School library and youth services professionals must develop and display a strong sense of cultural competence to effectively serve their patrons. Cultural competence is defined here as one’s ability to understand the needs of populations different from their own. This paper reports on the perceptions of school library and youth services students about how well their library and information sciences (LIS) coursework has prepared them to become culturally competent library practitioners.

An electronic survey was used to collect data from matriculating LIS students. The survey 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. By focusing on the responses from students enrolled in school library and youth services concentrations, this study may help both school library and youth services educators and practitioners consider implementing more culturally sensitive curriculum and pedagogical reforms.

Introduction

How might cultural competence education and training impact the work of future school library and youth services professionals? Moreover, how well do school library and youth services students feel their courses prepare them to become culturally competent practitioners who can understand and serve the needs of culturally diverse youth in library settings? These are two questions addressed in this paper, which reports the results of a study that collected data from matriculating library and information science (LIS) students about the level to which their LIS coursework has prepared them to become culturally competent library practitioners.

Background and Research Questions

Initial research efforts collected data from students enrolled in all concentrations within LIS programs at Wayne State University and Syracuse University (Kumasi and Hill 2011). This paper reports the results of the respondents who indicated that they were preparing for careers in school librarianship or youth services. The main question guiding this current research report is this: How well do students enrolled in school library and youth services concentrations feel their courses prepare them to become culturally competent practitioners? A related sub-question under examination is this: Do any gaps exist between how students rate their knowledge level about a particular aspect of cultural competence prior to and after entering their program of study? The discussion that follows is intended to highlight the necessity for school librarians and youth service professionals to acquire strong knowledge, dispositions, and abilities in the area of cultural competence.

Literature Review
Developing a strong sense of cultural competence is crucial to the work of school library and youth services professionals. Yet, while definitions of cultural competence abound in the literature, there is a paucity of research linking cultural competence discourse to school library and youth services scholarship and practice. This literature review aims to help bring these seemingly disparate areas of scholarship together. Implications for reforming the LIS curricula on the basis of this body of literature and the findings of this study are discussed in the conclusion.

Cultural Competence Defined

The term cultural competence describes the “ability of professionals to understand the needs of diverse populations” (Overall 2009, 176). Cultural competence has not been largely examined in school library settings but has been applied with great frequency in the health sciences (e.g., Cross et al. 1989; Jeffreys 2006; Sue, Arredondo, and McDavis 1992). Overall (2009) provided a detailed conceptual description of cultural competence in the general LIS context. Extrapolating from this work, a culturally competent school librarian can be described as an individual with the ability to “understand and respect [students’] cultural differences and to address issues of disparity among diverse populations competently” (176).

Overall suggests three concepts that characterize cultural competence. These include self-awareness, education, and interaction. Self-awareness involves recognizing the significance of culture in one’s own life and in the lives of others. Education relates to an individual’s ability to fully integrate members of diverse groups into services, work, and institutions in such a way that the lives of the individuals being served and those of the people delivering service are enhanced. Interaction concerns understanding and respecting cultural backgrounds other than one’s own by through engaging with individuals from diverse ethnic, linguistic, and socioeconomic strata.

Diversity in Context: School Library and Youth Services Education Programs

The word diversity encompasses racial, ethnic, and cultural characteristics that make up the whole of a population. Some have described the term diversity as simply the differences among us. The reference used to describe the composition of the United States as a “salad bowl” or “cultural mosaic” continues to be an appropriate one in light of statistics that indicate that the number and percentage of people from underrepresented racial and ethnic groups grows each year (Jaeger and Franklin 2007; Chao and Moon, 2005). U.S. public K–12 schools reflect the nation’s increasing diversity with a reported 40 percent of enrolled students hailing from racial and ethnic minority groups (Marcoux 2009). Additionally, the number of multilingual communities continues to grow (Lance 2005), as does the percentage of American youth who identify as members of the lesbian, gay, bisexual, or transgendered community. Both LIS researchers and ALA accreditation standards have acknowledged that an ideal method for effectively serving an increasingly diverse user population would be to prepare more librarians from diverse backgrounds (ALA 2008; Jaeger and Franklin 2007; Kim and Sin 2006; Winston and Walstad 2006). In addition, the AASL Position Statement on Diversity in the Organization affirms the commitment to increasing diversity among its members in leadership positions (ALA 2011). However, the majority of the individuals enrolled in school library and youth services programs continue to be a relatively homogeneous group: white and female (Kumasi and Hill 2011; Wallace and Naidoo 2010). It is essential for these future library professionals to receive cultural competence training in their graduate programs to understand the varied backgrounds of their K–12 patrons to effectively serve their information wants and needs.

Cultural Competence as a Twenty-First-Century Literacy Skill

One of the main roles school and youth services librarians have assumed is helping young people acquire the skills they need to successfully navigate the complex terrain of information available to them and to ultimately become productive citizens. What are often left out of the conversation of twenty-first-century literacies are cultural competencies. Yet, while the AASL Standards for the 21st Century Learner do not explicitly address cultural competence, they do address some of the skills and dispositions necessary for cultural competence. Below are examples of the Standards that speak to the development of cultural competence:

- Standard 1.1.5: Evaluate information found in selected sources on the basis of accuracy, validity, appropriateness for needs, importance, and social and cultural context.
- Standard 1.3.2: Seek divergent perspectives during information gathering and assessment.
- Standard 2.3.2: Consider diverse and global perspectives in drawing conclusions.
Standard 3.1.5: Connect learning to community issues.
Standard 3.3.1: Solicit and respect diverse perspectives while searching for information, collaborating with others, and participating as a member of the community.
Standard 4.2.3: Maintain openness to new ideas by considering divergent opinions, changing opinions or conclusions when evidence supports the change, and seeking information about new ideas encountered through academic or personal experiences (AASL 2009).

These particular standards embrace the importance of young people developing a sense of cultural competence as a core component of the twenty-first-century competency toolkit. Today’s youth need to be more than just information literate. They also need to understand the world from a global perspective. They need to know the people of the world, their backgrounds, and current social and political conditions. Ultimately, as youth become more globally connected with other people and cultures via technology and other media, the roles of school library and youth services professionals must expand to accommodate these global shifts.

At the core of both school librarianship and youth services is a service mission to provide services and programming to all who are in need of them. School librarianship, in particular, has experienced shifting roles in the school (Mardis 2009; Valenza 2011). For example, school librarians are no longer solely seen as resource providers or collection managers, but now take on primary roles as instructional partners and curriculum leaders (Callison 2006; Stripling 1996). Through such activities as “collaboration with teachers,” supporting “student learning in the classroom,” and “development of children’s leisure and academic interests” (Mardis 2009, 2), school librarians contribute to the overall excellence of the schools at which they serve. Because school librarians are not constrained by being assigned to a particular classroom, they have the potential to be learning leaders with the ability to make connections with every student in the school environment (Loertscher 2006). Likewise, youth services professionals are expected to move beyond the basic reference interaction with youth but also need to coordinate after school programs, collaborate with school librarians and teachers, and develop culturally responsive programs to engage youth in the library (Kumasi 2010).

In general, LIS has made steady progress toward understanding and embracing differing information needs with respect to cultural diversity. Because school librarians and youth services professionals specifically are in positions that affect literacy development of the youngest patrons, it is important that they are exposed to a curriculum that prepares them to implement strategies that increase their cultural confidence and competence.

Methods

Participants

During the fall 2010 semester, the researchers issued calls for participation (CFP) to all students enrolled at their respective ALA-accredited institutions who had earned at least 15 credit hours. The credit-hour criterion was incorporated 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. Included in the CFP was a link to the survey questionnaire. While the questionnaire was accessed by students enrolled in all LIS concentrations who met the criteria above, this current report discusses only the responses collected from students enrolled in school library and youth services concentrations.

Instrumentation

The researchers developed an electronic survey instrument that collected information about the extent to which students enrolled in LIS programs at Syracuse University and Wayne State University felt that their programs prepared them to effectively serve library patrons from a variety of cultural backgrounds. The study was conducted in October 2010; the current paper reports the results of only the respondents whose educational focus was school librarianship and youth services. The data collection instrument was modeled after LibQUAL+, which is an instrument designed to measure library service quality and calculate the gaps between perceived versus actual service adequacy. A Detailed description of LibQUAL+ appears on its website (www.libqual.org/home). The instrument designed for the current study included 16 items grouped across three areas: (1) self-awareness, (2) education, and (3) interaction. Data were generated through the use of a side-by-side matrix design that allowed respondents to rate the following:
• 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 (Kumasi and Hill 2011).

Data Analysis

Determining the Gaps

The gap scores for the study were computed using a formula that calculated the difference between each respondent’s ranking of their prior knowledge and the knowledge/experience gained resulting in what we have termed knowledge gaps.

A knowledge gap is an indicator of the extent to which students perceive their coursework to have prepared them in such a way that they come away with more knowledge than they already had about a given aspect of cultural competence. A knowledge gap is calculated by subtracting the prior knowledge score from the knowledge gained score on any given item for each 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. By contrast, a positive knowledge gap score indicates that students perceive that their LIS coursework resulted in them having either the same level or an increased amount of knowledge than they had upon entering the program.

Study participants were instructed to rate their responses using a 7-point Likert scale, in which 1 indicates no or low prior or gained knowledge; 4 indicates moderate level of knowledge; and 7 indicated high level of prior or gained knowledge about a particular aspect of cultural competence. 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 opposed to attempting 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. Because we decided to use frequency counts (or modes) to calculate the gaps in some instances, we had to take into account multiple modes. That is, we had to factor into our findings the occurrence of equal numbers of rankings across items. For example, if 10 students ranked item 2 at level 1 and 10 students ranked the same item 2 at level 2, then both numbers were factored into the analysis.

Findings and Discussion

School Library and Youth Services Student Demographics

A total of 672 students at both institutions were determined eligible to participate in the initial survey. All were sent links to the online questionnaire; 151 students submitted completed questionnaires, 29 of which were enrolled in school library or youth services concentrations. Twenty-six of this subset of respondents were white females. One respondent was a white male, one respondent was an African American female, and one respondent preferred not to reveal his or her gender or ethnicity. Twenty-seven respondents enrolled in school library or youth services tracks submitted responses to all items.

Summary of Responses

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 exclusively on this section of the questionnaire because doing so highlights areas of opportunities for LIS programs to infuse increased cultural competence instruction into their curriculum in an effort to effect educational reform.

Knowledge Gaps

Knowledge gaps measure respondents’ perceptions of what they knew about specific cultural competence concepts related to education before entering their LIS program and their knowledge level 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 actually learned in their coursework (Kumasi and Hill 2011). Table 1 illustrates the knowledge gaps for the education section of the questionnaire.

This section of the survey includes eight 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 education had a range of variance.

Students rated their prior knowledge of the concepts in the education section between low (e.g., a score of 1) to moderate (e.g., a score of 4). We posit that because all of the respondents were currently matriculating LIS students, it is not unusual that none of them rated their prior knowledge as above average or superior. Rather, one might accurately presume that the student respondents had enrolled in master’s programs to become more knowledgeable about issues related to providing effective library service. Below is an analysis of scores for each item in the education section.

**Negative Gap Scores**

Only one item (statement 2) resulted in the majority of respondents rating their prior knowledge as superior to what they were taught. The statement in this item instructed participants to consider their “knowledge of the cultural differences among ethnic populations in the U.S.” Eight students reported that their knowledge before entering an LIS program was moderate (a score of 4); nine rated what they learned in their courses as slightly below moderate (a score of 3) resulting in a gap score of -1. In this instance, the majority of students surveyed did not report having exposure to this particular concept to the extent that it increased their knowledge level.

Perhaps because this statement was not specifically related to libraries and is basic in its wording about “knowledge of the cultural differences,” the respondents felt more comfortable assigning themselves a moderate level of prior knowledge. In contrast, the burden of proof for reporting what was learned in the context of the LIS coursework is perhaps higher and students are therefore less likely to report having learned something that was not covered in class.

**Neutral Gap Scores**

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 and 7:

- Understanding of the term *literacy*, including cognitive and sociocultural perspectives.
- Recognizing the role libraries play in providing outreach and specialized services to various cultural groups in the United States.

For both items, the majority of students (n = 8) rated themselves as having moderate prior knowledge (a score of 4) and also determined that they had exactly the same level of knowledge following coursework completion at the time they participated in the survey, resulting in a neutral gap score of 0. These scores perhaps indicate that the concepts introduced in each of these statements (literacy and outreach) are general enough for students to feel comfortable having some level of understanding, but perhaps they were not explored with enough depth in their LIS coursework to qualify as increasing their knowledge beyond their existing level. Again, the more general the question, the more willing students seem to be to assign themselves higher levels of prior knowledge and knowledge gained.

**Knowledge Increase**

For several items respondents reported having gained knowledge in a particular area of cultural competence as a result of their LIS coursework. However, there were variances in the levels of knowledge increase that were reported, with several questionnaire items (3, 4, 5, and 8) yielding multiple modes. It is important to note that although there were multiple modes, most respondents reported relatively low levels of prior knowledge (scores of 1, 2, 3, or 4). In contrast, survey respondents rated their perceived level of knowledge gained as moderate or slightly higher (e.g., Likert scale 4 or 5). This means that for almost all items in this section of the questionnaire, the majority of respondents experienced only moderate knowledge increases as a result of their coursework.
Two items (items 3 and 6) resulted in reports of slightly higher than moderate knowledge increases. The one exception is item 8, where the mode was 6, which is almost the highest rating possible. In item 8, respondents were asked to consider the impact that recruiting library professionals from various cultural backgrounds has on library service.

The results for item 8 are encouraging given the attention and material resources (e.g., ALA Spectrum Scholarships) that the LIS field has given to recruit library students and professionals from diverse cultural backgrounds. Data collected in this section of the questionnaire likely reflect the progress that has been made in diversity recruitment efforts. Hence it is not surprising that the respondents would indicate that their LIS coursework addressed the importance and impact of recruiting culturally diverse professionals to the field.

As mentioned previously, items 3, 4, and 5 also had multiple modes that resulted in positive knowledge gaps. (Item 5 actually generated both positive and neutral gap scores, but we chose to group this item with knowledge increase for sake of clarity.) In these items, respondents were asked to rate their

- familiarity with the history of library service to individuals from various cultures;
- recognition of how individuals from various cultures access information; and
- recognition of barriers to information access and use that may exist for individuals from various cultures.

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 fact that there were multiple frequency counts (or modes) for certain statements in this section of the questionnaire helps bolster the findings already derived from the data. In other words, although an equal number of students may have ranked an item as low as did those who ranked it slightly less than moderate (or 3), this represents a general trend in the data where students rank their prior knowledge on the lower rather than higher spectrum of the Likert scale.

To contextualize the 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 troubling that the majority of respondents reported only a moderate knowledge gain, which indicates 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.

**Conclusion and Implications**

Educational reform should be driven by evidence-based research grounded in practical issues of teaching and learning. This study provides some preliminary evidence for helping LIS faculty understand how school and youth services librarians perceive their preparation in the area of cultural competence. With this knowledge, LIS faculty, particularly those who teach in the areas of school library and youth services, can begin to consider what types of curricular restructuring they might institute in their programs to achieve greater cultural competence education.

Moreover, cultural competence education is important to the work that school and youth services practitioners do because these individuals will potentially impact the literate lives of twenty-first-century learners from numerous cultural and linguistic backgrounds. The results of this study suggest a need for LIS curriculum to be more strategically imbued with the concepts and principles of cultural competence. In general, the respondents reported having low to moderate knowledge gains in cultural competence education. This means that there is room for the LIS curriculum to be more directly infused with cultural competence concepts. This type of educational reform will benefit not only school and youth services students, but the entire LIS student population who will eventually go on to serve diverse patrons in various library settings.

**Works Cited**


Table 1. School and Youth Services Respondent Knowledge Gap Scores for Cultural Competence: Education Area

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

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