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Seeing Different: Portrayals of Disability in Young Adult Graphic Novels

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Abstract
As more students with disabilities are included in standard American education classrooms, the need to provide all students with literature that depicts people with disabilities has never been greater. With graphic novels growing in popularity with youth and becoming more apparent in school curriculum, the authors chose to analyze this format to answer the following research questions: Do graphic novels include individuals with disabilities? If disabilities are present, what disabilities were most often featured? What is the gender and ethnicity of the individuals with disabilities? Is there a positive portrayal of the person with a disability? After examining thirty graphic novels recommended for teens, the authors found that less than half of the sample depicted an individual with a disability. Of these, the majority of the portrayals were of negative stereotypical images of disability. The authors concluded that the authors, illustrators, and publishers of graphic novels recommended for teens have not provided a realistic representation of people with disabilities.

Introduction
The 27th Annual Report to Congress on the Implementation of the Individuals with Disabilities Education Act, 2005 (U.S. Department of Education 2007, 28) reported that approximately six million U.S. students aged six to twenty-one were served under the Individuals with Disabilities Education Act in 2003—9.1 percent of all U.S. students in that age range. These numbers have increased in both real numbers and proportion of the total U.S. school-age population almost every year since 1993. Following the current trend of inclusion, most of the students are educated in regular schools along with their peers without disabilities. With that in mind, teaching students without disabilities about the various disabling disorders they might encounter has become necessary.

Much has been written about the role of literature for youth that includes people with disabilities. Ayala (1999) provides four cogent reasons for making the materials available for students:

1. Because of the issues raised, the materials can help children “understand and cope with difficult decisions they must face in an increasingly complex society.”
2. The “relevant, authentic publications” can be used to draw students to reading.
3. The books can portray people with disabilities “who are increasingly reflected in our society.”
4. People with disabilities can be provided with an entertaining reflection of self.
5. One popular reading format for youth today is the graphic novel. Students of varying ability enjoy the dual text and pictorial presentation of stories, and this appears to be particularly true of males. Because of the interest by youth in this format, this study will look at the representation of disabilities found in current graphic novels.

**Review of Literature**

The recent significant writings about graphic novels have roots in the second-language-education domain but can be applied to general education as well. Ujiie and Krashen (1996) surveyed seventh grade students in one Chapter 1 and one middle-class school, both located in California, to determine if students enjoyed reading comics. Of the 571 students surveyed, 57 percent were eligible for free or reduced-priced lunches. The rest were identified as middle-class. A total of 28 percent of the students surveyed from the Chapter 1 school were identified as Limited English Proficient (LEP) students. The researchers determined that the boys in this population read comics much more often than girls, thus the girls’ responses were eliminated from the study. Ujiie and Krashen found that the boys from both schools who read comics tended to enjoy reading and read other books in addition to comics.

Worthy, Moorman, and Turner (1999) studied the reading preferences of sixth grade students from three Texas middle schools with populations varied by race and socioeconomic levels. The researchers surveyed 419 sixth grade students concerning their reading interests, and additionally interviewed twelve sixth grade teachers and three school librarians working in these schools to determine how the schools fulfilled the students’ reading preferences. Responses from students indicated that they most preferred to read scary stories, comics, magazines that focused on popular culture, sports magazines and books, humorous stories, series books, books about animals, and books and magazines that focused on cars and trucks. The majority of the students indicated that they obtained their preferred reading materials from sources outside of school due to their lack of availability at school. The researchers’ interviews with teachers and librarians confirmed the students’ view that more enjoyable materials are not found in schools, which the researchers suggested may be because of the negative attitude of teachers and librarians toward the educational value of popular materials.

Norton (2003) recognized that the comic *Archie* proved popular with several children and sought to understand how children’s interest in comics could be applied to the literacy practices of educators. Norton provided questionnaires and interviewed thirty-four elementary school students in Vancouver who had identified themselves as readers of the *Archie* comic to understand how the comic appealed to students, how these students related to each other in and out of school, and how the students’ comic reading was different from those reading practices recognized as legitimate by school officials. The researcher found that the students’ enjoyment in reading *Archie* stemmed from their sense of ownership in that comic and their desire to discuss the plot and characters with each other. Norton also found that teachers and parents do not consider comic book reading to be a legitimate literacy practice.
Cary (2004) described how the theoretical disciplines of second language acquisition, brain-based teaching, and progressive literacy each lend themselves to the use of graphic novels in the curriculum. Specifically, Cary illustrated how graphic novels act as authentic materials from which students can understand how language looks and sounds in the real world. Furthermore, the author explained how graphic novels act as visual support for curriculum subjects, engaging material with which students desire to interact, and create opportunities for representational learning opportunities that are more in demand as concrete opportunities are lost with budget cuts.

McTaggert (2008) argued that graphic novels are useful in the curriculum because they “enable the struggling reader, motivate the reluctant one, and challenge the high-level reader” (12). The author explained that graphic novels help struggling readers by providing them with the images they need to decode messages that are communicated via text. McTaggert maintained that by engaging reluctant readers in material in which they are interested, the students will be more likely to choose and enjoy reading. Finally, McTaggert described how graphic novels can be used with higher-level thinking, writing, and reading skills to challenge more advanced students.

**Depictions of Disability in Media**

In response to the growth of disability activism in the 1970s, Biklen and Bogdan (1977) surveyed “a range of classic literature as well as popular contemporary media” (5) to determine how individuals with disabilities are portrayed. They identified ten major stereotypes with examples that are commonly used in the media to portray people with disabilities:

- **Pitiable and pathetic:** Tiny Tim in *A Christmas Carol*.
- **Object of violence:** Audrey Hepburn’s character, who is terrorized as an individual who is blind in the movie *Wait Until Dark*.
- **Sinister or evil:** Captain Ahab, who has one prosthetic leg in *Moby Dick*.
- **“Atmosphere”:** Individuals who are background characters, such as “blind musicians.”
- **“Super Crip”:** The private detective who used a wheelchair in the television show *Ironsides*.
- **Laughable:** Mr. Magoo, who had a visual impairment.
- **His or her own worst—and only—enemy:** Those who are portrayed as whiners who could succeed if they tried harder.
- **Burden:** Those who appear to others as “helpless” and being in need of care.
- **Nonsexual:** Those who appear “as totally incapable of sexual activity.”
- **Incapable of fully participating in everyday life:** Those who are presented as unable to be included in activities as employees, brothers or sisters, students, etc.

Biklen and Bogdan suggested that this identification of stereotypes in books would bring awareness of disparaging depictions of individuals with disabilities to readers.

Noting how stories presented in the comic format can use visual images to convey personality characteristics, Weinberg and Santana (1978) studied how the emotional characteristics of comic book characters with physical disabilities were depicted. The authors examined forty superhero comic books to determine the characters’ physical conditions, moral stature, and group membership. The researchers identified sixty-three “physically deformed” (328) characters, each of which was found to be morally good or evil, not neutral. With reference to comic books, Weinberg and Santana suggested “that physical inferiority extends to moral inferiority with the
physically deviant being portrayed as morally deviant” (330). Conversely, they suggested that those characters with physical disabilities that possessed special abilities were portrayed in such a way as to explain how a person needed to be exceptional to overcome the perceived barriers of physical disability.

Byrd and Elliott (1985) conducted a study of feature films to determine whether people with disabilities were included and, if so, how that was presented. The authors asked the following research questions:

- What percentage of features films depicted disability?
- Did one disability receive more attention than another?
- Were women or men depicted as having a disability?
- Did film critics evaluate films depicting disability positively or negatively? (48)

Of the 1,051 films they studied, 120 (slightly more than 11 percent) included people with disabilities, with psychiatric disorders being represented most frequently. The authors also found a much larger number of films with negative portrayals of people with disabilities (98) than positive portrayals (22).

In an article advising school librarians on collection development issues of juvenile materials about individuals with disabilities, Mellon (1989) identified problematic depictions of disability in books for youth. The author identified that these depictions stem from the author’s focus on the disability rather than the character. Mellon described how some stories rely on the differences between children with and without disabilities rather than similarities, thereby defining each character by his or her level of ability rather than other characteristics. Mellon also uses the characterizations of “poor little thing” and “brave little soul” (47) to describe those characters who are portrayed as having a disability that is an obstacle they can and do overcome at the end of the story. Here again, Mellon noted, the characters are defined by their disability and how hard they work to defeat it. Mellon advises that:

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\text{The best approach to disability in juvenile books is one in which aspects of the disability are revealed, not as the main focus of the book, but through the unfolding of the story. In this way, characters can be developed as people who happen to be disabled, just as they happen to have red hair, or happen to hate spinach, or happen to be quick-tempered. (47)}
\]

Mellon concluded by stressing the need for authors to portray the similarities as well as the differences in children of various ability levels.

In response to her observations of the depictions of cognitive disabilities in literature for youth, Heim (1994) suggested five criteria on which books should be evaluated for quality:

1. Accuracy of information
2. Lack of stereotypes
3. Literary quality
4. Confronting the disability
5. Not “using” characters with disabilities

Heim further illustrates how these criteria indicated quality youth fiction by describing how a sample of young adult novels depict characters with cognitive disabilities who exhibit a sense of
agency, are not ignored by peers and family, and who are portrayed as unique individuals with their own personalities.

With a focus on the cultural and linguistic characteristics associated with disability, Ayala (1999) analyzed fifty-nine picture books and books for intermediate readers published between 1974 and 1996 that featured a primary character who was identified as possessing a disability. Ayala’s examination of cultural and linguistic characterizations included the language of the book’s text, the ethnicity of the characters with disabilities, and any cultural emphasis communicated in the story. Ayala found that only a small number of the sampled books depicted nonwhite characters and were written in a language other than English, and most “placed little or no emphasis on specific cultural practices” (103). The author argued that if books written for youth are to accurately portray children’s lives, they must portray ethnically diverse children with disabilities.

Mills (2002) claimed that authors’ ethical norms are often communicated in their writing, thus Mills examined those truths held by the authors of a sample of children’s books that feature characters with disabilities. The author gave examples of how stories have communicated the notion that low intelligence and corrupt moral character go hand-in-hand. Mills also described the ways in which characters with disabilities are portrayed as inherently good only to suffer later because of their disability. The author also described how, instead of tackling the implication that human value is suggestive of one’s ability to succeed intellectually, authors often attempt to communicate a sense of equality by portraying a character with a cognitive disability as having more compassion or more talent with tactile objects that the character’s peers without disabilities. The one positive theme that Mills found in novels for youth was that the young protagonists of stories involving disruption in their home situations often chose to live with their guardian who had a cognitive disability. Mills claimed that this demonstrated the authors’ opinion that those individuals with cognitive disabilities are as valuable, if not more, than individuals without disabilities. Mills noted that it is important to understand how disability is portrayed in media for youth because “books for children about mental disability inescapably convey values about how we should respond to difference in intelligence” (542).

Based on the guidelines developed in their 2000 study, Dyches and Prater (2005) conducted a content analysis on thirty-four children’s fiction books published between 1999 and 2003 to determine how characters with developmental disabilities were portrayed and if any related issues were described within the plot. The sample population depicted characters with developmental disabilities as having either autism spectrum disorder or mental retardation; however, the characters’ disability was only one of many character traits. The majority of the characters in this sample were male, and many held ethnically diverse backgrounds. The authors noted that many of the characters were shown as dynamic individuals who acted with agencies, whose primary relationships were with peers, and who were shown to be educated in an inclusive setting. The researchers acknowledged that this study’s results indicated a positive trend concerning the depiction of characters with developmental disabilities compared to a similar study they conducted in 2001. As such, they further encouraged authors to portray characters as complex individuals whose actions have significant consequences for themselves and others, whose role is that of caretaker or protector, and who interact with others within the context of recreational activities.

People with disabilities have often been present in the media; however, Riley (2005) posited that little has changed in the depictions since the 1920s. He found continued presentations of people
with disabilities as “the supercrip, the medical miracle, the object of pity” in newspapers, movies, and other forms of media” (x). He also stated that the negative portrayal:

...translates into economic and political deprivation for people with disabilities, whose status is irreparably harmed by the images projected to the nondisabled world through print and electronic media . . . [illustrated by] horrific unemployment figures for people with disabilities (hovering at a steady 80 percent even before the last recession) together with the dwindling ranks of disability-specific publications and programs. . . . In other words, even as the situation of other minorities continues to improve, the material signs of acceptance of people with disabilities in the workplace and the mainstream are declining. (10)

Statement of Problem
Based on the literature, a number of questions emerged:

1. Do the graphic novels include individuals with disabilities?
2. If disabilities are present, what disabilities were most often featured?
3. What is the gender and ethnicity of the individual(s) with disabilities?
4. Is there a positive portrayal of the person with a disability?

Method
We drew the sample for the study from the sixty graphic novels listed on the Young Adult Library Services Association’s Great Graphic Novels for Teens 2008: “The books, recommended for those ages 12–18, meet the criteria of both good quality literature and appealing reading for teens.”

Thirty graphic novels were used in the study. To select the sample, each of the sixty titles from the list was printed out on an individual strip of paper, randomly drawn, and assigned a number from one to sixty. Since some of the graphic novels are part of a series, only the first chosen from a series was included in the sample. If another graphic novel from a series was drawn, the next in the numerical list was added to reach the total sample of thirty graphic novels (see Appendix A for the list of graphic novels in the sample.)

Both of us read each of the graphic novels independently three times: text only, visual presentations only, and text and visuals together. We took descriptive notes on each graphic novel, and only after one read did we compare notes to determine its representation of disability.

The mere undertaking of this specific study implies a certain set of ethics inherent in our work. As we are, in part, examining this sample of authors’ ethical approaches to presenting disability in graphic novels for youth, we deemed it appropriate to describe our own ethical approach to this study. As Mills (2002) noted:

We have no more reason to exempt the writer from ordinary moral evaluation in carrying out her professional role than the doctor, the lawyer, the politician, the journalist. The author, like any human being, can be held accountable if she makes the world a worse rather than better place. And the moral values expressed by a work cannot be separated
from its aesthetic quality as a whole; what a work says is at least as important in judging its overall aesthetic quality as how the work says it. (532).

In literature for youth, we would expect to see character representation that reflects the significant population of school-aged children who have disabilities. Not only should the number of characters be representative of the actual population, but the treatment of those characters should reflect the variety of physical characteristics, emotional traits, personalities, family structures, and interests that true children with disabilities embody.

In the interest of trustworthiness, we acknowledged at the beginning of the research process that we were not medical or cognitive diagnosticians and thus could not identify any disability in this graphic novel sample that had not been clearly illustrated, described, or referred to by the stories’ characters. Instances occurred in which we disagreed about a character’s disability status; however, these disagreements were discussed until an agreement was reached as to the appropriate way to identify the character. One example of this type of disagreement was the challenge of deciding how to identify Lex Luthor in *All Star Superman* and the Joker in *Batman: Secrets*. We felt that the two characters appeared to exhibit the same behavior, thus one felt that both characters should be identified as having the same disability. The other argued that there were no graphic or descriptive indicators of disability attached to Lex Luthor’s character, whereas the Joker was depicted as being taken to Arkham Asylum, a fictional psychiatric facility, which implied that he was in need of psychiatric assistance. After discussing this issue, we determined that the Joker could be identified as having a behavior disability, but Lex Luthor could not.

To determine disability, the definitions provided in the Individuals with Disabilities Education Improvement Act (IDEA) of 2004 were used. The disabilities included are autism, emotional disturbance, hearing impairment including “deafness,” “mental retardation,” “multiple disabilities,” “orthopedic impairment,” “other health impairment,” “specific learning disability,” “speech or language impairment,” “traumatic brain injury,” and “visual impairment including blindness.” For the purposes of this study, the researchers considered graphic novels to be a standalone book that contains one story or a collection of stories presented in comic format. Although the researchers included manga in their sample, manga differ from other graphic novels in that they are presented in the traditional Japanese book format of having to be read back to front and from right to left.

**Results**

Of the thirty graphic novels in the sample, we agreed that twelve included at least one character with a disability. Using the IDEA terms, the disabilities represented are:

- Other health impairments (seven characters)
- Visual impairments (three characters)
- Orthopedic impairments (three characters)
- Emotional disturbance (two characters)
- Specific learning disability (one character)

Four of the graphic novels in the sample included two characters with disabilities. Of the sixteen total characters, seven were male, nine were female, and one was of indeterminate gender. The question of each character’s ethnicity could not be answered, mostly because of the varied situational combinations of geographic location, written language, and physical appearances. The
gender, disability representation, and genre as manga or superhero for the specific graphic novels are presented in Appendix B.

Based on the Biklen and Bogdan (1977) stereotypes, the most frequent representation was “pitiable.” The five individuals portrayed in this way included two women with visual impairments in Blue Beetle and To Terra, and a female with emotional disturbance in Emma. The only male represented as pitiable was a child with other health impairment in Death, Jr., and the sex of one character with orthopedic impairments could not be determined.

Three characters were presented as being their own worst enemy: two females in Translucent and one male in Stuck in the Middle. The females had other health impairments and the male had a learning disability. Crossing Midnight and Batman both portrayed males with disabilities as evil, the former with a visual impairment and the other with emotional disturbance. Two graphic novels, The Plain Janes and Blue Beetle, had characters with disabilities; however, they were only depicted as atmosphere. The former was a male in a coma and the latter was a female in a wheelchair. Death, Jr. gave a picture of a male child with a health impairment who was the object of violence.

Three characters were portrayed as inclusive members of their communities. A female with a broken leg in Re-Gifters and a male and female with chronic illness due to exposure to radiation in Town of Evening Calm, Country of Cherry Blossoms were presented as part of everyday life with family and friends.

Of the eleven manga books in the sample, four included characters with disabilities: Town of Evening Calm, Emma, Translucent, and To Terra. In two of the books the representation was of pitiable characters, and one depicted characters who were their own worst enemy. Town of Evening Calm featured the only representation that was not stereotypical. Two superhero books included characters with disabilities; neither portrayal was positive.

Conclusions
Based on the results of this study, it appears that people with disabilities are represented in graphic novels; however, those portrayals most frequently fit a negative stereotypical image. The findings are similar to those in the Weinberg and Santana (1978) study that described “physically deformed” characters as either being morally good or evil, but never neutral. Furthermore, as Mellon (1989) and Dyches and Prater (2005) discussed, the majority of creators of this sample of graphic novels largely defined the characters who had a disability by their disability rather than considering the disability as being only one aspect of their individual traits.

Males and females with disabilities were both present; however, more females were depicted as pitiable and only males were shown as evil. Of the two graphic novels with positive representations of people with disabilities, one was manga.

While the number of graphic novels that include characters with disabilities was larger than anticipated, there were many missed opportunities to incorporate people with disabilities into the stories. For example, many of the graphic novels included images of groups of students in school settings; however, students with physical disabilities were not present—no wheelchairs, crutches, or arms in slings. All were portrayed in the normative image of being fully able bodied. Since many disabilities are hidden (e.g., hearing impairments, learning disabilities), the authors
recognize the difficulty of graphically representing some disabilities in these novels; however, people with disabilities and the range of disabilities included in the sample were not representative of the total population.

The results of this study appear to indicate that graphic novel authors, illustrators, and publishers have not provided a realistic representation of people with disabilities in even the “best” of their work. People with disabilities are most often presented in the stereotypical modes that Biklen and Bogdan described in 1977. Cary (2004) described graphic novels in part as acting as visual supports for curriculum subjects and as sources of representational learning opportunities. Concerning the educational role that graphic novels can play, the importance of accurate and fair representations of individuals with disabilities in this format cannot be stressed enough. Children need to see themselves and others in society represented in learning materials.

Several studies have been conducted on the portrayal of disability in literature for youth; however, absent from this body of research is an analysis of the gendered depictions of disability in youth literature. As was determined in this study, the characterizations of female and male characters differed, which may be the case in other formats of literature for youth.

There are limitations to this study. While the research focused on graphic novels for young adults, we are not members of that age group. The sample of graphic novels used (supposedly the best graphics novels of 2008) was selected by librarians who were also not from the young adult age group, which may have biased the sample. We only analyzed those graphic novels included in the study, excluding others within a series or within the corpus of work related to individual characters. The latter exclusion, for example, meant that we could not include information in the study about the background of Blue Beetle’s Oracle, who is only briefly presented as a female in a wheelchair. In other graphic stories, the character of Oracle has her own prolific storyline, including a rich history involving her alternate personae, Barbara Gordon and Batgirl. Despite the researchers’ knowledge of Oracle’s role as a superhero who provides assistance to others in various graphic stories, there was not enough material about her in Blue Beetle to ascertain the strength of this character. Therefore, further research needs to be conducted to determine the views of young adults about representation of people with disabilities in graphic novels and to broaden the sample beyond the “best” graphic novels.

Studies have demonstrated the importance of realistic presentations of people with disabilities in materials for youth (Ayala 1999; Dyches and Prater 2005; Heim 1994; Mellon 1989; Mills 2002; and Riley 2005). When more than 9 percent of the American student population qualifies for services under the IDEA (U.S. Department of Education, 2007), materials that share honest portrayals of people with disabilities are important to the development of acceptance and understanding of the disability experience by those who have disabilities and those who do not.

Works Cited


*Individuals with Disabilities Education Improvement Act of 2004*. U.S. Code 20, Å, Å§Å, Å§1400 et seq.


American Library Association, 

Cite This Article


Appendix A. Graphic Novels Included in the Sample

Castellucci, C. and J. Rugg. The Plain Janes. 2007. DC/Minx. Disability(ies) Presented: Other health impairment: Coma
Kouno, F. Town of Evening Calm, Country of Cherry Blossoms. 2007. Last Gasp. Disability(ies) Presented: Other health impairment: Chronic illness due to exposure to radiation
Disability(ies) Presented: None

Mori, K. *Emma, vol. 5*. 2007. CMX.
Disability(ies) Presented: Emotional disturbance

Disability(ies) Presented: None

Disability(ies) Presented: None

Disability(ies) Presented: Other health impairment: Disappears

Disability(ies) Presented: None

Disability(ies) Presented: None

Disability(ies) Presented: Specific learning disability: Attention deficit hyperactivity disorder

Disability(ies) Presented: Visual impairment

Disability(ies) Presented: None

Disability(ies) Presented: Orthopedic impairment: Paralysis

Disability(ies) Presented: None

Disability(ies) Presented: Other health impaired: Connected to tubes; Other health impaired: Twins attached at the head

Disability(ies) Presented: None

**Appendix B. Representations of People with Disabilities in Sample Graphic Novels**

Gender: Female
Representation: Inclusive presentation with natural friendship.

Gender: Male
Representation: Evil, maniacal

Gender: Male
Representation: Atmosphere

Gender: Two females
Representation: Atmosphere; pitiable
Comic type: Superhero
  Gender: Male
  Representation: Evil, maniacal
  Comic type: Superhero

  Gender: One male and one female
  Representation: Presented as part of everyday life
  Comic type: Manga

Mori, K. *Emma, vol. 5*. 2007. CMX.
  Gender: Female
  Representation: Pitable
  Comic type: Manga

  Gender: Two females
  Representation: Own worst enemy
  Comic type: Manga

  Gender: Male
  Representation: Own worst enemy

  Gender: Female
  Representation: Pitable
  Comic type: Manga

  Gender: Not specific
  Representation: Pitable

  Gender: Two males
  Representation: Pitable; Object of violence

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The Impact of New York’s School Libraries on Student Achievement and Motivation: Phase III

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Abstract
This article reports the results of the third and final phase of a two-year research study on the impact of New York State’s school libraries on student achievement and motivation. Results of Phase I and Phase II are briefly reviewed to provide the context for phase III methods and findings. Phase III comprised (1) qualitative research that included focus groups and interviews held in ten selected schools with school librarians, classroom teachers, building principals, students, and parents; and (2) a more ethnographic approach in two exemplary school libraries, including observations over a period of ten weeks and interviews with principals and classroom teachers. Results are reported in the areas of Learning and Motivation (including Research & IL Skills Development/Motivation and Reading Skills Development/Motivation), Librarian-Teacher Collaboration, Technology Use, Inclusion, Administrative Support, Outreach, and Library Environment. The article culminates with implications for practice.

Introduction
A two-year research study on the impact of New York State’s school libraries on student achievement and motivation, funded by a National Leadership Grant from the Institute of Museum and Library Services, included three phases. The research began broadly with an online survey to all school librarians and building principals in the state (phase I) with a response rate of more than 38 percent of librarians and 13 percent of principals. A representative sample of 47 schools was selected to participate in the phase II in-depth surveys. This article focuses on the results of phase III of the research, in which interviews and focus groups were conducted in ten selected schools and an ethnographic study was conducted in two additional schools.
Prior Research

This research is the final phase of a three-phase research study on the impact of New York State’s school libraries on student achievement and motivation. Phase I consisted of a general online survey administered to 1,612 school librarians and 562 building principals from schools throughout the state (Small, Snyder, and Parker 2009). The general survey consisted of Likert-type multiple-choice items, demographic items, and one open-ended comment item (Small and Snyder 2010). Phase II consisted of in-depth surveys to probe more deeply into some of the areas of interest uncovered in phase I (Small and Snyder 2009). Surveys were administered electronically to 47 school librarians, 134 classroom teachers, and 1,153 students in 47 schools throughout New York State that had participated in the general survey. The in-depth survey consisted of Likert-type multiple-choice questions, a ten-item rating question, and an open-ended critical-incident probe (Small and Snyder 2010).

Results from the previous two phases of this research study supported previous research efforts (e.g., Lance, Wellborn, and Hamilton-Pennell 1993; Todd 2006) by demonstrating a positive relationship between school libraries and student achievement, regardless of educational need (school district or student poverty) or the financial resources of the school district. A summary of findings for phases I and II are presented below. Results are categorized by five main areas of research interest: Learning and Motivation, Librarian–Teacher Collaboration, Technology Use, Administrative Support, and Inclusion (services, technologies, and resources for students with special needs).

Learning and Motivation

- A majority (69 percent) of participating fifth, eighth, and eleventh grade students visit their school library at least once a week, and most students (72 percent) use the library for research.
- Elementary students in schools with certified school librarians are more likely to have higher English and language arts (ELA) scores than those in schools with noncertified school librarians.
- Certified school librarians are more likely than noncertified school librarians to make a point of selecting materials for their library collections that represent different points of view and that support the general curriculum.
- The school librarians’ perception of the library program’s ability to motivate students to learn is significantly correlated with the importance he or she places on teaching information literacy (IL) skills.
- After controlling for needs-to-resource capacity (poverty level), elementary school librarians use more motivation strategies in their teaching than school librarians in either secondary or K–12 libraries.
- School librarians’ perceptions of their impact on teaching IL skills (using and evaluating information) are greater than the perceptions of classroom teachers.
- All who responded to the critical-incident item reported situations related to school librarians teaching students to find useful information.
- Classroom teachers’ perceptions of the impact of school librarians on teaching IL skills (finding and using information) are greater than the perceptions of students.
- School librarians’ perceptions of their impact on teaching IL skills (finding, using, and evaluating) and technology use are greater than the perceptions of students.
School librarians rated “providing information resources for teachers and students” as their most important role whereas classroom teachers perceived “motivating students to read” as their librarian’s most important role.

**Librarian–Teacher Collaboration**
- School librarians perceive a greater level of collaboration with classroom teachers than classroom teachers perceive.
- Although it was not one of the highest scoring areas on the in-depth survey, both school librarians and classroom teachers described frequent librarian–teacher collaborations in their critical-incident responses.

**Technology Use**
- The school library plays an important role in many aspects of technology use in their schools.
- Both students and classroom teachers rated “motivating teachers to use computers” as the least important role for school librarians.
- Fifth and eighth grade students’ perceptions of the impact of the school librarian and the school library on their Learning and Motivation are greater than the perceptions of eleventh graders on all scales except technology use.
- Both school librarians and classroom teachers ranked technology support for teachers as least important.
- As indicated by responses to the critical-incident item, all groups reported frequent use of technology and resources in multiple formats for helping students find information they needed for assignments.

**Administrative Support**
- Principals have perceptions of higher autonomy supportiveness for their school librarian than school librarians’ perceive they have.

**Inclusion**
- School librarians report lower levels of technology and physical accessibility to resources for students with disabilities than other services and resources.
- Mean scores by school librarians for services to students with disabilities accounted for several of the lowest scores on both surveys.
- The provision of assistive learning technologies in the school library and attention to individualized education programs (IEPs) received the two lowest scores from the school librarians.
- Elementary school librarians’ perceptions of their use of IEPs to provide differentiated instruction to students with disabilities were greater than perceptions of secondary school librarians.
- No school librarian reported providing separate instruction to students with IEPs.

**Phase III Research**
The purpose of the phase III research was to focus on a small number of school libraries and their librarians who had participated in the previous two phases, which would allow us to probe areas of interest and identify specific examples where school librarians are having an impact on...
members of their school communities and beyond. In phase III we selected ten of the 47 schools that participated in phase II to be a part of audio-recorded focus groups and interviews. We held sessions with school librarians, principals, teachers, students, and parents.

Subsequently, using ethnographic research methods (observations and interviews), we selected two schools in which to further study areas of interest identified in previous research. Observations over ten weeks were conducted to document the school librarian’s interactions with school administrators, classroom teachers, and students, and a series of six interviews with principals and classroom teachers was conducted in those two schools. Based on findings from the two previous phases, phase III focused on six areas of inquiry: Learning and Motivation (in the areas of Research & IL Skills Development/Motivation and Reading Skills Development/Motivation), Librarian–Teacher Collaboration, Technology Use, Inclusion, Administrative Support, and Outreach.

**Instruments**

Focus group and interview protocols were developed, tested, and revised before implementation (see Appendix). We developed protocols for school administrations to volunteer school librarians, principals, classroom teachers, students, and parents. Some questions were identical across all protocols (e.g., “If you could only use one word or phrase to describe your school library, what would it be?”), some were identical except for only slight wording changes (e.g., “Can you tell me how you use your school library?” was changed to “Can you tell me how your child or children use your school library?” for the parent focus group and “Can you tell me how your teachers use your school library?” for the principal interview), and some were unique to a particular focus group (e.g., “Have you ever collaborated with your school librarian?” for classroom teachers and “Has your school librarian ever taught you something you didn’t know before?” for students). Each question had one or more follow-up questions.

**Participants**

From the 47 schools that participated in phase II, we chose ten for phase III on the basis of geographic location, need/resource capacity (N/RC) level, size (small < 400 students; medium 400–900 students; large > 900 students) and grade level (elementary, secondary, or K–12). Enrollments in the selected schools ranged from 208 to more than 2,000 students. One urban school was located in a mid-sized city whereas four were in different sections of a large city. The participating schools were described as follows:

- Small, urban elementary school (pre-K–5)
- Small, rural elementary school (K–5)
- Small, rural all-grade school (pre-K–12)
- Medium, urban elementary school (K–5)
- Medium, urban elementary school (K–5)
- Medium, suburban middle school (Grades 6–8)
- Medium, urban elementary school (pre-K–5)
- Large, rural junior/senior high school (Grades 6–12)
- Large, suburban high school (Grades 9–12)
- Large, urban elementary school (K–5)
In these ten schools, we held focus groups with fourth, eighth, and eleventh grade classroom teachers; fifth, eighth, and eleventh grade students; and parents, all of whom volunteered to participate. The grade levels are consistent with those targeted in phases I and II (see Small and Snyder 2009; Small, Snyder, and Parker 2009). One-on-one, face-to-face interviews were held with building principals whereas online focus group sessions were conducted with the librarians because their schools were distributed in locations throughout New York State.

We selected two schools to participate in the ethnographic part of this study. Selection for this final part of the research focused on characteristics of the librarian rather than the school—the two selected school librarians were categorized as “exemplary” by their library administrators using New York State Department of Education criteria. The sites represent elementary and secondary levels; both are suburban, low-needs schools. Both librarians are tenured, experienced professionals; one has teaching credentials, the other has public library experience. Both librarians are proactive members of school committees and professional organizations; one is more focused on technology, the other is more focused on leadership activities. Each of the sites and librarians is described in more detail below.

Site 1
Site 1 is a suburban elementary school with approximately 900 students in grades K–5. The student stability rate is 94 percent, and about 16 percent qualify for free or reduced-price lunches. Ninety percent of the students are classified as white, and only two students have limited English proficiency. This is a school in good standing on all of the required state tests. The Site 1 Librarian has been the school librarian for more than nineteen years after working for more than seven years in different roles in other libraries. She has a mixed schedule of classes, each with a specified time in the library and open access for “just-in-time” use. She is active with the school and serves on different committees, including the Curriculum Committee and the Building Technology Committee. She is also active in professional organizations focused on providing technology support.

Site 2
Site 2 is a suburban middle school with approximately 850 students in grades 6–8. The student stability rate is 97 percent, and about 23 percent qualify for free or reduced-price lunches. Ninety percent of the students are classified as white, and only six students have limited English proficiency. This is a school in good standing on all of the required state tests. The Site 2 Librarian has been a school librarian for eight years after working as a teacher in public schools for more than ten years. Her library is on a completely flexible schedule. She is active within the school and serves on different committees, including the Strategic Planning Committee. She is also active in professional organizations serving in various leadership roles, presenting in numerous conferences, and writing for professional publications. In addition, she serves on a public library’s board of trustees and is on the advisory board for an educational institution. She has also submitted for and received numerous grants.

Methods
After conducting a general survey of librarians and principals in more than 1,600 New York schools and follow-up, in-depth surveys of 47 selected schools, we determined that a third phase of research using a more qualitative approach was warranted. This approach would give us a
more intimate look into areas of interest that have an impact on student Learning and Motivation with a broader range of stakeholders.

Phase III comprised (1) qualitative research that included focus groups and interviews held in ten selected schools with school librarians, classroom teachers, building principals, students, and parents, and (2) a more ethnographic approach in two exemplary school libraries, including observations over a period of ten weeks and interviews with principals and classroom teachers. Ethnographic research allows direct observation of the person of interest’s behavior over time, supplemented by interviews with key others. We selected the two exemplary school libraries because their school library system directors graded them as “exemplary” library programs using New York State Department of Education criteria.

**Qualitative Research**
Focus groups were conducted by trained research assistants living near the selected schools. The research assistants audio-recorded and later transcribed all sessions for analysis. The focus groups included 33 classroom teachers, 37 parents, and 53 students from the ten schools, and each building principal was interviewed. A translator (the school’s parent coordinator) was used as an interpreter for one focus group in which all participating parents spoke only Spanish. Seven of the ten school librarians took part in two separate focus group sessions held and recorded electronically using Elluminate, a real-time online collaboration software, and moderated by the primary researcher of this study. The three other librarians were unable to participate in either of the Elluminate sessions because of scheduling conflicts.

**Ethnographic Research**
Two research assistants, trained in ethnographic-data-collection techniques, were each assigned to one of the two selected sites. Each spent ten weeks on-site (90 hours), observing the school librarian’s activities and interactions with administrators, classroom teachers, parents, and students. Observers were instructed to take notes on the school librarian’s interactions (particularly those demonstrating support from others) and activities (e.g., collaboration, instruction, technology use, and service to students with special needs). While observations were mainly based in the library, whenever possible the researcher observed the school librarian when she went to other parts of the school building. At site 2, the researcher was excluded from some of the librarian’s meetings with principals and library aides because of confidentiality issues.

In the final week of observations, the research assistants conducted a series of audio-recorded interviews with the building principal, school librarian, and four classroom teachers at each school. The research assistant selected the classroom teachers on the basis of having had multiple interactions with the librarian during the period of observation. Research assistants recorded notes from observations and interview responses electronically using word-processing software on notebook computers. All data were collected in electronic format.

**Results**
The research assistants transcribed all of their recorded observations, focus groups, and interviews. Two independent coders, trained in content analysis methods, analyzed the focus group and interview data and observation notes using the six code categories of interest that were derived from the findings in phases I and II: Learning and Motivation, Librarian–Teacher Collaboration, Technology Use, Inclusion, Administrative Support, and Outreach. Once all data
were analyzed, the coders compared their analyses to identify any instances of disagreement in the coding scheme. All such instances were resolved, resulting in 100 percent coder agreement.

Results of the analyses are presented by category, integrating examples from observations and interactions with classroom teachers, building administrators, students, parents, and school librarians. This section concludes with a summary of phase III findings.

**Learning and Motivation**
The category Learning and Motivation addresses examples that demonstrate ways in which the school librarian has influenced student Learning and Motivation to learn. As one might expect, this category had the largest number of activities and comments of the six coding categories. Learning and Motivation data were first identified by this broad category but were later broken down into two subcategories, Research and IL Skills Development/Motivation and Reading Skills Development/Motivation.

**Research and IL Skills Development/Motivation**
With the rise of electronic resources, school librarians are educating students how to find, select, use, and evaluate reliable resources on the Internet. The subcategory Research and IL Skills Development/Motivation was used to classify data that revealed education around research concepts such as IL skills; the ability to find, evaluate, and cite both print and electronic resources; and the motivation to use those skills. In her interview, a rural elementary-level principal recalled with a smile her sixth grade daughter telling her, “Mom, you can’t just put into Google ‘manatees’ because [our librarian] said that anything can pop up. You really have to go to direct sources on that.”

Another principal described with pride an example where the librarian worked with both students and the teacher to create an exemplary learning product.

> The librarian helped the students and the teacher research information on the Iroquois using the Internet and with the books in the library. They researched the information for the project and they created a PowerPoint presentation . . . that is able to be used with any class in the building and students outside of [our school]. (Urban elementary principal)

The Site 2 Librarian’s principal stated in an interview:

> I see very much already that she is considered an instructional leader, teacher leader within the building. Staff members go to her for curricular support, instructional support. When she is in the library she will often team teach with teachers’ lessons. She provides more than just stereotypical assistance and support. (Suburban middle school principal)

Classroom teachers provided some rich examples of situations in which the school librarian had an impact on student learning of research skills.

> Twelfth grade anatomy and physiology. Used online databases. [Our librarian] presented how to assess the materials (primary and secondary research, to expose them to what is happening at research facilities, universities, medical centers,
Department of Energy based online sources). [Our librarian] was more than helpful in teaching them how to differentiate what is primary or secondary research. Next semester I’ll bring my AP bio class and she’ll teach them video streaming. (Rural junior/senior high school teacher)

Yeah, a concrete example for me is I had a student work on a government project, he wanted to interview other students about school violence and bullying, and so [our librarian] walked him through how to use a digital video camera, and [the student] did interviews, brought it back to a computer, downloaded it, and he created this moviemaker ten-minute thing. . . . So I think [our librarian] is willing to lend those different pieces of technology and sit down with students and help them. And when other students see them using that: “Hey, how’d you do that? I’d rather do that, that’s kind of cool, how’d you do that.” Then I think word spreads kind of quickly: “Hey (our librarian) will help, go talk to her and check it out.” (Suburban high school teacher)

I’ve also seen [our librarian] deliver a lesson on using reference materials on a certain unit we were doing in language arts. She was showing the students where different information could be found, how to use that information, and what to do with it once they’ve finished with it, but also in her lesson she was very personable with the students. I mean she has a rapport with all the students here, so she was trying to engage them and make the reference material interesting to them because it was a biographical research paper that they were doing and she had a plethora of books that she was throwing out on the table and calling out topics like Women in Sports and Military Leaders. The students were flocking to the books and calling out “I want that one!” which was great, and I was trying to damper my students’ enthusiasm for it but [our librarian] said it was fine and let them have it. I thought that was great, and it was a clue to me that sometimes you have to step back and let kids be kids. So it was a great lesson in terms of showing them how to find the reference materials, but also to get them interested in that material, which could sometimes seem a little dry. (Suburban middle school teacher)

Students were also enthusiastic about ways in which their school librarian helped them learn important research skills. One student remarked, “One thing she taught me is how to use a search engine. Now I know Google and Ask and also Dogpile. They help you to find information you want.” (Urban elementary student)

Parents also demonstrated an awareness of how their school librarian was improving their child’s learning. Here are two examples:

While in here [the library], [students] have assistance of a librarian to help them focus on what they need to find. Classes have to present projects with outside information, and my son gets this information off the Internet. [He] has learned skills in finding information and seems to use it successfully. I have seen papers which show he knows how to do this. (Rural junior/senior high school parent)
Yeah, reputable sources is big. You know the kids can go on the Internet and find God-knows-what, and you don’t know if it’s really good or not. I know they’ve checked, the [librarian] helps them check. (Suburban high school parent)

During the online focus group, librarians were asked to describe a situation in which they taught research skills to students. A few examples are provided below.

I try to teach students . . . how to put some thought and planning into their research project and how to gain information. Thinking about what exactly it is that they are looking for and what types of things are appropriate for them . . . also to know that they have support, that I can help them whenever they need it. I always stress with my students that they can call me at home. I put my phone number on the research guides that I give them, and I periodically do get calls at home with students that are having trouble getting into a database or have questions about how to do a bibliography. (Rural junior/senior high school librarian)

A lot of my students don’t understand how to, why it’s so important that they know where they had gotten their information from, and giving credit. And plagiarism is a huge issue in my district right now. And just teaching them how it’s okay to use information other people have put out there but you have to let others know where they get their information. (Rural pre-K–12 librarian)

I don’t know if it’s a skill or not but I would say respect. Respect for books, for each other, for information, for equipment. (Urban elementary librarian)

In our ethnographic data, observation notes reveal many examples of librarians teaching IL skills to students, often using a variety of motivational strategies. For example, the Site 1 Librarian explained to a group of students what intellectual property is and what it means to steal someone else’s intellectual property. She used The Simpsons as an example and the kids immediately started asking more questions.

In another example, the Site 1 Librarian began a lesson on Boolean logic and Venn diagrams using hula hoops. After a quick review of the Venn concept, she divided students into groups and used the hula hoops to form the Venn diagram. This grabbed the students’ attention from the beginning and engaged them both intellectually and physically in the lesson. When some students had trouble grasping the concept, she asked, “Would you like to borrow an expert?” She sent them a student who really understood the concept, allowing the expert student to perform the highest level of learning (teaching others), and the students that were having trouble had the concept explained in terms they could understand by one of their peers.

The Site 1 Librarian’s principal described her teaching of IL skills in this way:

Last year [she] did something very interesting. She did a series of lessons on Boolean operators, and she just taught that every way possible. She did this great lesson—you know candy bars and it’s chocolate AND nuts! And you know which ones—and it is just a rip. And she had color transparencies and I mean it was—
and I don’t mean this in a derogatory way—but it was the dog and pony show! 
*Boy the kids, you know! They will never forget but it was all about Boolean operators and why/what they were built for, and Internet searches. (Suburban elementary principal)*

The Site 1 Librarian has also held several workshops for teachers about fair use of materials.

The Site 2 Librarian was teaching a class on “citing your source.” She began by stating, “When you find the tool, that perfect book, the first thing you are going to do is cite your source.” She then asked the class, “What does that mean?” Once students understood the concept, she provided immediate relevance by explaining, “Next week you may be talking about your career choice and someone asks you where you found the information, and if you haven’t cited the information, you will not be able to provide them the answer.” Later, when she was in her office eating her lunch, a student walked in asking for help with his presentation’s works-cited page. She stopped eating and showed the student how to get to the MLA citation maker page, how to fill out the form, and how to cut-and-paste the citation into his presentation.

**Reading Skills Development /Motivation**

The act of promoting (through various strategies) reading and writing; introducing new genres, concepts, and authors; and motivating students to read appears to be the most important aspect of the school librarian’s role to all groups. In an environment where standardized tests serve as a performance benchmark, school administrators have found that library circulation statistics reveal behavior patterns that may be strong predictors of a student’s ELA performance. This is reflected in the following responses from two different principals.

*The biggest different in that our ELA scores and reading scores have gone up steadily from when we got the library. This is great because we . . . have a large population of students with special needs. In addition, the students all want to go to the library and get books for their independent reading. That shows they are enjoying reading. . . . I correlate library visits and book circulation with children’s test scores and I look at student scores, and if children are not progressing I look to see how many times they circulated a book from the library or how many times their teacher has taken them to the library. And I found there is a direct correlation with the number of books circulated and the scores on the ELA assessment. (Urban elementary principal)*

*Well, you know part of what I think is special about [our librarian] is that she just has this high level of commitment to making the library a hub of the building . . . for the children for the teachers, for the families, and it is not just a place to come a pick out a book, you know it is a place to—it is an incredibly supportive place to come a listen to a story because . . . that is the best place to hear someone read to you. So [our librarian] said why don’t we all just pick our favorite books and we will take a picture of everybody and you know put it on [our website]. So that is what we did and that was her brainchild and it was really great. (Rural pre-K–12 principal)*
Most of the interactions with classroom teachers in the library were during reading and literature appreciation activities (this was the librarian activity that received the highest rating of importance by teachers in phase II). In the teacher focus group, one teacher described a motivating strategy the librarian used to stimulate reading:

[Our librarian] has a PowerPoint slide of book reviews, puts them on the TV, when kids are in library, they can see book reviews by other kids in the school, encourages them to see what their peers are doing. During study hall my students have books for enjoyment, reading on their own for pleasure. (Rural junior/senior high school teacher)

Students at all levels recognized the important role their school librarian plays in stimulating their reading and fostering an appreciation of literature. This area elicited the most frequent comments from students. A few examples are provided below.

[My librarian] showed me some articles on the Internet about haikus and poetry, and I’d never seen anything like it before. I actually have my favorite poems and I look at them sometimes (Suburban high school student)

[My librarian] always introduces me to great books because she knows about me and she knows what I like. She recommends good books for me and then I get lots of reading practice. That makes me a good reader. (Urban elementary student)

She knows me so well, she points me to the books that I’d want every time. She’s like “I know what you’d like” and she nails it. (Rural pre-K–12 student)

She taught me how to find books of the same genre and also how to look for books by the same author. That is a good thing. That helps me find books I like. If you like this book then you might like this other book. If you like this author then you might another book by this author. It helps me to do this to find more books I like to read. (Urban elementary student)

So if you’re like my sister who inherited all the athletic skills in the family . . . but I don’t like to run around and stuff like that. I am a very avid reader, and it only takes me a very short time to read a very thick book, so I’m always in the library for a new book I haven’t read. I’ve read Harry Potter, I’ve read A Series of Unfortunate Events, and I started Harry Potter in third grade and I’ve been reading books like that ever since (Suburban middle school student).

One suburban high school student explained how the library allows him to access books that he could not otherwise afford. He states, “I only like a certain type of books and they’re really expensive and, um, my mom and I we really can’t afford it, so she’ll let me know that they actually have them here and they get new ones and stuff, so she said that if I come in advance, I can get one saved for me.” A similar example was provided by an urban elementary parent about books and her child: “I cannot afford to buy my child books and the public library is not easy to get to, so this really helps my child because he always can get great books to read and the librarian can help him choose books he likes.”
When asked to describe ways in which they motivate student reading, the librarians cited a variety of strategies, often involving students in the process.

One way that we have promoted books and reading has been in the displays that we have, both in the library and the display cases just outside the library. We target different types of books, have different themes, and I find that that has really—especially the displays that are in the hallway as people are passing by—that has really caught kids. And a lot of times they are coming and they are requesting the books that they are seeing in the display cases. So that has helped a lot. And I think that making displays attractive and interesting kind of motivates them also to look at the books that we have on display. Secondly, I have a PowerPoint of different book reviews that runs constantly—it just loops—in the library. And they’re reviews that kids have written so as they’ve read a book, they write a very, very short review on it and it’s there to help students as they come in and they are looking for a book. They can look at the screen and see, well, here’s something that someone their age enjoyed. So, that’s helped promote some of the books we have. (Rural junior/senior high school librarian)

The graphic novels we got in have a HUGE, huge draw. And the fact that we built the reading area in our library and now have magazines, popular magazines with the kids, so they’ll actually come in on their free time, sit in their reading area and look at magazines, and they are reading them. They are reading Sports Illustrated, ESPN, and People and Teen and all those. And then the graphic novels, we can’t keep them on the shelf. So when they are off the shelf, we try to get them interested in the others. But just ordering books that the kids request is another big draw. (Suburban high school librarian)

When I do my paperback order, I have some fifth graders come down and they go through the catalogs and they decide what books we should buy. (Urban elementary librarian)

One rural librarian mentioned interlibrary loan as an essential service for her library.

Interlibrary loan has really increased the amount my students are reading. They get a favorite author and there are sequels and we’re able to get them in quickly. We do a lot of interlibrary loan. I try to order the things the kids are getting in that . . . they want to read, but it really adds to the depth of our collection. (Rural pre-K–12 librarian)

At our ethnographic sites, we found many examples of situations in which the librarians helped students with their reading choices and engaged students in helping decide which books to order for the library.

When helping students select which books are most appropriate for them, thereby increasing their reading confidence, librarians might do storytelling or book talks with groups of students, or guide students one-on-one. For example, the Site 2 Librarian walks around the library, helping students find that “perfect” book. As she does this, she
presents mini-book talks to convince a student to choose a book. While observing this, one student tells the Site 2 Librarian that she will trust whatever she finds for her.

Helping students “take ownership” of their library by seeking their input on library policies and book choices increases their engagement and self-esteem. For example, we observed the Site 2 Librarian asking a student her opinion of a graphic novel series that had been recommended and to provide a name of a graphic novel series she thinks will appeal to students in the school. The Site 2 Librarian also checked some books out of the local public library and had students read them to provide recommendations for purchases. One student said that the Site 2 Librarian should order the book that she had read.

Librarian–Teacher Collaboration
The category Librarian–Teacher Collaboration encompasses examples that demonstrate a collaborative culture in which librarians and classroom teachers see the value, importance, and benefits of collaboration to themselves, each other, and their students (Small 2002). The complexity of the collaborative activity falls along a continuum from simple resource provision to total design, delivery, and evaluation of instruction. The following examples, provided by building administrators, librarians, and classroom teachers, demonstrate various points along that continuum.

The most recent [collaborative] project I did with [our librarian] actually we just finished—the kids just finished it. We did a PowerPoint presentation on a reformer from the early 1900s, and like I said before, she’s really good at getting the resources we need to provide for the students to be successful. With her the collaboration usually comes up front, and then we talk about what we want to do and what worked well and something for future years so that the project can work even better. (Suburban middle school teacher)

The librarian has copies of all the standards and curriculum for every grade. The librarian will meet with teachers in the beginning of the year for teachers to sit down and talk about what are the curriculum needs and what are the standards that have to be met in each grade. The librarian will set her schedule up to meet the teacher’s need and will meet with the teachers periodically to make sure those needs are carried out. (Urban elementary principal)

Yes, we have worked together. I come with my class to do research. The librarian does a mini lesson that involves research or searching on the Internet. She also sometimes uses videos that connect to the curriculum, and this really helps my students. She also helped a lot with the social studies curriculum to help to prepare for the social studies statewide test. (Urban elementary teacher)

In collaboration with the lessons that we might be focusing she’ll do a lesson to follow-up, which might also include some work on the computer to do it differently. Whereas with the book-learning they get to see things on the computer, for instance when we did a trip to the dentist they go to actually do a little trip with a little girl and boy going to the dentist [on the computer] and that was fun. (Urban elementary teacher)
I have a living environment teacher who brings her class in to do research on disease, and I create a research guide—kind of a pathfinder-type guide that follows the basic process, and so it gives them guidelines on how they, on the steps they should take to follow their research. And within that guide I will—I give them suggestions of where they could go to find information. I give them help with passwords for databases, things like that, suggestions on different keyword searches they might want to do. But at the same time, I also provide typically in like a computer lab with projection, I show them how they can access, how they can search—just how the resources are used, basically. (Rural junior/senior high school librarian)

There also were several examples of higher-level collaboration in which the librarian and teacher co-planned and co-taught lessons. One collaboration lead to a principal deciding to institutionalize higher-level collaboration as a regular librarian–teacher activity.

Something new with [our librarian] is the fact that she demands that they [classroom teachers and librarians] co-teach. So it isn’t just, “You’re coming to do a content on topic x, here’s some resources, here are some books on a cart.” It’s, “We’re going to do this together, and the kids are going to see both as instructional leaders,” which then—when the kids do something outside of class—they can access [the librarian] because they know she’ll have the information as well. (Suburban high school principal)

I try to imbed my instructional program into the curriculum and into what each of the classroom teachers is involved in as much as possible. That’s sort of the point . . . where I begin collaboration with the teachers, is first to support them with the resources they need, and then to tailor both my informational technology skills that I would like to pass on to the students as well as my information literacy goals to align with standards and to use what they are doing to support and extend the teaching and the curriculum that we have going in our school. (Rural elementary librarian)

I use the library in many ways. First, I use it for my own research when planning my lessons. I also plan collaboratively with the school librarian to teach students skills that help them to be better readers and information users and researchers. I also bring the class here to do research and to choose books for their independent reading. (Urban elementary teacher)

Yes, [the school librarian and I] collaborate and we always have these collaborative discussions. We are able to have discussions with [the librarian] about regular curriculum and what we’re doing and how can we translate that to what we’re doing in class. For example, in February we’re going to be doing biographies in my class, and we are going to translate the biography into reader’s theater. We’re going to be doing reader’s theater in my class. We are going to be highlighting Marion Anderson. She is one person we are going to be focusing upon. The kids are very excited about it. The kids are interested in singing. I have several kids in my class that like to sing, and it’s because of [the librarian] being so enthusiastic about it and I’m being so enthusiastic about it. Yes, they are really excited! (Urban elementary teacher)

We use the library as an enrichment model. It is not a cluster or a special position. It is the opportunity for enrichment and to promote the love of literacy through the building.
So we have collaborative team teaching classes—co-teaching I should say—where the teacher and the librarian teach together around science and/or social studies to enrich those opportunities for our kids and give them the opportunity to do research on the computers we have here. (Urban elementary principal)

A unique example of collaboration occurred in the ethnographic elementary school. The Site 1 Librarian asked members of the community to bring different kinds of trucks that are present in the community to the school one evening. Students and parents were invited to the event to learn about the uses of the trucks in the community. The event was a huge success, and although there wasn’t collaboration within the school, there was collaboration between the community and the school librarian.

A number of librarian–teacher collaborations were noted in the research assistants’ observations. For example, the music teacher came to the Site 1 Librarian’s library to plan the events for Veterans Day, something they have done for many years. The music teacher brought an agenda and wanted the Site 1 Librarian to take a look at it when she had a chance.

The Site 2 Librarian collaborated with a classroom teacher to teach a unit that would require students to use library resources (both print and online) to find information that would eventually be synthesized into a PowerPoint presentation. This is a unit that they have taught together several times, and each time it is adapted for improvement. The unit is frequently team-taught, but at certain times either the school librarian or the classroom teacher will take the lead. Both are responsible for assessing the students’ work at the completion of the unit. Soon thereafter, the Site 2 Librarian and the collaborating teacher meet to discuss what worked and what didn’t and to make notes for improving the unit.

In interviews, teachers described their experiences collaborating with the Site 2 Librarian. One teacher remarked that the Site 2 Librarian takes on a leadership role when they are teaching a particular unit and that she also provides support role to the teacher and the students as necessary. Another teacher commented that it was nice to have someone else in the classroom that has knowledge different from her own.

**Technology Use**

The category Technology Use represents those instances in which the school librarian serves to promote technology and share its benefits with students, classroom teachers, and building administrators. In phase II, classroom teachers rated “motivating teachers to use computers” as the least important role for librarians out of ten choices, but many of the phase III focus group comments from teachers appear to contradict that opinion. For example:

_I know that I benefited because . . . I am not computer literate, computer savvy. So I actually benefited by being a part of lessons that [the librarian] has done. Actually, about a year or so, I had a third-grade class . . . doing a unit on Russia and [our librarian] did a streaming video—a beautiful presentation where he had a clip of a typical little boy expressing what his day is like in Russia. It was exciting; rather than just reading about it you can see it. That brought it alive! (Urban elementary teacher)_

_I was just recently doing this type of research with our government papers, [the librarian] was talking about new online databases that she had and she was using the_
smart board to do it, so she was demonstrating the appropriate technology. Like we said before, she’s really engaging, outgoing, students respect her, and respect the fact that she knows the answers to a lot of questions they’re gonna have. So I think it’s like a mini-lesson, ten or fifteen minutes—we went over bibliography format and things like that—for her to take control of that and me to not have to worry about that. I don’t know how to use a smart board necessarily. I don’t know how to tell what databases are going to be best for this research. For her to do all that ahead of time and come in for fifteen minutes . . . and present that in a way for students to relate, I think is beneficial for them and for me. (Suburban high school teacher)

The librarians also provided a number of examples of ways in which they teach and support classroom teachers in the use of technology:

Last year our school asked the teachers what kind of professional development they wanted, and 90 percent of them wanted to learn more on technology. So that’s where I spent my Tuesdays after school, . . . teaching teachers ways that they can integrate technology into their classroom. I greatly enjoyed it. It was fun. It was very fun. (Suburban high school librarian)

I do projects with the teachers. We have one teacher who is technologically deficient, and after I went to a library meeting and learned about culture-grams, I brought it back to the school and I talked to the teacher, and we had a class use that program to do a project. And I showed her how to do video conferencing and she started teaching lessons with it. (Urban elementary librarian)

I like to be a technology advocate because I’m on technology committees here with our district. So when our occupational therapist and our physical therapist found that they didn’t have the type of IT equipment that they needed, . . . I really pushed for them to get what they needed. So kind of in an off-handed way [I] helped to support them in what they did in their jobs. I also included MP3 books this year, added to my collection in a limited way to see how they hold up, for the kids who have a hard time reading. I also brought in two Alpha Smart portable computing carts so that the kids can use those for those that have really poor hand-writing skills and processing skills and things like that, and they’ve taken off like wildfire. (Rural elementary librarian)

I feel I sometimes model for teachers the different types of technology they can be using in their classrooms, like the Elmo and overheads, to put together slide shows, helping them on their web page. We’re a very small district, K–12, 350 students. Technical help is far and few in between, so lots of times I act as the technician to help them solve their problems. (Rural pre-K–12 librarian)

Librarians recognize the importance of both using technology themselves and teaching students how to effectively and ethically use technology. One librarian stated,

I’d like to think that I’ve impacted the students in a few different ways. One way would be the fact that I always use technology when I’m teaching them. Typically it’s the computer and a projector—not terribly sophisticated technology, but I think they see me using it and that helps them. And in my instruction I also try to promote as a type of resource
databases and Web evaluation because they’re all very excited to jump on and Google, but most of them have really not learned how they could best use the Internet for research. And so providing them with some instruction with that and providing them with other choices such as databases I think has opened the eyes of many students. (Rural junior/senior high school librarian)

Collectively, administrators perceive their school librarian to be a primary facilitator of technology integration and use within their buildings and districts, which in many poor urban and rural districts can make all the difference for their graduates. While funding technology is a challenge for some institutions, administrators across the board agreed the benefits are worth the investment and were struck by the breadth of technology-enhanced learning opportunities that their school librarians have integrated into the school curriculum. The importance of the librarian’s technology role is reflected in comments from several principals:

We’re a poor rural school district with some of the best instructional technology for teachers . . . when we spend money on tech it has to be well spent. People respect [the librarian’s] opinion, she’s well informed, open minded, and has a clear sense of direction. [Her graduate] program introduced her to cutting-edge tech and gave a mindset for her to move in “How do we prepare kids to graduate and survive a school like [University X], what type of tech should we put in place?” This is how we think. (Rural junior/senior high school principal)

It’s the regular, it’s computer use, it’s iPod use. I mean it’s presentations, it’s software...So if anything, [the librarian] has moved this building into more of the electronic use and the Internet use and appropriate uses than anybody...we’ve come a long way in just the last couple of years. (Suburban high school principal)

[The librarian] has been pretty much the sole implementer as far as technology is concerned in the building. She has raised the levels of our students in terms of technology and their use of technology. (Urban elementary principal)

I see the responsiveness in [Mr. O’Bryan, the librarian’s] understanding of technology, which is our children’s language. . . . And Mr. O’Bryan kind of cherishes that and draws it out, so that when he is doing these little podcasts or the kids are working on things, he kind of creates this wonderful repertoire with them. He understands their inside knowledge and he blows on those embers that are warm and gets them all fired up. (Rural elementary principal)

[The librarian] may just show a new technology to a teacher, and then usually she knows the strengths of the people in the building and who would take off with it. And usually it becomes then ten more people want the same thing in the classroom. (Suburban high school principal)

One building administrator even acknowledged how his librarian helped him with technology in this way:

She has been a tremendous resource and research assistant to me . . . more technologically advanced, helped me improve technical presentations. I use the library
differently as an administrator. I’ll call and say I need quick info on this on any number of topics—time management, architectural suggestions. She helped me retrieve ILL materials; she can search the Web better than I can. (Rural junior/senior high school principal)

Students also expressed the importance of their librarian in teaching them how to use a variety of technologies:

She teaches us about finding information using the computer. I learned to find books about the topic. I learned to use different databases. I learned how to research on the computer by trying different keywords. If you put different keywords you can find more information about your topic. (Urban elementary principal)

I’m in camera club [a library activity] and I learned how to download pictures from the camera to the computer. We learned to edit them. (Urban elementary student)

The importance of this student support was acknowledged by parents:

[My son] uses computers whenever [he] needs to do research. My son gravitates right to computers, not so much books—checks out books when there is a requirement to use a book. Comes during study hall and after school. Has a computer at home. Easier to do in school because he gets help and OPAC is at school. The Web is so overwhelming that without the assistance of people in the library he wouldn’t know how to focus. (Rural junior/senior high school parent)

Her son has learned how to do research on the Internet from the library. When they need information to research in books they ask the librarian. They know how the library is pretty much, is cataloged, you know, the categories of, like say science or history. The children are aware of that and if they can’t find the book they go to the librarian. (Urban elementary parent)

One example of how important and pervasive technology has become in many schools, largely because of librarians’ efforts, comes from our observations of the Site 1 Librarian, the elementary librarian. She receives computer magazines to keep up-to-date with technology and admits she does so as much for the teachers as for the students. “I am trying to stay, if not ahead of the game, at least with the game.” During the fall semester, she took an extended trip to China while school was in session. While away, she posted a blog about her trip to all of the classes in her school; the students followed her adventures daily. The blog served as a teaching tool for the entire school, and when she returned, the Site 1 Librarian provided a number of follow-up activities.

One of the middle school teachers described the Site 2 Librarian’s commitment to making sure students have the technology skills they will need in high school: “She has the goal of not just offering print media to students but also making sure that they are well equipped to use technological advances when they leave the library.”
Inclusion
The Inclusion category includes making accommodations for special-needs students and creating an environment that is open and accessible to all. It has become increasingly clear that having a solid understanding and ability to work with students of all abilities is an essential characteristic for today’s school librarian, whether in an urban, suburban, or rural district. This is underscored by this comment:

We have an 8:1:1 class (8 students, 1 teacher, 1 aide) on campus, and now we have full inclusion in the library, and that’s dealing with the kids who have pretty severe disabilities. (Rural elementary librarian)

In phases I and II, librarians were found to lack the knowledge and skills to provide adequate services and resources to special-needs students. When probed further, several librarians described ways they are attempting to serve their special-education population, mostly in terms of resource provision:

I just try to include our special-ed kids in every way we can. I order special books if they need it. They are usually staffed with aides who come in with them, and whatever the aides need I try to get or accommodate. (Suburban middle school librarian)

We do have a special-education population, and we have right now about four CTT [Collaborative Team Teaching] classes. We have special-ed children and regular ed together with two teachers and a para[professional]. And they participate in the library program we have, they come in for book circulation—they are often working on research projects and we use the computer a lot. We also have CDs and DVDs. And so we try to have materials in various formats. We had a blind student. Up until recently we had a Braille collection for her so she was also able to participate. And I feel that, you know, we are going more and more towards materials in different formats because many of our children have difficulty even if they don’t have any disabilities. They have difficulty with the print and just sustaining their reading—you know—for fluency. So, really, all of these different varieties of materials have really helped a lot of them; especially e-books online, and things like that, has really helped prepare them for taking the test. (Urban elementary librarian)

Well, I have to say that our autistic kids are completely fascinated with the manga, and they were so excited when they came in the library and saw that we had it that they run, they literally run through the library to get to them. And if they are all signed out, they will come back every day until the book comes back even though we tell them we can put a reserve and let them know, they still come back every day. . . . I have one special-ed teacher who does her IEPs [Individualized Education Programs] and she includes the library as part of it. So every year, I start a project with the kids. We either do a puppet show or play with costumes. We do something relating to literacy. And she watches the kids so she can note their progress on their IEPs. We have six self-contained classrooms. What I do in the beginning of the year, is I take all the classrooms and see which regular classes are really good that I can I combine with special-ed classes. Sometimes you can combine them, sometimes you keep them separate, sometimes you split a class. Some kids will go with one grade and some with another. (Urban elementary librarian)
Our BOCES [Board of Cooperative Educational Services] has provided software on our computers that will take text and read it out loud to kids. So we have that available. We also have a lot of books on CD. We are members of the Talking Books for visually impaired students. (Suburban high school librarian)

I just discovered Play Aways that Follett has. They’re MP3 players. Special-ed teachers love them. The kids love them. I can’t keep them in the library. And looking into using special-ed money to purchase more for the library. (Rural pre-K–12 librarian)

We discovered from our prior data on this topic that this is perhaps the weakest area for school librarians in New York State. While some of the librarians mentioned various instances of their services to special-needs students, it is evident that these services tend to be more reactive than part a comprehensive plan to provide library and information services to this population.

Our finding of a lack of comprehensive special-needs planning was reinforced by our observations in our two ethnographic schools, where interactions with and services to this special population appeared to be somewhat brief and mostly focused on resources. For example, the Site 2 Librarian was observed doing a book talk for an eighth-grade resources class that contains many students who wouldn’t normally visit the library. The teacher remained in the library but did not participate in the session. The class went to the library to choose a book for “free reading” in class. Later, the drug education teacher came to ask the Site 2 Librarian’s help in recommending picture books that might improve a particular group of boys’ self-esteem, and the special-education teacher asked her for copies of a particular magazine to show to sixth-grade teachers. The English as a Second Language (ESL) teacher praised the Site 2 Librarian for providing English language learners a space in the library to find materials that were on their level.

In her interview, the ESL teacher praised the Site 2 Librarian:

[She] has done so many things to help my ESL students I hardly know where to start. Both in terms of motivational things and educational things, and I’ve worked with her on projects. I could go on and on. . . . Whenever she sees something that needs improvement, she will come up with a strategy for that purpose. Like when I last year when I first started getting some very, very beginner-level ESL students but we still wanted to make it so that they could use the library—which is tricky—we worked together and she got her designated a special couple of shelves, and she even had some of the library club kids help going around looking for picture books and things. That was so that when I would have library day with my ESL language arts group we could go in and we had a spot where we could look for the books.

The middle school special-education teacher described a situation in which the Site 2 Librarian supported a lesson on feelings:

A lot of times I will go [to the library] if I am doing a unit on something and recently I just did a unit on feelings. Well I was having a hard time finding books even though my students—the group I have are like ten, eleven, and twelve year olds—I would try to find something that displays feelings that kind of looks appropriate for them, but got down on like a two- or three-year-old level. So I went in and they pulled out different kinds of
books for me to display these feelings, and my kids are very interested in this—in the pictures in the books. They were big picture books, which adds interest level to them, and that’s what I do—go in and say “I’m reading at this level. What do you have that I can do? We are doing this unit what kinds of books do you have that I can—what kind of movies do you have?” So I go in and use [the librarians] as a resource to apply some extra material to whatever unit I am doing.

The Site 1 Librarian tries to work with the teachers of inclusion students to reinforce behavior that is expected of them in their regular classroom and apply it to the library. One inclusion teacher stated, “It’s there and again with the inclusion kids—you know I feel like if I take her side and say I know this kid is a challenge, he is really challenging us in the classroom, but this is where we are trying to go with him and this is why we are going to let him get away with this behavior in library. Because right now we just need him to be with us. She is supportive of that, and you know she is open to that and will work with us the best she can.”

However, one classroom teacher in the Site 1 Librarian’s school stated that in his observations, the Site 1 Librarian didn’t seem to know how to deal with his students who might have problems at home or who have special needs: “I have another child who is ADHD and is off meds, and when he is off meds, he needs to be dealt with in a certain way…I trust [the Site 1 Librarian] to respect those kids and to understand that they—they have stuff that they are coming into school with that you have to also consider…and I don’t think she always considers that.”

While most librarians do their best to provide special-needs students with reading guidance and to identify appropriate resources for their teachers, it has been demonstrated in all three phases of this study that providing a range of appropriate resources, technologies, and services to students with special needs—particularly a group with a wide range of disabilities—as well as an understanding of how to work with these students continues to be an area in which librarians need additional training and support.

**Administrative Support**

In the first phase of this study we discovered that school administrators perceived themselves as being highly supportive of their librarian and library, but school librarians did not have the same perception. The nature of that support was typically described as financially driven (for example, expanded space, library aides, and additional resources).

"[Our] library is the focus of the building. I expanded the library budget threefold from the one I inherited. I started requiring departments to purchase library materials, videos, CDs, slide show, etc., and took them away from the teachers and put them in the library where every kid and teacher had access. (Rural junior/senior high school principal)"

"I’ve tried to support [our library] with personnel and with money and resources...Typically what I do and probably in the next couple of weeks, I take a look at the building budget, and any money that’s left over I ask [the librarian] what everybody needs because she again has the pulse on what the high school community needs as far as technology or resources or books. So usually I try to filter as much money because I know that it’s going to be used and it’ll be used in the right manner. (Suburban high school principal)"
This is a newly renovated library, and in the library portion itself I have fourteen computers and then there’s the computer lab attached with twenty-seven computers. And along with that are the printers and a scanner. We have a wireless connection in the computer lab, a wireless projection so that we can bounce from computer to computer to project. We have podcasting equipment. The administration here has been a big supporter of databases and e-books, so we have, I think, a pretty good selection of those. I’m trying to think of what else. Our high is currently upgrading each classroom. All of them will have a computer, projection, and a write tablet. And . . . I’m supposed to be getting a write tablet but I have received it yet. (Rural junior/senior high school librarian)

If I had all the money I would have a library helper. [Our librarian] is usually here to 5:00 p.m. or 6:00 p.m. doing things that are clerical that she can’t do during the day because [the library is] so busy with kids. (Urban elementary principal).

Both principals at the ethnographic sites encourage their librarians to participate in professional development and provided them with the funds to do so. Another important way that administrators show their support is by providing their librarian with the personnel assistance needed to keep the library running. At our two ethnographic sites, both librarians had at least two employees in full-time support roles. This allowed the librarians the time needed to provide library instruction and to collaborate with classroom teachers on projects as needed.

In addition, these principals demonstrated a strong sense of trust in their librarians to run the library and its programs. During the interview, the Site 1 Librarian’s principal stated, “She tells me what she wants and gives a good rationale, and then I just try and get out of her way and clear hurdles if I can.” The principal also related the following humorous anecdote that illustrates the support and respect she has for her librarian. One summer morning the principal received a phone call from the buildings-and-grounds superintendent who told her that she could go ahead with installing new carpeting in the library.

I said “Joe, if you think that I am going to pick out [the Site 1 Librarian’s] carpeting, you have another think coming!” The only way—I said I hope she is in town because if she is not in town we are not doing it. . . . So I said “I will have to call you back,” and I am dialing [the Site 1 Librarian’s] number saying “please god please god let her be home.” Well she picked up on like the second ring. . . . So she came in [at] eight o’clock the next morning, but she had a vision of what that carpet should look like, and—you know—and so she does all that because she loves the students and she wants the students to love the library.

The Site 2 Librarian’s principal encourages her any time she approaches him with an idea, and he has come to appreciate the amount of help she can give to teachers in educating students. He stated, “Well, certainly in my role it’s through encouragement and support; it’s through funding; it’s through allowing her to use her expertise in developing a program; it’s through not micromanaging her position but trusting her that she will offer the best of what there is.”

It is necessary for school librarians to understand the reality of the fiscal limitations of administrative support, particularly in difficult economic times. However, even with tight
Budgets principals can support the school librarian by recognizing their critical value in the school’s educational mission.

Outreach
Outreach describes those activities in which the school librarian communicates and interacts with the community-at-large. Data reveal that librarians use a variety of techniques to draw the community to their library (for example, newsletters; local, state and national competitions; collaborative activities; and special programs open to the community). Such libraries take on a hybrid role, fulfilling the needs of students, their families, and their communities. Rather than managing a closed, self-contained library learning community, school librarians perceive their role as inspiring broader communities of lifelong learners, particularly in areas where public libraries are not readily accessible.

While this category was not investigated in previous phases of this research, it emerged as an important category in the content analysis. The data revealed many creative ways librarians reach out to communities inside and outside their schools.

_We’re completely open to homeschoolers. And I have a family in today who was accessing, you know, anything that they want, taking anything they want out, which is completely logical since they are community members, open to them. I don’t have a great deal of resources, but we are trying to start thinking about developing some community resources in the way of texts and books and things like that, and possibly working with our school psychologist and counselor to develop more of a collection of books that are germane to all those social issues that strike kids and what they can do about them: broken families, sexual issues, that kind of thing. (Rural elementary librarian)_

_I make sure I put information about the library in each newsletter that goes home._
(Urban elementary librarian)

_I have offered Internet safety classes to parents. We also promote databases, send out passwords, and explain what they are so the parents understand how students can—and how they can—use databases to get the information [they] want, for personal reasons or school-related reasons. At open-house nights I have the community come. The parents and the families come in, and I show them what we have here, what the students are able to access. There’s nothing stopping them at any time from borrowing from us, but that seems to be a time in particular where I’ll find some parents that will find something of interest that they’d like to borrow from our library._
(Rural junior/senior high librarian)

_One of the ways I’ve tried to (reach out) is through books for parents. I’ve got quite a collection of books for parents of ADHD [students] and some moms join me for lunch so we can talk some. I’ll get interlibrary loan books for parents or other kids, just depending. It’s a small community, so I try to respond if necessary._
(Suburban middle school librarian)

_In my school, I present at PTSA (Parent-Teacher-Student Association) meetings once a year. At open house I always give a brochure about all the services we have in our library and the fact that you can access the library page at home and the databases_
online. And I give them the password, so they have all the information they need right there. (Suburban high school librarian)

We have an open-access library. We have children and parents coming in throughout the day, borrowing books. We have a very close relationship with the public library, and we have worked together to, you know, reach out to the parents. (Urban elementary librarian)

In terms of visibility, bringing people into our library, [the librarian] always holds professional development here. He has a partnership with many community-based organizations to help us enrich the learning that we have at the school. (Urban elementary principal)

In her interview, the Site 1 Librarian described some of the support she received from the community in the past. She hosts a Parents-As-Reading-Partners (PARP) month in the spring. During this month the library is open two nights a week for parents and students. The Site 1 Librarian reports that the program has been a huge success and that there is always a strong turnout.

During one observation at site 2 (the middle school), a parent and her son were quietly reading a book in the book nook area. The mother asked the Site 2 Librarian if she could check out one of the Christmas books on display, and the Site 2 Librarian agreed.

The school library’s role in outreach to students’ families and to the larger community appears to be increasing. In some communities, the school library functions as the community’s information center.

**Library Environment**

A seventh category that emerged during the analysis is worthy of mention. The importance of this category—the perception of the library as a warm and welcoming environment for students and teachers at all levels—cannot be underestimated. Here are some examples from this category:

*She like invites you in. She does. “Come on in!” It’s almost like being over at someone’s house. (Suburban high school student).*

*I come with my class. It is fun and everyone can’t wait to go into the library! Everyone loves our school library. I like to use the library. (Urban elementary student)*

*[Our librarian] is ideal because he has that “yes, I want you to come through.” He champions the teachers with writing grants or technology to support what they are doing. And because there is that nice collaborative nature between them, I think that it just makes them want to seek it out and be there that much more. (Rural elementary principal)*

The elementary principal described how his librarian has made the library central to the school’s mission:
Well, you know part of what I think is special about Jane [the school librarian] is that she just has this high level of commitment to making the library a hub of the building, and—you know—for the children, for the teachers, for the families. And it is not just a place to come and pick out a book. You know it is a place to—it is an incredibly supportive place to come and listen to a story because . . . that is the best place to hear someone read to you. (Rural elementary principal)

Observation notes verify that the Site 2 Librarian provided a comfortable and welcoming library space where both teachers and students were observed visiting, relaxing, reading a book, using the Internet, and having a quiet conversation. For example, a seventh-grade language arts teacher came into the library with his class. While students were picking out their books, the teacher completed a display on a table. The Site 2 Librarian took a picture and offered praise to the teacher for her efforts. Also, a seventh-grade social studies class came skipping into the library. The Site 2 Librarian explained that this was happening because all of the students did their homework, so they got to have a parade. When interviewed, the ESL teacher in the middle school stated, “In terms of the whole school, [the Site 2 Librarian is] always doing things to motivate the students to come into the library, giving them interesting motivation for reading, and for coming in, and for making the library a comfortable place to be.” Another teacher summed it up in this way: “I mean I love coming in here. I’ll come in here sometimes just on my free time, you know, just to chat, catch up.” It is clear from our data that the school library is mainly perceived as a place in which teachers, students, and administrators like to spend time.

Summary of Results
The phase III results were consistent with findings in phases I and II. The following statements summarize the data from each of the categories of interest. Using the data from the ten-week observations at two school libraries, we confirmed that school librarians perform a wide range of tasks and activities, such as changing bulbs in projects, teaching students how to use technology to complete assignments, organizing a school-wide mock presidential election, and serving as judge at the school spelling bee.

Learning and Motivation
- Librarians and library programs appear to positively influence students’ research-skills development and motivation for research and inquiry, particularly in the use of information technologies such as databases and the Web.
- Librarians and library programs appear to positively influence students’ reading skills development and test scores.
- Librarians and library programs appear to positively influence the development of students reading interests.

Librarian-Teacher Collaboration
- Librarian collaborations with classroom teachers range from simple resource provision to collaborative lesson planning and delivery.

Technology Use
- Principals often perceive their librarian as the technology leader in the school.
- Librarians have an impact on both teachers’ and students’ technology use.
**Inclusion**
- Librarians seek ways to provide appropriate resources but do not typically design programs and services to meet the needs of students with special needs.

**Administrative Support**
- Principals often perceive support of the library and librarian in terms of money for resources and facilities.

**Outreach**
- School librarians reach out to families and the greater community through a variety of programs and services.

**Library Environment**
- The library’s welcoming, safe, and comfortable environment is a positive influence on library use for both students and teachers.

**Implications for Practice**
The results of this final phase of the three-phase New York State school library impact study have the following implications for practice in school libraries:

- All stakeholders recognize the profound ways in which school librarians can and do influence students to develop twenty-first-century learning skills and to embrace reading as a lifelong activity. This has not only been documented by the many statewide impact studies and but also by individual principals who recognize the relationship between increases in their students’ ELA test scores and the presence and use of their school library. But this is not enough. School librarians must accept the additional role of school-based researchers and evidence-based practitioners, collecting data from their constituents about their library programs and information services and documenting their effects.
- The types of librarian–teacher collaboration that occur in schools vary from lower levels of activities (such as providing appropriate resources for teacher-led lessons and teaching research skills to students who have been given a research assignment) to higher-level collaborations in which librarians and teachers work together to plan, co-teach, and collaboratively evaluate instruction. Librarians should strive toward these higher-level collaborations in which both educators are equal partners in the process.
- Stakeholders, including parents, perceive the school librarian as the technology expert in their school and, as such, the source of support and training for both teachers and students. For teachers, this not only means learning to use a variety of Web 2.0 tools and other critical technologies, but also understanding how to integrate these technologies into their curriculum and lessons.
- Many school librarians lack the knowledge and understanding of what they must do to provide adequate library and information services to students with special needs. Librarians must not only be aware of the meaning of terms like “universal design for learning” and “individualized education programs,” but they also must recognize how those terms affect the quality of their programs and services.
• In phase I, data indicated that principals perceive themselves as strongly supportive of their librarians whereas librarians did not. In phase III, principals defined that support in terms of money, personnel, resources, and space. While these things are of critical importance, librarians need to make sure their administrators realize that the principal’s enthusiastic vocal support of such things as flexible scheduling, librarian–teacher collaboration, and IL skills instruction is equally important.

• Some school librarians are reaching out to their communities by providing extended services and special resources to those outside of their usual constituencies, such as homeschoolers, parents and grandparents, and community leaders. The results of these services can have immensely positive consequences—higher visibility of the importance of the library, broader and increased use of library resources and services (demonstrating the need for more funding and support of school libraries), and greater good will in the community.

• The atmosphere and tone that the librarian establishes for his or her library can have a major impact on its use. When the library and librarian are seen as friendly, welcoming, and caring, both students and their teachers will want to spend time there.

Works Cited


Appendix. Research Instruments

Teacher Focus Group Protocol Questions

School:
Session:
Participants:
Date
Time:
Facilitator:

1. If you could only use one word or phrase to describe your school library, what would it be?
2. Can you tell me how you use your school library?
3. How would you describe your school librarian?
4. Have you ever collaborated with your school librarian?
5. How do your students use the school library?
6. Have you ever seen your school librarian teach a lesson to your students?
7. How would you describe your school librarian’s impact on the use of computers in your school?
8. What evidence have you seen that, by coming to the school library, your students have learned how to do research?
9. Can you give an example of how the school library has had an impact on your students’ reading skills or enjoyment of reading?
10. Can you give me an example of how the school library has made a difference to you and/or your students?
11. What would you do to improve your school library to make it better for you and your students?
12. Is there anything else you would like us to know about your school library?

Student Focus Group Protocol Questions

School:
Session:
Participants:
Date:
Time:
Facilitator:

1. If you could only use one word or phrase to describe your school library, what would it be?
2. Please tell me how you use your school library.
3. Has your school librarian ever taught you something you didn’t know before?
4. Has your school librarian ever helped you to learn to use computers?
5. What is an example of a project or activity you have done in the school library?
6. How has your school librarian helped you to learn research skills?
7. Has the school librarian helped you become a better reader?
8. How could your school library be improved to make it better for you?
9. Is there anything else you would like us to know about your school library?

Parent Focus Group Protocol Questions
School:  
Session:  
Participants:  
Date:  
Time:  
Facilitator:  

1. If you could only use one word or phrase to describe your school library, what would it be?
2. Please tell me how your child or children use their school library.
3. How would you describe your school librarian?
4. Can you give me an example of a time when your child or children used the school library and learned something new?
5. Can you give an example of a way in which your child uses computers in the school library?
6. How do you find out about what is happening in the school library?
7. Can you give me an example of how the school library helped your child learn how to do research?
8. Can you give me an example of how the school library has helped improve your child’s reading skills or enjoyment of reading?
9. Is the school library ever open to parents and/or the community? If so, when and for what reason?
10. As a parent, do you feel comfortable coming to the school library?
11. Can you give me an example of a time when you used the school library?
12. Can you give me an example of how the school library has made a difference to your child?
13. What would you do to improve your school library to make it better for your child?
14. Is there anything else you would like us to know about your school library?

Librarian Focus Group Protocol Questions
Session:  
Participants:  
Date:  
Time:  
Facilitator:  

1. If you could choose only one adjective to describe your school library, what would it be?
2. How would you describe your instructional program for students?
3. In your opinion, what is the most important skill you teach students and why?
4. Could you give a specific example of maybe a project they worked on where you found that to be a very important skill?
5. In what ways have you impacted the way that teachers in your school use technology for instruction?
6. In what ways have you impacted the way that students in your school use technology to learn?
7. Please give examples of the ways in which the school library program has had an impact on the types and amount of leisure reading that your students do, both in and out of school.
8. Please give examples of how you have affected students’ curiosity and interest in learning new things.
9. How do you feel your instruction has affected students’ enjoyment of the research process?
10. Do you think motivating kids at the elementary level is very different than at the secondary level?
11. What school library services and resources are offered to students’ families and/or the community?
12. How do you create a learning community in the school library media center that recognizes and celebrates differences?
13. In what ways does your school library program provide services to students with disabilities?
14. Is there anything else you would like us to know about your school library?

Principal Interview Protocol Questions
School:
Session:
Participants:
Date:
Time:
Facilitator:

1. If you could only use one word or phrase to describe your school library, what would it be?
2. Can you tell me how your teachers use your school library?
3. Please tell me how your students use your school library.
4. How would you describe your school librarian?
5. Can you give an example of a time when your school librarian helped you?
6. Have you ever seen your school librarian teach a lesson to students?
7. How would you describe your school librarian’s impact on technology use in your school?
8. What evidence have you seen that, by coming to the school library, your students have learned how to do research?
9. Can you give an example of how the school library has had an impact on students’ reading skills or enjoyment of reading?
10. How would you describe your support of the school library?
11. Can you give an example of how the school library has made a difference in your school?
12. If you could, what would you do to improve your school library to make it better for teachers and students?
13. Is there anything else you would like us to know about your school library?

School Library Research (ISSN: 2165-1019) is an official journal of the American Association of School Librarians. It is the successor to School Library Media Quarterly Online and School Library Media Research. The purpose of School Library Research is to promote and publish high quality original research concerning the management, implementation, and evaluation of school library media programs. The journal will also emphasize research on instructional theory, teaching methods, and critical issues relevant to school library media. Visit the SLR website for more information.

The mission of the American Association of School Librarians is to advocate excellence, facilitate change, and develop leaders in the school library field. Visit the AASL website for more information.
Exploration to Identify Professional Dispositions of School Librarians: A Delphi Study

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Abstract
This article reports the findings of an exploratory study to identify professional dispositions of school librarians. The authors employed the Delphi method, a qualitative research method that emphasizes expert knowledge and consensus within a particular field. The Delphi panel consisted of members of the editorial boards of nationally recognized school library journals in the United States. Panelists independently forecasted and described the identified professional dispositions, commented on eleven prominent dispositions that received the most responses, and ranked and combined categories of dispositions. The results of this study provide a foundation for further exploration of professional dispositions, leading to the design of signature pedagogies for use in school library education, appropriate assessment measures for both school library education and practicing school librarians, and thoughtful and reflective consideration of the acquisition and nurturance of these dispositions.

Introduction
The 2007 release of the Standards for the 21st-Century Learner by the American Association for School Librarians (AASL) introduced the concept “dispositions in action,” an idea new to school librarianship and not found in the conventional vocabulary of the field. The hierarchical framework of AASL’s Standards fosters high expectations for today’s learners because the skills, dispositions, responsibilities, and self-assessment strategies represented by these standards will provide the foundation for learning throughout life . . . and . . . serve as guideposts for school library media specialists (SLMSs) and other educators in their teaching because these skills and dispositions are most effectively taught as an integral part of content learning. (AASL 2009, 5)

Even though the focus of these standards is on the learner, the support of a strong school library is assumed. This mindset mirrors the thinking of national professional groups, which recognize that teacher quality is vital to student learning and achievement (see, for example, Darling-Hammond and Bransford 2005). The authors of the AASL Standards conclude that “a strong
school library media program (SLMP) that offers a highly-qualified school library media specialist” is “implicit within every standard and indicator” (AASL 2009, 5).

The AASL dispositions in action introduced expectations not evident in past standards and led to questions stemming from the fear of noneffective practice, obsolescence, and job loss (Jones and Bush 2009a). After much anecdotal discussion with, and interest from, colleagues from across the country, these concerns spurred us to explore the concept of dispositions within the school library profession.

Why Dispositions, and Why Now?
A review of the literature reveals the ongoing struggle by educators to understand the concept of professional dispositions. The recent interest in dispositions arose from the 1980s standards movement to restructure America’s schools that was largely the result of efforts by three professional groups: the National Council for the Accreditation of Teacher Education (NCATE), the Council of Chief State School Officers (CCSSO), and the National Board for Professional Teaching Standards (NBPTS). Their efforts culminated in the 1996 publication of What Matters Most: Teaching for America’s Future by the National Commission on Teaching and America’s Future (NCTAF), a twenty-six-member panel that concluded that school improvement is heavily dependent on improving the quality of teachers (Clark 2005).

The NCTAF set six goals in its report. The first goal states, “All children will be taught by teachers who have knowledge, skills, and commitment [a term that precedes the use of dispositions] to teach children well” (Darling-Hammond 1996, 196). NCTAF recognized that if the United States is to prepare all of its children for the challenges of the twenty-first century, it must be able to recruit and retain able, well-prepared teachers for all classrooms. These entrants must be equipped with the knowledge, skills, and dispositions to enable them to succeed with all students.

As a result, the three participating professional groups developed teacher-education-program standards that stress the importance of performance-based assessments of teacher quality. The CCSSO’s robust Interstate New Teacher Assessment and Support Consortium (INTASC) standards, published in 1992, are divided into the categories of knowledge, skills, and dispositions. The operating premise of INTASC is that effective teachers integrate content knowledge with pedagogical understanding to ensure that all students learn at high levels. The professional dispositions that are implicit to the ten INTASC principles are:

- Embracing reflection necessary to lifelong learning and communicating
- Understanding the diversity of students and recognizing and promoting growth in others
- Promoting positive social interaction and developing health and helpful relationships with children and youth
- Integrity and collaboration to advocate for children
- Understanding and using a variety of instructional strategies, planning, organizing, and goal-setting (Jones and Bush 2009a).

By contrast, NCATE leaves the identification of additional dispositions (except for fairness and belief, which all children can learn) to individual teacher education preparation programs. NCATE defines professional dispositions as professional attitudes, values, and beliefs
demonstrated through both verbal and non-verbal behaviors as educators interact with students, families, colleagues, and communities. These positive behaviors support student learning and development. (NCATE 2007, 89)

NBPTS does not define dispositions at all; it expects that proficient teachers are able to employ the necessary “skills, capacities, and dispositions” in the interest of students (2002, 2).

The Definition of Dispositions
Progressive educational philosopher John Dewey (1922) laid the foundation for dispositions by contemplating the question, “Why do some well-educated people function at higher levels than others?” Dewey attributes this functioning to a “readiness to act overtly in a specific fashion whenever opportunity is presented” (41).

Building solidly on Dewey’s assertion, Arnstine was first to extend the philosophical discussion about dispositions to the educational field (Freeman 2007). Arnstine views learning as the acquisition of “behaviors, knowledge, skills, habits, and attitudes” (1967, 13). The latter he defines as dispositions. Learning therefore is the continuing and lengthy process of acquiring and developing a great number of abilities and attitudes—or dispositions—or the changing of old ones.

Aronstine characterizes dispositions as:

- Predictive of future behavior in which “something or someone has a tendency to behave in certain ways when certain conditions are realized”
- Verifiable (or able to be assessed), but “only after the occurrence of several relevant tests or observations . . . that is, the more varied are the situations during which we observe an ascribed disposition being exercised, the more likely we are to assign credibility to the ascription” (Aronstine 1967, 32).

Aronstine laid the foundation for dispositions in education, but Katz and Raths moved the discussion about effectiveness and teacher quality to the forefront of teacher education by proposing that the “goals of teacher education programs should include a class of outcomes we call professional dispositions” that focus “exclusively upon behaviors of teachers related to effective teaching in the classroom” (1986, 302).

Katz defines disposition as a “tendency to exhibit frequently, consciously, and voluntarily a pattern of behavior that is directed toward a broad goal” (1993, 2). Katz and Raths describe these as a “pattern of acts that were chosen by the teacher in particular contexts and at particular times” (1986, 7). We are not using the term dispositions to indicate a cause of behavior—the construct is descriptive rather than explanatory. For example, a teacher does not praise children because of a disposition to be supportive; rather, a teacher observed to make use of praise in a number of contexts and on frequent occasions might be described as having a supportive disposition (Katz and Raths 1986, 301–2).
The Complex Concept of Dispositions

There are several reasons for the misunderstanding of dispositions, including semantics and dispositions’ identification, acquisition, and assessment. Each is briefly explored in the following section.

One confusion is rooted in semantics. Words such as skill, trait, attitude, habit, belief, and characteristic are used interchangeably to mean disposition (Knopp and Smith 2005; Jones and Bush 2009b). Using these words as conceptually synonymous with disposition muddies the waters and diffuses the conversation regarding observable educational behaviors. A brief description of these terms relative to disposition is identified below:

- **Skills** “carries with it a sense of mastery” (Katz and Raths 1986, 5). One can be skilled without having a disposition for that skill. For example, even students that are skillful at comprehending readings will not necessarily frequently and voluntarily engage with reading (in other words, exhibit the disposition of reading).
- **Traits** and are qualities that are consistent, enduring, and independent of a situation. For instance, eye color and height are inborn traits that cannot be changed. Traits are often related to personality and temperament whereas dispositions convey choice in employing an appropriate behavior at an appropriate time (Friedman and Schustack 2006).
- **Attitudes** are judgments regarding likes and dislikes that can be changed, and they often are measured using various scales that gauge one’s stance toward a situation or issue. **Habits** are learned behaviors displayed routinely without forethought or reflection. For instance, putting on a seat belt when we get into a car is a habit (Katz and Raths 1986, 6–8).
- Other nouns, such as belief and characteristic, add to the semantic confusion of the meaning of disposition. A belief is an opinion or conviction that may or may not be substantiated whereas a characteristic pertains to a quality of a person or thing (Jones and Bush 2009b).

The second misunderstanding is the identification of dispositions. Even though standards organizations such as NCATE and NBPTS agree that dispositions are integral to quality teaching, confusion exists when they are not identified. In 1996, Collinson asked the most capable teachers she knew to describe exemplary teaching characteristics that reveal strengths in three areas: professional knowledge of the subject and pedagogy, interpersonal knowledge of students and the community, and intrapersonal knowledge such as reflection, ethics, and dispositions. Similarly, as former students ourselves, we know instinctively the qualities of exemplary educators even if we have difficulty naming these qualities. In 2006, Cushman asked sixty-five high school students to describe the qualities they most wanted in their teachers. The students responded that teachers must like their students, be trustworthy, and treat students as smart and capable of challenging work. In addition, students want engaging classes taught by teachers who like and care about the material they teach. Students want teachers who exhibit dispositions of care, trustworthiness, and respect for them.

The third concern is whether dispositions are inborn qualities or are acquired developmentally through modeling. Observational and qualitative research on “bedside manner” provides insight into the frequently posed question, “Can dispositions be taught?” Weissmann et al. (2006) studied twelve clinical faculty who were identified by medical residents as excellent teachers of humanistic care—popularly known as “bedside manner,” which is identified within the affective
domain and includes patient care and communication skills—to determine how these dispositions were taught to medical residents. The findings of this eighteen-month qualitative and observational research indicate that clinical faculty members teach humanism and professional values almost exclusively by role-modeling, and “generally, they assumed that learners would recognize, learn, and emulate their behaviors without added comment or direction” (Weissmann et. al. 2006, 662). Bedside manner is modeled in the following ways:

- Nonverbal cues, such as demonstrating care, tone of voice, and appropriate touching
- Demonstrations of respect, such as making proper introductions or asking the patient’s permission before turning down the volume of the television
- Building personal connection by using shared experiences to bond with the patient
- Awareness of their influence on students and residents

Sockett views modeling as the preferred method of dispositional attainment, even though “this point may be subtle, but it is critical. If the faculty model the dispositions they want candidates to hold, then the candidates are more likely to develop them” (2006, 65).

The fourth confusion regards assessment of professional dispositions. The research by Lund et al. (2007) to identify dispositions of beginning physical education teachers exemplifies the difficulty of assessment. Even though dispositions such as trustworthiness, dedication, and taking initiative were identified as important in the pedagogical and theoretical literature of physical education and were indicated as important by 90 percent of the faculty interviewed, assessment of these behaviors occurred 50 percent of the time or less. Lund et al. maintain that assessment of dispositions is especially complicated when the observable behaviors are difficult to define.

This realization—that we must identify the dispositions we value, that there is no one-size-fits-all when it comes to dispositions—may lead to uneasiness in some professionals who are uncomfortable with uncertainty and ambiguity. These notions were evident in the responses and comments made by Delphi study panelists, notwithstanding the NCATE definition of dispositions that was provided to them. It is within this context of dispositions and the AASL Standards that we sought to investigate the expert thinking about professional dispositions of school librarians, which had not previously been studied.

The Delphi Study

The qualitative research method selected for this study was the Delphi method, which emphasizes expert knowledge within a particular field. Early Delphi studies, predominantly conducted by the Rand Corporation in the 1950s for the U.S. Air Force and others, focused on forecasting future trends using data collected in the form of expert opinions expressed in response to broad questions (Dalkey 1969; Rowe and Wright 1999). This research technique was quickly adopted by corporate planning teams concerned about the cost and time of participant involvement (Crance 1987). The use of independent, reliable responses to queries that invite participants to use their individual experiences as a guide for their thoughtful contributions is in contrast to the group-think that often results from focus group (or “nominal group technique”) consensus (Van de Ven and Delbecq 1974). An economical hallmark of Delphi studies is their reduction of the need for panelists to travel to participate in focus groups. Additional rationales against employing focus groups for Delphi studies are consistent with individual contributions to the research.
The mythological reference to oracles in the term “Delphi” stems from the importance of gathering comments about a field from a small number of scholarly experts in unique positions. The process of Delphi studies is (1) judgmental input from a modest number of invited participants (commonly ten to eighteen) and (2) responses to one to three rounds of questionnaires over a period of six weeks to six months. Okoli and Pawlowski provide a table of examples of studies that trace the evolution of the method: “Forecasting and issue identification/prioritization represent one type of application of the method. Concept/framework development designs typically involve a two-step process beginning with identification/elaboration of a set of concepts followed by classification/taxonomy development” (2004, 16). Four defining characteristics of Delphi studies include anonymity of responses, which protects privacy throughout the process; iteration, which allows panelists to change or adjust their responses privately if desired; controlled feedback of the consensus of the group, and possibly additional information, having heard equally from all participants; and aggregation of the group response, which takes the shape of a final judgment based on equitable input from all panelists (Rowe and Wright 1999, 354).

The specific strengths of the Delphi method as the research technique chosen for this study are highlighted by two renowned research teams in this arena: by Linstone and Turoff, who used the Delphi method to tackle a “problem that does not lend itself to precise analytical techniques but can benefit from subjective judgments on a collective basis” (1975, 275); and by Van de Ven and Delbecq, who recognize that without the use of focus groups, the “isolation of the participants facilitated a freedom from conformity pressures” (1974, 619). Pollard and Pollard take the role of the participant one step further in their claim that “an additional perceived benefit of using the Delphi is the belief that the writing process enables participants to thoroughly deliberate and reflect upon all aspects of the problem. The result is the participants’ submission of precise, deliberate ideas” (2004, 147). While the Delphi method lent itself to the initiation of the conversation started by this study, we anticipate that future studies may take different research paths to deepen this discourse.

Traditional Delphi-based studies are organized in the following fashion:

1. A panel of experts is identified.
2. The panel members receive information describing the objective and procedures of the study.
3. The panelists agree to participate.
4. Each panelist who agrees to participate is sent the initial inquiry.
5. The results of the initial inquiry are summarized and sent to each participating panelist.
6. Panelists are invited to respond “in light of the information generated by the collective response to round 1.”
7. The process is repeated based on consensus or the acceptable level of agreement determined by the researchers.
8. The inquiry is terminated and the procedure and the results are documented including rationale for agreement or disagreement. (Crance 1987, 2)

Participants
Delphi panelists are required to contribute their opinions in response to specific queries within a short period of time. While subject selection is considered a critical step in the Delphi process, there is little in the way of standards for the selection process. Since “expert” is defined within a
discipline, selection is determined by researchers as appropriate within the context of the query and the perceived ability of the participants to respond. Researchers may use their discretion to identify appropriate participants for a particular study; this judgment may vary within a field because of the type of information researchers intend to elicit. Commonly chosen panelists across disciplines include positional leaders, authors of publication in the literature, and those who might have direct contact with the issue under investigation (Hsu and Sanford 2007).

Invited Delphi panelists for this study include members of the editorial boards of Knowledge Quest, Library Media Connection, School Library Monthly, School Library Media Research, and Teacher Librarian, all journals in the school library field, with select academic scholars and association leaders—a total of 63 invited participants. We considered this selection suitable to this study because it encompassed leaders in the field who regularly use their scholarly and professional judgment in editorial decisions to share their expert views on a wide range of school librarianship topics. They determine annual themes for the journals and develop column and feature topics that are timely and critical to the advancement of the school library field. The editorial boards represent both school library scholars and accomplished practitioners from across the country.

We estimated that one-half of the 63 invited Delphi panelists would be willing to participate because of the timely nature of the study and because participant fatigue would likely continue through the subsequent rounds. This strategy was a backward design with the intent of having approximately 15 panelists participate throughout the entire study, the average number of Delphi panelists as identified by Ludwig in 1997. We informed the participants (via the informed consent form; see Appendix A) that the Delphi approach asks experts to respond to a single query and subsequently contribute on the basis of the initial responses. They were also informed that participation was intentionally individual and that panelists would be asked for independent thought. Since all communication would be via e-mail, participants would not need to weigh cost or travel considerations.

Delphi studies tend to have a high degree of participation because of the convenience and typically brief time commitment. Indeed, of the original 63 invited panelists (including all the editorial members, some of whom are involved in the publishing field rather than school librarianship), 35 (55 percent) responded with interest and 33 (52 percent) participated through round 1. Round 2 questions were sent to the 33 panelists who had responded affirmatively to round 1, with a return of 17 (52 percent). Round 3 was sent to the 33 panelists who responded affirmatively to round 1, with a return of 21 (64 percent), which exceeded the intended size for the final panel by 6 participants. See Appendix B for a list of participants.

Research Design and Timeline
This Delphi study sought to identify professional dispositions of school librarians. The data was gathered, collated, and analyzed for consensus, and additional requests for response may be forthcoming based on the findings. Participants were informed that templates would be provided as fill-in forms.

We informed the panelists that the first query (round 1) would consist of a request to identify and briefly substantiate five dispositions (100-word maximum each). Traditionally in Delphi studies, the number of rounds—or “iterations”—depends both on the consensus of the responses and the degree to which the researchers are seeking consensus from the study (Hsu and Sanford 2007).
Timeline

- July 27, 2009: Managing editors were informed of the upcoming invitation to their editorial board members (Appendix C)
- September 14, 2009: Invitation—requested reply by October 1 (Appendix D)
- October 12, 2009: Round 1—requested reply by November 19 (Appendix E)
- November 30, 2009: Round 2—requested reply by December 11 (Appendix F)
- December 14, 2009: Round 3—requested reply by December 31 (Appendix G)

Results

Round 1

On October 12, 2009, we asked our panelists to identify five key professional dispositions of school librarians. This request was described as forecasting a vision rather than reporting on the panelists’ perception of the current reality within the practice of school librarianship (see Appendix B). The descriptions should have clarified what an administrator would observe in a school librarian demonstrating that disposition in action.

See Table 1 for a listing and description of responses.

<table>
<thead>
<tr>
<th>Disposition</th>
<th>Consensus (%)</th>
<th>Descriptors of Disposition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching</td>
<td>85</td>
<td>Best practices used to measure learning, evidence-based practices, guided inquiry, student-centered differentiated instruction</td>
</tr>
<tr>
<td>Collaborating</td>
<td>61</td>
<td>Team-builder, central part of job, crosses boundaries, builds partnerships, brings people and ideas together</td>
</tr>
<tr>
<td>Leading</td>
<td>55</td>
<td>Moves vision forward, leads by modeling, visionary activist, innovator, leading force in school, library as center of learning</td>
</tr>
<tr>
<td>Lifelong Learning</td>
<td>55</td>
<td>Staying at forefront and on trends, professionally engaged, love of learning, “love of the hunt,” model learning behaviors</td>
</tr>
<tr>
<td>Creative Thinking</td>
<td>45</td>
<td>Intellectual curiosity, sees opportunities where others see problems, open and curious, visionary thinker, big picture</td>
</tr>
<tr>
<td>Empathy</td>
<td>42</td>
<td>Compassion, honors diversity, kindness, open-mindedness, listens to all points of view, learning experiences for all</td>
</tr>
<tr>
<td>Critical Thinking</td>
<td>39</td>
<td>Analytical, metacognitive, strategic, innovative, reflective, deep thinking, delves into new ideas, initiator</td>
</tr>
<tr>
<td>Professional</td>
<td>30</td>
<td>Stewardship, clear goals and action planning, people-centric service role, high quality of work, professional demeanor</td>
</tr>
<tr>
<td>Ethical</td>
<td>24</td>
<td>Equity of access, models information use that respects intellectual property rights, defends and committed to intellectual freedom</td>
</tr>
<tr>
<td>Advocacy</td>
<td>21</td>
<td>Communication, positive, inherently optimistic, motivator,</td>
</tr>
</tbody>
</table>
promotes, uses avenues that yield best results, involved, “big picture”

<table>
<thead>
<tr>
<th>Reading</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commitment to power of literacy, loves reading for sake of reading, supports reading strategies</td>
<td></td>
</tr>
</tbody>
</table>

Note: Round 1 respondents (N = 33) identified five dispositions and provided descriptors for each disposition. The descriptors represent the variety of keywords used to identify individual dispositions.

Round 2
On November 30, 2009, we offered our panelists an opportunity to respond to the dispositions that had been identified in round 1. The dispositions were listed in descending order by the number of responses. We created three sets of dispositions grouped by number of responses. The smaller sets make the information more manageable for comparison rather than keeping the eleven dispositions as one large group, as Miller (1956) discusses in his article about “chunking.”

See Table 2 for panelist reactions to the dispositions identified by their fellow panelists.

Table 2. Round 2—Reactions to Identification of Dispositions by Respondents in Round 1 (N=17)

<table>
<thead>
<tr>
<th>Disposition Set</th>
<th>Dispositions</th>
<th>Representative Reactions to Dispositions Identified in Round 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Set 1</td>
<td>Teaching/ Collaborating/ Leading/ Lifelong Learning</td>
<td>Exciting finding. Consistent with all of the meta-analyses of educational research that looks at “effects” on student achievement. My question is—what are the dispositions of a librarian in a teacher role, in a collaborator role, etc., that are key to success? What I call this set, collaborator, leader, lifelong learner, all go together and paint a picture of what the school librarian of the future must be. The placement of “leader” is because you queried leaders? Leader—leading what? Leading who? Little evidence of instructional leadership. I am not surprised by leader, teacher, collaborator, or lifelong learner being at the top of the list. And where does a collaborator get the ideas from which to lead? Lifelong learning.</td>
</tr>
</tbody>
</table>
| Set 2           | Creative Thinking/ Empathy/ Critical Thinking | We need to create environments where children have the space and the (emotional, intellectual, social) safety to explore their own ideas about what books, digital objects, connections, and creative expression can offer them. We need to create a space in the school that is not an extension of or add on to the classroom, but a space unique in itself. Empathy trumps ethical . . . The evidence that . . . “Creative thinking” ranks relatively high is also testament to our mission as a “whole curriculum
Note: Panelists were invited to share any quick reactions or thoughtful reflections based on round 1 results. We assumed that a lack of response to round 2 implied that the panelist chose to offer no comments at that time (but would continue to be included in the study as it progressed).

### Round 3

On December 14, 2009, we sent the panelists the identified dispositions in alphabetical order along with several representative descriptors replicated verbatim from the round 1 replies. In this third and final query, panelists were given three invitations to engage with the data. Panelists were told to feel free to respond to one, two, or all three invitations:

1. Order the dispositions identified in round 1 in descending order from critically important to lesser importance; and/or
2. Combine two or three like dispositions that you think belong together as one; and/or
3. Change the term used to identify the disposition.
For further clarification of the Delphi Study design regarding the role of the panelists and professional dispositions, the following statements were included in round 3: “Panelists identify what should be—not what is; seek to identify the ideal, do not report on our reality” and “Dispositions are not roles nor are they personality traits; while held internally, dispositions are outwardly manifested by observable behaviors.”

See Table 3 for the round 3 ordering of dispositions.

Table 3. Round 3—Ordering of Dispositions from Critically Important to Least Important (N=21)

<table>
<thead>
<tr>
<th>Dispositions</th>
<th>Points</th>
<th>Suggestions on Combining Dispositions</th>
<th>Renaming Dispositions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical Thinking</td>
<td>60</td>
<td>I would combine Creative and Critical Thinking and name the category Problem Solving</td>
<td>Combine with Creative Thinking</td>
</tr>
<tr>
<td>Creative Thinking</td>
<td>55</td>
<td>This is at the top of Bloom’s taxonomy of educational objectives</td>
<td>Combine with Critical Thinking to make Problem Solving</td>
</tr>
<tr>
<td>Teaching</td>
<td>55</td>
<td>Combine Collaborating, Teaching, and Reading</td>
<td>Instructional Partner</td>
</tr>
<tr>
<td>Leading</td>
<td>50</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Collaborating</td>
<td>40</td>
<td>Combine Collaborating with Empathy because each requires the other to be relevant to school librarianship</td>
<td>Teaching and Collaborating</td>
</tr>
<tr>
<td>Lifelong Learning</td>
<td>36</td>
<td>Combine with Creative and Critical Thinking; also contains parts of Professionalism</td>
<td>—</td>
</tr>
<tr>
<td>Reading</td>
<td>25</td>
<td>Combine Teaching and Reading</td>
<td>Multiple Literacies</td>
</tr>
<tr>
<td>Professional</td>
<td>22</td>
<td>Combine with parts of Lifelong Learning</td>
<td>—</td>
</tr>
<tr>
<td>Ethical</td>
<td>19</td>
<td>Combine Ethical and leading</td>
<td>Ethical Stance</td>
</tr>
<tr>
<td>Empathy</td>
<td>18</td>
<td>Consider eliminating</td>
<td>—</td>
</tr>
<tr>
<td>Advocacy</td>
<td>18</td>
<td>Combine with Leading</td>
<td>Old-fashioned term</td>
</tr>
</tbody>
</table>

Note: In Round 3 panelists (N=21) ordered the dispositions from most to least important as well as provided input regarding combining and renaming dispositions. A reverse point scale was developed that weighted the dispositions 1–11 so that the dispositions with the highest number of points were ranked as the highest. Comments suggest that panelists struggled with semantics. For instance, one panelist who eliminated Empathy wrote, “It just didn’t fit. I think it is a personality trait.” However, the notion of care is identified by many scholars as the core disposition of teachers (Bernard, 2004; Hurst, 2005; Noddings, 2005; Smith & Emigh, 2005).
Discussion

The impetus for this study was the publication of AASL’s *Standards for the 21st-Century Learner* complete with dispositions in action for the student learner. There was an implied imperative that practicing educators were to provide the requisite modeling of student-learning dispositions, which is borne out in the teacher education professional literature (Katz and Raths 1986; Katz 1993; Mevarech 1995; Darling-Hammond and Bransford 2005; Smith, Skarbek, and Hurst 2005; Sockett 2006). However, we uncovered studies of professional dispositions of classroom teachers based on standards only, as described in the introduction to this article. It became clear that initial studies needed to be conducted in school librarianship; there had been no research detected or published studies found, no indication that professional dispositions were identified, were discussed in school librarian preparatory programs, were topics of professional development, or were included in professional evaluations by administrators.

Disposition is a complex concept and one that does not lend itself easily to either definition or identification. The paradox of a professional field that dwells comfortably in inquiry but appreciates clear delineations of fact from opinion was made evident by numerous panelist responses. The Delphi study described above could be considered a problem-based learning experience, one that seemed ill defined and messy to some participants. This assignment for the panelists was not a “bird unit” (Loertscher, Koechlin, and Zwaan 2005) to be sure. And to add yet another layer of complexity, this study was born of the affective domain rather than the cognitive. This issue is usually discussed in more distant terms, such as “climate” and “learning environment,” rather than in personal terms, and that might strike some too close to home knowing that assessment and evaluation cannot be far behind.

Despite the coupling of the relatively unfamiliar and decidedly complex concept of dispositions and the open-ended qualitative research design of the Delphi study, results were found to (1) indicate a vision for professional dispositions of school librarians recognized predominantly for their quality teaching but from a distinctly school library perspective, (2) provoke a range of emotional responses from dedicated leaders of the field, and (3) highlight the critical importance of grappling with the identified schism between reality and the vision of professional dispositions of school librarians as documented by this study. Evaluation and assessment are inevitable in our accountability-laden educational system, and if we do not identify our own vision of school librarian dispositions, we run the very real risk that they will be identified for us. This motivational message was not lost on the thoughtful panelists of this study and likely convinced many to participate despite the provocative nature of the inquiry.

1. Results indicate a vision for professional dispositions of school librarians recognized predominantly for their quality teaching but from a distinctly school library perspective.

Panelists identified professional dispositions that fall into the following three categories: (1) holistic, (2) transformative, and (3) inquiry. Taking the school library as a context, “holistic” is the foundational category. These dispositions engage the school as a learning ecosystem, with the school library as a communal space for building knowledge societies. Envisioned dispositions encompass the school library writ large, both the physical environment and the twenty-first-century networking environments. It has a societal context that provides for a learning environment where inquiry reigns, access is universal, and minds meet to construct new understandings. School librarians have a unique position as an instructional partner who integrates learning through all curricula and engages with students throughout their tenure in a
school; in highly mobile school populations that might be just one or two years, but it could add up to four (secondary school), nine (kindergarten through eighth grade) or thirteen years in consolidated school districts (kindergarten through twelfth grade).

This longitudinal relationship with both the student and the curriculum establishes a fundamental engagement shared by each student as he or she journeys through the school. Building on this foundation of a holistic context, the second category is “transformative of intellectual character.” Here we focus on our learners in a developmental approach. This teaching philosophy recognizes that the school librarian is a constant in the learning environment of the student over time, unlike the classroom teacher who knows a learner for approximately 185 days throughout one school year. The school librarian not only focuses on integrating content in the curriculum but also focuses on the learner, on guiding and influencing an openness to new ideas and ways of making meaning, of critical and creative thinking, of building on the knowledge of the student as learner throughout each developmental stage. Here the library becomes a way of learning rather than a physical or virtual space—it becomes embedded in the life of student’s mind as the student has access over time to changing resources depending on discipline and developmentally appropriate resource allocation.

The third category of professional dispositions of school librarians might appear to be the most familiar—“the inquiry stance.” The inquiry stance makes the universe of the school librarian applied and pragmatic, and it feeds the program’s actualization. Panelists discuss inquiry as a common thread woven through the majority of the dispositions identified. In each case there was an immediacy brought to the demonstration of understanding that accompanies constructivist knowledge-building.

Panelists identified dispositions that focus on change agency in the practice of teaching and learning. While the identification of teaching was both predominant and problematic, it spoke to the overwhelming response that in one way or another, it is all about teaching; if only we could get our ideas sorted out and identify the distinction that we have from our classroom-teacher counterparts. We engage with our learners in a holistic, communal, and societal context in which care and equity are symptoms of our respect for each student. We build intellectual character over time through modeling, guiding, and influencing learning through understanding. We share the journey with our young charges throughout their learning experiences in the school and throughout their authentic learning that reaches their local and global communities. We employ instructional strategies, techniques, skills, and applied best practices to bring focus to an inquiry stance that envelops both deep thinking and proven skill sets that create learners rather than the learned.

2. Results were found to provoke a range of emotional responses from dedicated leaders of the field.

The subject of this study is one that appears to be unexplored in school librarianship. Best practices are accepted even though they are rarely evidence-based, student learning is our worthy goal, and new iterations of visionary outcomes demonstrate remarkable contributions by school librarian scholars and leaders. The publication of the 2007 AASL Standards shone a light on student-learning dispositions and caused the field to turn the mirror on itself. There was a fair amount of cognitive dissonance with the complexity of the concept of dispositions, as indicated by this study’s round 2 results (see Table 2 on page 9). There was an understanding that
responses were individual and should come from the panelist’s professional, tacit knowledge rather than from research. The Delphi method “is a group decision mechanism requiring qualified experts who have deep understanding of the issues” (Okoli and Pawlowski 2004, 20), but a tenuous grasp of the concept of dispositions caused panelists to be wary of claiming unfamiliar terms to describe their understandings—a hard peg in a fuzzy hole. And finally, experts in this field are unaccustomed to formalizing a vision based on the affective domain. This discomfort may have added to frustration with participating in this study. We were careful to report results as they were received; however, panelists seemed to grant ownership to us rather than to their fellow panelists (see comments below including “your study,” “you placed,” and “your list”). The round 1 results garnered a vast range of responses, including the following samples:

- “I am very surprised at the results of the first round of your Delphi study.”
- “I find this very discouraging.”
- “The responses and categories in which you placed them were quite predictable.”
- “I was a bit surprised at the top dispositions on your list.”
- “Exciting finding—consistent with all the meta-analyses of educational research.”

Indeed, frustration with this process of query (as in the process of identifying dispositions) is identified by Kuhlthau, Maniotes, and Caspari:

"The stages of exploration and formulation are usually an unpleasant surprise for students, and sometimes for teachers and librarians as well. Too often they expect to move directly from selecting the general topic for investigation to gathering and collecting information for completing the assignment. These studies show that the exploration and formulation stages are difficult and confusing for many students. They are encountering lots of new ideas that often conflict with what they already know and seem incompatible with each other . . . however, it is during exploration that the most significant learning takes place in the inquiry process. (2007, 17)"

3. **Results highlight the critical importance of grappling with the identified schism between reality and the vision of professional dispositions of school librarians as documented by this study.**

Participation by the panelists required visionary thinking, not about what experience has shown to be our professional dispositions, but about what the panelists forecast to be professional dispositions of school librarians. In round 3, we reminded panelists that they should “identify what should be—not what is; seek to identify the ideal, do not report on our reality.” Naturally, there are no wrong answers and no right answers, there are only responses gathered from recognized experts in the field who are dedicated, visionary, and accustomed to providing profoundly valuable and selfless service to the profession. Additionally, the Delphi method requires that panelists be independent in their responses and respond to inquiries individually. These factors illuminated diverse thinking across the field, both geographically and creatively. Some responses were grounded in the past and present, others were flung far afield and remain as outliers. Nevertheless, there seems to be a sinking feeling that the reality of the field in 2010 is substantively lacking in comparison to the visionary thinking demonstrated by the panelists. As stated by one panelist:
I am thrilled to see “teacher” out by a wide margin. I did some action research earlier this fall and the librarians who responded didn’t see themselves as teachers at all. Your responders obviously see it differently.

This realization by the study participants is an unexpected outcome that will hopefully be sufficient to motivate school library educators and professional development providers to implement necessary changes in school librarianship curriculum. Regardless of the particular sentiment of any given panelist, there is a distinctly heightened consciousness of the need for school librarians to identify their own professional dispositions as a compass for their professional education programs and professional development.

**Limitations of the Study**

Have a conversation about dispositions, and one major limitation of the study will emerge. We provided panelists with a definition of dispositions from NCATE, but that definition is not satisfactorily descriptive. This limitation is grounded in the historically challenging attempt to encapsulate the concept of dispositions into a neat and tidy concept. A limitation of any study of the concept of dispositions is the difficulty of absolutely defining the term. As one panelist commented, “the definition of a disposition is not sufficiently clarified.” While the concept of dispositions is complex, we believed that the school library scholars who chose to participate would give this topic their best effort. We hoped that this study will serve as a starting point for further research, no more and no less.

A Delphi study requests opinions of leaders in a field to forecast their views on a future that they alone envision on the basis of their substantive professional experience, background, and education. In this method, experts typically “generate ideas, gain consensus, and identify divergence of opinions about a specific topic” (Dimmitt et al. 2005, 216). The strength of the forecast is conversely a limitation of the study—it is only opinion and conjecture of a panel of experts that is gleaned from their perspectives, in this case, on the future of school librarianship.

Editorial board members tend to have been active in school librarianship for a significant period of time. The study panelists represent a cross-section of U.S. editorial board members, building practitioners, and university faculty engaged in school librarian education. By virtue of this expert panel, educators outside of school librarianship, including educational administrators, did not participate in the study. Also, those practitioners new to the field of school librarianship were not included in the study. The focused approach to selecting the panelists was exclusive rather than inclusive.

There is the inherent limitation of asking a busy person to do yet one more thing. While it is understood that busy people accomplish much, and every invitee is a “busy” person, timing does matter. This research project was introduced in July, invitations were sent in September, and completed in December. Three of the invitees (5 percent) claimed that the timing was problematic for them. This is a consideration for future studies that invite participation by those engaged in the academic calendar.
Implications for Research Results

One resonating finding of this study is the need to influence school library education—both preservice and continuing—to develop professional dispositions of school librarians. Experimenting with the topic through regional, national, and international conference sessions, we are finding that scenarios significantly affect the discussion of dispositions. The design and projected implementation of signature pedagogies for teaching future school librarians is a desired outcome for research results.

A logical future step is the development of valid and reliable assessments. Proposed assessments might include those used in preservice graduate preparation programs for intake at the time of admissions, for a benchmark at a midpoint during a program, and as a summative assessment. These assessments may be both self- and advisor-assessed. Additionally, the same points of ongoing assessment might be developed for building-level practicing school librarians.

Finally, research outcomes will be generative because the panelists who participated in this study are all accomplished providers of professional development, writing, presenting, and forward thinking for the field of school librarianship. While the Delphi method requires individual efforts and independent thought, the collaborative nature of the research results will empower a range of outcomes to move the field forward and close the gap between the reality and the vision.

Implications for Future Research

Our panelists did not hesitate to offer their recommendations for future research, as evidenced by the following comment: “Your next study would be to get a school librarian to describe his or her dispositions and then see if the principal, teacher, and students recognize any of them.” Studies might be conducted to compare the current curriculum in graduate school preparation programs to the teaching of identified professional dispositions forecast by the Delphi panelists. There is also an interest in the comparison to international school librarianship. The Delphi method might be used to identify dispositions within the categories explored through this research. While many descriptors were used to define each disposition, panelists expressed the importance of further clarity after responding to round 2 (see Table 2 on page 9). Each round of this study lends itself to deeper inquiry. And as with any study of professionals, accepted practices and expectations change over time, and this study might be replicated as a Delphi study at future dates.

Conclusion

This research project sought to investigate the identification of professional dispositions of school librarians by soliciting input from editorial board members of the leading professional journals in the field in the United States. We selected the Delphi method because we determined that it would best fit this research project investigation. Delphi study panelists independently identified professional dispositions and described their terminology (Table 1 on page 8); commented on eleven prominent dispositions that received the most consensuses of responses (Table 2 on page 9); and ranked and combined categories of dispositions (Table 3 on page 11). The results of this study provide a research-based foundation for designing and implementing signature pedagogies for use in school library education, appropriate assessment measures for both school library education and practicing school librarians, and for the discussion of professional dispositions of school librarians.
In addition to identifying dispositions and the broader context within which they are recognized, this study illuminated the emotional response to investigating in the affective domain. Clearly this research study struck a chord with the participating panelists, as illustrated by the following comment:

_I printed your results and tacked them to the wall of my office. For the last two days I have looked at that list repeatedly and considered it with some shock._

The exploration each panelist launched multiplied the impact of this study of professional dispositions and broadened the results to initiate a conversation that has only just begun. As we continue to mine the data to design appropriate pedagogies in school librarian preparation programs and assessments (intake for graduate programs, preservice, and position evaluation), we invite our researcher colleagues to courageously build on this study to further crystallize a robust vision of school librarianship.

**Works Cited**


What teachers should learn and be able to do. San Francisco: Jossey-Bass.


Weissmann, P., W. Branch, C. Gracey, P. Haidet, and R. M. Frankel, 2006. Role modeling

**Cite This Article**


**Appendix A. Informed Consent, September 14, 2009**

**Identifying Professional Dispositions of School Librarians**

**Informed Consent–Participant Form**

I understand that I have been invited to participate in a research project conducted by Jami Jones, Assistant Professor of Library Science at East Carolina University, Greenville, North Carolina and Gail Bush, Professor, Reading and Language, National-Louis University, Skokie, Illinois faculty from September 14, 2009 through December 1, 2009. The study “Identifying Professional Dispositions of School Librarians” seeks to identify professional dispositions of school librarians. Information from this study will be used to understand those dispositions that the leaders of our field identify as significant.

I understand that I’ve been invited to participate in a study that uses the “Delphi” approach, which engages experts in responding to a single query and subsequent contribution based on initial responses.

I understand that all participation will occur through e-mail, and that the researchers Dr. Jones and Dr. Bush will gather, collate, and analyze the data for consensus and make one additional request for response based on their findings. Templates will be provided as fill-in forms.

I understand that the first query will me e-mailed to me on October 12, 2009 and will consist of one question with a request for five answers that will include brief substantiation (100-word maximum each). The first query will be e-mailed back to the researchers by October 23, 2009, and will take approximately one to two hours to complete.

I understand that the second query will consist of two requests for prioritizing a list that will be supplied to me. The second query will be e-mailed to me on November 16, 2009. It will be e-mailed back to the researchers by November 25, 2009, and will take approximately one-half hour to complete.

I understand that my participation is voluntary. I also understand that I can discontinue my participation in the study at any time without any penalty or bias.
I understand there are no anticipated risks or benefits to me, no greater than that encountered in daily life. Further, the information gained from this study could be useful to practitioners, school administrators, school library faculty, and researchers.

To ensure confidentiality, Dr. Jones and Dr. Bush will maintain all data in a confidential manner and that this data will not be shared.

I understand that the results of this study may be published or presented at educational conferences, but my identity will in no way be revealed.

I understand that if I choose, my name will be included as a Delphi study panelist in a list of panelists but will not be directly linked to my responses. Therefore anonymity cannot be guaranteed.

I understand I will receive results of the study.

I understand that in the event I have questions or require additional information I may contact the researchers.

I give consent to participate in this research study and for my name to be included as a Delphi study panelist in a list of panelists.

<table>
<thead>
<tr>
<th>Participant’s Name (Please Print)</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participant’s Signature</td>
<td>Date</td>
</tr>
<tr>
<td>Researcher’s Signature</td>
<td>Date</td>
</tr>
<tr>
<td>Researcher’s Signature</td>
<td>Date</td>
</tr>
</tbody>
</table>

I give consent to participate in this research study only. I do not want my name to be included as a Delphi study panelist in a list of panelists.

<table>
<thead>
<tr>
<th>Participant’s Name (Please Print)</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participant’s Signature</td>
<td>Date</td>
</tr>
<tr>
<td>Researcher’s Signature</td>
<td>Date</td>
</tr>
<tr>
<td>Researcher’s Signature</td>
<td>Date</td>
</tr>
</tbody>
</table>

Appendix B. Delphi Study Panel Participants

Debbie Abilock, *Knowledge Quest*
Thomas H. Adamich, *Knowledge Quest*
Susan Ballard, *Teacher Librarian*
Appendix C. Introductory Letter to Editors, July 27, 2009

Hello Editors,

We are embarking on a Delphi study to identify professional dispositions of school librarians. As our “panelists” we are planning to contact the members of the editorial/advisory boards of the five journals in our field, including Knowledge Quest, LMC, School Library Media Activities Monthly, School Library Media Research, and Teacher Librarian. Our institutional review board proposals are in process at this time. We will, of course, include you and your associate editors in our panel of experts.

An invitation will be sent to each panelist in September that begins, “You are invited to participate in a Delphi study titled “Identifying Professional Dispositions of School Librarians” by Jami Jones and Gail Bush that seeks to identify professional dispositions of school librarians.”
We are inviting all members of the editorial boards of five journals in the school library field to participate. This research methodology is suitable to this study as we are inviting key leaders in our field who regularly use their scholarly and professional judgment in editorial decisions to share their expert views on this particular dynamic topic. The Delphi approach engages experts in responding to a single query and subsequent contribution based on initial responses. All participation will occur through e-mail; our contact with you, the ‘panel,’ is intentionally individual. Panelists are asked for independent thought. The researchers will gather, collate, and analyze the data for consensus and make one additional request for response based on our findings. Templates will be provided as ‘fill-in forms.’”

We are accessing the lists of editorial/advisory board members posted on your websites (KQ—we have your current roster). The total number of panelists to be invited is approximately 55; naturally everyone will decide whether to consent to participate. The invitation will be sent in mid-September and all the data will be gathered by December 2009.

We are very excited about the potential impact of this research. We consider this study to be “Phase 1” as we will seek to recommend signature pedagogies and assessments for evaluation based upon our findings.

This e-mail is meant to be informational and also to request updated editorial/advisory member contact information if necessary (all contact will be conducted through e-mail); you could reply to this e-mail address with updated or additional information regarding the panelists. Please feel free to contact us with any concerns or comments.

Sincerely yours,

Jami Jones, Ph.D.

Gail Bush, Ph.D.

Appendix D. Invitation to Delphi Panelists, September 14, 2009

Dear (Editorial Board Member),

You are invited to participate in a Delphi study titled “Identifying Professional Dispositions of School Librarians” by Jami Jones and Gail Bush that seeks to identify professional dispositions of school librarians. We are inviting all members of the editorial boards of five journals in the school library field to participate. This research method is suitable to this study as we are inviting key leaders in our field who regularly use their scholarly and professional judgment in editorial decisions to share their expert views on this particular dynamic topic.

The Delphi approach engages experts in responding to a single query and subsequent contribution based on initial responses. All participation will occur through e-mail; our contact with you, the “panel,” is intentionally individual. Panelists are asked for independent thought. The researchers will gather, collate, and analyze the data for consensus and make one additional request for response based on our findings. Templates will be provided as fill-in forms.
The first query will consist of one question with a request for five answers that will include brief substantiation (100-word maximum each). Our second query will consist of two requests for prioritizing a list that will be supplied to you.

The first query will be e-mailed to panelists on October 12, 2009. The second query will be e-mailed to panelists on November 16, 2009. For both queries you will have two weeks to respond to our requests for contributions. The Delphi study will be completed by December 1, 2009.

The AASL 21st Century Learner Standards have brought dispositions to the forefront of our field—this one aspect of the 2007 Standards represents the most dramatic departure from the 1998 Information Literacy Standards. Our national standards are now guiding our practice to include dispositions for students, which is akin to the cart before the horse of our own professional inquiry. How do we teach learner dispositions through modeling when we have yet to identify our own dispositions?

It is our hope that through your participation we will begin to understand those dispositions that the leaders of our field identify as significant. Editorial and advisory board members who routinely hold sway with the professional literature together form a panel of experts who share both deep understanding and dedication to a shared vision of exemplary school library practice. This impressive group of individuals includes those who engage in service to our profession through a wide range of commitments.

Please respond to this e-mail by October 2, 2009, to inform us of your decision (to participate or to not participate) from your preferred e-mail address and include full contact information.

In addition, if you choose to participate in the study, please return the attached consent form either by affixing an electronic signature, faxing, or by mailing a hard copy of your consent form with your signature no later than October 23, 2009 to Gail Bush at the address listed below.

We thank you in advance for considering our request for your participation. We feel fortunate to know many of you personally and admire every one of you professionally.

Sincerely yours,

Jami and Gail

NLU Approval 09.11.09

Appendix E. Round 1: First Query, October 12, 2009

Identifying Professional Dispositions of School Librarians: A Delphi Study

Dr. Jami Jones & Dr. Gail Bush

October 12, 2009
First Query

You are asked to identify five key professional dispositions of school librarians. Please support each identified disposition with a brief description (fewer than 100 words) of what an administrator would observe in an exemplary school librarian demonstrating that disposition in action.

Appendix F. Round 2: Second Query, November 30, 2009

Identifying Professional Dispositions of School Librarians: A Delphi Study

Dr. Jami Jones & Dr. Gail Bush

November 30, 2009

Second Query

On October 12, 2009, Delphi study panelists were asked to identify five key professional dispositions of school librarians. Clearly this research hit a chord with you, the leaders and scholars in our field; we received almost forty thoughtful responses to our query, well over half of those queried.

When researchers develop a Delphi study, the subsequent participation of the panelists is unknown at the outset. As you can see, the dispositions are in descending order based on number of responses that fell naturally into a prioritized order. Descriptions then clarified what an administrator would observe in a school librarian demonstrating that disposition in action.

You are invited to share any quick reactions or thoughtful reflections based on these results by December 11, 2009. If we do not hear from you, we will not send out reminders, we will merely assume that you are going to wait patiently for our final results in the form of a research article, chapter, edited journal issue, assessments, pedagogies, and subsequent book as a follow-up to our prequel, Tales Out of the School Library: Developing Professional Dispositions (January 2010, ABC CLIO).

Identifying Professional Dispositions of School Librarians: A Delphi Stud

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<tr>
<td>28</td>
<td>Teacher</td>
</tr>
<tr>
<td>15</td>
<td>Creative</td>
</tr>
<tr>
<td></td>
<td>Thinking</td>
</tr>
<tr>
<td>10</td>
<td>Professional</td>
</tr>
<tr>
<td>20</td>
<td>Collaborator</td>
</tr>
<tr>
<td>14</td>
<td>Empathy</td>
</tr>
</tbody>
</table>
A clear definition and robust list of identifiers for each disposition will accompany our research results. We are still working with the data and are fascinated as patterns are emerging within each category. It cannot be overstated that the value of this research resides in its collaborative strength powered by each panelist, each one busier than the next, each one equally generous. We are awed by your heartfelt response to this research and grateful to count you among our colleagues, our friends,

Jami Jones and Gail Bush

NLU Approval 09.11.09

Appendix G. Round 3: Third Query, December 14, 2009

Identifying Professional Dispositions of School Librarians: A Delphi Study

Dr. Jami Jones & Dr. Gail Bush

December 14, 2009

Third (and Final) Query

On October 12, 2009, Delphi study panelists were asked to identify five key professional dispositions of school librarians. Clearly this research hit a chord with you, the leaders and scholars in our field; we received almost forty thoughtful responses to our query, well over half of those queried.

On November 30, 2009, Delphi study panelists were offered another opportunity to respond to the dispositions that had been identified by fellow panelists. The dispositions were listed in descending order based on number of responses. As with many forms of problem-based inquiry, this minimal display of dispositions without identifying descriptors provoked numerous replies. We received almost twenty quick reactions with a wide range of passionate and many conflicting responses.

When researchers develop a Delphi study, the subsequent participation of the panelists is unknown at the outset. Today we are sending you the dispositions along with several representative descriptors that are verbatim from the query 1 replies. In this third and final query, you are given three invitations to engage with the data:

<table>
<thead>
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<th></th>
<th>Ethical</th>
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<tbody>
<tr>
<td>8</td>
<td>Leader</td>
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<tr>
<td>18</td>
<td>Critical Thinking</td>
</tr>
<tr>
<td>6</td>
<td>Advocate</td>
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<tr>
<td>18</td>
<td>Lifelong Learner</td>
</tr>
<tr>
<td>5</td>
<td>Literacy/Reading</td>
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</table>
• Order the dispositions (now listed alphabetically) in descending order from critically important to lesser importance;
• Combine like dispositions that you think are just two (or three) that really belong together as one; and/or
• Change the name/term used to the disposition.

Please note:
• *Panelists identify what should be—not what is; seek to identify the ideal, do not report on our reality*
• *Dispositions are not roles nor are they personality traits; while held internally, dispositions are outwardly manifested by observable behaviors*

You are invited to share any or all of the above responses along with any quick reactions or thoughtful reflections based on these results and return that response by *December 31, 2009* (let us know if you would like to respond but need more time into the new year). If we do not hear from you, we will not send out reminders, we will merely assume that you are going to wait patiently for our final results in the form of a research article, chapter, edited journal issue, assessments, pedagogies, and subsequent book as a follow up to our prequel, *Tales Out of the School Library: Developing Professional Dispositions* (January 2010, ABC CLIO).

**Identifying Professional Dispositions of School Librarians: A Delphi Study**

*Advocacy*: communication, promotes, uses avenues that yield best results, involved, understands big picture, involves partnerships, maintenance of relationships

*Collaborating*: team-builder, brings people and ideas together for greater good, connector, initiates and participates in collaboration, dynamics of working with diverse personalities, power sharer

*Creative Thinking*: intellectual curiosity, sees opportunities where others see problems, seeks novelty, genuine sense of wonder, all new information generates questions, experimentation

*Critical Thinking*: analytical/strategic, reflective inquirer, deep thinking/delves into new ideas, uses research to solve problems, thinking ahead of change, uses information to create new knowledge

*Empathy*: compassion, perceives the world through eyes of others, honors diversity, kindness, open-mindedness, listens to all points of view, concern, learning experiences for all, responsive, each child can learn, inclusive, listening ear, thoughtfulness, accommodation, helpful, models respect, commitment to environment where all students can learn, inclusive

*Ethical*: equity of access, models information use that respects intellectual property rights, defends and committed to intellectual freedom, provides information that meets needs of students without exception, integrity as related to ethics
**Leading:** moves vision forward, lead by modeling, visionary activist, perseverance/integrity/passion/reflective/honesty/innovator/change agent, risk-taking, communicates respect and understanding, exhibit leadership through knowledge of profession

**Lifelong Learning:** openness, staying at forefront and on trends, eagerness to learn, model curiosity, “love of the hunt,” active and involved, seeks best practices

**Professional:** stewardship, logic and organization, clear goals and action planning, people-centric service role, multitasking time management, manager of safe and orderly learning environment

**Reading and Literacy:** commitment to power of literacy, loves reading for sake of reading, values reading and literacy, supports reading strategies, motivation.curiosity/passion for reading and writing, format-neutral

**Teaching:** intellectually stimulates students, uses repertoire of diverse strategies, continually shifting/adjusts to fit learning culture, create safe learning environment, connect school to global community as information specialist

Again, it cannot be overstated that the value of this research resides in its collaborative strength powered by each panelist, each one busier than the next, each one equally generous.

We are awed by your heartfelt response to this research and grateful to count you among our colleagues, our friends,

*We wish you a joyful and fulfilling 2010 and hope to see you soon,*

Jami Jones and Gail Bush

NLU Approval 09.11.09

**School Library Research** (ISSN: 2165-1019) is an official journal of the American Association of School Librarians. It is the successor to School Library Media Quarterly Online and School Library Media Research. The purpose of School Library Research is to promote and publish high quality original research concerning the management, implementation, and evaluation of school library media programs. The journal will also emphasize research on instructional theory, teaching methods, and critical issues relevant to school library media. Visit the [SLR website](https://www.ala.org/aasl/slr) for more information.
The mission of the American Association of School Librarians is to advocate excellence, facilitate change, and develop leaders in the school library field. Visit the AASL website for more information.
The Relationship Between School Culture and the School Library Program: Four Case Studies

Jody K. Howard, Associate Professor, Palmer School of Library and Information Science, Long Island University

Abstract
This research describes the results of a cross-case analysis of four individual case studies at schools having nationally recognized school library programs. The focus of the study is on the culture of the school as an organization and its effect on establishing an effective school library program. The purpose of the study was to identify cultural themes at each school. The approach to analysis is consistent with the tenets of naturalistic research and reflects the assumptions of qualitative research. Giddens’ (1984) structuration theory, Senge’s (1990) concepts of the learning organization, and Schein’s (1992) theory of organizational culture provide the framework for this research. Common patterns found at each site include the presence of a collaborative culture, the collaborative leadership style of the principal, and high expectations for the students and the staff. Possible future research includes replicating this study using a larger number of schools to determine if the same patterns will surface. Additional research is necessary to further analyze the role of culture in organizations and its effect of establishing an effective school library program.

Introduction
In a suburban K–5 school, a librarian just finished explaining to a group of fifth graders how they should keep track of the sources they used while researching the subject of pioneers in the early days of the United States. She and the classroom teacher had been working with these students for two days in the library learning how to find this information and had discussed books and online resources. As the school librarian gave the students time to research, the teacher approached her and the two of them decided the teacher would keep half the students in the classroom the next day and send the students who still needed research time to the school library to work with the librarian.

This example is not an unusual occurrence in schools where the teachers and school librarians work together. In these schools, school librarians and teachers work hand in hand developing and implementing the information literacy and content curriculum so that each student has the opportunity to master the content and develop the critical thinking skills necessary to seek,
evaluate, synthesize, use, and create information and knowledge. However, at some schools equally well trained school librarians find it is next to impossible to establish a collaborative environment. In other words, even if a school librarian is committed to establishing a vibrant, dynamic school library program that supports the national standards, it is not always possible. So why are some school librarians successful in implementing an effective library program and others are not?

During the 2007 and 2008 school years, I worked with two school librarians on developing strategies for professional development in their respective schools. As we were concluding one of our meetings, one of the school librarians indicated that we would need to be aware of her school culture as we continued developing the lessons as the culture would have a direct impact on what she would be able to accomplish through this staff development. This incident is important because it acknowledges that context is a key dimension in school library activities and points specifically to the fact that school librarians are keenly aware of school culture as an important element of that context. This idea of school culture and the relationship to the school library program is a concept that is not often addressed in the professional library and information science (LIS) literature today.

To examine the relationship between school culture and the school library, I conducted four case studies in the spring of 2008 at four schools that have been recognized through a national award as having effective school library programs. The libraries at these schools have implemented programs that align with the national standards as presented by the American Association of School Librarians (AASL) and the Association for Educational Communications and Technology (AECT) in *Information Power: Building Partnerships for Learning* (1998). The formula presented in this work describes the school librarian as having four roles: a teacher, an instructional partner, an information specialist, and a program administrator. The purpose of these roles is to provide a blueprint for school librarians, enabling them to establish effective library programs that help increase the achievement level of the students. Since I conducted this research, AASL has published *Empowering Learners: Guidelines for the School Library Media Programs* (2009), which continues to support these roles and identifies leadership as a fifth role.

LIS literature does examine the relationship of the school librarian to the effectiveness in delivering programs and services. A variety of researchers in the library field suggest that the librarian must be a leader in order to establish a quality program (Andronik 2003; Farmer 1995; Hartzell 2001; Lance and Loertscher 2005; Lance, Rodney, and Hamilton-Pennell 2000; Woolls 2004). Other research indicates that the support of the principal is a key factor in creating an environment favorable to the development of a quality program (Hartzell 1994, 2001, 2003). Although the AASL formula for an effective library program suggests what the school librarian must do, it does not acknowledge or address contextual issues nor explore if and how forces outside the library will affect the implementation of a viable program. AASL’s *Empowering Learners* (2009) discusses the need for developing an environment conducive to student achievement, but it does not cover how to implement change that will create this type of environment throughout the school. Nor has the relationship of the school culture and the role of the school librarian been addressed in a holistic way in school library research.
Recent Research in School Librarianship

Research has been conducted in the LIS field linking the effectiveness of schools, including the increase in student achievement, with school libraries (Lance, Rodney, and Hamilton-Pennell 2000; Todd and Kuhlthau 2005; Whelan 2004). Lance, Rodney, and Hamilton-Pennell (2000) demonstrated the positive correlation between the role of the school librarian and the increase in student achievement. By 2005, their research had been replicated in more than a dozen states with five different researchers or research teams (Lance and Callison 2005). Each of these studies demonstrates the importance of school libraries and clarified the relationship between a strong library program, student learning, and an increase of test scores. These studies analyzed how the school libraries affected 2.6 million students in approximately 8,700 schools (Lance and Callison 2005). The studies built on the premise that having a school librarian assume an instructional role increased student achievement. School Libraries Work (Scholastic 2008) provides a synopsis of the nineteen states and one province that have produced similar studies with links between effective school libraries and student achievement.

Todd and Kuhlthau (2005) approached their research with a different focus and illustrated how school libraries and librarians have been instrumental in the success of students in 39 school libraries in Ohio affecting 13,000 students. Todd and Kuhlthau began from the vantage point of the students, ascertaining how the school library helped them succeed during high school. These studies focus on the school librarian as an integral part of the school, but they do not examine the culture of the school or the influences the existing school culture may have on implementing an effective school library program.

While school context has not been the direct focus of research in LIS, several studies have suggested its central importance. Kuhlthau (1993, 2004) worked extensively with students in developing an information search process (ISP), using process in conjunction with content. The Library Power Project (Zweizig and Hopkins 1999) worked with school libraries throughout the United States and arrived at conclusions that accounted for the context of the entire school, including the need to restructure the roles of teachers and the school librarian. Hartzell (1994, 2001, 2003) addresses nonlibrary factors affecting the school librarian’s role, including the process of school improvement, the management style of the principal, the previous training of faculty members, and the attitudes of the community members.

Purpose and Research Questions

The purpose of this study was to examine the culture of participating schools to determine if there were any practices that contribute to establishing an effective school library program.

The concept of culture has a variety of meanings. This study uses Peterson and Deal’s (1998) definition. Working in the K–12 arena, Peterson and Deal define culture as “the underground stream of norms, values, beliefs, traditions, and rituals that has built up over time as people work together, solve problems, and confront challenges” (28).

This research has one central question: which elements of the school culture make schools fertile ground for the establishment of an effective school library program?

In exploring this question, I collected data that addressed the existence of an organizational culture at each research site related to ongoing support for effective school library programs. In
addition to the above question, I asked myself the following to provide structure and focus for data collection through observations, interviews, and document artifacts:

- What artifacts, values, and assumptions are in place in schools that have successful school libraries?
- Are there artifacts, values, and assumptions found in the school community that can be identified as part of the culture of the school?
- How do the principal and the classroom teachers perceive the role of the school librarian?
- Is there a specific organizational structure in the school that assists the school librarian in setting up an effective program?
- What types of interactions occur between the school librarians and the administrators, the administrators and the teachers, and the school librarian and the classroom teachers?
- What information do these interactions provide concerning the type of culture present in the school?

In addressing these questions, this study identifies the patterns that are present at each site that describe the culture of each school and its relationship to the school library program.

**Theoretical and Conceptual Frameworks**

Three different theories provided the foundations for this research: Giddens’ (1984) structuration theory, Senge’s (1990) concept of learning organizations, and Schein’s (1992) process of identifying the different elements of culture in an organization. Giddens combines the concern for social structure and the concern for human agency in structuration theory. This duality of structure—humans and social norms—illustrates his concept of looking at the process of change in society. Humans develop social norms but by virtue of their interactions with each other change those norms. This change is brought about gradually as humans interact, collaborate, and solve problems. The once-established societal norms are altered through the interactions of the people who originally established these norms. Thus change occurs. Senge’s work, *The Fifth Discipline*, discusses organizations and how each institution should become a learning organization. He identifies five disciplines: personal mastery, mental models, building a shared vision, team learning, and, most importantly, systems thinking. He likens an organization to a mirror. If the mirror is whole, it is functional and provides an accurate reflection. If the mirror is broken into many parts, then it is not functional and the reflection of the image is inaccurate. Someone observing specific departments in an organization may understand each department. However, it is not until the observer looks at the organization as a whole will he or she understand how the organization functions. Schein provides a way to analyze culture by identifying three different levels. The first level comprises the artifacts of an organization, the traditions and practices that are visible to the observer. The second level includes values that are concepts the group supports strongly and have implemented into their daily routines. Assumptions, the third level, are the deep beliefs that the members of an organization hold; these beliefs influence the actions of the members of the organization. Giddens’, Senge’s, and Schein’s theories provide the conceptual framework for my research.

**Method**

The purpose of this study was to conduct case studies at four schools that had been identified as having effective school library programs to determine if the schools shared any common themes
or elements. Yin (2003), Merriam (2001), and Stake (1995) provide guidelines for conducting a multiple-case study. Each entity in the case study must be analyzed as an individual unit, and then a cross-case analysis should be performed to find common themes. This project is designed as a qualitative study, is descriptive in nature, and will not provide statistical significance as to correlation and causality. I selected the four sites for the case studies by identifying the schools whose libraries had most recently been designated as aligning their programs with the AASL standards in Information Power (1998), the national standards in 2008 (see Appendix A for the demographics of each school). Working with the school librarians at each school, I arranged to visit each site for three days, arriving the night before the first day and staying an additional day to analyze the data I collected. To make certain that the vision of the school was the same as when they were award recipients, I had the school librarians verify that there had not been personnel changes in either the principal’s position or the school librarian’s position. In a school, the principal is the instructional leader, and the school librarian is an integral reason for the school’s national recognition. To determine common themes that describe the culture of the schools, these two positions needed to be the same as when the award was received. During the course of the four case studies, I conducted forty-seven interviews, including two focus groups consisting of eight classroom teachers (see Appendix B for interview questions). These two focus groups were originally planned as separate interviews, but while I was at the school, the teachers were following an abbreviated schedule that did not lend itself to individual meetings. All interviews were tape-recorded and transcribed at the end of each visit. During my visits, I observed the teachers, students, administrators, and other school personnel interacting with each other during the normal course of the day. I documented these observations through copious field notes that I transcribed and synthesized at the end of each day. To triangulate the data, I collected important documents from each school that illustrated the makeup and foundational structure of the school programs (see Appendix C for a list of these documents). At the conclusion of each visit, I analyzed the data using QSR’s NVivo 7 and prepared individual case studies. Then I revisited the data from all four schools and prepared a cross-case analysis, identifying themes found at all four schools.

Site Descriptions

School A
School A is a suburban elementary school with 445 students in kindergarten through fourth grade. Although the district is the wealthiest district in the area, School A is a Title 1 school receiving federal funds and has a 32 percent free and reduced lunch population. School A has 1 administrator, 27 teachers, 28 support staff, 1 full time school librarian, and 1.5 support staff. The school was built in 1966, but the district has consistently remodeled to keep the facility updated.

The interior of the school is very bright, clean, and colorful. Green-and-white-striped awnings are placed outside of each classroom and doorway entrance. In the support of literacy, many signs hang from the ceilings displaying various words, such as “respect,” “responsibility,” “curiosity,” “common sense,” “self-control,” and “integrity.” The expectations for the students’ behavior are listed on plaques and placed strategically on the walls. For example, there are specific procedures for the restrooms, and these are posted outside of the restrooms at student eye level. The many bulletin boards display pictures of the students taken during specific events, and many examples of student work also are displayed on the bulletin boards. The screensavers
on all of the computers in the computer lab and in the library loop the phrases “Do the Right
Thing” and “Treat People Right.” Baskets of books are placed next to benches and chairs in the
hallways available for anyone who wishes to read while they are sitting on the benches. The
“Information @ your library” sign surrounded by the various sources where the students can
look for information was displayed in the library. The fourth-grade classroom has one board that
displays classroom duties as “Responsibility, Organization, and Effort.” Another board is labeled
as “Lifelong Guidance: Personal Best, Truth, Trust, Active Listening, and No Put Downs.” These
are only a few of the visual cues that the staff provides for the students. The administrator and
the staff work hard to provide a comfortable atmosphere for the students to learn as much as they
can and to succeed academically and emotionally.

**School B**

School B is a private college preparatory school for girls in grades 5–12 and has 625 students
from 37 different zip codes. School B was founded in 1865 and began as a seminary institution
for young ladies. The school has undergone many changes, and since the 1950s has dedicated its
existence to the education of young women. The mission statement of the school found on the
school’s website and displayed prominently on the campus is to educate the girls to “think
critically, to lead confidently and to live honorably.”

Since School B is an independent school, it is not governed by some of the federal initiatives that
affect public schools. There is a sense of accountability that is built into the curriculum, and the
faculty provides activities for the students that will prepare them to become lifelong learners. In
2007 there were eighty-one graduates, including eight national merit finalists and eight
commended scholars, and the graduates attended forty-four different colleges and universities,
earning $3 million in scholarships. The school’s website states that 100 percent of the graduating
class attends college. This fact was verified during my interviews. The students score more than
two hundred points above the national average on the SAT and are eligible for enrollment at
some of the top universities and colleges in the country. The school sees itself as supporting the
education of the whole person and emphasizes leadership abilities, a rigorous academic schedule,
a state-recognized athletics program, and a dedication to service learning. The academic
curriculum requires the students to complete four years of English; three years of social studies,
math, foreign language, and science (including chemistry and physics); one year of fine arts;
seven semesters of physical education; one semester of life skills; and four semesters of
additional academic credits. With these requirements, 93 percent of the students take four years
of both math and science.

School B has a middle school with 264 students in grades 5–8 and an upper school with 361
students in grades 9–12. There are eighty-three faculty members, seventy-five full-time, and the
average teaching experience is 16.7 years. Fifty-eight faculty members have their master’s
degrees, and ten have doctoral degrees. The school library staff consists of four endorsed
librarians and six support staff. The school commits to having the normal class size of fifteen
students with an eight-to-one student–teacher ratio.

Because it is an independent school, there is a dedication to working with the alumni to establish
fundraising and gift-giving to develop the campus buildings and the curriculum. The library is a
good example of this gift-giving. In 2003, one of the school’s alumni provided five million
dollars to build a new library facility.
School C

School C is made up of two small high schools that are serviced by one school library. School C is part of a magnet public school district that had its beginnings in the 1960s as a vocational school district. A magnet school is a school that is dedicated to a specific subject area with enrollment on a first come, first serve basis conducted through an application process. The school enrolls students with an interest in the school’s subject area instead of providing services for students in a specific location. This district has evolved and now has four magnet high schools, each dedicated to a different area of study. School C has a science academy and a high school supporting the health professions. School C’s reach is actually three entire counties servicing twenty-eight independent school districts and covering an area of 3,643 miles. Since there is open enrollment, the students as freshmen come from as many as seventy different middle schools. As a public school district, the students are provided with free bus service to attend school, but sometimes spend up to two hours travelling to and from school. The district has 49 percent of the students qualifying for free and reduced lunch.

School C has four buildings on the campus: the administration building that houses the superintendent and the other administrators in the district, the library, the medical school, and the science academy. The library is the bridge between the two schools and is situated equal distance from each school. The library facility is 33,370 square feet and includes a 128-seat lecture hall, an e-training lab, video-editing rooms, two small conference rooms, and one classroom. It is available for the teachers, students, and community members to use for various activities. The lead librarian worked with the architect to design the facility and incorporated a circular design. The exterior walls facing the two schools are rounded, and the circulation desk, the patterns on the shelves, and some of the furniture continue with this theme. The lead librarian stated that this design was a conscious decision as learning is never ending and there are no limits on what students can do or learn. The library serves approximately fourteen-hundred students, seven hundred from each high school. The library staff has three professional librarians and five support staff. This staff provides services to both schools and supports and creates opportunities for students from both student bodies to interact.

The two high schools on the campus support different themes. The science academy presents a nationally recognized program focusing on the math and science career fields, including engineering, architecture, and computer science. The school partners with the national program Project Lead the Way, a pre-engineering program in which students receive college credit through high school beginning in their freshman year. During their senior year, each student must research a real-world problem, create a solution, and present this information to their classmates. The other high school is dedicated to training students for the medical profession. This national-award-winning school has a rigorous high school curriculum and provides hands-on clinical experience in hospitals, nursing homes, and pharmacies as well as doctors’ and dentists’ offices and veterinary clinics. During the four years of high school, many of the students earn medical certificates as pharmacy technicians, nursing assistants, and dental and x-ray technicians.

Each high school has its own administrative staff, including a principal and assistant principal, its own faculty, and a high school curriculum that meets state requirements. The educational program provides the training that supports the science and medical themes appropriate for each school. The system of having two separate schools with small enrollments allows for a student–teacher ratio of approximately twenty to one.
School D
School D is a four-year high school in the suburbs of a large metropolitan area. The school district only has two schools, both of which are high schools. There are 3,267 students and 326 faculty members, including 4 librarians and 5 support staff. The average class size is 25 students per class. The student population is 75 percent Caucasian, 9.2 percent Asian, 8 percent black, and 8 percent Hispanic. School D is a Title 1 school with 11 percent free and reduced lunch.

The graduation requirements for the students include 4 credits of English; 2 of math; 3 of social studies; 2 of science; 4 of physical education; 0.5 credits in consumer education, fine arts, and applied arts and technology; and 3.5 credits in electives. To graduate the students must earn a minimum of 20 credits. The graduation rate is 95.4 percent, and the students achieve in the 65th percentile on all of the state tests. In 2007, 91 out of 756 seniors scored above the national average on the SAT. Also in 2007, 265 students took 495 advanced placement tests and 80 percent scored a three, four, or five out of a possible five points. School D is a “typical” high school in that it has an all-encompassing high school program for the students in the area.

Findings
School libraries have been identified as effective when they align their library program with the national standards published by AASL and AECT in Information Power: Guidelines for School Library Media Programs (1998). Many school librarians have tried to establish their programs reflecting these qualities. AASL has recently published Empowering Learners: Guidelines for School Library Media Programs (2009), and school librarians are studying these current guidelines to make certain their programs follow the tenets of this document. School librarians cannot act in a vacuum when they are establishing their programs or evaluating them. The research in this paper has examined schools with identified effective libraries and has examined other factors in the school to determine if there are any patterns or themes present in the school culture that assist school librarians in establishing effective library programs. As stated earlier, this research focused on a central question: which elements of the school culture make schools fertile ground for the establishment of an effective school library program?

As I coded the data from each school, I found a variety of themes. Initially, School A had 36 themes, School B had 37 themes, School C had 36 themes, and School D had 23 themes. With further analysis I was able to combine many of these themes, and I synthesized the data into four major themes at each school (see Appendix D for an example of this process). Of these four themes, three were present in the data for all four schools. These common themes were a collaborative culture, the leadership style of the principal, and high expectations for the staff and students. Other patterns were present at some of the schools, but these three concepts permeated the cultures of all four.

Discussion
The three themes I found in the four case studies are a collaborative culture, the leadership style of the principal, and high expectations for the staff and students. These themes manifested in a variety of ways. To present a clearer picture of these themes, the data from all four schools are summarized below.
Collaborative Culture

In describing a collaborative culture, it is important to determine what collaboration means. In conversational terms, collaboration indicates working with someone. *Information Power* (1998) encourages the school librarian to work with the classroom teacher. Garmston and Wellman (1999) have developed workshops and training sessions that support collaboration. Their definition is working together to support a common cause. They state that collaboration must be “part of one’s professional identity” (18). Senge (1990) dedicates his third discipline to team learning, which is working together or collaborating. Senge calls this “alignment” (234) and describes it as when a group works together and functions as a whole. He describes collaboration through the example of the functioning of a jazz band. All the members know their own parts but the beauty of the composition occurs when all of the musicians participate as one entity performing a piece.

All four of the schools in the case study had a common focus and worked together as one entity toward that end. This common focus was visible through examining artifacts (Schein 1992) at each school. School A had grade-level teams with common planning periods. During this planning time, the members of the grade level reviewed the lesson plans for the current week and then worked on the lesson plans for the upcoming weeks. In addition to these grade-level teams, School A had implemented DuFours and Eaker’s (1998) professional learning communities (PLCs) for the purpose of evaluating the progress of each student, focusing on academic achievement. School B also had collaborative teams in the middle school for each grade level, which planned with each other weekly. The school librarian joined these sessions when possible, and as a team they determined that there was a lack of cross-curriculum collaborative projects. They developed and implemented a project that would flow across all of the content areas as a collaborative experience for the students and the instructors. The high school faculty supported the collaborative culture with cross-discipline projects, such as an all-grade poetry project. The staff of both the middle school and the high school revised the curriculum to have a project-centered assessment process. This type of assessment allowed the students to work together as a group and participate in collaborative experiences. School C, by virtue of the two high schools supporting either science and engineering or health sciences, developed collaborative communities supporting the members of each of these disciplines. One teacher commented that each school has a strong bond with the other members of that community, showing respect and appreciation for each other. In addition, School C has implemented PLCs comprising members from each school to create formative assessments and to determine if the curriculum and instruction in each school is as effective as possible.

School D is governed by a collaborative model but with a hierarchical flavor. Because of its size, the school is organized into content areas with department heads for each. The department heads work with the principal to make decisions by providing input from each member of their department. While I was visiting the school, I attended a department meeting in which the department head was soliciting information to take back to the department meeting so that they could make the final decision. School D bases their collaborative model on decision-making teams (Garmston and Wellman 1999). In addition, the school has formed PLCs across grade levels to examine the instructional methods being used at the school to make certain they are appropriate for the learning styles of the students. The English department and the school librarians at School D provide the most visible signs of a collaborative culture. One of the school librarians was on the English curriculum revision team, which created a curriculum that embodies inquiry projects as requirements for all of the English levels. The librarians showed me
more than twenty lessons that illustrate the collaboration between the school librarians and the English department. The collaborative culture between these two departments also is evident through the budget arrangements the English department has with the library. Each year the English department gives the library $30,000 from their budget to assist the library with providing resources that will be used in these collaborative lessons.

Using various methods, each of these schools has established a process of collaboration, and through these activities they have established a collaborative culture that is present throughout the school. Collaboration for these four schools indicates a willingness to work together, either informally with other members of the staff or formally through a school improvement method such as a PLC. I found that each school discussed collaboration, but the term had different meanings and was used with different connotations. The word “collaboration” was used in reference to students completing inquiry projects in which the teachers and librarians worked together to create the lesson. It was used to describe the teachers working together in teams both with members of their grade level and with vertical teams having different teachers representing different grades. It was used to describe the school librarians interacting with the teachers in a variety of ways. Collaborative culture has multiple dimensions that work in combination with one another to ensure success at each of the schools. Some of the specific dimensions observed across these four schools were the following:

- Grade-level teams meeting weekly
- Cooperative curriculum planning and decision-making
- Cross-curriculum collaborative projects that involve the librarian
- Vertical planning to facilitate student skill development
- District departmental in-service days to discuss curriculum planning
- School events to foster interaction
- School reform initiatives that support collaboration
- Scheduling that supports collaborative planning
- Staff development regarding technology and mentoring for new faculty to further a collaborative culture

**The Leadership Style of the Principal**
The second pattern the data identified at each school was the leadership style of the principal. Each school’s principal had a collaborative style of leadership; the principals worked side-by-side with the teachers, receiving input from them and empowering the faculty members to participate in making decisions. The principal of School A demonstrated this leadership through the revision of the school improvement plan. The principal, the school librarian, and a classroom teacher were the leaders of the school improvement team. When I was visiting this school, the principal had received the draft of their school improvement plan (SIP) after the school district had reviewed this information. The district requested that the school make some minor changes in the wording of the document but not to the essence of the plan. As the principal, school librarian, and a classroom teacher were revising these sections, the principal said he was uncomfortable revising the document, even if it was simple wordsmithing, unless the entire faculty voted on the changes. He called an emergency staff meeting so that the SIP leaders could explain these changes to the document. The staff members were then able to review the changes for a couple of days and resubmit their votes to accept the document. The principal had established his leadership style as collaborative and was not comfortable revising the document unless the staff had reviewed the changes. School B has a head of school (as a superintendent), a principal of the
middle school, and a principal of the high school. These three administrators work closely together, meeting regularly to make certain they are working for the same purpose. The head of school stated that she tries to build a strong team of people around her who will assist her with running both schools. One vivid example of this leadership style occurred when there was some unrest on the faculty because of the lack of technology support. The school was exploring the possibility of having each student have their own laptop and establishing a wireless campus. Some faculty feared that this would cause an upheaval of the school’s culture. The head of school talked individually with the teachers, determined that the majority thought establishing a wireless campus was a wise move, and then the head of school stated that this was the plan of action the school would follow. The head of school gathered information from the entire staff prior to making a decision. The middle school principal stated that the head of school is collaborative and there is nothing hierarchal about how she manages the school. The high school principal reiterated this thought but admitted that because she had not worked in this type of environment before, it took her some time to work with the teachers collaboratively.

The Principals of School C evinced their collaborative leadership by listening to the teachers, having discussions with staff members, and collaborating on methods of solving problems that occurred throughout the course of the school day. The superintendent modeled this style of leadership by having weekly visits with the principal of each high school to reflect on the happenings of the week prior. She stated that these visits developed a sense of trust between her and the principals and laid the foundation for mutual respect to work together collaboratively. The superintendent of this two-high-school district supported the idea of interdependence, stating that everyone in the district is dependent on every other member of the district, and through collaboration they could move the district forward for the success of the students. The superintendent and two principals from School C established PLCs to ensure that this collaboration will flourish.

The administrators of School D support a collaborative style that is based on Garmston and Wellman’s (1999) concept of shared leadership. The administrators and department heads are expected to facilitate, present, coach, and consult. The principal exhibits his collaborative style through the implementation of these four activities.

In discussing the leadership role of the principal, the word “collaboration” was again stated. Collaboration, in this sense, described the principal making decisions with the input and guidance of the staff. Yet different configurations were described. In some schools the principals worked alongside of the teachers; in others the principal worked with department heads but not with all of the teachers as a group. The use of “collaboration” when discussing the principals’ leadership style also included the ability and style of making unpopular decisions if those decisions were for the good of the school. The ability of the principals to make these decisions illustrates a different form of collaboration. Research needs to be conducted to determine exactly what collaboration means to principals, to teachers, and to school librarians. It is different in different situations.

“Leadership,” for these four principals, can be defined as creating an atmosphere in which the principal is seen as the person in charge of the school and the one who makes the hard decisions. However, the principals at these schools made the decisions only after seeking input from the stakeholders. They illustrated a willingness to work with the teachers, staff, students, and
parents. Then the collaborative decision would be made while weighing all opinions. The principals did not hesitate to make a hard decision if it was appropriate.

The principals’ collaborative leadership was illustrated in a variety of ways:

- Establishment of PLCs to further collaboration between staff members
- Sharing decisions and changes to decisions with the staff members
- Providing training and professional development in team learning through adaptive teams and PLCs
- Forming and changing teams to make them more collaborative
- Organizing the department heads to share and gather information from their department members
- Establishing interview procedures for new employees that gathers input from all stakeholders
- District administrators meeting weekly with other administrators to establish a positive working relationship

High Expectations of Students and Staff
All four of the schools in this study had high expectations for both their staff members and the students. School A expected the students to succeed in academics. School A’s staff has as their goal 100 percent of their students improving on the yearly state test. This statement is a part of their school improvement plan, and when the district questioned them about this perfect percentage, they indicated that each student needed to succeed—not just 90 or 95 percent. The principal illustrated this by looking at one third-grade class and asking the faculty to decide which 5 or 10 percent of the students they would choose to not succeed. The faculty embraced the idea of working with all students and therefore set their goal at 100 percent. School B expected 100 percent of the senior class to pass all of their subjects and to attend college in the fall after their senior year. School C had the same expectations for their seniors to attend college, but raised the bar by expecting each of the seniors to graduate from these college programs. They kept in contact with the seniors during their college years to provide the support the students needed to accomplish this goal. School D did not have a stated college policy but illustrated their high expectations for the students through the implementation of assigned inquiry projects. The school librarians and the English department have created inquiry lessons through the use of essential questions. The students at each level are required to attempt and complete these inquiry research projects. The librarians and English staff members have created mini-projects for the students if they need any remedial work or have had difficulties with the regular assigned projects. School D has committed to having each student develop their information literacy skills through these guided inquiry projects.

The collaborative atmosphere of the schools and the leadership style of the principal also speak to the high expectations for the students and staff. In these case studies, the expectations had been established before I visited the schools, and they were part of the culture. The following list illustrates the variety of ways high expectations were present at each school:

- Rigorous curriculum, including many AP classes and tests
- Senior projects requiring the creation of a new invention
- The goal of having 100 percent of the students succeed, attend college, or finish college
• Supporting the concepts of being a great school and not just a good school, as described by Collins (2001)
• Supporting school reforms that address sound instructional methodology
• Requiring a year-long mentoring program for staff to make them aware of the high expectations

Future Research
These four case studies examined the culture of schools with identified effective school library programs to determine if there were any patterns or themes that permeated each school. Additional research needs to be conducted in the area of the culture of the school as it is critical to determine why some schools provide the environment conducive to establishing an effective library program and some do not. Using different criteria for site selection, further research should be conducted as to the presence of these themes in other schools. While conducting this research, I found that a collaborative culture was present in all four schools. Does this mean that effective school library programs must have a collaborative culture to flourish? I also found that these schools had administrators that believe in a collaborative style of management. Does that mean that there are not effective school libraries in schools with administrators who believe in a hierarchical style of leadership? Another area to explore is the leadership qualities of the staff members. Are there school librarians setting up effective programs but not exhibiting personal leadership skills? What does leadership mean in relation to a school librarian? Does the principal’s leadership style have to align with the school librarian’s leadership style? How does the role of the interactions between staff members, the principal, and the school librarian affect the establishment of an effective library program? Additional research must be conducted in these areas.

This cross-case analysis illustrates that there is a relationship between school culture, leadership, and effective school library programs. This research provides us with a foundation to use as we continue to examine the role of school culture in establishing an effective school library program contributing to the academic achievement of the students.

Works Cited


**Cite This Article**

Appendix A

<table>
<thead>
<tr>
<th>School Demographics</th>
<th>School A</th>
<th>School B</th>
<th>School C</th>
<th>School D</th>
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Appendix B

Interview Questions

**Questions for Principals**
1. Background information: Explain your educational background and how you arrived at this position.
   - Length of time in school?
   - Length of time as a principal?
   - Type of management and leadership?
   - School reform issues
2. What are the challenges at your school?
3. How would you describe the culture of your school?
4. What do you look for when hiring a staff member?
5. How would you describe your staff?
6. How would you describe your relationship with your staff members?
7. What is the impact of the school library program on your school?
8. What is your relationship with your school librarian?

**Questions for Teachers**
1. Background information: Tell me about your educational career.
2. What do you like about the school?
3. How would you describe the culture of your school?
4. What procedures are in place that enable you to help students learn?
5. What are the barriers that prevent you from helping students learn?
6. How would you describe your relationship with the principal?
7. How would you describe your relationship with the other teachers?
8. How would you describe your relationship with the school librarian?
9. What is the impact of the school library program on your teaching?
10. To what extent do you collaborate with the school librarian?
**Questions for School Librarians**

1. Background information: Tell me about your educational career.
2. Describe the school library program as you found it when you first were hired.
3. Tell me about your program. Why do you think it received the national award?
4. How would you describe your role as a member of the faculty?
5. What situations at your school have helped you with establishing your program?
6. Have you experienced any difficulties in implementing your program?
7. How would you describe your relationship with the teachers?
   - Do you have the same kinds of relationship with every teacher?
8. Describe your relationship with the administrators. Principals? Assistant principal?
9. What are your strengths as a teacher?
10. Is there anything else that will help me understand the culture of the school?

**Appendix C**

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<tr>
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Appendix D
The following words and phrases are the initial themes generated from the analysis of interviews, documents, and observations from School A using NVivo 7 indicating the number of sources and the references from those sources.

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With further analysis, the words and phrases were organized into four major themes. This organization was based on revisiting the original statements and synthesizing further.

1. **Vision**
2. **Collaboration**
   - Culture
   - Building Relationships
   - Environment
   - Family
   - Trust
   - Community
   - Relationships
   - Relationships with Administrator
   - Relationship with School Librarian
   - Relationship with Staff
3. **Expectations**
   - School Reforms
   - Student-centered
4. **Leadership**
   - Leadership style
   - Principal Leadership Style
   - School Librarian’s Leadership Style

This process was followed for each of the schools in these four case studies.
School Library Research (ISSN: 2165-1019) is an official journal of the American Association of School Librarians. It is the successor to School Library Media Quarterly Online and School Library Media Research. The purpose of School Library Research is to promote and publish high quality original research concerning the management, implementation, and evaluation of school library media programs. The journal will also emphasize research on instructional theory, teaching methods, and critical issues relevant to school library media. Visit the SLR website for more information.

The mission of the American Association of School Librarians is to advocate excellence, facilitate change, and develop leaders in the school library field. Visit the AASL website for more information.
An Electronic News Database for Upper Primary School Students and Teachers in Hong Kong

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Abstract
The current research extended the pilot study and examined the use of an electronic news database by upper primary school students and their teachers in five local schools in Hong Kong. We used a mixed-methods design for data collection and analysis. We examined records of users’ database activities for the usage patterns of students and teachers. Surveys and phone interviews were conducted to assess their perceptions of the usefulness of the electronic database for learning and teaching. The Revised Two-Factor Learning Process Questionnaire (R-LPQ-2F) was employed to assess students’ learning approaches and their associations with news database use, and perceptions were examined. Findings revealed that younger students tended exclusively to browse, while older students and teachers used both browsing and keyword searching. Use patterns also confirmed that the news database provided accessibility to a vast amount of information. Both students and teachers perceived the electronic database to be useful for learning and teaching. Finally, we found that a deep learning approach was associated with frequency of use and positive perceptions of the usefulness of the electronic database. These results provide potentially important implications for teachers, school administrators, and system designers in developing an efficient electronic database to facilitate learning at upper primary school levels.

Introduction
The Internet, through electronic databases or digital libraries, has become an important source of academic information for secondary and tertiary students (Baildon and Baildon 2008; Hourcade et al. 2003). The literature has well established the educational value of these electronic databases for higher education (Atakan et al. 2008; Tenopir 2003; Vibert et al. 2007). In 2004, the Education Bureau (EDB) of the government of the Hong Kong Special Administrative
Region (HKSAR) suggested the extension of electronic database use to secondary and primary schools to empower teaching and learning at primary and secondary levels (EDB 2004). While substantial research has been conducted on the evaluation of digital libraries (Chowdhury, Landoni, and Gibb 2006), the use of such electronic databases by primary school students is relatively scarce. Previous studies have found that children are able to interact confidently with electronic sources, but their information-seeking behaviors are substantially different from those of adults (Bilal and Kirby 2002; Kafai and Bates 1997; Madden et al. 2006; Schacter, Chung, and Dorr 1998). Accordingly, the investigation of the use of electronic resources in primary schools is important in achieving a match between the learning needs of children and providing them the necessary resources.

A pilot study undertaken in a local primary school in Hong Kong has shown that an electronic news database can be useful for Primary 4 (P4) students for their inquiry-based learning (Chow et al. 2007; Chu 2009). In the HKSAR education system, P4 corresponds to Grade 4 in the American system. To further investigate the usefulness of electronic news databases in primary education, the present study expanded the pilot project and implemented the project in five local schools. This expansion also included other students from middle to upper primary levels (levels 3 to 6). This study aimed to examine the use and perceived efficacy of an electronic news database in primary education. We made a news database resource available to students and teachers and gathered objective data on their use patterns. We also obtained subjective information on the users’ perceptions through questionnaires, and we examined the students’ learning approaches as a related variable.

**Review of the Literature**

**Electronic Databases in Education**

An electronic database, or digital library, is an organized collection of digital information focused on one or more subject areas (Monopoli et al. 2002). Not only does it allow users to access a vast number of resources from different areas of knowledge, but it also enables users to retrieve those resources systematically and efficiently. Scholars and researchers have long discussed the potential utility of electronic databases in enhancing teaching and learning. For example, Marchionini and Maurer (1995) pointed out that the introduction of electronic databases to educational settings would benefit teachers and students because it would create opportunities for them to access information resources that have traditionally been inaccessible outside school. One of the benefits brought by these electronic resources is the availability to support classroom learning through the use of numerous books in a online digital collections (Hourcade et al. 2003). Furthermore, Wallace et al. (2000) suggested that the introduction of electronic databases enhances self-guided learning as information resources become accessible for students to explore questions of personal interest and as students are equipped with the tools to conduct browsing and creative discovery (Marchionini and Maurer 1995).

In recent years, various electronic databases have been used by academics, teachers, and students in higher education. To a certain extent, electronic versions have become preferable to print books and journal articles (Borrego et al. 2007; Monopoli et al. 2002). In an analysis of more than two hundred studies on the use of electronic databases in higher education, Tenopir (2003) noted that academic staff and students preferred electronic databases because of their relative convenience and relevance. The purposes for which electronic databases are used in the context...
of higher education have been shown to include teaching, research, and keeping up-to-date in the development of interest areas (Monopoli et al. 2002). Borgman et al. (2000), through a series of case studies, have demonstrated the usefulness of electronic databases in supporting research and teaching undergraduates. Similarly, postgraduate students have confirmed the usefulness of electronic databases in research when they have acquired information search skills (Chu and Law 2007).

**Electronic Resources in Primary Education**

Different kinds of electronic resources, such as databases and search engines, have been adopted increasingly in primary school classrooms (Kuiper, Volman, and Terwel 2005). However, studies that have examined the use of electronic resources in the context of primary education are still limited, and the findings are far from consistent. A number of studies provide evidence that electronic resources offer benefits for students. For instance, Owens, Hester, and Teale (2002) found that the use of electronic databases enhances cognition in the areas of reading and writing among primary and junior secondary school students. Chow et al. (2007) found that an electronic news database boosts the quality of primary school students’ inquiry-based projects.

On the other hand, research findings have also revealed that primary students experience difficulties in handling vast amounts of online information resources because they do not have the necessary information technology (IT) skills to search online effectively (Borgman et al. 1995; Chu 2009). Researchers have found that students have insufficient levels of information literacy (IL) to evaluate and analyze critically the information they acquire (Bowler, Large, and Rejskind 2001; Chow et al. 2007). In a series of studies, Bilal (2000, 2001, 2002) examined the use of a search engine “Yahooligans!” by seventh grade students. Bilal found that students have had trouble completing search tasks because they lacked adequate information-search skills. Bowler, Large, and Rejskind (2001) have also reported that many sixth graders lacked the basic IT skills to use web-based information in doing their school assignments.

Research has shown that electronic news databases have important teaching potential, and their use in primary school classrooms has improved the quality of teaching and learning in language, communication skills, and critical thinking (Trillo 2003). Such databases also attract and motivate young people to learn through news articles that are relevant to their daily lives (Chow et al. 2007).

**Learning Approaches**

Students undertake learning for a variety of reasons, and those reasons determine how they proceed with their learning and hence influence their academic performance (Biggs 1993). Biggs (1987a) identified two approaches to learning—surface and deep—with corresponding motives and strategies. A surface approach is characterized by the fear of failure and the aim for qualification, whereby the students perceive school learning as a means toward some other ends, such as obtaining a well-paid job, pleasing parents, or just keeping out of trouble (Biggs 1993). The strategy arising from this approach is to invest minimal time and effort to meet the requirements. Thus rote-learning and memorization of content within the syllabus without understanding is one of the commoner ways of doing this. In contrast, a deep approach is based on intrinsic interest in the subject matter of the task, such that students perceive the task as interesting and are prepared to work hard and commit time to their study. They use strategies to seek in-depth understanding by relating ideas to constitute a more integrated view of knowledge.
(Kember, Biggs, and Leung 2004). Webber and Johnston (2000) have suggested that pedagogical approaches that facilitate learning experiences and involve IL must emphasize the enhancement of a deep learning approach among students.

Research has shown that online learning environments affect students’ learning approaches (Cleveland-Innes and Emes 2005). As such, the concept of learning approaches, which provides a framework for understanding the dynamics between learning context and learning processes for individual students (Garrison and Cleveland-Innes 2005), may be relevant to the use of electronic databases in education. The Learning Process Questionnaire (LPQ), which measures students’ approaches to learning, has been used and tested in numerous studies, yielding high validity and reliability across cultures (Biggs 1987b, 1992; Watkins 1998; Wong, Lin, and Watkins 1996).

**Research Gap**

While teachers and students have used electronic resources in primary education, evidence that supports the usefulness of these databases is far from conclusive. Limited research has examined the actual use of such resources by teachers or students. To pave the way toward an appropriate and effective use of electronic databases in primary education, we desire a better understanding of the context and experiences related to their use. This present study aimed to examine the use of an electronic news database in primary school learning and teaching. This expands on an earlier pilot project using P4 students (Chow et al. 2007), extending the implementation to include middle to upper primary school levels. Besides offering relevant insights into how primary school teachers and students use an electronic database to support teaching and learning, the findings of this study show the relationship between students’ learning approaches and their use of an electronic database. This study thus contributes to the growing body of research that provides the basis for using electronic resources in primary education.

**Method**

**Research Questions**

The main objective of this study was to examine the use and efficacy of an electronic news database for upper primary school students and teachers. We asked the following research questions:

- How do students and teachers interact with the electronic news database?
- How do students and teachers perceive the usefulness of the electronic news database?
- Are the students’ use and perceptions of the efficacy of the electronic news database related to their learning approaches?

**Participants**

Participants were upper primary school students (N = 561), including levels P3 (n = 90), P4 (n = 127), P5 (n = 141), and P6 (n = 203), and the teaching staff (N = 99) in five local primary schools in Hong Kong. The participating schools ranked as average in academic standing when compared to the Hong Kong local school population.
**Procedure**

At the beginning of the school year 2008–9, we introduced an electronic news database called WiseNews to students and teachers in the five participating schools. WiseNews draws information from myriad sources, such as newspapers, magazines, journals, and newswires, and is updated every day with content direct from about one thousand content providers and five hundred websites (Wisers Information Limited 2010). Containing such a vast range of information, we assumed that WiseNews would be a useful database to enhance teaching and learning at the primary education level. We negotiated with the server provider of WiseNews to provide one-year free trials of the WiseNews database to the schools for educational purposes. Informed consent was obtained from the participating schools to allow the recording of database activities. The service provider then recorded automatically the activities of the students and teachers on the online database throughout the year. Individual informed consent was obtained to conduct surveys and interviews at the end of the academic year to collect students’ and teachers’ perceptions of the usefulness of the news database.

**Data Collection**

We collected data using the following strategies:

- **Automatic records of online database activities.** The service provider of WiseNews automatically recorded all online activities by the users. These were collected to characterize the participants’ use pattern of WiseNews. The information included the mode of information retrieval, document management, sources of information, and the headlines viewed.
- **Surveys.** We used a questionnaire with a four-point Likert scale (1 = strongly disagree to 4 = strongly agree) to examine the participants’ perceptions on the usefulness of WiseNews (see Appendices A and B).
- **Interviews.** We conducted semistructured interviews using open-ended questions with students and teachers to obtain in-depth information regarding their perceptions of using WiseNews to assist their learning and teaching.
- **Revised Two-Factor Learning Process Questionnaire (R-LPQ-2F).** We used the Chinese version of the two-factor LPQ (R-LPQ-2F) by Biggs, Kember, and Leung (2001) to assess students’ learning approaches, which were their predominant motives and strategies for learning. Students were asked to respond to the questions on a five-point Likert scale, with response options ranging from 1 (“never or rarely true of me”) to 5 (“always true of me”). An option of 0 (“I do not understand the meaning of this item”) was provided (see Appendix C).

**Findings and Discussion**

**Research Question 1: How Do Students and Teachers Interact with the Electronic News Database?**

The service provider of WiseNews monitored the participants’ interactions with the electronic database. We characterized these interactions in terms of the methods of information retrieval, information management, temporal parameters associated with use, and the sources of retrieved information.
Methods of Information Retrieval
There were two major methods for information retrieval in the news database: browsing and keyword searching. Table 1 shows the proportions of different user groups (i.e., students at different grade levels and teachers) using browsing exclusively, searching exclusively, or both browsing and searching in retrieving information. A Chi-Square test (method of information retrieval crossed with user group) showed that there was a significant relationship between the user groups and the methods of information retrieval ($\chi^2(8, n = 659) = 89.375, p = 0.000$).

P3 and P4 students showed preferences for using general browsing exclusively, while P5 and P6 students showed the capacity to use both browsing and searching functions. These findings are consistent with a number of earlier studies that have shown younger children favoring browsing over keyword searching (Bilal and Kirby 2002; Hirsh 1997; Large and Beheshti 2000; Schacter, Chung, and Dorr 1998). It is worth noting that students in the current study used the news database for a variety of purposes throughout the school year. Students’ preferences could be different when they are asked to perform specific information-searching tasks (Chow et al. 2007). Another interesting finding is the increasing trend in using searching only—the proportions of students that used searching only were higher at higher levels. Students at higher levels may be more experienced and familiar with IT (e.g., Chinese keyboarding) and information-search skills.

Table 1. Modes of Information Retrieval Used by the User Groups

<table>
<thead>
<tr>
<th></th>
<th>Primary 3</th>
<th>Primary 4</th>
<th>Primary 5</th>
<th>Primary 6</th>
<th>Teacher</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$N = 90$</td>
<td>$N = 126$</td>
<td>$N = 141$</td>
<td>$N = 203$</td>
<td>$N = 99$</td>
</tr>
<tr>
<td>Browsing Only</td>
<td>63 (70.0%)</td>
<td>86 (68.3%)</td>
<td>78 (55.3%)</td>
<td>67 (33.0%)</td>
<td>43 (43.4%)</td>
</tr>
<tr>
<td>Searching Only</td>
<td>0 (0.0%)</td>
<td>6 (4.7%)</td>
<td>7 (5.0%)</td>
<td>44 (21.7%)</td>
<td>5 (5.1%)</td>
</tr>
<tr>
<td>Browsing and Searching</td>
<td>27 (30.0%)</td>
<td>34 (27.0%)</td>
<td>56 (39.7%)</td>
<td>92 (45.3%)</td>
<td>51 (51.5%)</td>
</tr>
</tbody>
</table>

Information Handling
Users may handle the information that they find on the news database by viewing and archiving. Archiving actions include downloading, e-mailing, and printing. Since no participant used archiving exclusively, we segregate the methods of information handling into two categories: “viewing only” and “both viewing and archiving.” Table 2 shows the proportions of participants the information management actions for each user group. The Chi-Square test (information handling $x$ user group) showed that there was a significant relationship between the user groups and the methods of information handling ($\chi^2(4, n = 659) = 14.139, p = 0.007$). The proportions of users using viewing only are much greater.
than the proportions of users using both viewing and archiving for all user groups. The users tended to restrict their information management to viewing and rarely did they perform any archiving action. Even for these recorded “viewing” activities, whether the users actually viewing or processing the information remains uncertain.

Table 2. Information Handling by the User Groups

<table>
<thead>
<tr>
<th></th>
<th>Primary 3</th>
<th>Primary 4</th>
<th>Primary 5</th>
<th>Primary 6</th>
<th>Teacher</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N = 90</td>
<td>N = 126</td>
<td>N = 141</td>
<td>N = 203</td>
<td>N = 99</td>
</tr>
<tr>
<td>Viewing Only</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>84 (93.3%)</td>
<td>119 (94.4%)</td>
<td>132 (93.6%)</td>
<td>197 (97.0%)</td>
<td>85 (85.9%)</td>
</tr>
<tr>
<td>Viewing and Archiving for</td>
<td>6 (6.7%)</td>
<td>7 (5.6%)</td>
<td>9 (6.4%)</td>
<td>6 (3.0%)</td>
<td>14 (14.1%)</td>
</tr>
</tbody>
</table>

Temporal Parameters Associated with Use

As shown in Figure 1, the peak hour for WiseNews use was 11:00–11:59 a.m., followed by 12:00–12:59 p.m. and 3:00–3:59 p.m. With the official school hours running from 8:00 a.m. to 2:59 p.m., it appears that students used the news database slightly more after school (52 percent) than during school hours (48 percent). The use during school hours most likely reflects the training or class activities on the database as instructed by teachers. On the other hand, the considerable amount of use outside school hours indicated that students made use of the database on their own. The peak hours of use by teachers were 3:00–4:59 p.m. (see Figure 2). Given the official working hours for teachers are between 8:00 a.m. and 4:59 p.m., it appears that teachers used the news database mostly during working hours (76.6 percent), indicating that they used the database primarily for teaching-related purposes. The proportion of use outside official working hours was much lower when compared with students (23.3 percent).

One of the more commonly proposed benefits associated with electronic databases is their accessibility (Marchionini 1989). Remote access means that information is available in classrooms, libraries, and even homes. As such, according to Marchionini and Maurer (1995), electronic databases can help promote learning beyond the classroom. The finding that students had substantial use of the WiseNews database outside school hours appears to confirm that students made use of the greater accessibility to resources.

Sources of Retrieved Information

The contents of the WiseNews database included news articles in Chinese publications, mostly from Hong Kong, Mainland China, Macau, Taiwan, and Singapore (97 percent). A limited number of news articles in Chinese and English were from publications in other parts of Asia and North America (3 percent). Students mainly retrieved articles from local publications as shown in Figure 3, indicating that they generally chose to use local
sources with which they were familiar. While teachers retrieved information mostly from local sources as well, they were more likely to retrieve information from overseas countries, including North America (see Figure 4).

**Figure 1. Percentage Distribution of News Database Use Frequency by Students over 24 Hours**

![Percentage Distribution Chart]

Electronic databases may be able to offer vast amounts of information, much more than any individual or school could easily acquire and maintain at one time (Marchionini and Maurer 1995). WiseNews made news articles from publications across the world available to the registered users. However, it seems that users in this study did not fully explore this wide variety of available information. We identified individual differences that might influence users’ actions with online resources. For instance, children’s information needs relate to schoolwork and imposed questions rather than self-generated queries (Gross 1995). On the other hand, teachers use electronic resources to support their teaching needs (Tenopir 2003). Considering that the user groups’ needs might be intrinsically related to the local Hong Kong setting, it seems natural that they mainly chose local sources of information.
Figure 2. Percentage Distribution of News Database Use Frequency by Teachers over 24 Hours

![Bar Chart]

Figure 3. Location of the Publications Retrieved by Students

![Pie Chart]
Research Question 2: How Do Students and Teachers Perceive the Usefulness of the Electronic News Database for Teaching and Learning?

To examine the users’ perceptions of the usefulness of the WiseNews electronic news database for teaching and learning purposes, we obtained quantitative data through questionnaires and qualitative data through interviews.

Quantitative Measure of Perceptions
A number of students (n = 161) and teachers (n = 30) gave their informed consent to respond to questionnaires and interviews. Separate sets of questionnaires obtained the perceptions of the students and teachers on the usefulness of WiseNews, and both groups of participants had generally positive perceptions of the usefulness of the news database for their learning and teaching. The students’ ratings for the different aspects related to using WiseNews are summarized in Table 3. The ratings—based on a four-point Likert scale—were all within the range that corresponds to positive perceptions in terms of usefulness (M = 3.24, SD = 0.69), ease of use (M = 3.05, SD = 0.58), relevance to schoolwork (M = 3.17, SD = 0.60), and helpfulness of training in the use of a news database (M = 2.95, SD = 0.70). Independent sample t-tests confirm that these observed mean ratings are statistically different from the midpoint of the scale (p < 0.05).

In the pilot study, P4 students also reported positive perceptions of the usefulness of the electronic news database in their inquiry-based projects (Chow et al. 2007). The findings of this expanded study confirm a similar perception of the usefulness and relevance for
schoolwork among a more diverse group of primary school students. While the use of the Internet in school has been growing (Bilal 2002), children have also had difficulties in searching for information and finding relevant results (Bilal 2001; Large and Beheshti 2000). Students in this study found the electronic news database easy to use. Using the database might have been similar to using web search engines, which are used with minimal difficulty by primary school students (Wallace et al. 2000).

Table 3. Students’ Ratings on Various Aspects Relating to the Use of WiseNews

<table>
<thead>
<tr>
<th></th>
<th>Mean (SD)</th>
<th>n</th>
<th>t</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Usefulness</td>
<td>3.24 (0.69)</td>
<td>155</td>
<td>13.25</td>
<td>0.00</td>
</tr>
<tr>
<td>Ease of Use</td>
<td>3.05 (0.58)</td>
<td>158</td>
<td>11.95</td>
<td>0.00</td>
</tr>
<tr>
<td>Relevance to Schoolwork</td>
<td>3.17 (0.60)</td>
<td>154</td>
<td>13.89</td>
<td>0.00</td>
</tr>
<tr>
<td>Helpfulness of Training</td>
<td>2.95 (0.70)</td>
<td>143</td>
<td>7.73</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Teachers’ ratings on the different aspects related to the usefulness of the WiseNews electronic news database were generally positive as well. Table 4 shows that teachers had positive perceptions of the news database’s usefulness (M = 2.98, SD = 0.33), ease of use (M = 2.96, SD = 0.43), relevance to teaching (M = 2.82, SD = 0.46), and reliability of information (M = 3.06, SD = 0.59). Independent sample t-tests confirm that these observed mean ratings are statistically different from the midpoint of the scale (p < 0.05). Atakan et al. (2008) have shown that electronic databases are heavily used by academics in higher education, particularly for research. The findings in this study provide evidence that primary school teachers perceive an electronic database as useful, particularly for teaching purposes. It may be worth considering that the electronic resource used in this study is a news database, and its nature may have made it more usable for primary school teachers.

We used one-way, between-subject analysis of variance (ANOVA) to examine students’ ratings on the usefulness of the WiseNews database. The findings revealed that grade level had a significant effect on the variance of ratings (F(2, 154) = 4.18, p = 0.017, η2 = 0.05). Post-hoc tests confirmed that the mean rating given by P4 students (M = 2.98) was significantly lower than that given by P3 (M = 3.33) and P5 (M = 3.34) students (p < 0.05). This finding implies that P4 students considered the news database to be less useful in supporting their learning in comparison with students in other grades. While there were no differences in the database that was used by the students, interview findings revealed that some P4 students were given an assignment in their visual arts subject that required historical information. These students reported that they felt disappointed at being unable to find relevant resources, but the limitation in their retrieved information may have been due to the nature of the electronic database (i.e., current news) used in this study.
Table 4. Teachers’ Ratings on Various Aspects Relating to the Use of WiseNews

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Mean (SD)</th>
<th>n</th>
<th>t</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Usefulness</td>
<td>2.98 (0.33)</td>
<td>30</td>
<td>7.92</td>
<td>0.00</td>
</tr>
<tr>
<td>Ease of Use</td>
<td>2.96 (0.43)</td>
<td>29</td>
<td>5.74</td>
<td>0.00</td>
</tr>
<tr>
<td>Relevance to Teaching</td>
<td>2.82 (0.46)</td>
<td>30</td>
<td>3.79</td>
<td>0.00</td>
</tr>
<tr>
<td>Reliability of Information</td>
<td>3.07 (0.59)</td>
<td>29</td>
<td>5.16</td>
<td>0.00</td>
</tr>
</tbody>
</table>

**Qualitative Information on Perceptions**

We conducted phone interviews with a randomly selected group of students (n = 30), and all teachers (n = 30) who responded to the questionnaire. Students reported three main purposes for their use of the news database: news reading, doing homework, and searching for information for inquiry-based projects. More than half of the students (17 of 30) indicated that the news database was helpful in terms of their becoming more aware of local and world issues because they were able to read a lot of news online. A number of students (12 of 30) also reported that the WiseNews helped them expand their knowledge, and they appreciated the easier access and faster process that online searches entailed relative to print materials. This information from students complements the finding discussed above (see “Temporal Parameters Associated with Use”), which showed that students were able to take advantage of the greater accessibility provided by the news database, as evident in their substantial use after school hours. Earlier studies on the use of electronic resources have shown similar perceptions by users (Fidel et al. 1999; Large and Beheshti 2000). A few students also found the news database useful for preparing for examination questions about current news in their general studies (GS) subject. Some students also indicated that they had expanded their Chinese vocabulary by using the news database.

Teachers reportedly used the news database for more diversified purposes, such as finding relevant materials for teaching, news reading, searching for information for inquiry-based projects, preparing examination questions, doing in-class activities, and self-learning. This finding highlights the difference between the user groups. As expected, teachers used WiseNews in relation to their work tasks. It was most popularly used by GS teachers, most likely because of the nature of the subject they were teaching. Nevertheless, librarians and computer studies teachers also perceived the usefulness of WiseNews to extend to teaching students IT and information-search skills.

Despite the generally positive perceptions of the teachers of the usefulness of the news database, a number of them (10 of 30) noted that while the news database was a convenient platform for students to perform research for projects, its effectiveness
depended on the project topic. For instance, a teacher librarian (T-HOS) said that “the news database is not that useful for projects about Exploring Science, which emphasizes doing experiments in laboratory.”

Difficulties in searching the news database were also reported by students, who appeared to have engaged in a “cumulative and reiterative” search process. This strategy involves the users entering a term, scanning the results, and then modifying the search (Foster 2004). Students typically recognized the need to refine the keywords for searching. For example, one P3 student (S-CLL) changed the keyword from “dirty water” to “water pollution” and “polluted water” to find the desired information. However, many students reported difficulty in formulating keywords for searching, which previous studies (Borgman et al. 1995; Hirsh 1997; Large and Beheshti 2000; Moore and St. George 1991; Marchionini 1989) have observed as typical for young information seekers. This consistent observation about the information search strategies of children shows the important role of adults in providing guidance for keyword formulation. Teachers in this study appear to recognize such a role, as is apparent in remarks such as the one made by a GS teacher (T-HWK): “After designing the project topic, it is better for teachers to do a preliminary searching on the news database, then narrow down the date range for students to do the searching effectively.”

Students also had trouble dealing with the vast amounts of information. They reported spending considerable time selecting appropriate information from the large number of news articles produced by keyword searching. Inevitably, some irrelevant articles were encountered in the students’ search results. For instance, one P4 Student (S-LWN) recalled that “when I typed in ‘East Asia Olympic,’ some irrelevant news about regular sports competitions was found.” Besides the concern about the volume and relevance of information search results, previous studies have also shown that children do not tend to question the validity of their retrieved information (Hirsh 1999; Watson 1998; Large and Beheshti 2000). The participants in the present study reported the same finding. For instance, a P4 student (S-LCY) reported, “my teacher pointed out that a piece of information I found from the news database about Picasso was indeed inaccurate.”

Both students and teachers also gave several suggestions for the redesign of the electronic news database to be more effective and efficient for primary school students. The most common suggestion given by the participants was to have a search interface that is designed particularly for children. Such an interface might employ a more colorful platform with graphic icons that can arouse children’s interest. Also, a brief summary of the news article might be provided so that it is easier for children to read. Lengthy articles could be shortened, with words not so densely packed and with enlarged font size. Teachers also suggested modifications in the organization of information for search purposes. One Chinese language teacher (T-KYW) suggested that “it would be easier for students to search for news if they only needed to type in the topic instead of keywords for searching.” Finally, some teachers also suggested enlarging the database to include more children’s magazines that met the needs of primary school children. Finally, a GS teacher (T-KWK) also recommended that some discussion questions be added to the news database to stimulate students’ critical thinking after reading the news articles.
RQ 3: Are the Students’ Use and Perceptions of the Efficacy of the Electronic News Database Related to Their Learning Approaches?

A sample of students (n = 161) completed the R-LPQ-2F, which is a 22-item self-reported inventory to assess their learning approach (Biggs, Kember, and Leung 2001). The items in the questionnaire were dichotomized into indicators for deep and surface learning approaches. Good internal consistency of the R-LPQ-2F data was found, with Cronbach $a = 0.87$ and 0.79 for the items of deep and surface approach, respectively. Students’ mean score of deep approach was 37.52 ($SD = 8.89$), while that of surface approach was 30.95 ($SD = 8.84$). Univariate ANOVA tests examined the influence of grade levels on the variance of the scores in each learning approach scale; no significant main effect was found for both scales ($p > 0.05$).

We found a positive association between students’ frequency of use of the WiseNews news database and scores in the deep learning approach scale ($r = 0.29, p < 0.001$); however, there was no significant association between students’ use of the database and surface learning approach scale scores ($p > 0.05$). Students who used the news database more frequently appeared to be those who also had a higher level of engagement in deep learning. Similarly, we found a positive association between students’ ratings on the perceived usefulness of the news database and scores on the deep learning approach scale ($r = 0.39, p < 0.001$). Students’ perceived usefulness ratings for the news database did not have a significant association with their scores on the surface learning approach scale ($p > 0.05$).

Deep approach learners have an intrinsic interest in learning, and their strategies are aimed at maximizing meaning (Biggs, Kember, and Leung 2001). As such, our findings showed that a greater tendency toward a deep approach to learning is associated with greater efforts in terms of time given to exploring the electronic database. Student motivation may also be a relevant factor that leads to a more positive perception of an online learning resource that offers a huge amount of information with greater accessibility. While our findings are based on associations and do not determine a cause–effect relationship, it might be logical to explore in further studies whether the use of online resources contributes to promoting deep learning approaches among primary school students. Newble and Clarke (1986) have shown that problem-based learning facilitates an increase in deep learning among students and a decrease in surface learning orientations. As primary schools adopt such learning strategies, electronic databases could provide a form of supportive learning tools.

Practical Implications

A number of educational practice implications may be derived from the findings of this study. Considering the reported difficulties of students in information searches, teachers and librarians might need to ensure effective information-literacy and IT-skills training to primary school students. The level of a person’s IT skills is expected to influence his or her online searching process (Fidel et al. 1999). The implications of the findings of this research support earlier suggestions that students need supervision and support in acquiring both web searching skills and IL, which is the ability to critically assess the information they find (Hirsh 1999). Chu (2009) suggested that an electronic database might benefit students by promoting effective information-search skills and critical thinking. Accordingly, librarians and teachers should collaborate in providing training support for students to acquire the necessary information-literacy and IT skills that will enable them to effectively use electronic databases for information-search processes.
Study implications in relation to domain knowledge may also be discussed. Domain knowledge, which is the knowledge of a specific subject, affects searching processes (Hsieh-Yee 2001; Wildemuth 2004; Fidel et al. 1999; Hirsh 1997). It influences the formulation of suitable keywords and the evaluation of the relevance and reliability of retrieved information. Accordingly, teachers might find it useful to elaborate on project topics during lessons to equip students with relevant vocabulary and understanding to facilitate their search process.

**Limitations of the Study**

While access to the WiseNews database was provided free of charge to all the participants in this study, not all students had equal access to the Internet at home. This could have influenced their amount of use after school hours. Furthermore, the users might also have varied levels of IL and IT skills, which may have affected their methods of information retrieval. This study did not include any assessment of the levels of IL and IT skills of the users. Finally, the five participating schools were recruited on the basis of convenience sampling, which might limit the generalizability of the findings to other schools in Hong Kong.

**Conclusion**

This study addressed questions concerning students’ and teachers’ use patterns of an electronic news database, their perceptions of its usefulness, and associations with students’ learning approaches. Findings showed that younger students tended to exclusively browse through the electronic database, while older students and teachers tended to engage in both browsing and searching. While there were substantial logs of viewing news articles, all the users appeared to have engaged in limited information-management activities as shown by the low percentages of users who downloaded, e-mailed, or printed the materials they viewed. Temporal patterns and locations of retrieved information appear to differ between students and teachers, but both parameters of use confirm that the electronic news database provided the users with greater accessibility and volume of information. Further research may continue to explore the use of electronic databases to determine what happens after users have viewed and archived the information that they have retrieved.

Both user groups viewed the use of the news database positively in terms of supporting learning in various aspects. Other measures of usefulness may be explored in further studies, such as effects on the quality of schoolwork and learning outcomes. Finally, the findings of this study indicate that students’ use frequency and usefulness perception were positively associated with the degree to which they exhibited a deep learning approach. This provides some evidence for the potential usefulness of electronic databases in supporting teaching approaches that aim at increasing students’ deep learning. The findings offer some basis for further studies that examine a cause–effect relationship between learning approach and the use of electronic databases.

In sum, this study provides evidence to support the view that electronic databases can be useful in primary educational settings. As teachers’ and students’ use patterns are better understood, school administrators might gain more insights into selecting appropriate electronic databases to facilitate learning and teaching. In addition, database service providers may use this information to design databases that better suit students and teachers at primary levels.
Acknowledgement
This research was supported by Wisers Information Limited and the HKSAR Government
Matching Grant.

Notes
2. “S” stands for student.

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Appendix A. Sample Questions in the Survey and Interview for Students

Please select the one that best represents your opinion of WiseNews for the following items.

<table>
<thead>
<tr>
<th></th>
<th>No Opinion</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resources in WiseNews are useful for my project-based learning (PBL)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resources in WiseNews are useful for my homework (other than PBL)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I can search for relevant resources in WiseNews easily</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WiseNews is useful for my news reading</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

What are the major difficulties you encountered, if any, when using WiseNews?

Appendix B. Sample Questions in the Survey and Interview for Teachers

Which subject do you mainly teach? ____________________________

Which class(es), if any, that you are teaching use WiseNews? ____________________________

Please select the one that best represents your opinion of WiseNews for the following items.
<table>
<thead>
<tr>
<th></th>
<th>No Opinion</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resources in WiseNews are relevant to my lesson planning</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resources in WiseNews are relevant to my self-learning</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I can search for relevant resources in WiseNews easily</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WiseNews is useful for in-class activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WiseNews is useful for my news reading</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resources in WiseNews are reliable</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Are there any other activities that you think WiseNews is useful for? If yes, please specify:

**Appendix C. Revised Learning Process Questionnaire (R-LPQ-2F)**

**What the LPQ is About**
This questionnaire has a number of questions about your feelings about schools and how you go about learning in school. Remember, there is no right way of going about your learning. It depends on what suits you and the things you are learning. It is accordingly important that you answer each question as honestly as you can. If you think your answer to a question would depend on what you are learning, give the answer that would apply to your most important subject.
How to Answer
Alongside each item (on following page) there is a row of numbers ranging from one to five. A response is shown by circling the number which is closest to the way you want to respond.

The numbers stand for the following responses:

0—I do not understand the meaning of this item
1—this item is never or only rarely true of me
2—this item is sometimes true of me
3—this item is true of me about half the time
4—this item is frequently true of me
5—this item is always or almost always true of me

Circle the number that you think of first—don’t spend a long time thinking about any one question. It is important that you answer each question.

Do not worry about what you think your teachers or anyone else might want you to say.

Your answers are CONFIDENTIAL.
<table>
<thead>
<tr>
<th></th>
<th>Statement</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I find that at times studying makes me feel really happy and satisfied.</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>2</td>
<td>I try to relate what I have learned in one subject to what I learn in other subjects.</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>3</td>
<td>I am discouraged by a poor mark on a test and worry about how I will do on the next test.</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>4</td>
<td>I see no point in learning material which is not likely to be in the examination.</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>5</td>
<td>I feel that nearly any topic can be highly interesting once I get into it.</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>6</td>
<td>I like constructing theories to fit odd things together.</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>7</td>
<td>Even when I have studied hard for a test, I worry that I may not be able to do well in it.</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>8</td>
<td>As long as I feel I am doing enough to pass, I devote as little time to studying as I can.</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td></td>
<td>There are many more interesting things to do.</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>9</td>
<td>I work hard at my studies because I find the material interesting.</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>10</td>
<td>I try to relate new material, as I am reading it, to what I already know on that topic.</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>11</td>
<td>Whether I like it or not, I can see that doing well in school is a good way to get a well-paid job.</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>12</td>
<td>I generally restrict my study to what is specifically set as I think it is unnecessary to do anything extra.</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>13</td>
<td>I spend a lot of my free time finding out more about interesting topics which have been discussed in different classes.</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>14</td>
<td>When I read a textbook, I try to understand what the author means.</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>15</td>
<td>I intend to get my A Levels [or equivalent qualification] because I feel that I will then be able to get a better job.</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>16</td>
<td>I find it is not helpful to study topics in depth. You don’t really need to know much in order to get by in most topics.</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>17</td>
<td>I come to most classes with questions in mind that I want answering.</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>18</td>
<td>I learn some things by rote, going over and over them until I know them by heart even if I do not understand them.</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>19</td>
<td>I find I am continually going over my school work in my mind at times like when I am on the bus, walking, or lying in bed, and so on.</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>20</td>
<td>I find the best way to pass examinations is to try to remember answers to likely questions.</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>21</td>
<td>I like to do enough work on a topic so that I can form my own conclusions before I am satisfied.</td>
<td>0 1 2 3 4 5</td>
</tr>
<tr>
<td>22</td>
<td>I find I can get by in most assessment by memorising key sections rather than trying to understand them.</td>
<td>0 1 2 3 4 5</td>
</tr>
</tbody>
</table>

Note: The questionnaire was translated into Chinese for primary school students in Hong Kong to fill in.

School Library Research (ISSN: 2165-1019) is an official journal of the American Association of School Librarians. It is the successor to School Library Media Quarterly Online and School Library Media Research. The purpose of School Library Research is to promote and publish high quality original research concerning the management, implementation, and evaluation of school library media programs. The journal will also emphasize research on instructional theory, teaching methods, and critical issues relevant to school library media. Visit the SLR website for more information.

The mission of the American Association of School Librarians is to advocate excellence, facilitate change, and develop leaders in the school library field. Visit the AASL website for more information.
Developing California School Library Media Program Standards

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Alan M. Safer, Associate Professor, Department of Mathematics and Statistics, California State University, Long Beach

Abstract
California is developing outcome standards for school library students and quantitative standards for library program factors that provide the conditions for students to meet library outcomes. In an effort to make those program standards empirically based, the researchers analyzed three 2007–8 reputable data sets: California’s school library data set, AASL’s School Libraries Count data set, and a national School Library Journal data set. The researchers clustered the standards into two sections: (1) baseline factors and (2) statistical standards for resources. Findings revealed that school libraries that met the baseline standard were significantly different from libraries that did not. Once the baseline set of factors were determined, the researchers applied descriptive and correlational statistics to the data sets, with the resultant figures based on the average figures supplied by those libraries that met the baseline factors.

Introduction
School library media programs (SLMPs) support the school’s mission, and more specifically, they have their own aligned mission: to help students and staff become effective users of ideas and information (AASL 1998). The 2009 AASL Empowering Learners: Guidelines for School Library Media Programs focuses on developing a flexible learning environment in which students can become competent in twenty-first-century learning skills.

AASL, and many states, have defined what learning skills are under the prevue of the teacher librarian—or at least what skills teacher librarians can address in collaboration with the rest of the school community. Moreover, AASL and states also have created standards for twenty-first-century learning: what students should know and be able to do. The AASL standards include inquiry and critical thinking, application and creation of knowledge, ethical and productive sharing, and the pursuit of personal and aesthetic growth. Each standard is composed of skills, dispositions, responsibilities, and self-assessment strategies.
For those standards to be implemented, teacher librarians are responsible for providing the optimal conditions for learning. Thus, not only are there standards for students, but there are standards for library media programs. These standards describe the resources and the services that the library can provide, the supports and interventions that facilitate student learning.

In March 2009, the California legislation permitted the state Department of Education to develop library standards. A steering committee was then established to develop student learning outcome standards and SLMP standards. California wanted to ensure their standards were database, data that are now easier to derive because dozens of studies have demonstrated that staffing, collections, services, and facilities affect student learning. This research was conducted to provide that data.

**Literature Review**

Numerous studies since the 1950s have established that SLMPs contribute significantly to student academic success. Some practices are straightforward, such as teaching students how to strategically find and evaluate needed information. Likewise, providing a rich collection of curriculum-supportive resources helps students comprehend academic subject matter better. It should be noted that not only do teacher librarians *directly* affect student success, but they contribute *indirectly* by helping classroom teachers succeed in developing and delivering curriculum more effectively because of the library’s resources and services (Lance 2002). (It should be noted that the official term for school librarians in California is “teacher librarian,” so that term is used in this study.) Parsing the SLMP’s elements, several variables have been identified as contributing to student academic achievement: staffing; the library facility as a physical learning environment; library collections; instruction, collaboration, reading-related, and other services; and program administration.

The single most important variable is the value-added service of a full-time credentialed teacher librarian. More than twenty separate studies with a wide variety of populations attest to this vital factor, noting teacher librarian’s positive impact on student academic achievement, reading performance, information competency and study skills (Farmer 2003; Scholastic 2008). Such teacher librarians should not have nonlibrary teaching duties, although they do need to instruct *in* the library (Houston 2008). Farmer’s 2003 literature review identified several specific characteristics of an effective teacher librarian, such as technological competency, communication skills, and trustworthiness. The other significant aspect of staffing is the value-added service of a full-time paraprofessional librarian as a team member alongside a full-time teacher librarian (Achterman 2008; Lance, Rodney, and Russell 2007; Scholastic 2008).

Another obvious factor is the library facility itself, which needs to be accessible throughout the day for both classroom and individual use (Callison 2004; Farmer 2003; Lance, Rodney, and Hamilton-Pennell 2007). To facilitate access, particularly for relevant learning moments, flexible scheduling is necessary—although some fixed scheduling can be offered (Shannon 2007).

The school community usually thinks of the school library in terms of its collection. However, that variable has to be parsed into several aspects to be meaningful. For instance, the collection should support the curriculum (Farmer 2006; Small 2008). The larger the collection, the better
(Farmer 2003) with the proviso that materials are current (Burgin and Bracy 2003; Lance 2001, 2005) and diverse (Farmer 2006; Small 2008).

Another necessary type of necessary resources these days is technology. The school media center needs to provide students with access to Internet-connected computers, online subscription database aggregators, an online library catalog, and a library web portal (Farmer 2003; Roberson, Schweinle, and Applin 2003; Lance, Rodney, and Russell 2007; Scholastic 2008). Several variables are clustered under the heading of services. The teacher librarian needs to regularly instruct the school community (Achterman 2008; Ireland 2001; Farmer 2003; Lance, Rodney, and Russell 2007; Scholastic 2008). This activity can be further divided into audience (Farmer 2003; Lance, Rodney, and Hamilton-Pennell 2007), content matter (Achterman 2008; Farmer 2003; Lance, Rodney, and Russell 2007; Scholastic 2008), and delivery method (Farmer 2003).

Linked with instruction as well as other services is collaboration, although this term could be further refined in terms of degrees of interaction (e.g., communication, cooperation, and coordination). Nevertheless, collaboration implies interdependent planning and implementation. Because it enables resources to be used more effectively and facilitates student learning, collaboration is identified in dozens of studies as a key variable in academic achievement (Farmer 2003; Houston 2008; Lance, Rodney, and Russell 2007; Scholastic 2008). Less obvious is the means to quantify such collaboration: the frequency, extent, and quality of such collaboration.

Service quality, although hard to quantify as such, has been identified as a contributing factor to student academic success from the 1960s (McMillen 1965; Thorne 1967) to this decade (Achterman 2008; Farmer 2006).

Reading-related service is a subset of actions that constitute a significant variable in student academic success (Achterman 2008; Farmer 2003; Lance, Rodney, and Russell 2007; McCulloch 2006; Scholastic 2008). Some of the supportive services for both academic and recreational reading mentioned in studies include materials selection, reading guidance, reading promotion (e.g., booktalks, displays, and author visits), direct instruction, and support of school community efforts. As with collaboration, the quality and extent of reading services needs to be ascertained to validly measure their impact on student learning.

A number of other services also are mentioned in studies as contributing to student academic achievement: reference service (Achterman 2008), interlibrary loan (Baumbach 2002), and community outreach (Faucette 2000; Lance 2002). For instance, when teacher librarians work with parents, students improve academically (Faucette 2000). In general, teacher librarian expertise ensures that students can use library resources more effectively.

It makes sense that running the library efficiently would impact student learning because, for instance, resources would be organized for easier retrieval (Callison 2004; Farmer 2006). However, the attributes of efficient operations have been seldom systematically studied relative to student academic achievement. The one indicator that has been identified is the presence of documented library policies and procedures and a plan that included assessment (Farmer 2006).
Financial support of SLMP has been identified more often as a significant factor, with studies giving quantitative values (Farmer 2003; Lance, Rodney, and Russell 2007; Scholastic 2008). For example, having a bigger budget enables the teacher librarian to purchase more resources, so students have a greater variety of reading materials to choose from and are more likely to improve their reading (Baxter and Smalley 2003; Indiana 2006; Lance 2002).

Another source of power comes from administrative support. When SLMPs have such backing, they gain value and prestige that can translate into more resource allocations and a greater chance for collaboration with the rest of the school community. These factors provide the support that offers a rich learning environment that can impact student achievement (Farmer 2006; Lance, Rodney, and Russell 2007).

Goals and Objectives

The goal of the project was to develop baseline standards as well as service and quantitative resource standards for SLMP factors that provide the conditions for students to meet library outcomes, with a focus on California. Several relevant research questions emerged.

- Do SLMPs that meet baseline variable standards differ significantly from SLMPs that do not?
- What are the service and quantitative resource standards that significantly differentiate SLMPs that meet the baseline variable standards?
- Are California SLMPs significantly different from SLMPs nationally?

Method

To answer the research questions, the investigators used a mixed methods approach: (1) a content analysis of relevant literature and (2) statistical analyses to determine significant differences between populations.

We culled potentially significant variables from a thorough review of the literature pertaining to SLMP factors that contribute to student academic achievement. We used the variables that emerged from the content analysis as a tentative set of baseline SLMP standards.

To further validate the variables, we consulted a national school library survey sponsored by the School Library Journal (SLJ) (Shontz and Farmer 2009). SLJ e-mailed the survey to a sample of more than 2,000 of its subscribers. We validated 250 responses elementary, 168 middle school, 318 high school, and 103 other combination of grades. In comparing the demographics of those responses with the most recent available statistics about school library collections by the National Center for Education Statistics, we found that the sample was representative of schools that have professional librarians. To be established as a baseline standard for our study, at least half of the survey respondents had to meet that standard.

Once the baseline set of factors were determined, we examined the California Department of Education library data set. The California State Education Code directs local governing boards to report on the condition of school libraries. Each year the library services department collects site-based data. We had access to the 2007–8 data set for the purposes of the study. California’s data set consisted of 4,832 responses (3,312 elementary, 842 middle school, 595 high school, and 83
other), which represented a response rate of 49 percent of all California school libraries. We performed a t-test on the SLJ and California data sets to determine whether a significant difference existed between the two; none was found.

Next, we divided the two data sets into two sets: one that met all the baseline variable standards (CA1 and SLJ1) and one that did not (CA0 and SLJ0). A t-test was conducted to determine whether a significant difference exists between sets 1 and 2 relative to resource and service standards. A follow-up logistic regression statistical analysis determined the relative significance of the baseline variables, using a sideways process to generate the best model.

We then examined the two data sets that met the baseline standards to determine the quantity of other SLMP variables. For the SLJ 2009 study, the standards were based on the average resources and services of the set of respondents. For statistical standards (e.g., collection size), the standards were based on the average figures for the “baseline” set of respondents. For the California Department of Education 2007–8 school library survey, the standards were based on the average resources and services of the “baseline” set of respondents. We used findings to generate service and quantitative resource standards.

**Findings**
The following tentative set of standards for school libraries emerged from the meta-analysis and survey data set:

- One full-time teacher librarian (AASL 2008; Achterman 2008; Farmer 2003; Lance, Rodney, and Russell 2007; Library Research Service 2010; Scholastic 2008; Shontz and Farmer 2009)
- One full-time paraprofessional (AASL 2008; Achterman 2008; Farmer 2003; Scholastic 2008; Shontz and Farmer 2009; Sinclair and Tarr 2004)
- An integrated library management system (cataloging and circulation), including online public access catalog (OPAC) (Lance, Rodney, and Russell 2007; Scholastic 2008; Shontz and Farmer 2009)
- Internet access for students (AASL 2008; Achterman 2008; Scholastic 2008; Shontz and Farmer 2009)
- The library must be open 36 hours or more per week (AASL 2008; Achterman 2008; Farmer 2003; Library Research Services 2010; Shontz and Farmer 2009; Sinclair and Tarr 2004)
- At least some flexible scheduling (AASL 2008; Farmer 2003; Scholastic 2008; Shontz and Farmer 2009)
- A library webpage/web portal (Scholastic 2008; Shontz and Farmer 2009)
- Facilities: room and seating for one class and additional individuals, and the collection (AASL 2008; Scholastic 2008; Shontz and Farmer 2009)
- One class set of computers—at least 10 computers at the elementary level, 15 computers at the middle school level, and 25 computers at the high school level (AASL 2008; Shontz and Farmer 2009)
- At least two online subscription databases—one video/image based and at least one periodicals aggregator (AASL 2008; Lance, Rodney, and Russell 2007; Scholastic 2008; Shontz and Farmer 2009); model baseline for text databases is one for elementary, two for middle school, three for high school (Shontz and Farmer 2009)
• Regular planning with at least two grades or department of teachers (20 percent or more) (AASL 2008; Farmer 2003; Scholastic 2008; Shontz and Farmer 2009)

• Required services: readers’ advisory/guidance, information literacy instruction, and Internet and database instruction, even at elementary (AASL 2008; Achterman 2008; Farmer 2003; Scholastic 2008; Shontz and Farmer 2009; Sinclair and Tarr 2004)

• A current set of policies and procedures, and a yearly strategic plan that includes assessment (Farmer 2003; Shontz and Farmer, 2009)

A significant difference at the .01 level existed between CA1 and CA0, and between SLJ1 and SLJ0. The number of SLMPs that met all the baseline standards (SLJ1) was 209 (see Table 1).

Table 1. SLJ Data Set of SLMPs Meeting Baseline Standards (SLJ1)

<table>
<thead>
<tr>
<th>Level of School</th>
<th>Total N</th>
<th>N Meeting Baseline Standard</th>
<th>% Meeting Baseline Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary</td>
<td>250</td>
<td>37</td>
<td>14.8</td>
</tr>
<tr>
<td>Middle School</td>
<td>168</td>
<td>49</td>
<td>29.2</td>
</tr>
<tr>
<td>High School</td>
<td>318</td>
<td>114</td>
<td>44.0</td>
</tr>
<tr>
<td>Combination</td>
<td>103</td>
<td>9</td>
<td>8.7</td>
</tr>
</tbody>
</table>

The number of SLMPs that met all the baseline standards (CA1) was 352 (see Table 2). The main variable separating those SLMPs meeting the baseline standards and those not meeting the standards was the presence of a full-time teacher librarian.

Table 2. California Data Set of SLMPs Meeting Baseline Standards (CA1)

<table>
<thead>
<tr>
<th>Level of School</th>
<th>Total N</th>
<th>N Meeting Baseline Standard</th>
<th>% Meeting Baseline Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary</td>
<td>3,250</td>
<td>13</td>
<td>0.4</td>
</tr>
<tr>
<td>Middle School</td>
<td>841</td>
<td>69</td>
<td>8.2</td>
</tr>
<tr>
<td>High School</td>
<td>595</td>
<td>267</td>
<td>44.9</td>
</tr>
<tr>
<td>Combination</td>
<td>83</td>
<td>3</td>
<td>3.6</td>
</tr>
</tbody>
</table>

A follow-up logistic regression analysis revealed more nuanced differences. For the SLJ data set, the only factors that were significantly different from those libraries that did not meet the baseline standards were having two or more databases, instruction on Internet use, and flexible scheduling (see Table 3).
Table 3. National-Based Logistic Regression Analysis of Significant Variables Differentiating SLJ1 and SLJ0

<table>
<thead>
<tr>
<th>National Variable</th>
<th>B</th>
<th>S.E.</th>
<th>WALD</th>
<th>df</th>
<th>SIG.</th>
<th>EXP(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2+ Databases</td>
<td>.108</td>
<td>.052</td>
<td>4.403</td>
<td>1</td>
<td>.036</td>
<td>1.115</td>
</tr>
<tr>
<td>Internet instruction</td>
<td>.634</td>
<td>.270</td>
<td>5.516</td>
<td>1</td>
<td>.019</td>
<td>1.885</td>
</tr>
<tr>
<td>Flexible scheduling</td>
<td>.963</td>
<td>.189</td>
<td>26.016</td>
<td>1</td>
<td>.000</td>
<td>2.620</td>
</tr>
</tbody>
</table>

(B = coefficient; S.E. = standard error; Wald = test statistics; df = degrees of freedom; Sig. = significance; Exp(B) = odds ratio)

In contrast, for the California data set, not only were those factors significantly different, but the following additional factors were also significant: having a library website/web portal, information literacy instruction, and planning with teachers. In sum, “baseline” standard school libraries were significantly different from those libraries that did not meet the baseline standards (see Table 4).

Table 4. California Logistic Regression Analysis of Significant Variables Differentiating CA1 and CA0

<table>
<thead>
<tr>
<th>California Variable</th>
<th>B</th>
<th>S.E.</th>
<th>WALD</th>
<th>df</th>
<th>SIG.</th>
<th>EXP(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2+ Databases</td>
<td>.957</td>
<td>.157</td>
<td>37.133</td>
<td>1</td>
<td>.000</td>
<td>2.603</td>
</tr>
<tr>
<td>Internet instruction</td>
<td>1.666</td>
<td>.283</td>
<td>34.612</td>
<td>1</td>
<td>.000</td>
<td>5.292</td>
</tr>
<tr>
<td>Flexible scheduling</td>
<td>.195</td>
<td>.096</td>
<td>4.090</td>
<td>1</td>
<td>.043</td>
<td>1.215</td>
</tr>
<tr>
<td>Information literacy instruction</td>
<td>.632</td>
<td>.157</td>
<td>16.145</td>
<td>1</td>
<td>.000</td>
<td>1.881</td>
</tr>
<tr>
<td>Library web portal</td>
<td>.404</td>
<td>.185</td>
<td>4.776</td>
<td>1</td>
<td>.029</td>
<td>1.497</td>
</tr>
<tr>
<td>Planning with teachers</td>
<td>.757</td>
<td>.143</td>
<td>27.900</td>
<td>1</td>
<td>.000</td>
<td>2.132</td>
</tr>
</tbody>
</table>

Taking the average figure for the variables in data sets CA1 and SLJ1, we generated the following resource standards. When figures were significantly different relative to grade level, each set of figures was noted. When a discrepancy occurred between the two sets, both set of figures were noted. Figures were rounded to two significant figures for ease of reporting. The variables and figures were also validated by several research studies and the 2008 AASL survey of SLMPs (see Table 5).

Table 5. Resource Standards for California SLMPs

<table>
<thead>
<tr>
<th>Variable</th>
<th>Elementary</th>
<th>Middle School</th>
<th>High School</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Current print collection (2/3 newer than 1995)</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>2. Base collection size (in volumes)</td>
<td>13,000</td>
<td>15,000</td>
<td>20,000</td>
</tr>
<tr>
<td>3. Book collection ratio to number of students</td>
<td>20</td>
<td>18</td>
<td>12</td>
</tr>
</tbody>
</table>
4. Number of books to add each year  
<table>
<thead>
<tr>
<th>1/student</th>
<th>1/student</th>
<th>0.5/student</th>
</tr>
</thead>
</table>
5. Yearly book budget  
   | $5,000    | $5,000    | $5,000      |
6. Yearly nonbook budget (including databases)  
   | $4,000    | $4,000    | $4,000      |
7. Print periodicals budget  
   | $500      | $500      | $500        |
8. Total collection budget per student  
   | $13/student | $8.50/student | $4.50/student |

Bases for figures and notes for table 5:
1. AASL 2008; Achterman 2008; California 2008; Scholastic 2008; Shontz and Farmer 2009.
3. AASL 2008; California 2008; Shontz and Farmer 2009.
5. California 2008; note that on the national level the baseline amount was $8,000 (AASL 2008; Scholastic 2008; Shontz and Farmer 2009).
6. California 2008; note that on the national level all grades would be $4,000 (AASL 2008; Shontz and Farmer 2009).

**Discussion**

The California and national data sets confirmed the findings of dozens of studies correlating school library variables and student academic achievement.

**Base Standards**

The two linked base standard variables most likely to be absent were staffing: having both a full-time teacher librarian and a librarian paraprofessional. In general, about three-quarters of California high school libraries have teacher librarians; national and state percentages of school libraries that met base standards were about the same: 44. That percentage of teacher librarians drops to about half in middle schools and 17 percent in elementary settings. Therefore it is no surprise that less than 0.5 percent of California elementary school libraries met all the base standards as opposed to almost 15 percent of counterparts nationwide. That situation also differentiates California and national school libraries at the middle school level; less than 10 percent statewide versus almost 30 percent nationwide. Indeed, the California teacher-librarian-to-student ratio is the lowest in the nation, largely due to lack of professional staff at lower levels. Furthermore, teacher librarians are less likely to have a paraprofessional librarian on staff in California.

Almost every school library in the national data set had an integrated library management system and adequate facility. Statewide licenses enabled most school libraries to have subscription databases; California is one of the few states not to have such agreements (Fuller 2006). Concurrently, most libraries had computers, at least for the staff. Internet-connected computers and student access to online information were also the norm nationwide, although less likely in elementary than in middle and high schools. Similarly, California SLMPs were less likely to have library web portals than the general population nationwide.
Because several of the base standards were consistently present in the nationwide sample, the differentiation between those that did or did not meet the standard for both state and national data sets—at all school levels—dealt with access (flexible) and instruction. This finding held, regardless of the school enrollment. With more resources, more instruction existed for students to know how to use those resources. Having more resources could also imply that more management was required, thus the need for qualified and trained professionals.

California libraries were more uneven in terms of the presence of base standard variables, so more differentiated factors emerged when comparing CA1 and CA0 item by item. Some California schools have a limited web presence along with no online subscription databases, so their school library would be less likely to have a website or portal. According to the California Education Code, technology specialists are not required at each school either, so webpage development also can be affected. A few years ago, a state “digital high school” initiative assisted schools in cabling, but that project did not extend fully to middle schools and did not touch elementary sites. Along with library staff possibly not having web design training, it is not surprising that library portals would be a differentiating variable. A greater proportion (usually elementary) had only fixed scheduling. This situation sometimes arose because the teacher librarian was the supervising teacher when the regular classroom teacher had a preparation period (such as Long Beach Unified School District’s union contract). The same situation also could explain why teacher librarians were less able to plan with classroom teachers: little common time existed to plan together. Because California library funding is usually site- or district-determined rather than state-mandated, library budgets also varied significantly between CA1 and CA0. According to follow-up anecdotal evidence, some teacher librarians were wary of thorough weeding of materials, fearing that the shelves would look barren, so older books remain, making the collection less current.

**Quantitative Resource Standards**

Other school library variables represented a range of values (e.g., periodical budget) rather the existence of a variable or lack thereof (e.g., library web portal). Thus, to generate valid quantitative figures that would represent base standards, we used the average figure of SLJ1 and CA1 data points. These figures were triangulated with data generated by the 2008 AASL survey of SLMPs. Each variable was handled independently, although correlations between variables did exist. However, we made the assumption that if half of the sample had the variable, it was a reasonable expectation. Nevertheless, a cumulative effect did exist. The standards were meant to be achievable, yet even with average figures, no elementary SLMP, and only six middle and twelve high California SLMPs met both base and resource standards. A preliminary investigation found that all but one of the SLMPs that met both base and resource standards were either in the top 20 percent or performed more highly than demographically-comparative schools based on the state’s Academic Performance Index.

In determining the currency of the collection, several percentages and cut-off dates were tried. A 50 percent mark at 1995 (fifteen years ago) worked well. This figure applied at all school levels because different types of books differ in shelf life. For example, picture books and adult literature “canon” may be old but still worthwhile. On the other hand, science and travel usually need to be up-to-the-minute. It should be noted, however, that the average copyright date for elementary books in California SLMPs was 1998, 1995 for middle schools, and 1993 for high schools. This difference might be accounted for by the degree of physical handling of books at each age.
In terms of collection size, elementary SLMPs had the fewest number of volumes, and high school SLMPs had the greatest number. However, when the book-collection-to-student ratio was calculated, the reverse was the result, with elementary SLMPs having 20 books per student, as opposed to 18 books per student at the middle school level and 12 books per students at the high school level. These figures show that elementary schools have the lowest enrollment, and that children’s books are usually shorter, so more are needed per child.

For that same reason, elementary and middle SLMPs should add one book per child while senior SLMPs should add a half book per student. Senior high schoolers are apt to borrow fewer school library books (Bauerlein 2010). At the same time, they are more likely than younger students to conduct research using online databases. To pay for that growth, $8,000 would be needed at all school levels, according to national book collection average expenditures. In California, the average book budget for CA1 SLMPs was about $5,000 at the high school level, and usually ranged between $3,000 and $5,000 at the other levels. While adult titles tend to cost more than youth books (Publishers Weekly 2009), if more books are being added to the collection of elementary and middle schools, the total book budget would likely end up about the same at all levels. Furthermore, since the cost of books is about the same throughout the United States, California book budgets should rise to national levels: $8,000.

We divided the budget for periodicals into print and nonprint. The average spent for print periodicals at all levels was $500. This figure represents a decrease in print subscriptions over the years as more periodicals have gone digital or have been accessed electronically (Publishers Weekly 2009).

The average budget in California for total nonbook materials was $2,000 for elementary SLMPs. Middle and senior high SLMPs spent $4,000, of which about half was for online subscription databases. As was mentioned above, 90 percent of states have statewide licenses for such databases. Because elementary SLMPs in California seldom had such subscriptions, they would need to add $2,000 to their periodical budget as part of their total collection expenses. With this adjustment, the nonbook budget figures for all levels would be the same: $4,000, which is the national average at all levels. Interestingly, no significant correlation was found between (1) the collection size and the number of databases subscribed to or (2) the number of books and nonbook items.

Taking into consideration all material formats, a realistic total materials budget per annum for California SLMPs would be $10,000 (taking into consideration rising cost of materials since 2007–8). The 2007–8 figures showed much lower budgets for elementary, but part of that difference can be linked to the lack of online database subscriptions. The national budget average in 2007–8 was consistently $8,000 at all levels, regardless if the SLMP met baseline standards; this figure does not include the cost of online database subscriptions, which California SLMPs would need to add. Indeed, no significant correlation existed between total materials budget and meeting baseline standard; this finding was probably because of the perception that the school library is a place for resources, regardless if other services exist.

When calculating the budget in terms of cost per student, the resultant figure is highest for elementary SLMPs and lowest for high school SLMPs, largely because of enrollment averages at each level. A base number of materials are needed, regardless of the number of students in the
school. As with the total materials budget, the national per-student budget was the same regardless of whether the SLMP met baseline standards. Nevertheless, compared with national figures, California’s per student materials budget has a much greater discrepancy between elementary and high school levels. One reason for that difference might be parent donations and book fairs, which are more prevalent at the elementary level, and were not calculated in the SLJ budget figures.

**Conclusions**

The study’s research questions led to the following conclusions:

**Do SLMPs that meet baseline variable standards differ significantly from SLMPs that do not meet those standards?**

Yes, at both the national and state level, SLMPs that meet baseline standards differ significantly from those that do not. A little less than half of national and state high school libraries met the baseline standard for all of the identified variables. A little more than a quarter of the nation’s middle school libraries and about a twelfth of California’s middle school libraries met the standard. Only fifteen percent of national, and less than a half percent of California, school libraries met the standard. The one factor that singled out the groups was the presence of a full-time teacher librarian. There appears to be a perception that teacher librarians are more important at higher grades, a hypothesis that could be further studied.

**What are the service and quantitative resource standards that significantly differentiate those SLMPs that meet the baseline variable standards?**

A regression analysis found that a cluster of variables differentiated those SLMPs meeting all of the baseline standards from those that did not:

- National level: having at least two subscription databases, Internet instruction, flexible scheduling
- California level: number of subscription databases, Internet instruction, flexible scheduling, library web portal, information literacy instruction, planning with teachers, book and nonbook budget size, currency of collection, having a library website/web portal, information literacy instruction, and planning with teachers.

**Are California SLMPs significantly different from SLMPs nationally?**

Yes, California SLMPs tend to lag behind SLMPs nationally, as noted above. The simple answer is that high-quality and low-quality SLMPs exist at both state and national level, but a lower percentage of California SLMPs in comparison with SLMPs nationally have the services and resources that mark effective programs, particularly at elementary and middle schools. These differences cannot be accounted for by demographics.

California state has a long way to go to insure that its school libraries provide the conditions needed to enable students can succeed academically. However, this study has already contributed to the efforts of the California State Department of Education and state teacher librarians to establish library standards to be approved by state legislators. Even though the final figures varied a little in the final draft, most recommendations from the study were accepted by the drafters of the state library standards. It should be noted that one legislator wanted the book–student ratio to be 28:1 to give schools a high target to aim for; this figure was accepted for the
state standards draft. The standards drafters also wanted two-thirds of any SLMP collection be to current (i.e., since 1995). With those two stipulations, only one California school library, a reputable middle school site in a well-to-do county, met all of the base standards and adjusted quantitative values.

The strength of the study was its basis on actual library practice, both at the state and national level. Determining the independent variables via a thorough literature review, the study found a significant difference in resources and services of SLMPs that met the baseline standards and those that did not. The study also revealed that the baseline standards clearly differentiated achieving California SLMPs. Nevertheless, the national and state data sets were enough alike that California could be fairly compared with other states and held to national SLMP practices.

A couple of other useful statistics would further strengthen the study’s implications. More in-depth statistical analysis could determine whether a significant difference exists between CA1 and CA0 data sets relative to the California Academic Performance Index. Calculating the library budget as a percentage of a school’s total school budget, relative to CA1 and CA0, could also reveal significant differences. The study also could be extended to newer data and compared with AASL data sets.

In any case, teacher librarians should base library program standards on best-practice, empirically based statistics, and use these data to examine their validity in light of student academic achievement.

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Secondary School Principals’ Perceptions of the School Librarian’s Instructional Role

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Note: The survey for this study was administered and the research completed in spring 2009 before AASL’s change in terminology from “school library media specialist” to “school librarian” in January 2010. For that reason, the term “school library media specialist (SLMS)” is used throughout.

Abstract
Principals serve as instructional leaders within their schools. Their understanding and support play a key role in the effectiveness of the library program. At the same time, findings from studies in numerous states demonstrate the positive impact that the school library media specialist (SLMS) has on student achievement. This descriptive study explored Virginia secondary school principals’ perceptions of the role of the SLMS as teacher and as instructional partner. Findings demonstrate that principals support the instructional role of the SLMS, that they expect the SLMS to be the primary initiator of collaboration with classroom teachers at both the individual teacher and school levels, and that they gain their knowledge of the instructional role of the SLMS from SLMSs with whom they work as teachers and as administrators. These findings have significant implications for the field—in the K–12 environment for practicing SLMSs and in the higher education environment for SLMS preparation programs.

Introduction
Principals serve as the instructional leaders of their schools. They establish school climate, determine performance expectations, and set priorities for effective teaching and for student learning in their schools (Campbell 1991). Principal support and advocacy are important to the development of a strong school library program that supports and enhances teaching and learning (Haycock 1989; Henri, Hay, and Oberg 2002). Principals foster effective library programs through budgetary decisions that affect collections and staffing, through organizational decisions that affect scheduling, and through the expectations that they set for library use by students and teachers (Hartzell 2002b). Yet research has demonstrated that principals are not knowledgeable of the critical role that school library media specialists (SLMSs) play in student learning (Buchanan 1982; Dorrell and Lawson 1995; Kolencik 2001; Wilson and Blake 1993).


**Review of the Literature**

*Empowering Learners: Guidelines for School Library Programs* (AASL 2009) continues in the tradition of *Information Power: Building Partnerships for Learning* (AASL 1998) and specifies that SLMSs are teachers and instructional partners. According to *Empowering Learners*, the SLMS as a teacher “empowers students to become critical thinkers, enthusiastic readers, skillful researchers, and ethical users of information” (18). As an instructional partner, the SLMS “collaborates with classroom teachers to develop assignments that are matched to academic standards and that include key critical thinking skills, technology and information literacy skills, and core social skills and cultural competencies” (17).

Numerous studies, including those by Lance, Rodney, and Hamilton-Pennell (2000, 2001, 2002, 2005) and Smith (2006), have demonstrated that student achievement is higher when SLMSs take an active role in teaching and learning. In Illinois, 11th-grade ACT scores were 3 to 4 percent higher in schools in which SLMSs regularly collaborated with teachers by identifying materials, planning, and team teaching (Lance, Rodney, and Hamilton-Pennell 2005). In Oregon, SLMSs from high schools with the highest reading and language arts scores were twice as likely as SLMSs from the lowest scoring schools to plan collaboratively with classroom teachers (Lance, Rodney, and Hamilton-Pennell 2001).

In Wisconsin, Smith (2006) found that reading and language arts test scores were higher in schools in which the SLMS spent more time on instruction-related activities—between 7.9 and 19.0 percent higher at the high school level. Todd and Kuhlthau (2004) conducted a study in Ohio, examining how SLMSs and library media programs help students learn. Surveying more than 13,000 students served by 39 effective school libraries, they concluded that SLMSs in Ohio were agents of resources, information literacy development, knowledge construction, academic achievement, independent reading and personal development, technological literacy, and individualized learning. Achterman (2008) noted that in California, “the levels of services regularly provided by the library program are significantly related to student achievement” (190). As Kaplan (2006) asserts, however, “principals continue to be benignly neglectful of school library media programs” (xi).

Previous studies indicate that principals learn about the instructional role of the SLMS from SLMSs with whom they work. Pearson (1989) noted that principal preparation coursework did not include information on the importance of the role of the library in the school’s instructional program, and Campbell (1991) found that principals gained most of their knowledge about school library media programs from their current SLMSs. Buchanan (1982) and Hartzell (2002a) suggested that principals’ perceptions of the role of the SLMS also were formed through library experiences as students and as classroom teachers.

**Theoretical Framework**

In this study I explored principals’ perceptions within the context of critical incident technique (CIT). Flanagan noted in his seminal 1954 article that critical incidents “may be a very valuable supplementary tool for the study of attitudes” (353). Precedent has been set for using CIT in library and educational leadership fields. Andrews (1991) used it to identify difficulties that students had when using an academic library. Both Radford (1996, 2006) and Ozkaramanli (2005) used it when exploring students’ perceptions of reference encounters, while Todd and
Kuhlthau (2004) used it in their study of services offered by effective Ohio school library media centers.

In the field of educational leadership, Russell (1985) used CIT to analyze behaviors and activities of secondary school principals that contributed either positively or negatively to school effectiveness. Christensen (1993) explored activities of the principal in a restructured school, which featured collaborative decision-making and shared power, and Zalman and Bryant (2002) looked at incidents defined by elementary school principals as high-conflict encounters with parents, students, and staff.

**Research Questions**
The purpose of this descriptive study was to explore Virginia secondary school principals’ perceptions of the instructional role of the SLMS in the context of the following questions:

- How do secondary school principals view the SLMS as a teacher of information literacy skills?
- How do secondary school principals view the SLMS as an instructional partner?
- To whom do secondary school principals ascribe the responsibility for initiating collaborative instruction?
- How do principals feel that they support the library media program?
- What is the source of secondary school principals’ perceptions of the instructional role of the SLMS?
- What incidents shape principals’ perceptions of the SLMS?

**Method**
In December 2008 I requested permission from each of the 134 school divisions in Virginia to invite principals to participate in a 34-question web-based survey (see Appendix A). Sixty school divisions granted permission, and I sent their 315 middle and high school principals an e-mail invitation to participate in the study. Responses arrived during February and March 2009. A total of 108 principals completed the survey for a response rate of 34 percent, and all 8 Virginia superintendents’ regional study groups were represented in the responses.

**Data Sources**
I asked principals to rate statements regarding the teaching role of the SLMS and the instructional-partner role of the SLMS on a five-point Likert scale (strongly disagree to strongly agree). “Check all that apply” questions asked principals to characterize the role of the SLMS in their schools and to describe how they supported their SLMS’s instructional role. Principals were also asked to identify their primary source of knowledge of the instructional role of the SLMS. The survey concluded with an open-ended question:

Think back to a situation or incident which you have had with a library media specialist which helped to form your view of the role of the library media specialist in the school. This incident could be a positive one, or it could be a negative one. Please describe the incident.

I transferred the responses from the web-based survey from Inquisite to SPSS for analysis, and I explored responses to the open-ended question through content analysis.
Findings

Respondent Characteristics
When asked their total years of classroom teaching experience, 71 percent of the respondents reported fewer than sixteen years of teaching experience; 11 percent reported five or fewer years (see Table 1).

Table 1. Total Years of Classroom Teaching Experience

<table>
<thead>
<tr>
<th>Years of Experience</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>0–5</td>
<td>12</td>
<td>11.2</td>
</tr>
<tr>
<td>6–10</td>
<td>39</td>
<td>36.1</td>
</tr>
<tr>
<td>11–15</td>
<td>26</td>
<td>24.1</td>
</tr>
<tr>
<td>16–20</td>
<td>13</td>
<td>12.0</td>
</tr>
<tr>
<td>21–25</td>
<td>9</td>
<td>8.3</td>
</tr>
<tr>
<td>Over 25</td>
<td>8</td>
<td>7.4</td>
</tr>
<tr>
<td>No response</td>
<td>1</td>
<td>0.9</td>
</tr>
<tr>
<td>Total</td>
<td>108</td>
<td>100</td>
</tr>
</tbody>
</table>

When asked to specify their total number of years of administrative experience, 44 percent of the principals reported six to ten years administrative experience, and 19 percent reported eleven to fifteen years; 13 percent reported one to five years experience as an administrator (see Table 2).

Table 2. Total Years of Administrative Experience

<table>
<thead>
<tr>
<th>Years of Experience</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1–5</td>
<td>14</td>
<td>13.0</td>
</tr>
<tr>
<td>6–10</td>
<td>47</td>
<td>43.5</td>
</tr>
<tr>
<td>11–15</td>
<td>20</td>
<td>18.5</td>
</tr>
<tr>
<td>16–20</td>
<td>15</td>
<td>13.9</td>
</tr>
<tr>
<td>21–25</td>
<td>5</td>
<td>4.6</td>
</tr>
<tr>
<td>Over 25</td>
<td>5</td>
<td>4.6</td>
</tr>
<tr>
<td>No response</td>
<td>2</td>
<td>1.9</td>
</tr>
<tr>
<td>Total</td>
<td>108</td>
<td>100</td>
</tr>
</tbody>
</table>

The SLMS as Teacher
Most of the responding secondary school principals in Virginia support the instructional role of the SLMS as teacher and as instructional partner. Eighty-one percent agreed or strongly agreed that SLMSs should teach students to use print materials while 97 percent agreed or strongly agreed that SLMSs should teach students to use electronic databases to write reports and research papers and to complete classroom projects. Eighty-seven percent agreed or strongly agreed that the SLMS should teach students to use information found at free websites.
In the area of skills, 96 percent of the secondary principals agreed or strongly agreed that SLMSs should teach students to locate information in print and electronic sources; 90 percent agreed or strongly agreed that SLMSs should teach students to evaluate information found, but only 47 percent agreed or strongly agreed that SLMSs should teach students to take notes or to organize the information found. Ninety-four percent of the secondary principals agreed or strongly agreed that SLMSs should teach students to respect intellectual property, avoid plagiarism, cite sources, and respect copyright laws, and 96 percent agreed or strongly agreed that SLMSs should teach students to practice ethical behavior and follow acceptable-use policy guidelines.

In the area of access to students’ standardized test scores to inform instruction, however, secondary principals were much less supportive. Only 44 percent agreed or strongly agreed that SLMSs should have access to student standardized test data, and only 43 percent agreed or strongly agreed that SLMSs should use standardized test data to assist in the development of information-literacy instruction.

In the area of staff development, 91 percent of the secondary principals agreed or strongly agreed that SLMSs should provide staff development for teachers in such areas as effective searching on the Web and effective use of electronic subscription databases. Ninety-two percent of the secondary principals either agreed or strongly agreed that SLMSs should provide staff development for teachers in areas such as intellectual property and copyright. Detailed data demonstrating principals’ views of the SLMS as teacher are provided in Table 3 and Figure 1.

### Table 3. Teacher Role of the Library Media Specialist

<table>
<thead>
<tr>
<th>Question</th>
<th>% Strongly Disagree</th>
<th>% Disagree</th>
<th>% Neither agree nor disagree</th>
<th>% Agree</th>
<th>% Strongly agree</th>
<th>% No response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teach students to use print materials</td>
<td>1.9</td>
<td>7.4</td>
<td>9.3</td>
<td>53.7</td>
<td>26.9</td>
<td>0.9</td>
</tr>
<tr>
<td>Teach students to use electronic subscription databases</td>
<td>0.9</td>
<td>0.9</td>
<td>0.9</td>
<td>42.6</td>
<td>54.6</td>
<td>0</td>
</tr>
<tr>
<td>Teach students to use information found at free websites</td>
<td>0.9</td>
<td>2.8</td>
<td>9.3</td>
<td>47.2</td>
<td>39.8</td>
<td>0</td>
</tr>
<tr>
<td>Teach students how to locate information</td>
<td>1.9</td>
<td>0</td>
<td>0.9</td>
<td>30.6</td>
<td>65.7</td>
<td>0.9</td>
</tr>
<tr>
<td>Teach students how to evaluate information</td>
<td>0.9</td>
<td>2.8</td>
<td>5.6</td>
<td>41.7</td>
<td>48.1</td>
<td>0.9</td>
</tr>
<tr>
<td>Teach students how to take notes and organize information</td>
<td>1.9</td>
<td>25.0</td>
<td>25.9</td>
<td>29.6</td>
<td>17.6</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>1.9</td>
<td>2.8</td>
<td>0.9</td>
<td>25.0</td>
<td>69.4</td>
<td>0</td>
</tr>
<tr>
<td>------------------------------------------</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>------</td>
<td>------</td>
<td>----</td>
</tr>
<tr>
<td>Teach students to respect intellectual property</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teach students to practice ethical behavior</td>
<td>1.9</td>
<td>0</td>
<td>1.9</td>
<td>29.6</td>
<td>66.7</td>
<td>0</td>
</tr>
<tr>
<td>Have access to standardized student test data</td>
<td>4.6</td>
<td>17.6</td>
<td>33.3</td>
<td>29.6</td>
<td>13.9</td>
<td>0.9</td>
</tr>
<tr>
<td>Use standardized test data to develop information literacy instruction</td>
<td>4.6</td>
<td>15.7</td>
<td>34.3</td>
<td>25.9</td>
<td>16.7</td>
<td>2.8</td>
</tr>
<tr>
<td>Provide staff development for teachers in areas such as effective Web searching and effective use of subscription databases</td>
<td>0.9</td>
<td>1.9</td>
<td>5.6</td>
<td>42.6</td>
<td>48.1</td>
<td>0.9</td>
</tr>
<tr>
<td>Provide staff development for teachers in areas such as intellectual property and copyright</td>
<td>0.9</td>
<td>1.9</td>
<td>5.6</td>
<td>41.7</td>
<td>50.0</td>
<td>0</td>
</tr>
</tbody>
</table>

**Figure 1. Library Media Specialist as Teacher**

![Bar chart showing the percentage of principals strongly agreeing or agreeing with various tasks assigned to library media specialists.](chart.png)

- **% Principals Strongly Agree or Agree**


School Library Media Specialist as Instructional Partner

When considering the SLMS and the classroom teacher as partners for instruction, 96 percent of the secondary principals either agreed or strongly agreed that SLMSs should collaborate with teachers to teach information literacy skills in the context of the content curriculum. Eighty-nine percent either agreed or strongly agreed that SLMSs should collaborate with individual teachers to plan lessons which integrate information literacy into the curriculum, while 90 percent either agreed or strongly agreed that this collaboration should occur at the grade level/team level/department level. Ninety-two percent either agreed or strongly agreed that SLMSs should collaborate with teachers to teach lessons which integrated information literacy into the curriculum, yet only 65 percent either agreed or strongly agreed that SLMSs should collaborate with teachers to evaluate student work from these lessons. Detailed data demonstrating principals’ views of the SLMS as instructional partner are provided in Table 4 and Figure 2.

Table 4. Instructional Partner Role of the Library Media Specialist

<table>
<thead>
<tr>
<th>Question</th>
<th>% Strongly disagree</th>
<th>% Disagree</th>
<th>% Neither agree nor disagree</th>
<th>% Agree</th>
<th>% Strongly agree</th>
<th>% No response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collaborate with teachers to teach students info literacy skills</td>
<td>0.9</td>
<td>1.9</td>
<td>0.9</td>
<td>47.2</td>
<td>49.1</td>
<td>0</td>
</tr>
<tr>
<td>Collaborate with individual teachers to plan lessons</td>
<td>0.9</td>
<td>3.7</td>
<td>6.5</td>
<td>44.4</td>
<td>44.4</td>
<td>0</td>
</tr>
<tr>
<td>Collaborate with teachers at grade level to plan lessons</td>
<td>0.9</td>
<td>1.9</td>
<td>6.5</td>
<td>48.1</td>
<td>41.7</td>
<td>0.9</td>
</tr>
<tr>
<td>Collaborate with teachers to teach lessons</td>
<td>0.9</td>
<td>1.9</td>
<td>4.6</td>
<td>53.7</td>
<td>38.0</td>
<td>0.9</td>
</tr>
<tr>
<td>Collaborate with teachers to evaluate student work</td>
<td>2.8</td>
<td>10.2</td>
<td>22.2</td>
<td>41.7</td>
<td>23.1</td>
<td>0</td>
</tr>
<tr>
<td>Play an active role in the school improvement plan/process</td>
<td>0.9</td>
<td>0</td>
<td>4.6</td>
<td>36.1</td>
<td>57.4</td>
<td>0.9</td>
</tr>
</tbody>
</table>
School Library Media Specialist’s Contributions to Instruction

Ninety-four percent of principals either agreed or strongly agreed that SLMSs should serve on the school improvement team. Ninety-four percent said that SLMSs should be advocates for their library media programs; 90 percent noted that SLMSs should be instructional partners. Seventy-five percent said that SLMSs should serve as members of the leadership team; 61 percent said that SLMSs should be instructional leaders within the school; 43 percent said that SLMSs should be master teachers. Table 5 and Figure 3 depict the SLMS’s contributions to instruction as perceived by principals.

Table 5. Library Media Specialist’s Contribution to Instruction

<table>
<thead>
<tr>
<th>Role</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serves as member of school improvement team</td>
<td>101</td>
<td>94.0</td>
</tr>
<tr>
<td>Advocate for the library media program</td>
<td>101</td>
<td>94.0</td>
</tr>
<tr>
<td>Serve as instructional partner</td>
<td>97</td>
<td>90.0</td>
</tr>
<tr>
<td>Serve as member of leadership team</td>
<td>81</td>
<td>75.0</td>
</tr>
<tr>
<td>Be an instructional leader within the school</td>
<td>66</td>
<td>61.0</td>
</tr>
<tr>
<td>Be a master teacher</td>
<td>46</td>
<td>43.0</td>
</tr>
</tbody>
</table>

School Library Media Specialist as Initiator of Collaboration

When asked who should initiate collaboration at the individual teacher level, 8 percent of principals responding said that they as administrators should; 61 percent felt that this was the responsibility of the SLMS, whereas 31 percent said that it was the responsibility of the teacher. When asked who should initiate collaboration at the school level, 42 percent of principals responding felt that it was their duty as administrators; 55 percent said it was the responsibility of the SLMS, and 3 percent felt it was the responsibility of the teacher. Table 6 and Figure 4
provide data regarding responsibility to initiate collaboration as perceived by principals.

### Table 6. Initiation of Collaboration

<table>
<thead>
<tr>
<th>Question</th>
<th>% Administrator</th>
<th>% Library media specialist</th>
<th>% Teacher</th>
<th>% No response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary initiator of teacher-library media specialist collaboration at the individual teacher level?</td>
<td>8.3</td>
<td>61.1</td>
<td>30.6</td>
<td>0</td>
</tr>
<tr>
<td>Primary initiator of teacher-library media specialist collaboration at the school level?</td>
<td>41.7</td>
<td>55.6</td>
<td>2.8</td>
<td>0</td>
</tr>
</tbody>
</table>

### Figure 4. Responsibility to Initiate Collaboration

Principal Support of the School Library Media Specialist’s Instructional Role

Sixty-six percent of principals indicated that they strongly supported the SLMS in implementing an instructional role in the school. Thirty-three percent said that they supported the SLMS, while 1 percent indicated provision of minimal support. When asked to document how they supported implementation of an instructional role, 84 percent responded that they included the SLMS on key school committees; 75 percent noted that they encouraged the SLMS to take a leadership role in instruction; 74 percent said that they expressed an expectation to teachers to collaborate with the SLMS; 73 percent felt that they provided adequate funding for library resources; 66 percent indicated that they provided clerical staffing for the library. **Table 7** provides data showing how principals indicate they support their SLMS’s instructional role.
Table 7. Principal Support of Instructional Role

<table>
<thead>
<tr>
<th>Role</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appoint library media specialist to key school committees</td>
<td>91</td>
<td>84.3</td>
</tr>
<tr>
<td>Encourage library media specialist to take leadership role in instruction</td>
<td>81</td>
<td>75.0</td>
</tr>
<tr>
<td>Express expectation to teachers to collaborate with library media specialist</td>
<td>80</td>
<td>74.1</td>
</tr>
<tr>
<td>Provide adequate funding for library resources</td>
<td>79</td>
<td>73.1</td>
</tr>
<tr>
<td>Provide clerical staffing for library</td>
<td>71</td>
<td>65.7</td>
</tr>
</tbody>
</table>

Source of Principals’ Knowledge

Asked to note their primary source of knowledge of the instructional role of the SLMS, 60 percent of respondents indicated that they formed their views from interactions with SLMSs during their administrative careers; 32 percent indicated they formed their views from interactions with SLMSs during their teaching careers; 6 percent attributed their knowledge to relevant readings in professional journals, and 1 percent each to principal preparation coursework and conference presentations. Table 8 and Figure 5 illustrate sources of principals’ perceptions. In response to a follow-up question asking if they received any sort of formal training regarding the role of the SLMS during their principal preparation program, 6 percent

Table 8. Primary Source of Principals’ Perceptions

<table>
<thead>
<tr>
<th>Source</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coursework in principal preparation program</td>
<td>1</td>
<td>0.9</td>
</tr>
<tr>
<td>Interactions with library media specialist during my teaching career</td>
<td>34</td>
<td>31.5</td>
</tr>
<tr>
<td>Interactions with library media specialist during my administrative career</td>
<td>65</td>
<td>60.2</td>
</tr>
<tr>
<td>Readings in professional journals</td>
<td>7</td>
<td>6.5</td>
</tr>
<tr>
<td>Presentations at conferences which I have attended</td>
<td>1</td>
<td>0.9</td>
</tr>
</tbody>
</table>
Critical Incidents
Fifty-eight of the 108 respondents (54 percent) answered the open-ended question: “Think back to a situation or incident which you have had with a library media specialist which helped to form your view of the role of the library media specialist in the school. This incident could be a positive one, or it could be a negative one. Please describe the incident.” Responses to the open-ended question were systematically examined within the framework of critical incident theory (Flanagan 1954) using content analysis. Using Radford’s organizational structure (1996), critical incidents were first classified as positive or negative, then further classified as informational (content) or relational (attitudes).

Critical Incidents—Informational (Content)
In the informational (content) area, six themes emerged: (1) collaboration to teach twenty-first-century skills, (2) knowledge of state curriculum standards, (3) connection of library instruction to classroom, (4) promotion of reading and literacy, (5) teaching technology skills, and (6) provision of staff development for faculty. First, principals expressed that the SLMS should collaborate with classroom teachers to teach twenty-first-century information skills and, second, that they should demonstrate knowledge of state curriculum standards. One principal responded,

“Early in my administrative experience the SLMS in my school led the charge in helping students to take notes from resources in a way that promoted paraphrasing and not rote copying. Her work was aligned clearly with writing SOLs [Virginia Standards of Learning] and with best practices in instruction. Besides her constant cooperative efforts with all departments, this one lesson became a strong model for others and influenced the approach of many teachers to their work with research and with student-developed summaries.”

Third, principals expected SLMSs to connect library instruction to the classroom. A respondent shared:
“I also taught multimedia and I would always bring my students to the media center to have the specialist review the use of print materials and online materials for students to use while doing research. I saw her role as one of information and support of the efforts we were trying to do in the classroom.”

Fourth, principals expected SLMSs to support reading and literacy. One principal stated, “They welcomed students into the library to read. They had a group called ‘Lunch Bunch’ kids who came to the library to read and discuss books. They had the faculty to select a book to read and discuss. They set up monthly displays to generate interest.” From another principal, “They have initiated several reading programs both during and after school and collaborate with teachers regarding literacy.”

Fifth, principals noted that SLMSs should teach technology skills:

“I previously worked with a library media specialist who worked tirelessly to assist teachers in integrating technology into their daily classroom experiences. She was a wonderful support and model in this process.”

Finally, principals expressed that SLMSs should provide staff development for their faculty members:

“As we were developing our staff development sessions a few years ago, one of my media specialists mentioned some ideas about what we could do and then volunteered to look it up, learn about it, and present it to the staff. I have since learned to go to her first when looking for ways to improve our staff and develop meaningful training for them. She has been a great asset to our school and me.”

A reality check in the informational (content) area is provided by this principal’s negative comment:

“In my opinion [the] library media specialist should be more involved in the instructional program of the school. Also, most LMS retire in the position and they are very resistant to change and being technologically supportive . . . Some librarians believe their role should be one which does not include instruction, collaboration, teamwork, student involvement.”

Critical Incidents—Relational (Attitudes)

In the relational (attitudinal) area, three themes emerged: atmosphere, actions, and traits/dispositions. First, principals noted that they wanted their libraries to have warm, welcoming environments, to be inviting learning spaces with positive atmospheres. One principal related the following:

“I’ll take this opportunity to express how important I feel it is for the library media specialist to set a positive tone in the library. I have worked in schools where adults and students avoided the library because they didn’t see the specialist as a resource and in fact saw him/her as someone who was overly critical and hostile. The library resources went untapped. I have also worked in schools where the library media specialist made the library a welcoming place and consistently repeated the ‘welcome’ message across
Second, principals expected their librarians to display certain traits or dispositions: they wanted their librarians to be approachable, customer-service oriented, enthusiastic, friendly, and innovative: “Both of our librarians are extremely helpful in meeting our electronic media needs. They are both very customer-service oriented. By selling themselves, they sell the library and vice versa.” One principal stated, “My library media specialist has always been very helpful and honest when it comes to instruction and helping students,” and another related, “As a teacher, my library media specialist provided wonderful assistance to my class in finding material for my students for their chemistry research projects. She was friendly and approachable.” Finally, principals noted certain actions which contributed to their perceptions of the SLMS’s instructional role: positive interactions with students and staff; investment in school culture; involvement in the whole school and ability to see the big picture; willingness to collaborate and to be a team player; and willingness to take the initiative, be proactive, and promote library services. “The media specialist has played an integral part of our research program for our language arts program. She collaborates with the teachers at curriculum meetings and is proactive in involving teachers in her program.”

Another principal noted,

“For much of my administrative career I have been fortunate to work with a LMC specialist who was very involved in the whole school and saw the big picture. She worked on school improvement teams and spearheaded numerous school-wide activities. In doing so, people felt more comfortable in working with the LMC to facilitate lesson planning and instruction.”

Content analysis of responses to the open-ended question revealed both positive and negative incidents in the areas of informational (content) expertise and relational (attitudes) aspects. Principals related experiences and incidents which had formed their perceptions of the instructional role of the SLMS.

Discussion

Limitations of the Study

It must be noted that this study was performed in the context of several limitations. Sixty of Virginia’s 134 school divisions granted permission for their principals to participate in the study. Additionally, while all eight Virginia superintendents’ regional study groups were represented in the responses, response rate for the survey was 34 percent. Completion of the survey was voluntary in nature, and 66 percent of those Virginia secondary school principals who received the survey chose not to respond; therefore, there is a danger of non-response bias. Finally, responses were self-reported perceptions which cannot be objectively and accurately measured. While principals responding indicated how they view SLMSs as teachers of information literacy skills and as instructional partners and that they support the SLMS’s instructional role, it was not possible to determine how accurately their responses reflected their actual views.
Areas of Less Support
Based on responses received, Virginia secondary school principals strongly support the instructional role of the SLMS as a teacher of information literacy skills and as an instructional partner. It is most interesting to explore areas in which principals are less supportive: principals assert that SLMSs should teach students to use electronic databases (97 percent) but are less supportive of the free Web (87 percent) and even less of print materials (81 percent). It is encouraging that principals differentiate between subscription databases and the free Web and that they understand the importance of students using quality, vetted information to perform research. Their rating of instruction in the use of print materials could be troublesome, however, if this indicates that they place less value on print than on electronic resources.

Principals support SLMSs teaching students to locate information (96 percent) and to evaluate information (90 percent), but less than half of the respondents (47 percent) support the SLMS teaching students to take notes and organize information. Additional information is needed. Do principals believe that students have already mastered these skills? Or do they feel that teaching these skills is the responsibility of the classroom teacher rather than the SLMS?

Exploring this thread further, an analysis of principals’ ratings of the SLMS as an instructional partner shows strong support for collaboration to plan and to teach (ranging from 89 percent to 96 percent on relevant questions) but markedly lower support for the SLMS to collaborate to evaluate student work from lessons that integrate information literacy into the curriculum (65 percent). Again, additional information is needed. Do principals feel that evaluation of student work, even work taught collaboratively, is the job of the classroom teacher? And, if so, why? Do principals simply perceive that the classroom teacher should evaluate student work as part of his or her job, or do they feel that the classroom teacher is better qualified than the SLMS to evaluate student work?

Especially troublesome are the markedly lower percentages of principals who agree or strongly agree that the SLMS should have access to standardized test data (44 percent) and should use this test data to assist in the development of information-literacy instruction (43 percent). What are the implications here? Do principals, even those who express strong support for the instructional role of the SLMS, fail to recognize the contribution that the SLMS can make to student achievement? Do they fail to make the connection between the library program, instruction in twenty-first-century skills, standardized tests, and the key role that the SLMS plays in this area?

Exploring this underlying thread even further, when asked to identify the contribution the SLMS makes to the instructional program of the school, 61 percent of principals characterize the SLMS as an instructional leader and 43 percent as a master teacher (as opposed to 94 percent as an advocate, 90 percent as an instructional partner, and 75 percent as a member of the “leadership team”). The question must be asked: although principals support the instructional role of the SLMS, are they fully aware of their potential?

Sources of Principals’ Perceptions
Secondary principals in Virginia public schools form their views of the role of the SLMS in their schools through their interactions with practicing SLMSs. Ninety-two percent of middle and high school principals report that they learn what SLMSs do from SLMSs with whom they work, either as teachers (32 percent) or as principals (60 percent). Pearson (1989) suggested that it is
the responsibility of the SLMS to inform and educate the principal concerning the library’s potential contribution to student learning. Findings from this study validate Pearson’s charge.

The SLMS as Initiator of Collaboration
Another key finding of the study demonstrates that secondary school principals expect the SLMS to be proactive and to be the initiator of collaboration within the school. In the context of collaboration between a teacher and the SLMS, 61 percent of principals responding named the SLMS as the primary initiator of collaboration. In the context of collaboration at the school level, 55 percent indicated that the SLMS should be the initiator. This finding is reinforced by the comments shared regarding the actions that principals expect of SLMSs: willingness to collaborate and to be a team player, take the initiative, be proactive, and promote library services.

Significance of Work and Implications for Practice
The findings of this study affirm findings of previous studies that indicate that principals do not gain knowledge of the SLMS’s instructional role in their principal preparation coursework but rather learn from SLMSs with whom they work (Campbell 1991; Church 2008; Hartzell 2002a). It is worthy to take into consideration, however, that once principals are on the job, they are very busy as they coordinate, manage, and lead all activities occurring in their schools. As Hartzell (2002a) states:

“... the demands of the principalship preclude much chance of an administrator learning the truth about libraries and librarians on the job. The simple fact is that they just don’t have the time to . . . they get caught up in the imperatives of their own environments and it becomes very difficult for them to expand their conceptual horizons.”

Therefore, whenever possible, SLMSs as individuals and library media as a profession should encourage the integration of information about the instructional role of the SLMS into principal-preparation programs.

Principal-Preparation Programs
SLMSs geographically located near colleges and universities that offer principal-preparation programs should consider volunteering as guest speakers to share information with principal candidates. Many state-level professional associations offer lists of speakers who might be invited for class visits as well as resources that might be used in such presentations. Personal contact with principals-to-be can provide them with background information regarding libraries and raise the expectations that they will have for their school library media programs.

Library media faculty can work within their institutions to insure that information regarding SLMSs is addressed in principal preparation coursework. Sanders and Angel (2007) describe an initiative at Appalachian State University in which they use case studies and web-based communication tools to allow “school administration and library science students to discuss real school problems and develop lasting solutions” (206). By partnering with educational leadership faculty, library media faculty increase the knowledge base of future principals while modeling both collaboration and advocacy.
At the national level, as standards for principal-preparation programs are developed and revised by the Educational Leadership Constituent Council and the Interstate School Leaders Licensure Consortium, and as principal licensure tests such as the School Leaders Licensure Assessment are revised, SLMSs need to have a voice. If language regarding the instructional role of the SLMS and the contribution that SLMSs make to schools is included in the standards, it will be included in principal-preparation-program curriculum. Additionally, SLMSs need to explore the possibility of writing for textbooks used in principal-preparation programs. Every opportunity should be seized to educate future principals as they are completing principal-preparation coursework.

**Principal Professional Development**

To inform practicing principals about the instructional role of the SLMS, SLMSs should actively participate in principals’ professional-development activities. SLMSs should submit proposals to present at both state and national principal conferences. Copresenting with a supportive principal who understands what SLMSs do can be very effective. SLMSs are often characterized as writing for each other in library journals. SLMSs should write and submit for publication to journals read by principals, such as *Educational Leadership, Journal of Educational Administration, NASSP Bulletin*, and *Principal*.

Principal may also enroll in Mansfield University’s “Leveraging School Libraries to Improve Student Learning,” a “one-credit, online course for school administrators [which] will increase background knowledge and understandings of the role a quality school library media program plays in the academic success of students” (Kachel n.d.). Through course readings and online discussions, participants gain a better understanding of the instructional role of the SLMS and the contributions that a quality library program makes to their school.

Given the findings of this study, however, it is critically important that building-level SLMSs have the ability to communicate with their principals and to convey the critical ways in which the library program contributes to student learning. These findings offer significant implications for school-library-media preparation programs regarding the need for advocacy training within coursework, for professional associations to support SLMSs in their efforts, and for practicing SLMSs regarding the need for advocacy within their buildings.

**Recommendations for School-Library-Media Preparation Program Curriculum**

School-library-media preparation programs should prepare SLMSs to be advocates and leaders within their schools. Coursework should address the importance of analysis and understanding of the school’s mission and goals; of developing an action plan that connects the library’s mission, goals, and activities to the broader school mission and goals; and of collecting appropriate data to document how the library media program contributes to the mission and goals of the school and to student learning. Future SLMSs should learn how to effectively communicate with principals and other stakeholders to increase understanding of the importance of the library program. Advocacy training should be included in coursework.

Additionally, programs should scaffold instruction to provide opportunities for future SLMSs to develop the dispositions that principals value. Bush and Jones (2010) identify the following as areas in which SLMSs should develop dispositions: instructional strategies, information literacy,
assessment, literacy and reading, diversity, intellectual freedom, communication, advocacy, collaboration, resiliency, leadership, and professional ethics. Of these, responses to the open-ended question in this study highlight that principals value instructional strategies, information literacy, literacy and reading, communication, collaboration, and leadership.

Coursework should address the fifth role of the SLMS identified in AASL’s *Empowering Learners: Guidelines for School Library Programs*, that of leader (2009, 16–17). *Empowering Learners* outlines the leadership role expected of the SLMS, requiring that SLMSs understand content-area teaching and learning, new pedagogical strategies, trends in the education and technology landscapes, and skills related to information, media, and technology fluency… build strong relationships with teachers, school administrators, and the community…[and serve as] a leading member of school-wide committees (47).

Activities and learning experiences that allow future SLMSs to develop skills in these areas should be provided throughout preparation program coursework.

**SLMS Professional Development**

For those practicing SLMSs already in the field, professional organizations should provide opportunities for advocacy and leadership training. SLMSs should take advantage of resources available from the American Association of School Librarians, such as the *School Library Program Health and Wellness Toolkit* (AASL 2010b). AASL’s one-day Advocacy Institute for School Librarians provides excellent training. State professional organizations should offer workshops and conference sessions that allow their members to develop and hone advocacy and leadership skills. Toolkits such as the Ontario Library Association’s *Teacher Librarian’s Toolkit for Evidence-Based Practice* (n.d.) can assist them in their ongoing efforts.

**Conclusion**

Advocacy, as defined by the AASL Advocacy Special Committee (2010a), is the ongoing process of building partnerships so that others will act for and with you, turning passive support into educated action for the library media program. It begins with a vision and a plan for the library media program that is then matched to the agenda and priorities of stakeholders. Principals are library stakeholders, and their agenda and priorities focus on student learning. It behooves SLMSs to advocate for their library programs and to match them to principals’ agendas and priorities. **Appendix B** offers to practicing SLMSs a tool to help estimate a principal’s knowledge and understanding: “Assessment of Your Principal’s Knowledge of Your Instructional Role.” **Appendix C** presents a self-assessment tool for the SLMS focused on areas which this study identified as important to principals: “Assessment of Your Status in Attitudinal/Relational and Informational/Content Areas.” **Appendix D** offers a template for development of an advocacy action plan.

SLMSs must demonstrate the difference that they make in student learning as teachers of information-literate skills, collaborative instructional partners, and instructional leaders within their schools. SLMSs must communicate with and work to build partnerships with principals so that principals fully understand the contributions that a strong library program makes to student learning. Coursework in SLMS preparation programs should prepare SLMSs to be effective communicators and advocates in their schools. Professional organizations should offer ongoing workshops and trainings to allow practicing SLMSs to further develop skills in these areas.
Findings from this study offer insight into the types of activities performed by the SLMS that positively affect principals’ perceptions of their instructional role. Principals want SLMSs who collaborate to teach twenty-first-century skills, who demonstrate knowledge of state curriculum standards, who connect library instruction with classroom instruction, who promote reading and literacy, who teach technology skills, and who provide staff development for faculty. They want SLMSs who create welcoming learning environments in their libraries; who are approachable, enthusiastic, and innovative; and who interact positively, collaboratively, and proactively with the staff.

School library media preparation programs can use these findings to inform coursework, and building-level SLMSs can use them to inform practice. Principals learn what SLMSs do from the SLMSs with whom they work. The responsibility to inform and educate lies with each of us.

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Cite This Article
Appendix A. Survey: Secondary School Principals’ Perceptions of the Instructional Role of the Library Media Specialist

Section One: The Teacher Role of the Library Media Specialist
Directions: Please read each of the following statements and select the answer that best represents your response. Answer choices are Strongly disagree, Disagree, Neither disagree nor agree, Agree, Strongly agree.

1. My library media specialist should teach students to use print materials to write reports and research papers and to complete classroom projects.
   1. Strongly disagree
   2. Disagree
   3. Neither disagree nor agree
   4. Agree
   5. Strongly agree

2. My library media specialist should teach students to use electronic subscription databases which contain journal articles and other reference material (Gale InfoTrac, Grolier Online, Britannica Online, eLibrary, etc.) to write reports and research papers and to complete classroom projects.
   1. Strongly disagree
   2. Disagree
   3. Neither disagree nor agree
   4. Agree
   5. Strongly agree

3. My library media specialist should teach students to use information found at free Web sites to write reports and research papers and to complete classroom projects.
   1. Strongly disagree
   2. Disagree
   3. Neither disagree nor agree
   4. Agree
   5. Strongly agree

4. My library media specialist should teach students how to locate information contained in print and electronic sources.
   1. Strongly disagree
   2. Disagree
   3. Neither disagree nor agree
   4. Agree
   5. Strongly agree
5. My library media specialist should teach students how to evaluate information for accuracy and reliability before using it in a report, paper, or project.
   1. Strongly disagree
   2. Disagree
   3. Neither disagree nor agree
   4. Agree
   5. Strongly agree

6. My library media specialist should teach students how to take notes and how to organize information to be used in a report, paper, or project.
   1. Strongly disagree
   2. Disagree
   3. Neither disagree nor agree
   4. Agree
   5. Strongly agree

7. My library media specialist should teach students to respect intellectual property (avoid plagiarism, cite sources, respect copyright laws).
   1. Strongly disagree
   2. Disagree
   3. Neither disagree nor agree
   4. Agree
   5. Strongly agree

8. My library media specialist should teach students to practice ethical behavior by following acceptable use policy guidelines in their use of information.
   1. Strongly disagree
   2. Disagree
   3. Neither disagree nor agree
   4. Agree
   5. Strongly agree

9. My library media specialist should have access to standardized student test data.
   1. Strongly disagree
   2. Disagree
   3. Neither disagree nor agree
   4. Agree
   5. Strongly agree

10. My library media specialist should use standardized student test data as he/she develops information literacy instruction.
    1. Strongly disagree
    2. Disagree
    3. Neither disagree nor agree
    4. Agree
    5. Strongly agree
11. My library media specialist should provide staff development for teachers in areas such as effective searching on the World Wide Web and effective use of electronic subscription databases.
   1. Strongly disagree
   2. Disagree
   3. Neither disagree nor agree
   4. Agree
   5. Strongly agree

12. My library media specialist should provide staff development for teachers in areas such as intellectual property and copyright.
   1. Strongly disagree
   2. Disagree
   3. Neither disagree nor agree
   4. Agree
   5. Strongly agree

Section Two: The Instructional Partner Role of the Library Media Specialist
Directions: Please read each of the following statements and select the answer that best represents your response. Answer choices are Strongly disagree, Disagree, Neither disagree nor agree, Agree, Strongly agree.

13. My library media specialist should collaborate with teachers to teach students information literacy skills (accessing, evaluating, and using information) in the context of content curriculum.
   1. Strongly disagree
   2. Disagree
   3. Neither disagree nor agree
   4. Agree
   5. Strongly agree

14. My library media specialist should collaborate with individual teachers to plan lessons which integrate information literacy into the curriculum.
   1. Strongly disagree
   2. Disagree
   3. Neither disagree nor agree
   4. Agree
   5. Strongly agree

15. My library media specialist should collaborate with teachers at grade level/team level/department level to plan lessons which integrate information literacy into the curriculum.
   1. Strongly disagree
   2. Disagree
   3. Neither disagree nor agree
   4. Agree
   5. Strongly agree

16. My library media specialist should collaborate with teachers to teach lessons which integrate information literacy into the curriculum.
17. My library media specialist should collaborate with teachers to evaluate student work from lessons which integrate information literacy into the curriculum.
   1. Strongly disagree
   2. Disagree
   3. Neither disagree nor agree
   4. Agree
   5. Strongly agree

18. My library media specialist should play an active role in the school improvement plan/process.
   1. Strongly disagree
   2. Disagree
   3. Neither disagree nor agree
   4. Agree
   5. Strongly agree

Section Three: Overall Contributions of Library Media Specialist to Instruction
Directions: Please read each of the following statements and select the answer that best represents your response.

19. My library media specialist should be a(n) (Check all that apply)
   1. Advocate for the Library Program
   2. Instructional Leader
   3. Instructional Partner
   4. Master Teacher
   5. Member of the Leadership Team/Principal’s Advisory Council
   6. Other (please specify)

20. Who should be the primary initiator of teacher-library media specialist collaboration at the individual teacher level? (Check one)
   1. Administrator
   2. Library media specialist
   3. Teacher

21. Who should be the primary initiator of teacher-library media specialist collaboration at the school level? (Check one)
   1. Administrator
   2. Library media specialist
   3. Teacher
Section Four: Demographics
Directions: Please respond to each of the following questions.

22. Superintendents’ Regional Study Group in which your school is located (Check one)
   1. **Region 1**: Charles City County, Chesterfield County, Colonial Heights City, Dinwiddie County, Goochland County, Hanover County, Henrico County, Hopewell City, New Kent County, Petersburg City, Powhatan County, Prince George County, Richmond City, Surry County, Sussex County

   2. **Region 2**: Accomack County, Chesapeake City, Franklin City, Hampton City, Isle of Wight County, Newport News City, Norfolk City, Northampton County, Poquoson City, Portsmouth City, Southampton County, Suffolk City, Virginia Beach City, Williamsburg-James City County, York County

   3. **Region 3**: Caroline County, Colonial Beach, Essex County, Fredericksburg City, Gloucester County, King and Queen County, King George County, King William County, Lancaster County, Mathews County, Middlesex County, Northumberland County, Richmond County, Spotsylvania County, Stafford County, West Point, Westmoreland County

   4. **Region 4**: Alexandria City, Arlington County, Clarke County, Culpeper County, Fairfax City, Fairfax County, Falls Church City, Fauquier County, Frederick County, Loudoun County, Madison County, Manassas City, Manassas Park City, Orange County, Page County, Prince William County, Rappahannock County, Shenandoah County, Warren County, Winchester City

   5. **Region 5**: Albemarle County, Amherst County, Augusta County, Bath County, Bedford City, Bedford County, Buena Vista City, Campbell County, Charlottesville City, Fluvanna County, Greene County, Harrisonburg City, Highland County, Lexington City, Louisa County, Lynchburg City, Nelson County, Rockbridge County, Rockingham County, Staunton City, Waynesboro City

   6. **Region 6**: Alleghany County, Botetourt County, Covington City, Craig County, Danville City, Floyd County, Franklin County, Henry County, Martinsville City, Montgomery County, Patrick County, Pittsylvania County, Roanoke City, Roanoke County, Salem County

   7. Region 7: Bland County, Bristol City, Buchanan County, Carroll County, Dickenson County, Galax City, Giles County, Grayson County, Lee County, Norton City, Pulaski County, Radford City, Russell County, Scott County, Smyth County, Tazewell County, Washington County, Wise County, Wythe County

   8. **Region 8**: Amelia County, Appomattox County, Brunswick County, Buckingham County, Charlotte County, Cumberland County, Greensville County, Halifax County, Lunenburg County, Mecklenburg County, Nottoway County, Prince Edward County

23. School setting (Check one)
   1. Urban
   2. Non-urban
24. Grade level configuration which best describes the school in which you are principal (Check one)

1. 6–8
2. 7–8
3. 9–12
4. 6–9
5. 7–9
6. 10–12
7. 6–12
8. 7–12
9. 8–12
10. Other (please specify)

25. School enrollment (Check one)

1. 1 to 299
2. 300 to 749
3. 750 to 1,499
4. 1,500 to 2,249
5. 2,250 and above

26. Total years of classroom teaching experience which you have (Check one)

1. 0 to 25 years
2. Over 25

27. Content area(s) you taught as classroom teacher (Check all that apply)

1. Computers/Technology
2. Driver Education
3. English
4. Fine Arts
5. Foreign Language
6. Health
7. History/Social Sciences
8. Mathematics
9. Physical Education
10. Sciences
11. Other

28. Grade level(s) you taught as classroom teacher (Check all that apply)

1. a. PreK-2
2. b. 3–5
3. c. 6–8
4. d. 9–12

29. Total years of administrative experience which you have (including the current academic year) (Check one)

1. 0 to 25 years
2. Over 25
30. How would you characterize your support of the library media specialist in his/her instructional role?
   1. Strongly support
   2. Support
   3. Minimally support
   4. Do not support
   5. Do not feel that library media specialist has an instructional role

31. How do you support your library media specialist in his/her instructional role? (Check all that apply)
   1. Encourage the library media specialist to take a leadership role in instruction
   2. Express your expectation to teachers that they collaborate with the library media specialist
   3. Include the library media specialist on key school committees
   4. Provide clerical staffing for the library
   5. Provide adequate funding for library resources

32. What would you specify as the primary source of your knowledge of the instructional role of the library media specialist? (Check one)
   1. Coursework in my principal preparation program
   2. Interactions with library media specialists during my teaching career
   3. Interactions with library media specialists during my administrative career
   4. Presentations at conferences which I have attended
   5. Readings in professional journals
   6. Other (please specify)

33. In your principal preparation program, did you receive any sort of formal training related to library/media specialists?
   1. No
   2. Yes

If yes, in what context? (Check one)
   3. Entire course in school library media
   4. Topic of discussion in several courses
   5. Topic of discussion in one course
   6. Presentation from guest lecturer
   7. Other? (please specify)

34. Open-ended Question:
   Directions: Please respond to the following open-ended question in the space provided.
   “Think back to a situation or incident which you have had with a library media specialist which helped to form your view of the role of the library media specialist in the school. This incident could be a positive one, or it could be a negative one. Please describe the incident.”

Thank you very much for completing this survey. If you have any questions or are interested in the results of this research study, please feel free to contact the researcher at churchap@longwood.edu.
Appendix B. Assessment of Your Principal’s Knowledge of Your Instructional Role

How would your principal respond to each question using the following scale?

1. Strongly disagree
2. Disagree
3. Neither disagree nor agree
4. Agree
5. Strongly agree

Section One: The Teacher Role of the Library Media Specialist

My library media specialist should…

1. Teach students to use print materials to write reports and research papers and to complete classroom projects.
   1 2 3 4 5

2. Teach students to use electronic subscription databases which contain journal articles and other reference material (Gale InfoTrac, Grolier Online, Britannica Online, eLibrary, etc.) to write reports and research papers and to complete classroom projects.
   1 2 3 4 5

3. Teach students to use information found at free Web sites to write reports and research papers and to complete classroom projects.
   1 2 3 4 5

4. Teach students how to locate information contained in print and electronic sources.
   1 2 3 4 5

5. Teach students how to evaluate information for accuracy and reliability before using it in a report, paper, or project.
   1 2 3 4 5

6. Teach students how to take notes and how to organize information to be used in a report, paper, or project.
   1 2 3 4 5

7. Teach students to respect intellectual property (avoid plagiarism, cite sources, respect copyright laws).
   1 2 3 4 5

8. Teach students to practice ethical behavior by following acceptable use policy guidelines in their use of information.
   1 2 3 4 5
9. Have access to standardized student test data.
   1 2 3 4 5

10. Use standardized student test data as he/she develops information literacy instruction.
    1 2 3 4 5

11. Provide staff development for teachers in areas such as effective searching on the World Wide Web and effective use of electronic subscription databases.
    1 2 3 4 5

12. Provide staff development for teachers in areas such as intellectual property and copyright.
    1 2 3 4 5

Section Two: The Instructional Partner Role of the Library Media Specialist
My library media specialist should…

13. Collaborate with teachers to teach students information literacy skills (accessing, evaluating, and using information) in the context of content curriculum.
    1 2 3 4 5

14. Collaborate with individual teachers to plan lessons which integrate information literacy into the curriculum.
    1 2 3 4 5

15. Collaborate with teachers at grade level/team level/department level to plan lessons which integrate information literacy into the curriculum.
    1 2 3 4 5

16. Collaborate with teachers to teach lessons which integrate information literacy into the curriculum.
    1 2 3 4 5

17. Collaborate with teachers to evaluate student work from lessons which integrate information literacy into the curriculum.
    1 2 3 4 5

18. Play an active role in the school improvement plan/process.
    1 2 3 4 5

Section Three: Overall Contributions of Library Media Specialist to Instruction
How would your principal respond?

Please read each of the following statements and select the answer that best represents your response.

19. My library media specialist should be a(n) (Check all that apply)
   1. Advocate for the Library Program
20. Who should be the primary initiator of teacher-library media specialist collaboration at the individual teacher level? (Check one)
   1. Administrator
   2. Library media specialist
   3. Teacher

21. Who should be the primary initiator of teacher-library media specialist collaboration at the school level? (Check one)
   1. Administrator
   2. Library media specialist
   3. Teacher

22. How would you characterize your support of the library media specialist in his/her instructional role?
   1. Strongly support
   2. Support
   3. Minimally support
   4. Do not support
   5. Do not feel that library media specialist has an instructional role

23. How do you support your library media specialist in his/her instructional role? (Check all that apply)
   1. Encourage the library media specialist to take a leadership role in instruction
   2. Express your expectation to teachers that they collaborate with the library media specialist
   3. Include the library media specialist on key school committees
   4. Provide clerical staffing for the library
   5. Provide adequate funding for library resources

Appendix C. Assessment of Your Status in Attitudinal/Relational and Informational/Content Areas
Rate yourself on the following traits/activities using a scale of 1 to 5, 1 being the lowest implementation, 5 being the highest.

Attitudinal/Relational
Atmosphere

Warm welcoming environment in library itself (greet, smile, welcome)

1  2  3  4  5
Inviting learning space (place of learning; busy, bustling learning lab, not shrine)

Positive tone

Traits/Dispositions

Approachable

Customer-service oriented

Enthusiastic

Energetic

Friendly

Innovative

Actions

Has positive interactions with students and staff

Invests in school culture

Is a team player

Is collaborative/willing to be instructional partner

Is involved in whole school/sees big picture (activities and instruction)

Is proactive

Provides access to library
Promotes library services
1 2 3 4 5

Show leadership skills
1 2 3 4 5

Shows positive attitude toward school and library
1 2 3 4 5

Takes initiative
1 2 3 4 5

Takes strong stand on intellectual freedom
1 2 3 4 5

Informational/Content

Collaboration with classroom teacher to teach 21st century skills
1 2 3 4 5

Knowledge of and connection to classroom
1 2 3 4 5

Knowledge of and use of student test data
1 2 3 4 5

Knowledge of state curriculum standards
1 2 3 4 5

Provision of meaningful and engaging professional development for staff
1 2 3 4 5

Support for reading and literacy
1 2 3 4 5

Teaching of research skills
1 2 3 4 5

Teaching of technology skills
1 2 3 4 5

Appendix D. Action Plan: Advocacy Begins with YOU!

1. The current emphasis in my school is

2. Advocacy Goal in the Attitudinal/Relational Area:
3. How will I assess progress toward this goal?

4. Advocacy Goal in the Informational/Content Area:

5. How will I assess progress toward this goal?

School Library Research (ISSN: 2165-1019) is an official journal of the American Association of School Librarians. It is the successor to School Library Media Quarterly Online and School Library Media Research. The purpose of School Library Research is to promote and publish high quality original research concerning the management, implementation, and evaluation of school library media programs. The journal will also emphasize research on instructional theory, teaching methods, and critical issues relevant to school library media. Visit the SLR website for more information.

The mission of the American Association of School Librarians is to advocate excellence, facilitate change, and develop leaders in the school library field. Visit the AASL website for more information.
A Study of Self-Censorship by School Librarians

Wendy Rickman, Assistant Professor, Leadership Studies, University of Central Arkansas, Conway, Arkansas

Abstract
A study of Arkansas, Delaware, and North Carolina school librarians was conducted in 2006 to determine the extent to which self-censorship was practiced, if at all. Three possible factors influencing decisions to self-censor were assessed: (1) internal—self (individual belief system), (2) external—school (from within the school system), or (3) external—community (from the community at large).

More than one thousand school librarians at elementary, middle, and secondary public schools from the three states participated. The sample did not include representatives from other specialized public school campuses.

While the sample population as a whole did not demonstrate a practice of self-censorship in the selection process, four characteristics of the sample population did indicate self-censoring behaviors: (1) being of the age 60–69, (2) holding no formal collegiate education degree (bachelor of science in education, master of science, or master of science in education) with library media certification or licensure, (3) being at a secondary school library media center, and (4) having fifteen or fewer years of education experience.

Introduction
A primary purpose of the school library is to provide resources and materials in support of the curricular mission of the school district. It provides access to information for students via books, music, art, magazines, newspapers, software, videos, audio collections, and Internet access. Because the school library is an important complement to the school classroom, it is critical that these resources represent a wide range of ideas and information.

School librarians apply specific criteria, examine professional reviews, and assess reader-level suitability of content in collection development. These criteria help determine “what to add, what to access through resource sharing, and what to remove” (Van Orden and Bishop 2001, 7). Self-censorship by a school librarian involves making collection management choices on the basis of avoiding conflict with administrators, parents, or colleagues. Self-censorship decisions are often made on the basis of religious, sexual, political, or health factors (Klein 1985; Curry 2001).
Young (2002) found that profanity within materials was the basis for a majority of challenges encountered in school districts.

Pressure to block access to resources is ever increasing. A survey conducted by Kamhi (1981) indicated that the forces to censor books and other educational materials were real and growing at the time. As stated by the American Library Association (ALA) in its “Freedom to Read Statement” (2004), “Such pressure toward conformity is perhaps natural to a time of accelerated change. Yet suppression is never more dangerous than in such a time of social tension” (para. 4). Lukenbill (2002) further describes this pressure as “a basic sense of need to determine within a cultural and social context what is right and wrong, what is good and bad, and what is secular and what is religious” (26). Therefore an inevitable clash occurs between those who value the education system as a free marketplace of ideas and those who see the system as an effort to suppress certain items in a collection.

Statement of the Problem

Even though professional preparation programs emphasize the importance of information access, the literature claims that graduates of such programs continue to self-censor their school library collections. Several sources (e.g., Bellows 2005; Coley 2002; Kamhi 1981; McCarthy and Langdon 1993; Sacco 1993) indicate the removal of materials had more to do with value judgments by faculty, administration, and the community than with established educational criteria. Additionally, to avoid conflict with constituents or to protect students, school librarians removed and censored items they personally judged unacceptable or controversial.

Evans (1995) posits that it is not the responsibility of school librarians to dictate the choice or to substitute their judgment for that of the reader. The act of self-censorship affects the intellectual growth of the student body and their access to diverse information. According to ALA in “Free Access to Libraries for Minors: An Interpretation of the Library Bill of Rights” (2008), “libraries should not limit the selection and development of library resources simply because minors will have access to them. Institutional self-censorship diminishes the credibility of the library in the community, and restricts access for all library users” (para. 4). The educative process not only expects but demands advocacy by school librarians for access to information.

Purpose of the Study

The purpose of the study was to determine the extent to which self-censorship was practiced and the factors driving decisions to self-censor (internal—self [individual belief system], external—school [from within the school system], or external—community [from the community at large]) by school librarians in Arkansas, Delaware, and North Carolina. These three states require school librarians to have graduate degrees.

Significance of the Study

Previous studies have focused on the perceptions of and reactions to collection development policies of school librarians and other library professionals. Both a 2002 study of Texas’ school library collections and a 2005 study of Florida online public access catalogs (OPACs) employed a survey method of data collection that utilized online collection catalogs (Coley 2002; Bellows
The review of literature reflects a lack of focus on the self-censorship efforts of school librarians, who should serve as the unbiased supporter of the school’s curricular mission.

Documentation of collection self-censorship would have implications for the enforcement and regulation of state-mandated school-district selection policies. This evidence also would influence the curriculum of master’s-level professional preparation programs by increasing emphasis on the issue of self-censorship. Professionals should, as Bishop (2007) states, “be aware of their own biases and preferences so that personal prejudices do not inadvertently affect selection decisions” (170). Additionally, such evidence would result in the need to further investigate school-library professional internships, collection diversity, and school library administration.

Literature Review

Collection Development and the Role of Content in Self-Censorship

Library collections should be representative of society’s knowledge. Unpopularity of ideas is not sufficient reason for schools or libraries to suppress viewpoints (Donelson 1987; Simmons and Dresang 2001). School collection development should be based on curricular needs representative of a variety of viewpoints. Books (both nonfiction and fiction), magazines, newspapers, music, art, software, video, audio, film, music, and the Internet are all necessary to the instructional mission of the school, which is to educate the populace (Swiderek 1996).

According to Vandergrift (1978), collection development requires a school librarian to possess knowledge, insight, judgment, courage, and imagination. Promotion and defense of information access is highly important. The National Council of Teachers of English (NCTE 1978) made the following claim:

In short, professional responsibility means not only selecting print and nonprint materials, but also possessing a willingness and ability to defend the choices made. Teachers who are prepared to justify their choices and who have shared their thinking in faculty meetings will not be threatened by an objecting parent or would-be censor (4)

The school librarian is the person ultimately responsible for selection decisions (Vandergrift 1978). The building administrator provides the only oversight of materials selection. Daily effort to sustain the collection divides school librarians into one of two types: selector or censor.

Selectors and censors view collection development differently. Asheim (1983) notes that a selector seeks balance within a collection, while the censor seeks what he or she deems appropriate. Selectors look to be inclusive of items within the collection. Asheim (1953) stated “The aim of the selector is to promote reading, not to inhibit it; to multiply the points of view which will find expression, not limit them; to be a channel for communication, not a bar against it” (67). In contrast, a censor seeks to be exclusive within the collection. The focus is to control both the content of and access to information.

A book’s content plays a significant role in the practice of self-censorship. Curry reported in a 2001 article that 11 content types are likely to be challenged: profanity, sexuality, religion/witchcraft, violence/horror, rebellion, racism/sexism, substance use/abuse, suicide/death,
crime, crude behavior, and depressing/negative tone. Sexuality and profanity were the two content types most noted in challenges. Other studies resulted in similar findings (Dillon and Williams 1994; Hopkins 1990, 1998; Horton 1986; International Reading Association 2001; Jenkins and Odean 1988; Jenkinson 1994; Kovarsky et al. 1997; Saykanic 2000; Swiderek 1996; Vrabel, 1997; Woods and Salvatore 1981; Woodworth 1976). From 2001 to 2009, ALA’s Office for Intellectual Freedom (ALA 2010a) reported several content types—sexually explicit material, offensive language, unsuited to age group, violence, homosexuality, anti-family, and religious viewpoints—incurring the most challenges.

The effects of these challenges are revealed by Adler’s 1993 study that examined challenges and curriculum. Adler’s research found that 40 percent of schools were disrupted by challenges to curricular materials. These same institutions stated that materials would not be chosen or used because of challenges in other schools. Napier’s 1992 study demonstrated a belief that these challenges are substantially disruptive, even when no materials are removed.

While all individuals have the right to challenge ideas, none have the right to censor access of information. It was determined in Pico v. Board of Education that “local school boards may not remove books from school library shelves simply because they dislike the ideas contained” (Alexander and Alexander 1998, 265). The Supreme Court supported students’ right to pursue information and that school libraries were an acceptable venue of information access. Information access is based in both the intellectual and physical. It is the right to “hear, read, and view information; to receive ideas; to express ideas; and to develop skills to receive, examine, analyze, synthesize, evaluate, and use information, . . . [as well as permitted] unimpeded location and retrieval of information” (Bishop 2007, 161). In an effort to protect the student, many education professionals, parents, and groups go beyond their legal right by denying everyone access to certain information, thus individually defining morality for the community.

School librarians often find themselves on a slippery path of making value judgments of materials in the selection phase of collection development. Yet schools and school librarians cannot remove items without justification. When items are challenged, policies typically state that these items cannot be removed without due process. Without the support of their colleagues, school librarians are less likely to resist challenges and will often circumvent them by the act of nonselection.

Self-Censorship
As professionals, school libraries are subject to several forms of censorship: legal or governmental, individual or group, and self-censorship (Evans 1995). Those who challenge curricular media collection materials in an attempt to censor access tend to belong to one of these three groups: (1) parent or guardian, (2) community members, or (3) organizations (Gottlieb 1990). Reasons for challenges include language, illustrations, or specific titles. Other reasons for challenges appear when patrons or community members perceive a threat to their family values, religion, political views, or in dealing with minority rights (ALA 2010b). Often reactions are based upon the adverse publicity the materials have received.

Self-censorship has been identified as the “subtle censorship of ‘selection’” (NCTE 1978, 3). McKee (1977) compared self-censorship to external censorship, which is equally damaging to a collection. The external censor may attempt “to get a teacher fired, to demean the professionalism of a librarian, [or] to burn a book” to protect the reader (Peck 1997, 28). Dillon
and Williams (1994) found school librarians often choose censorship as a response to societal threats presented in literature. The school librarian, as an internal censor, may choose to act through the nonselection of realistic fiction to protect the reader from the content or to protect content from being questioned. That an educated and trained professional would partake in the act of denying information access has been viewed as ominous: LaRue (1994) foretells a future of ideal libraries with no books because “removing [or not purchasing] a book makes a library better” (1994, 45). Self-censorship historically has also been seen as a “concept of social control” (Geller 1976, 1255). The Boston Public Library’s 1881 selection policy reflected this sense of control by stating that “no public library should furnish books to young readers or to those of any age, which will influence their passions or pervert their moral sense” (Geller 1976, 1257).

Initial studies of self-censorship attempted to determine the effects of the practice on circulation (Coley 2002). The modern school librarian receives extensive training and development regarding the value and right of information access as well as instruction in appropriate procedure and policy development. Ignoring professional training raises serious issues. Researchers have stated several theories for this lapse. First, a conflict between a personal belief system and book content has been touted by many as a reason for self-censorship decisions (Bump 1981; Callison 1990; Jenkins and Odean 1988; White 1988). Second, community opinion often contributes to this behavior (Callison 1990; Hopkins 1998). Hopkins (1992) posits that school librarians suffer from low self-esteem, which affects professional practice. Often the behavior occurs at the hand of extreme school administration mandates (Dillon and Williams 1994). This practice does not exist in all schools (Tyler-Porter 1997), but has been documented in at least one state (Vrabel 1997). The most popular explanation of self-censorship is that of fear of challenge to a book (Bump 1980; Donelson 1981, 1987; Jenkins and Odean 1988; Woods and Salvatore 1981).

School librarians have offered various reasons for their acts of self-censorship. Many of the more common reasons include limited budgets; lack of interest; limited shelf space; community values; the author’s integrity; material content; and poor, unfavorable, or unenthusiastic reviews (Asheim 1953; Coley 2002; Donelson 1981; Moon 1962). Legitimate reasons do exist for the nonselection of titles from the collection, including legal, financial, or policy issues. The difficulty lies in the determination of the use of guise or the practice of legitimate nonselection. When the practice of self-censorship occurs, the reading patrons are not the only party affected. Since the 1880s, authors have continually expressed concern about censorship practices by the public and the federal government.

An example of an often challenged and censored genre is realistic young adult (YA) fiction, which emerged during the 1960s (MacRae 1998; Rochelle 1991). Realistic YA fiction is told through the young adult viewpoint of the “real world, with all its troubles . . . [without] taking into account [the] lack of the adult’s range of perspective and experience” (Rochelle 1991, 10).
Previously, fiction offered the viewpoint of a mature individual rather than a young adult. YA stories began to deal with issues significant to the young adult’s life. Jenkins (1998) noted the genre was “characterized by candor . . . and plots that portrayed realistic problems that did not necessarily find resolution in a happy ending” (299).

Fuchs (1984) noted that YA fiction allowed issues to be approached that were normally not discussed with parents. Realistic YA fiction provides a place to rehearse aspects of the reality of life in a safe environment and model strategies for problem solving (Baggett 1985). MacRae (1998) claimed that the attraction to the genre was its truthfulness and real-life qualities. The stories allowed young adults to “see themselves or people like themselves” (Rochelle 1991, 9).

Simmons and Dresang (2001), however, noted the evolution of this genre has led to questionable appropriateness. Author Norma Klein (1985) stated that at least one reason for this label of inappropriateness is that adult reviewers are often bothered by the books’ contents. Hielsberg (1994) stated that this is true because realistic YA fiction challenges the perceptions created by society.

A nationwide survey by Kamhi in 1981, which was supported by the Association of American Publishers, ALA, and the Association for Supervision and Curriculum Development (ASCD), focused on selection procedures and challenges to curricula and library materials. It was conducted using a large-scale mail survey. Kamhi surveyed elementary and secondary public school administrators as well as school librarians in all 50 states. Additionally Kamhi conducted a mail and phone survey of state administrators in 22 states. The study noted significant connection between selection policies and challenges.

Kamhi’s 1981 study found that three items were susceptible to censorship: media collection materials, upper-level curricular materials, and contemporary fiction and nonfiction titles. The larger the school, the more likely a formal written policy for both selection and reconsideration was available.

The Office of Educational Research and Improvement funded a 1989 study to examine factors that motivated the decisions of challenges (Hopkins 1991). The study looked at challenges to the presence or appropriateness of library materials. No questions were asked about curricular materials. The study also attempted to identify other factors that influenced the retention, restriction, or removal of materials. A positive relationship was found between the presence of a materials selection policy and the retention of materials; however, materials were more likely to be removed if the complaint originated within the school.

The American Association of School Librarians (AASL) recommends that all school libraries have both an established, school-board-approved selection policy and a reconsideration policy of due process (the guidelines by which decisions are made on book choices and a recommended course of action to deal with books challenged for their appropriateness) in place for the protection of the school and the school librarian. Because of increased pressures on Arkansas school districts, administrators, and school librarians, legislation was passed in 2003 that required school libraries to have written policies establishing “guidelines for the selection, removal, and retention of materials” (The Public School Library Media Services and Technology Act 2003, Section 5a). The act also requires that written policy be provided when materials are challenged. North Carolina’s Department of Education also recommends each district to have a
materials selection policy that includes a section on reconsideration of challenged materials (Public Schools of North Carolina 2005, 220).

Organized efforts to censor, whether by an individual or a group, have been constant throughout the history of the United States. As a democracy, the nation has established the right to challenge ideas as a freedom afforded its citizenry. By the same token, this freedom also allows for freedom of expression. The conflict between the two arises often in the forum of the public school as it provides access to information to educate a democratic citizenry. The act of self-censorship removes the supportive voice of both author and reader of the ideas found within the book from public. Self-censorship further removes any chance of a fair discussion between a community, the author, and the reader to defend or promote the vessel of ideas bound in a book.

In an effort to counter censorship efforts, ALA has historically made it a mission to further the cause of information access and intellectual freedom. Several pieces of literature published by ALA promote the position of the organization on information access, such as the “Library Bill of Rights” (ALA 1996) and the “Freedom to Read Statement” published by ALA and the American Book Publisher’s Council (ALA 2004).

Although the “Library Bill of Rights” was adopted in 1939 it has been amended several times. It states:

The American Library Association affirms that all libraries are forums for information and ideas, and that the following basic policies should guide their services.

i. Books and other library resources should be provided for the interest, information, and enlightenment of all people of the community the library serves. Materials should not be excluded because of the origin, background, or views of those contributing to their creation.

ii. Libraries should provide materials and information presenting all points of view on current and historical issues. Materials should not be proscribed or removed because of partisan or doctrinal disapproval.

iii. Libraries should challenge censorship in the fulfillment of their responsibility to provide information and enlightenment.

iv. Libraries should cooperate with all persons and groups concerned with resisting abridgement of free expression and free access to ideas.

v. A person’s right to use a library should not be denied or abridged because of origin, age, background, or views.

vi. Libraries that make exhibit spaces and meeting rooms available to the public they serve should make such facilities available on an equitable basis, regardless of the beliefs or affiliations of individuals or groups requesting their use.

The “Freedom to Read Statement,” adopted in 1953 and last revised in 2004 by ALA, states:

The freedom to read is essential to our democracy. It is continuously under attack. Private groups and public authorities in various parts of the country are working to remove or limit access to reading materials, to censor content in schools, to label “controversial” views, to distribute lists of “objectionable” books or authors, and to purge libraries.
Most attempts at suppression rest on a denial of the fundamental premise of democracy: that the ordinary individual, by exercising critical judgment, will select the good and reject the bad. We trust Americans to recognize propaganda and misinformation, and to make their own decisions about what they read and believe.

These efforts at suppression are related to a larger pattern of pressures being brought against education, the press, art and images, films, broadcast media, and the Internet. The problem is not only one of actual censorship. The shadow of fear cast by these pressures leads, we suspect, to an even larger voluntary curtailment of expression by those who seek to avoid controversy or unwelcome scrutiny by government officials.

Now as always in our history, reading is among our greatest freedoms...It is essential to the extended discussion that serious thought requires, and to the accumulation of knowledge and ideas into organized collections.

We believe that every American community must jealously guard the freedom to publish and to circulate, to preserve its own freedom to read. We believe that publishers and librarians have a profound responsibility to give validity to that freedom to read by making it possible for the readers to choose freely from a variety of offerings.

Design of the Study
The study was designed to determine the extent to which school librarians chose not to select certain materials because of internal or external reasons. The study relied on the results of a questionnaire available online to a sample of public school librarians K–12 within the states of Arkansas, Delaware, and North Carolina, all three of which require master’s degrees of their school librarians.

The questionnaire surveyed the process by which school librarians select titles for their collections. It was also designed to determine whether school librarians engage in self-censorship. In addition, the questionnaire identified the impact of challenges to curricular or library materials on the school librarian’s decision-making process.

Research Questions
Objective 1: To determine the effort of access limitation for students within the school library collection in relation to the school librarian’s self-censoring practices, specifically,

- Is self-censorship being practiced by the school librarian?
- At which level—elementary, middle, or secondary—is self-censorship by the school librarian more prevalent?
- Does the extent of self-censorship change in relation to the size of the school’s population?
- Does the extent of self-censorship change in relation to the gender of the school librarian?
- Does the extent of self-censorship change in relation to the age of the school librarian?
Does the extent of self-censorship change in relation to the level of education and licensure or certification of the school librarian?

Does the extent of self-censorship change in relation to the years of experience in education of the school librarian?

Objective 2: To determine if the factors that cause a school librarian to self-censor are (1) internal—self (individual belief system), (2) external—school (from within the school system), or (3) external—community (from the community), specifically,

- What role does the belief system of a school librarian play in relation to materials a school library’s selection?
- What external factors within the school system affect the school librarian’s materials selection?
- What external factors outside the school system affect the school librarian’s materials selection?

Population and Sample
The population for the study consisted of school librarians at 2,145 school campuses within the states of Arkansas, Delaware, and North Carolina. These three states were chosen because they are among five states nationally that require school librarians to have graduate degrees. Also, all five of the states requiring a graduate degree, currently has NCATE and AASL accredited school library graduate programs. The sample (1,069) was approximately 50 percent of the school librarian population.

Once the study’s population size was ascertained, the number of school campuses in each state was divided by the study’s population size to establish the percentage each state represented in number of school campuses. While Arkansas had a large number of school districts (245), the state represented only 42 percent of the school campuses in the study. North Carolina represented 50 percent of the school campus population, while Delaware represented only 8 percent.

Instrumentation
I created the online survey instrument, “Survey of School Library Media Specialists’ Collection Development Practices,” using the program WebSurveyor. The survey consisted of 12 questions divided into 3 sections. Section 1 gathered information about school librarians’ gender, age, level of education and licensure or certification, and years of experience. Section 2 collected information dealing with the size of the school district, campus, and grade level of the collection. Section 3 determined the internal and external pressures placed on school librarians and contained 34 statements, 17 based on internal statements and 17 based on external pressures. See the appendix for the survey instrument.

The survey asked participants to rate their selection decisions on the basis of possible concerns regarding the author, the school community, the community at large, and themselves using a Likert scale: Never = 1, Sometimes = 2, Frequently = 3, and Always = 4. A raw score was calculated for each participant by adding the number checked for each statement, thus creating a score between 34 and 136 (34 x 4 = 136). Scores were then grouped by internal statements (17) and external statements (17).
The survey instrument was checked for reliability through completion of the survey by a group of 20 graduate students enrolled in the Library Media and Information Technologies graduate program at the University of Central Arkansas. Each graduate student completed the survey and submitted comments concerning the clarity of directions, statements, and format. The researcher reviewed all comments and addressed any needed changes in the survey instrument. Internal consistency was determined by split-half reliability. Based on data collected from the 20 participants, each of the 34 statements in Section 3 of the survey instrument had a moderately high internal consistency (internal statements \( r = .56 \); external statements \( r = .53 \)).

Data Analysis
All surveys were scored on completion. Raw scores were calculated for self-censoring, with the score ranging from 34 to 136. If an overall mean score was less than 85 (\( 340/4 = 85 \)), it was least likely the school librarian was self-censoring. When the mean score was greater than 85, it was more likely self-censoring was taking place.

Raw scores also were calculated for the internal-statements group and external-statements group. Internal statements contained three subgroups: (1) internal pressures because of media content (IPMC), (2) internal pressures because of author perceptions (IPAP), and (3) internal pressures because of self-reflection (IPS). IPMC scores ranged from 8 to 32, with a score 20 or greater indicative of self-censorship. IPAP scores ranged from 6 to 24, with a score of 15 or greater indicative of self-censorship. IPS scores ranged from 3 to 12, with a score of 7.5 or greater indicative of self-censorship.

External statements contained two subgroups: (1) external pressures that are community-based (EPCB) and (2) external pressures that are school-based (EPSB). EPCB scores ranged from 10 to 40, with a score of 25 or greater indicative of self-censorship. EPSB scores ranged from 7 to 28, with a score of 17.5 or greater indicative of self-censorship.

The data were then grouped by categories, such as gender, age, years of experience, educational level, and so on, after the initial raw scores were calculated. Data were then analyzed to ascertain if a correlation existed between any of the categories and the level of reported self-censoring. A one-way analysis of variance (ANOVA) was run to determine whether significant differences existed within variables. Once the data analysis was complete, tables were generated to demonstrate the analysis process and report findings. The analysis of the data provided the basis for summary, findings, conclusions, and recommendations.

Participating in the study were 412 school librarians from 1,069 school campuses surveyed in Arkansas, Delaware, and North Carolina. The return rate was 40 percent. Of the 412 participants, 17 failed to complete the survey (abandoned the survey). Three hundred and ninety-five (37 percent) completed surveys were used in the data analysis, as demonstrated in table 1.

Responses to Research Questions
The ten research questions by two objectives: (1) determining individual traits that enable self-censoring practices and (2) determining the factors causing acts of self-censorship, both internally and externally. The following analysis is presented in the order of the research questions.
**Question 1.1**
Is self-censorship being practiced by the school librarian? The survey contained 34 statements, each rated on a Likert score from 1 to 4. A participant could have earned a maximum score of 136 (34 x 4 = 136). An average score was determined by adding all of the possible totals of maximum scores ([34 x 4 = 136, 34 x 3 = 102, 34 x 2 = 68, 34 x 1 = 34] = 340) and then dividing that total by the number of possible responses (340/4 = 85). Self-censorship would be indicative of a score of 85 (340/4 = 85) or higher. The mean score (51.36) of the entire sample (N = 395) indicated that taken as a group, self-censorship was not being practiced. There was a collective, however, of 4.8 percent (19/395 = 4.8 percent) of the sample with a score of 85 or greater.

**Question 1.2**
At which level—elementary, middle, or secondary—is self-censorship by the school librarian more prevalent? The highest mean score represented secondary-level school librarians (X* = 72.11). This higher score indicated at least some school librarians practiced self-censorship. Twenty-three (16 percent) of the 141 secondary school librarians had scores greater than the score of 85 necessary to indicate self-censorship.

The mean score for elementary-level school librarians was 35.75. Middle-level school librarians’ mean score was 43.38. Neither of these scores indicated self-censorship, and neither group had participants with scores equal to or greater than 85. See table 2.

Additionally, a one-way ANOVA on mean scores with grade-level groups (elementary, middle, and secondary) as the independent variable yielded a significant effect, F (2, 392) = 364.436, p < .05. A Tukey post hoc test indicated significant differences between elementary, middle, and secondary groups at the p < .05 level.

**Question 1.3**
Does the extent of self-censorship change in relation to the size of the school’s population? The survey asked participants the size of both their district and campus. The participants appeared to be confused as to how to answer. Thus I felt this question was invalid and could not be analyzed from the responses given.

**Question 1.4**
Does the extent of self-censorship change in relation to the gender of the school librarian? This question also could not be answered from the survey data. Of the 395 participants, only 6 indicated they were male. This minimal response did not provide enough data for comparison.

**Question 1.5**
Does the extent of self-censorship change in relation to the age of the school librarian? The resulting analysis of the data indicated that the prevalence of self-censorship increased according to age group. The 60–69 age level topped all others with a mean score of 96.54, which is indicative of self-censorship. More than half (53 percent) of the participants in this level had a mean score greater than 85. See table 3.

Further analysis was done in a one-way ANOVA with age groups (20–29, 30–39, 40–49, 50–59, and 60–69 years) as the independent variable, which yielded a significant effect of
F (4, 394) = 436.572, p < .05. As age increased, so did the likelihood to self-censor. A Tukey post hoc test indicated significant differences between both the 50–59 age group and the 60–69 age group and the other 3 age groups at the p < .05 level.

**Question 1.6**
Does the extent of self-censorship change in relation to the level of education and licensure or certification of the school librarian? The mean scores were lower for those with a specific degree-level education and certification or licensure than without. Those with a bachelor of science in education (BSE) and certification or licensure reported a 34.21 mean score. The mean score increased marginally with the master’s degree and certification or licensure to 43.62.

The mean score of those reporting to be currently enrolled in a library graduate program (n = 48) increased significantly to 90.00. Twenty-one (43 percent) of the individuals marking this category had mean scores greater than 85. Those indicating belonging to the “other” group recorded a mean score of 68.65. Only 2 of the 49 individuals (4 percent) marking “other” had a score greater than 85. Thus self-censorship was indicative of those not currently holding a degree and certification or licensure as school library media specialists. See table 4.

Additionally, a one-way ANOVA on level of education (BSE with licensure/certification, master of science or master of science in education with licensure or certification, enrolled in a library graduate program, and other) as the independent variable yielded a significant effect, F (3, 391) = 402.918, p < .05. A Tukey post hoc test indicated a significant difference between each of the four levels of education (BSE and licensure or certification, MS or MSE and licensure or certification, enrolled in library graduate program, and other) at the p < .05 level.

**Question 1.7**
Does the extent of self-censorship change in relation to the years of experience in education of the school librarian? This analysis demonstrated that mean scores decreased with an increase educational experience. Those indicating 0–5 years of experience had an average mean score of 57.90, which rose incrementally with the 6–10 years grouping. This fell, however, with each succeeding age group. Again, this analysis demonstrated that self-censorship was indicative of school library media specialists with few years of overall educational experience. See table 5.

Further, a one-way ANOVA on years of experience in education (0–5, 6–10, 11–15, 16–20, 21–25, and 26+ years) as the independent variable yielded a significant effect, F (5, 389) = 21.392, p < .05. A Tukey post hoc test indicated significant difference between the 0–5 and 6–10 age groups and the other four groups at the p < .05 level.

**Question 2.1**
What role does the belief system of a school librarian play in relation to materials selection? The survey instrument contained 17 statements regarding an internal belief system. These 17 statements were divided into three subgroups: (1) internal pressures from media content (IPMC), (2) internal pressures from author perceptions (IPAP), and (3) internal pressures from self-reflection (IPS).
The IPMC subgroup contained 8 statements. A maximum score of 32 (8 x 4 = 32) was possible for this group. An averaged score of 20 (80/4 = 20) indicated self-censorship in the subgroup. This averaged score was determined by adding up all of the possible totals ([8 x 4 = 32, 8 x 3 = 24, 8 x 2 = 16, 8 x 1 = 8] = 80) and then dividing that total by the number of possible responses (80/4 = 20). The IPAP subgroup contained 6 statements with a maximum possible score of 24 (6 x 4 = 24). Self-censorship would be indicated with a score of 15 (60/4 = 15). Again, this averaged score was determined by adding all of the possible totals ([6 x 4 = 24, 6 x 3 = 18, 6 x 2 = 12, 6 x 1 = 6] = 60) and then dividing that total by the number of possible responses (60/4 = 15). The IPS subgroup contained 3 statements. A maximum score of 12 (3 x 4 = 12) was possible, with a score of 7.5 (30/4 = 7.5) demonstrating self-censorship. Once more this averaged score was determined by adding all of the possible totals ([3 x 4 = 12, 3 x 3 = 9, 3 x 2 = 6, 3 x 1 = 3] = 30) and then dividing that total by the number of possible responses (30/4 = 7.5).

Internal beliefs did not appear to govern participants in the practice of self-censorship. The analysis indicated that the mean for each of the 3 subgroups never exceeded that subgroup respective score ceiling. Self-censorship was demonstrated by 80 participants (20 percent) of the IPMC subgroup. Only 8 (2 percent) of the IPAP subgroup indicated self-censorship. The IPS subgroup showed 50 (12.6 percent) demonstrating this practice. If anything, the data did show media content presenting the largest internal governor of school librarians.

**Question 2.2**

What external factors within the school system affect the school librarian’s materials selection? The survey contained seventeen statements regarding an external belief system. These 17 were divided into 2 subgroups: (1) external pressures from community (EPCB) and (2) external pressures from school (EPSB). The EPSB subgroup contained 7 statements with a maximum score of 28 (7 x 4 = 28). Self-censorship would be indicated by a score of at least 17.5 (70/4 = 17.5). This averaged score was determined by adding all of the possible totals ([7 x 4 = 28, 7 x 3 = 21, 7 x 2 = 14, 7 x 1 = 7] = 70) and then dividing that total by the number of possible responses (70/4 = 17.5).

External beliefs that were school-based did not appear to govern participants in the practice of self-censorship. The descriptive analysis indicated that the mean for the subgroup never exceeded the 17.5 score indicating self-censorship. Only 50 (12.6 percent) of the EPSB subgroup indicated self-censorship.

In looking at the analysis of the means for each of the statements regarding external school-based pressures, 3 demonstrated increased mean scores. These statements were (1) an administrator might not approve a potential collection item, (2) an administrator might request avoidance of a potential purchase, and (3) the school board might request the avoidance of a potential purchase.

**Question 2.3**

What external factors outside the school system affect the school librarian’s materials selection? The survey contained 17 statements regarding an external belief system. These
17 were divided into 2 subgroups: (1) external pressures based on community (EPCB) and (2) external pressures based on school (EPSB).

The EPCB subgroup contained 10 statements. A maximum score of 40 (10 x 4 = 40) was possible for this group. A score of 25 (100/4 = 25) indicated self-censorship within the subgroup. This averaged score was determined by adding up all of the possible totals ([10 x 4 = 40, 10 x 3 = 30, 10 x 2 = 20, 10 x 1 = 10] = 100) and then dividing that total by the number of possible responses (100/4 = 25).

EPCB did not appear to govern participants in the practice of self-censorship. The analysis indicated that the mean for the subgroup never exceeded 25. Self-censorship was demonstrated by 22 (5.5 percent) of the EPCB subgroup. The data did show external pressures from the community presented a small external barrier of school librarians.

Three factors demonstrated increased mean scores: (a) parents might not approve a potential collection item, (b) community member might not approve, or (c) the possibility of a potential challenge might be avoided.

**Comments Made by Participants**

Many participants were motivated to provide additional comments in response to many of the survey instrument’s questions. Several followed up their survey participation with e-mail and phone communications with the researcher. Six specific questions provided substantial open-ended responses.

In response to what level of education was held by each school librarian, participants added additional comments. Several specified that their bachelor’s degrees were in library science. Several of the master’s degree–holding school librarians indicated that they were National Board Certified.

When asked about avoiding the purchase of titles because of themes; language; religious, social, and political views; and possible theft, many participants commented that purchases were based on curricular needs. Purchases stemming from age and grade level recommendations were consistently mentioned, for example, “I try to keep the collection age-appropriate for middle school students and relevant to the curriculum.”

Participants readily commented when asked if titles were avoided based on external groups’ or individuals’ disapproval. Again, great faith in the selection policy and support of the curriculum in making purchasing decisions was obvious, as evidenced in this statement: “I follow the selection policy of my school district so I feel I have done my job and I don’t worry about what everyone else thinks.” However, a few comments indicated a different attitude: “Avoiding a possible challenge is actually implied by the fact that I sometimes let my perception of community values determine purchase of materials. When I do think about these groups before purchasing, it is in balance with the worth of the book.” Or this one: “I will follow the advise(sic) of my administration. I may not agree but I will do as they say.”

When asked about avoiding the purchase of a title because of personal views, participants were quick to respond. A number of individuals pointed out that they strove to provide equal coverage to all sides of issues. The following comments are representative of many participants:
• “I want my student(s) to read both sides and become educated to the world around them.”
• “I try very hard to leave my personal opinions out. If I feel I am overreacting to a book/author then I get other opinions from our English teachers and the other media specialists. I have also asked parents’ opinions.”
• “The collection is not about me it is about what my student’s need(s) (are) to make them better readers. I do use numerous reviewers and awards to make decision(s) but I will go outside of these to fulfill an interest that will get reluctant readers reading.”

The majority of comments regarding the avoidance of purchases at the request of groups or individuals stated that none of those parties had ever made such a request. Instead, many made mentioned requests to purchase items and referred to their collection development policies with comments of this nature: “I have never had any of the above individuals ask me NOT to purchase a book or books.”

Conclusions
The findings in this study provided a picture of the traits of a school librarian who is more apt to self-censor during the selection process. As a whole, the responding school librarians (mean score = 51.36) were not inclined to self-censoring of materials for selection. Nor was the population subjectively influenced to self-censor during the selection process by internal beliefs (mean score = 25.50) or by either the external school-based pressures or the external community (mean score = 25.86).

This is not to say that self-censorship does not exist in the population. While the overall picture gave a positive indication that the practice is not common, self-censorship tendencies were evident in specific portions of the sample. Four factors were associated with self-censoring practices: (1) being of the age 60–69, (2) holding no formal collegiate education degree (BSE or MS/MSE) with library media certification or licensure, (3) being at the secondary level school library, and (4) having 15 or fewer years of educational experience.

Just over half of respondents who were 60–69 had a mean score greater than 85. It does not indicate that most school librarians over the age of 60 practice self-censorship during the selection process.

The propensity to self-censor during the selection process was apparent with a segment of the practicing population not in possession of certification or licensure and a formal degree. The overall mean score of those reporting to be currently enrolled in a library graduate program increased significantly to 90.00. Forty-three percent of the individuals marking this category totaled overall mean scores higher than the threshold score of 85.

Of the three levels of educators—elementary, middle, and secondary—one level demonstrated an inclination toward self-censorship. Secondary-level school librarians had a mean score of 72.11. Sixteen percent of this group incurred scores of 85 or greater, indicating a tendency to self-censor.
Not unexpectedly, school librarians in their early years of their careers indicated a predisposition to self-censor during the selection process. Elevated mean scores existed with those with 15 or fewer years of education experience. Educators fresh to the profession need time to adjust to the demands of time, organizational cultures, community mores, and professional standards. While they are trained professionals, they need time to grow into their positions as educators and professionals.

**Recommendations**

The factors lending themselves to the practice of self-censorship of materials selection could be addressed in many ways throughout the professional career of school librarians. One initiative would be to require all school librarians to hold a formal degree in education along with the appropriate certification or licensure in school library media. With increasing national standards for student learning, this would be an opportune action to strengthen the mission and capabilities of school districts. Further, to require a master’s degree in school library media would provide school districts with master-level teachers capable of integrating and co-teaching as information resource leaders in the twenty-first century.

Professional development also may be indicated by these findings. Specifically, a course or inservice focusing on reconnecting with patrons and their needs is one possibility. Another option is to create a series of courses or inservice sessions available for school librarians at specific years of experience that would provide updated information and best-practices for collection development and management, intellectual freedom, and censorship. These options would provide an avenue for the practicing professional to reconnect with other school librarians and revitalize their knowledge and professional practices.

Several recommendations for further study became apparent at the end of the study. At the forefront is the recommendation that the study be replicated nationally and disaggregated by state or region. This would provide a well-rounded picture of the profession and allow for regional comparison. This information would allow for further study of professional practices and could be reflected in professional preparation programs nationally.

Another recommendation is to replicate the study qualitatively. This recommendation is based on the number of responses to open-ended response areas in the survey instrument and the number of personal communications received by the researcher from study participants. The participants stated many times that they found themselves responding verbally to the survey instrument as it was being completed.

Lastly, a recommendation could be made to replicate the study looking at the entire collection-management process, which includes selection, purchase, weeding, and reconsideration of challenged collection items.
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