
	6	6	6
	7 (High level)	7 (High level)	7 (High level)

Section III. INTERACTIONS

This final section of the questionnaire contains items that ask you to indicate your level of personal interaction regarding individuals from various cultural backgrounds.

Please read each statement below then select a number in EACH column. (1) In the first column, select the number that best describes your level of knowledge, understanding, and/or experience PRIOR

to beginning the LIS program. (2) In the second column select the number that best describes the level of IMPORTANCE that you assign to developing knowledge, understanding, and/or experience in this area through your LIS education. (3) In the third column, select the number that best describes the level of knowledge, understanding, and/or experience you have GAINED as a result of being enrolled in LIS courses.

	Prior Knowledge	Importance of Learning	Knowledge Gained
1 Having personal interactions with individuals from various cultural backgrounds.	1 (No or low level)	1 (No or low level)	1 (No or low level)
	2	2	2
	3	3	3
	4 (Moderate level)	4 (Moderate level)	4 (Moderate level)
	5	5	5
	6	6	6
	7 (High level)	7 (High level)	7 (High level)
2 Visiting libraries that are patronized by users from a variety of cultural backgrounds.	1 (No or low level)	1 (No or low level)	1 (No or low level)
	2	2	2
	3	3	3
	4 (Moderate level)	4 (Moderate level)	4 (Moderate level)
	5	5	5
	6	6	6
	7 (High level)	7 (High level)	7 (High level)

	Prior Knowledge	Importance of Learning	Knowledge Gained
3 Collaborating with others to develop library services, programs, and outreach efforts for individuals from various cultural backgrounds.	1 (No or low level)	1 (No or low level)	1 (No or low level)
	2	2	2
	3	3	3
	4 (Moderate level)	4 (Moderate level)	4 (Moderate level)
	5	5	5
	6	6	6
	7 (High level)	7 (High level)	7 (High level)
4 Knowledge of professional development events designed to share information about various aspects of culture.	1 (No or low level)	1 (No or low level)	1 (No or low level)
	2	2	2
	3	3	3
	4 (Moderate level)	4 (Moderate level)	4 (Moderate level)
	5	5	5
	6	6	6
	7 (High level)	7 (High level)	7 (High level)

Section IV. OPTIONAL COMMENTS

Please use the area below to include comments about the survey questionnaire and/or the survey topic.