Evidence Based Library and Information Practice

Article

School Library Media Specialist Collaboration with Special Education Personnel in Support of Student Learning

Lesley S. J. Farmer
Professor
California State University, Long Beach
Long Beach, California, United States of America
E-mail: lfarmer@csulb.edu

Abstract

Objective – The objective of this study was to identify factors for effective collaboration between school library media specialists and special education personnel in support of student learning.

Methods – A review method was used to examine illustrative studies of collaboration.

Results – The analysis revealed studies that represented a variety of methodologies: survey, observation, interview, action research, and participatory ethnography. The review identified cross-study factors that facilitate collaboration between school library media specialists and special educators: shared knowledge via cross-training and regular professional interaction, effective communication skills, and effective educational team planning and co-teaching of meaningful learning activities.

Conclusion – The study concluded that school library media specialists and special education personnel need to share their knowledge and expertise about the effective use of appropriate resources and services for students with special needs.

Introduction

Collaboration is a central value in school librarianship. Numerous studies have addressed collaboration between school library media specialists and classroom teachers as well as between school library media specialists and site administrators. School library media specialist collaboration with special education personnel has received less attention, although these staff members can contribute significantly to student success, particularly as students with disabilities are mainstreamed into the typical classroom.

The unique qualities of special educators make them valuable partners for school library media specialists. The impact of these partnerships is best measured based on the evidence of the results of those collaborative efforts to impact student learning. This article examines the field of special education and its relationship to educational librarianship. A review of studies about school library media specialist practices relative to special education personnel identified cross-study factors that facilitate collaboration between school library media specialists and special educators in support of student achievement.

School Library Media Specialists and Special Education Legislation

What constitutes special education? According to the Individuals with Disabilities Education Improvement Act of 2004 (IDEIA), the U.S. federal government defines "special education" as "specially designed instruction, at no cost to parents, to meet the unique needs of a child with a disability" (11).

What then constitutes a disability? IDEIA defines a child with a disability as one:

(i) with mental retardation, hearing impairments (including deafness), speech or language impairments, visual impairments (including blindness), serious emotional disturbance (referred to in this title as 'emotional disturbance'), orthopedic impairments, autism, traumatic brain injury, other health impairments, or specific learning disabilities; and
(ii) who, by reason thereof, needs special education and related services. (*IDEI Act* 6)

The law further stipulates that for children between the ages of three and nine, the term "disability" may be expanded to include a child:

> (i) experiencing developmental delays, as defined by the State and as measured by appropriate diagnostic instruments and procedures, in one or more of the following areas: physical development; cognitive development; communication development; social or emotional development; or adaptive development; and (ii) who, by reason thereof, needs special education and related services. (*IDEI Act* 6-7)

In either case, the child's disability must adversely affect his or her educational performance. While a student with a temporary disability, such as a broken leg, might require short-term accommodations while the bone is healing, the intent of special education is to help individuals with chronic or acute disabilities participate and perform to the fullest reasonable extent in academic settings. Under this definition, about 9% of children ages 3 to 21 are served through special education efforts.

School library programs provide resources and services for *all* students, which includes students with special needs. Not only is this philosophy socially responsible, but it is also a legal necessity. Several federal laws in the United States impact school library programs for students with special needs:

- **Americans with Disabilities Act of 1990** (ADA). Public services must provide reasonable accommodations for all individuals with a disability. The law provides protection from discrimination.
- **Individuals with Disabilities Education Act of 1990, 1997, and 2004** (IDEA). This act asserts that all eligible students are guaranteed a free public education, regardless of disability. The act provides federal financial assistance to State and local education agencies to support that mandate.
- **Assistive Technology Act of 1998**. Federal grants provide assistive technologies and associated services for persons with disabilities. The act also supports related programs and research.
- **Section 508 of the Rehabilitation Act of 1973**. This set of standards and guidelines for information technology accessibility applies to some library programs that receive state funding.
- **Individuals with Disabilities Education Improvement Act of 2004 (IDEIA).** This act encourages the incorporation of universal-design based technology as part of the method to meet the needs of individuals with disabilities.

Gibson identified four categories of library services that need to be addressed when supporting academic achievement of students with disabilities:

1) Policies and Procedures. School library policies must comply with government laws and regulations, such as those mentioned above. School library media specialists also need to make sure that the entire school community, particularly families with affected students, know how the library implements those policies through appropriate accommodations. Sample policies include selection policies that address needs of students with special needs, differentiated circulation periods, differentiated class management procedures, and Web page development.

2) Access to facilities and equipment. Shelving heights, aisle widths, traffic flow, signage, furniture, and lighting all need to accommodate students with physical challenges. Adaptive technologies need to be available so all students can have physical access to information, e.g., larger monitors for computers, keyboards with track balls, optical scanners, and reading software.

3) Specific services. Information needs to be available in a variety of formats, such as Braille, audio, captioned videos, and electronic files. Student-specific services may also be called for, such as extended lending periods, delivery of materials to students' homes, customized picture books (e.g., texturized), customized teaching aids (e.g., task cards), and individual instruction.

4) Staff development. Library staff usually need training to enable them to interact successfully with students with special needs. Some training can be general, such as universal design. Other training would be disability-specific (e.g.,

autism or vision impairment) and student-specific, based on each student's individual education plan.

Who Are Special Education Personnel?

Special education personnel address the academic needs of students with mild to severe disabilities: sensory, mobile, developmental, or cognitive. Personnel work with students in self-contained and mainstreamed classrooms, and they collaborate with other specialists as well as classroom teachers and community agencies.

The educational preparation of special education personnel varies from a high school diploma to advanced degrees. Special education professionals (typically called special educators, special education instructors, or education specialists) may have a basic teaching credential and an added credential for teaching special education, or they may have a credential that enables them to teach only in special education areas. In any case, their academic preparation includes special education theory and practice, learner characteristics and development, language development, instruction, collaboration, and assessment (Council for Exceptional Children). According to the National Board for Professional Teaching Standards, special education instructors must have the following competencies:

- knowledge of learners and social development
- knowledge of curriculum
- assessment and intervention ability
- use of various resources
- ability to provide a safe, caring, and stimulating learning environment
- communication and collaboration skills (1).

According to Gibson's clusters of services, special educators can offer valuable expertise for school library media specialists. Special educators know the relevant laws, and can help school library media specialists comply with those laws (e.g., Web page accessibility). Special educators can help school library media specialists select and arrange furniture and equipment to facilitate physical access for all students. Special educators can also recommend appropriate resources – books, electronic resources, and adaptive technology – to match the needs of individual students. Special educators can provide formal training and just-in-time aid.

Several characteristics of special educators resemble those of school library media specialists: specialized knowledge and preparation, often they are the sole site experts in a given facility; a dual focus on resources and services; formal and informal instructional roles; and their role as student support professionals. Other similarities between special educators and school librarians include having no standard curriculum; often relying on just-in-time information or skills; scheduling and planning time constraints; and the potential to work with all students and other school personnel (McGrath).

What do School Library Media Specialists Contribute to Special Education?

To collaborate effectively requires that both parties contribute to the effort. School library media specialists have a broad and deep knowledge about resources across the curriculum and in different formats, which can help special educators match materials with individual students. While special educators might know more about adaptive technologies, school library media specialists are likely to know Internet and other online resources that could be useful for students with special needs.

Furthermore, school libraries are likely to have more current technology than special education rooms. Since library use should support the curriculum, school library media specialists can link learning activities with special educators' strategies. Even more than special educators, school library media specialists work with the entire school community, and can introduce special educators to teachers who might not otherwise come into contact with them.

As part of their standards for special educators, the Council for Exceptional Children identified several collaboration factors that apply to work with school library media specialists:

- knowledge of the school library media specialist's role in individual education plans
- knowledge of learners and learning
- assessment skills
- instruction and accommodation skills
- communication skills (28).

Hopkins offers several ideas for ways that school library media specialists and special educators can collaborate.

- Conduct literature reviews on special education issues
- Select resources that meet students' needs
- Assess physical access to information
- Assess intellectual access to information
- Develop learning activities that accommodate and address students' needs
- Assess and address professional development needs
- Be involved in educational policies that support the needs of students with special needs. ("Accessibility" 18).

Jackson asserted that school library media specialists should know about various disabilities and the specific needs of students with disabilities, particularly since each type of disability may require unique resources and strategies. Even within each type of disability many variations may exist. For example, autism, more accurately called autism spectrum disorder, includes five major disorders, and even one disorder may be manifested in substantially different behaviors by children of the same age.

Literature Review: Aspects of School Librarianship and Special Education

Little current research exists in the professional literature regarding the collaboration of school library media specialists and special educators, particularly in terms of evidence based practice. Historically, studies about library services for youth with special needs have been written soon after the enactment of federal laws pertaining to this student population. An example is the cluster of publications from the early 1990s after the Americans with Disabilities Act and the Individuals with Disabilities Education Act were enacted (American Library Association; Walling and Karrenbrock; Wright and Davis).

Because newer legislation about supporting students with special needs has been enacted, and advances have been made in dealing with this population, the literature review for this article was limited to the past ten years. The following databases were examined: Dissertations Abstracts International; ERIC; Education Index; Academic Search Elite; Library Literature and Information Science; Library, Information Science & Technology Abstracts; PsycINFO; SocIndex; Sociological Abstracts; Family and Society Studies Worldwide; CINAHL; and the U.S. Department of Education's Web site, "What

Works Clearinghouse"
<http://ies.ed.gov/ncee/wwc/>. The most
fruitful search terms were "school librar*"
and "special educat*". When the term
"collaboration" or "cooperative" was
included, results were meager.

The goal was to find studies that used solid
research data (evidence) to develop
recommendations for best practices to
impact student achievement. Several studies
surveyed school library media specialists
about accommodations for students with
special needs, including collaboration with
special education teachers. These studies
evidenced some effort to provide
appropriate resources, but in most cases,
collaboration was missing or spasmodic;
furthermore, library-specific and disability-
specific training was needed in order to
collaborate successfully (Lani; Loomos). A
few studies analysed current practices, but
did not apply the findings to develop
interventions and test for their impact
(Allen; Cox; Murray "Implications"). Other
studies described successful collaborations,
but did not provide pre- and post-test
evidence to document the impact of the
efforts (Appignani and Lawton; Blaum and
Bryant). Still other articles gave
recommendations without rigorous research
to back their claims (Noonan and Harada;
Hopkins "Extending;" Jurkowski).

The most comprehensive review of existing
studies on collaboration between school
librarians and special educators was
published in a 2006 issue of *Intervention in
School & Clinic*. Like other edited collections,
the papers are uneven in quality, but the fact
of the existence of this collection is
encouraging as a signpost of beginning
research efforts. Many of the articles in this
issue were anecdotal and prescriptive,
rather than evidence based, and they were
not included in this review. Sadly, the
amount of research from special education
that speaks to collaboration with school

library media specialists is even sparser. The
most germane research was Williams' study
linking special education teachers with
information technology, although he did not
refer to school library media specialists.

The seminal researcher in the field appears
to be the Australian librarian Jane Murray.
She laid the foundation in Australia for
identifying contributing factors for strong
collaboration between school library media
specialists and special educators.

Evidence Based Practice

The following studies represent a range of
research as noted above. A few studies
explicitly provide evidence based examples
of leveraging collaboration between school
library media specialists and special
educators, focusing on student learning and
access to information, and drawing upon
each stakeholder's expertise. Other studies
highlight conditions for collaboration.

*Collaboration Studies in Australia and New
Zealand*

The most significant and broad-based
studies in educational library and
disabilities services collaboration seems to
emerge from Australia and New Zealand.
Because New Zealand post-secondary and
tertiary education can serve students as
young as sixteen, and because the
collaborative nature of disabilities services
and educational libraries is well codified,
their code development is included in this
literature review. New Zealand now has a
national code of practice for creating
inclusive environments (Achieve *Kia Orite*),
which further guides libraries and Disability
Support Services in their collaboration. The
code was developed following wide
consultation across New Zealand, including
the New Zealand Ministry of Health and the
New Zealand Ministry of Education. The
consultation included a survey to guide the

writing of the code. The survey was administered to 95 students with impairments, members of disability groups, academicians, and disability support staff, including librarians. The survey listed 13 action plans. Based on the responses, a draft code was developed and reviewed by disability staff and focus groups in seven cities, involving 165 people. The code explicitly addresses libraries in terms of providing accessible technology and computer facilities; accessible library electronic resources; assistance cards that facilitate students asking for librarian help both in person and by telephone; library workshops delivered in the students' preferred learning modality; and other library disability support services. The code more generally discusses the need for staff training and positive interaction with these students.

New Zealand's most well-known and respected example of library and special education best practices is at Victoria University. The university's office of Disability Support Services has developed a strong professional relationship with university librarians to support student learning <http://www.victoria.ac.nz/Library/services/disabilitysupport.aspx> (Gibson 60). When students first enter the university, they are introduced to both the library and special education centers. In 1992 the library was granted funding to assist students with disabilities, and a 2000 grant supported the center's expansion. In collaboration with CAN-DO, a support group for students with disabilities, librarians created a separate room with adaptive technology to aid students. In developing services, a consultation process between Disability Support Services and library staff revealed that personnel attitudes about disabilities were the most significant barriers for students with disabilities. Therefore, Disability Support Services trained library

staff in the experiences of people with disabilities and the implications for library services, best practices in library services for this population, and communication and information strategies. In the process, librarians reviewed their personal practices to insure that they provided inclusive service. The library and Disability Support Services regularly monitored library services to students with disabilities through an annual survey as well as through direct student feedback received in group meetings, individual appointments and via a feedback box. Changes were made, either in response to specific situations or as part of long-term planning. For example, a kitchenette was installed as a social space in response to student feedback. As a result of this initiative, students had a safe supportive place to study and social networks formed, although there was no formal assessment of improved student learning as a direct result of library services. Nevertheless, over time the New Zealand code mentioned above was incorporated into the assessment process (Gibson 65).

Australian librarian Janet Murray conducted several studies focusing on the relationship between school library media specialists and special education teachers. Her research, begun in 1994, involved sending surveys to 1,450 Public, Independent, and Catholic primary and secondary school library media specialists in Victoria and New South Wales (493 responded) to assess their awareness of the needs of students with disabilities. She sent a second survey to the respondents eighteen months later to collect follow-up data. Fifty-two percent of the school library media specialists had received training about disabilities (mainly in public schools), but none of the training was library-specific (and no training was given to paraprofessional library staff). Furthermore, only 57% of the respondents were aware of recent legislation that might impact library services for students with disabilities, and

very few sites had policies dealing with library services for this population. Murray concluded that in-house and local training specifically for school library media specialists was sorely needed ("Enhancing" 1).

From this population, Murray identified fifteen schools (five primary, seven secondary, and three K-12) for her next study, focusing on communication and collaboration between school library media specialists and special educators as assessed by observation and interviews ("Implications"). A constant comparative case study methodology was used to identify salient factors for impactful collaboration. The mode of delivery (i.e., separate or inclusive classroom) did not impact learning significantly, but the provision of disability-friendly library facilities was positively significant for student learning. In combination with weekly learning activities supervised by the school library media specialist and special education staff, this welcoming atmosphere resulted in students being able to successfully perform library skills. Further, students were able to perform those skills not only in the school library, but they were also able to transfer the skills to the public library setting (Murray noted that during the second year of implementing this strategy at one location, the special education teacher did not accompany the students, and the school library media specialist had to spend significant time supervising circulation functions rather than teaching). School library media specialists who were aware of disability resources and who knew how to interact with students with disabilities, contributed significantly to student success; this knowledge was gained either from personal experience or work with special educators. Having a special education aide available also facilitated student use of resources. The study recommended that school library media

specialists take a more proactive role in telling special educators about available resources, including the use of technology. School library media specialists can conduct literature reviews for their special educator colleagues. On their part, special educators need to inform school library media specialists about specific students' needs and disabilities in general. With this shared knowledge, school library media specialists and special educators could co-teach this population. On a site-wide basis, a school culture of collaboration also facilitated partnerships between school library media specialists and special educators. Murray found that effective communication and management skills were also necessary for effective collaboration ("Implications" 20).

Site Status Surveys about Student Disabilities and Services

Cox's 2004 survey of rural Missouri elementary school library media specialists aimed to assess accessibility to library resources and services for students with sensory or mobile impairments. From the 783 sites surveyed, 387 school library media specialists responded to questions about physical accessibility of their library facilities and about their work with impaired students, collaboration with special education teachers, and professional development about disabilities. Of the respondents, 79% reported they were encouraged to collaborate with teachers about the needs of students with impairments and that student achievement improved because of accessibility to the library. Nevertheless, school library media specialists indicated that they needed disability-specific training. Almost half had general training about disabilities, such as information about relevant legislation, but only a third received any training about barriers that specific students might experience. Most school library media specialists tried to address the needs of

individual students through the choice of appropriate resources, differentiated circulation policies, and differentiated instruction such as multi-sensory resources. A majority incorporated assistive technology such as scanners, text readers, and amplifiers. However, only a third had a library Website, and of those, only 3% of those Websites were in compliance with the Americans with Disabilities Act. Fewer than 20% of school library media specialists in this study had acquired large-print books and books in Braille, fewer than 4% had a captioned television set in the library, and only one school had a telephone device for the deaf in the library (fewer than 5% of schools had such a device for their disabled students).

Similarly, Lani surveyed 78 elementary school library media specialists in eight southern New Jersey counties (59% of the total school library media specialist population of 133) about their training experiences and information needs related to educating learning disabled students. Few reported they had received training, and most had received little information about individual students and their specific needs. School library media specialists stated they had to proactively seek this data. Nevertheless, most respondents had at least minimal contact with classes having learning disabled students; 45% of the responding school library media specialists worked with classroom teachers of disabled students weekly, and 10% worked with them daily. On the other hand, only 6% of school library media specialists occasionally collaborated with special education teachers. Typical school library accommodations included visual aids, specialized computer programs, use of peer study buddies, and trained adult aides. School library media specialists indicated that successful inclusion required time for collaboration and strong staff support.

Studies about Interventions to Improve Conditions for Effective Collaboration

Several studies focused on the conditions that foster effective collaboration between school library media specialists and special education teachers. These studies described specific resources and actions that might have potential for improved student achievement.

Technically, school library media specialists and special educators are support service personnel, so while the library program can improve with the collaboration of special educators, even more significant results can be obtained using a collaborative team approach incorporating classroom teachers. In examining ways to help students with literacy, Farr developed second-grade and fifth-grade collaborative education teams of classroom teachers, reading specialists, special educators, and school library media specialists. In both cases, the teams met bimonthly to discuss the curriculum with the goal of improving student achievement, sometimes focusing on individual student work. The school library media specialists influenced decisions about which library material resources would be acquired for use by students in each grade. The special educators suggested modifications for instructing students with special needs. Classroom observation notes verified the actions taken as a result of the teams' collaboration, and team members self-reported student improvement (although no formal test scores were examined by the researcher). The team members improved their own practices as a result of their collaboration. Factors that contributed to the effectiveness of the collaborative process included mutual respect, equity, active listening, open questioning, flexibility, trust, and understanding of the bigger picture. The percentage of students with special needs impacted discussion and results; the teams not only implemented appropriate

learning activities, but they also addressed larger curriculum issues. This result confirmed Murray's earlier findings, although quantitative statistics about student performance were not collected. Emphasis was placed on inter-faculty learning processes.

Heeks and Kinnell examined how school library media specialists support special education in terms of resources, instruction, and staffing. Five school districts comprising a total of ten libraries in England participated in the study, which involved document analysis, observation, and interviews with staff working with Year Seven special needs students. The researchers found that school library media specialists' collaboration depended on their knowledge about special needs and the school's operations. Awareness of learning difficulties helped school library media specialists choose appropriate materials for this population, and they generally included special educators in the selection process. When special educators let school library media specialists know about learning needs, acquisition decisions improved. While improved student performance was not addressed explicitly, the researchers noted that the project's school library media specialists increased the length of their instruction sessions, and made greater attempts to tie the sessions to classroom subject matter. In one school, book circulation increased fourfold. Project libraries were refurbished to accommodate students with special needs, and surveys indicated this effort was appreciated by both staff and students.

Matsudo examined how school library media specialists could be involved in special education. To that end, she conducted semi-structured interviews with five special needs education coordinators in Japan about their perceptions of library programs. Libraries were seen as places that provided information resources and offered comfortable spaces to connect with others. School library media specialists were considered material specialists with spontaneous associations with students, and considerate of student progress. Based on these perceptions, special educators and school library media specialists collaborated to provide suitable materials to address individual students' needs, to address students' affective needs, and to provide educational support to foster student socialization.

Allen examined the practices of 65 school library media specialists in a large public school district in North Carolina. Her online survey collected data about: 1) how school library media specialists gain information regarding best practices in special education and how they learn about students with special needs; 2) library services and instructional accommodations for special needs students; and 3) school library media specialists' collaboration with special education teachers. Most respondents (particularly high school library media specialists) reported low self-confidence about special education best practices; 78% of respondents received no relevant information about special needs instructional techniques. Respondents stated they would prefer to get information from special education teachers, particularly as part of a professional development activity. Of those who did receive such information, the special education teacher most frequently provided the training. Only 22% had seen a student's individual education plan (mainly at the elementary school level), nevertheless, 59% reported that they collaborated with special education teachers (least frequently at the elementary school level). At all levels, school library media specialists tried to connect library resources with classroom units, and made efforts to provide differentiated instruction (e.g., scaffolded worksheets, different texts,

materials with more visuals, audio texts, hands-on manipulatives, or interactive Web tutorials). At the middle school level, some school library media specialists worked with special education teachers to select appropriate resources for their students. Unfortunately, no attempt was made to determine whether the collaborations impacted student learning. The main recommendation was the identified interest and need for professional development conducted by special education teachers for school library media specialists.

Focusing on ways to scaffold learning via the library Website, Jackson conducted research on collaborating with special education teachers to design effective library Web pages at a suburban high school near Chicago. She identified four types of scaffolding: cognitive (providing information), meta-cognitive (facilitating self-regulation), procedural (giving instruction) and strategic (suggesting alternatives). She asked special education teachers to identify their students' research needs and issues, and created Web pages to address their specific needs. Then she had both special education teachers and their students' pilot-test and evaluate the scaffolding Web pages. As a result of this collaboration, Jackson was able to produce a valuable library Website to support students' independent learning: <http://whs.d214.org/results/whslibspecial/> . On the other hand, no follow-up analysis was conducted to find out if the academic needs of students with special needs were actually met through the Website content. The strength of this research lies, rather, on the process of working with special education teachers to design a solution that has the *potential* of impacting student achievement.

Studies about Special Education Library Aides

Building on the importance of transition training for high school students with disabilities, Jilbert asserted that school libraries constitute a valuable vocational education venue, because on-site employment is convenient for students, there is a guarantee of adequate supervision and support, and the libraries facilitate collaboration with special education teachers. The library and special education staff participating in Jilbert's study collaboratively analysed library aide tasks according to vocational-technical education job descriptions. As students began their work, the school library media specialists and special education teachers conducted situated vocational assessments, comparing the students' work with the actual job skills needed, so that diagnostic data could be gathered, and specific training could be provided to optimize student performance. Jilbert noted that these student aides improved their communication skills and also became more productive, with some obtaining jobs as library assistants after graduation.

Appignani and Lawton described their successful Special Training and Employment Program (STEP) at the South Brunswick (New Jersey) High School Library. The school library media specialists worked with the school's special education staff to determine life work skills that would be useful for students with special needs. The team then identified which tasks could be done in the library, and structured a student work plan to provide real-life experiences for these students, from preparation of job applications and practice for interviews to on-the-job training and supervision. The program has been popular, and some graduates have gone on to be successfully employed in local businesses.

Site-Level Action Research Efforts Focused on Impactful Collaboration

Moyer and Farmer are both school library media specialists who have provided reports of their action research projects focusing on collaboration with special education teachers to impact student achievement.

Moyer investigated the use of the Accelerated Reader computerized reading management program, with 69 special education ninth- and tenth-grade students. The objectives of the project were to help these students become more aware of their reading habits, to increase their library reading, and to improve their reading scores. Students received pre- and post-intervention surveys to assess their attitudes about reading and their habits of sharing reading with their families and peers. In collaboration with the special education teachers, the school library media specialists developed a general reading rubric, and they worked with the students to create individual reading goals. Those students who met their goals could attend an award event and receive a $20 gift certificate to spend in a local bookstore. The school library media specialists reinforced student reading by presenting them certificates when they passed Accelerated Reader tests, regardless of the goal. As a result, students borrowed more books (an increase of 5 to 32 books per student), visited the library weekly by themselves, connected reading with academic success, and improved both their reading and grammar scores. The school library media specialists and special education teachers reviewed and modified their action plans so that students had more choices in how they demonstrated knowledge about the books they read. Students could suggest alternative Accelerated Reader questions, and they could request books to be added to the Accelerated Reader database of tests. By the

end of the second year, students expressed personal enthusiasm for reading, independent of any tests or incentives.

Farmer's action research project on information literacy infusion incorporated special education expertise and training. Her study site was actively engaged in whole school reform, and information literacy constituted one initiative under the umbrella of reading improvement across the curriculum. One aspect of her study involved a participatory ethnographic approach to collaboration between school library media specialists and special education instructors. Prior to the study, special educators tended to focus on pull-out instruction, and interacted little with the rest of the teaching faculty. Moreover, the self-contained special education class, located across the hall from the library, seldom visited the library or used its facilities. In an effort to address the information literacy needs of this population, the school library media specialist spoke with the special education coordinator and visited the special education learning center. The school library media specialist found few current resources or technology for the students, yet she did observe good instructional practices such as the use of visuals and Inspiration software (<http://www.inspiration.com>) to capture student knowledge. The school library media specialist exchanged ideas with the special education coordinator about reading support, both in terms of learning activities and resources. She learned about relevant publishers for this population and ordered print and audio books for the library, and she gave books to the special education learning center, based on the recommendations of the special education teacher.

The school library media specialist modified four library computer stations to enable students with visual and motion limitations

to access needed information. The school library media specialist met with the self-contained classroom special education teachers and aides to show them the adapted computers and new, targeted books (displayed together for easy access); as a result, special education personnel felt more comfortable with the library program, and they brought their students to the library almost daily. Based on the special educators' needs assessment and suggestions for modifying instruction, the school library media specialists gave special education students targeted instruction on finding and using library resources, particularly to help them locate articles and visual materials. The students began checking out library materials for the first time, and some students visited and used the library productively on an independent level. The school library media specialist also encouraged the special educator to give a faculty in-service on reading interventions, and used grant money to pay the special educator to attend after-school department chair meetings (a cost that was picked up by the site the following year and made into a permanent position). These venues enabled classroom teachers to get to know the special education coordinator and her areas of expertise, leading to increased collaboration between the special education personnel and the school library media specialist (e.g., providing more differentiated instruction, using alternative reading resources, modifying student projects and assessment instruments. The focused collaboration of the school library media specialist, special education staff, and classroom teachers resulted in more on-task academic behavior and higher graduation rates among this student population.

Discussion

While several studies indicated that school library media specialists and special

education personnel want to collaborate (Allen; Cox; Lani), few studies provided evidence of an impact on student learning. Nevertheless, the studies in this report do reveal some needs and possible factors for effective collaboration.

Most of the studies described here based their conclusions on perceptions. Such self-reporting may be skewed; however, school librarianship research often relies on surveys for data collection. Surveys were the prevalent data gathering method used in these studies (Allen; Cox; Gibson; Lani; Matsudo; Moyer). Heeks and Kinnell and Matsudo conducted interviews, and Murray led focus group discussions ("Implications"). Several others observed behaviors, mainly for case study research (Farmer; Farr; Heeks and Kinnell; Murray, "Implications"). Heeks and Kinnell and Gibson analysed documents to ascertain significant differences. Gibson noted library skills gains, and the two studies about vocational aides (Appignani and Lawton; Jilbert) assessed students' improved library work competency.

The reported prevailing status of collaboration between school library media specialists and special educators is uneven, largely due to the underlying conditions for such collaboration. On the positive side, Matsudo found that special educators generally held high opinions about school library media specialists, which facilitated their collaboration. Cox reported that the majority of school library media specialists used assistive technology, incorporating it into the library program. Allen and Cox also noted that school library media specialists helped students with special needs by choosing appropriate resources, having different circulation policies, and providing differentiated instruction. Lani mentioned that school library media specialists used visual learning aids and special computer programs to aid special needs students.

Cox and Murray ("Enhancing") reported that roughly half of responding school library media specialists had training about disabilities in general, and most respondents stated that they needed disability-specific or library-targeted training. Allen asserted that most school library media specialists had low self-confidence dealing with students having special needs, and she also found that fewer than a quarter of the respondents had even seen an individual education plan. In terms of resources to support special education, Cox discovered that only a third of the schools had library Websites, and that only 3 % of them complied with the Americans with Disabilities Act guidelines. Cox also found that only a fifth of the respondents had large-print or Braille books, fewer than 4% had captioned television, and only one library had a telephone with hearing-impairment options.

Not surprisingly, then, several needs emerged: training about disabilities and learning needs of this student population (Allen; Cox; Jackson; Lani; Murray "Implications"), policies that addressed disabilities (Murray "Enhancing"), staff support (Lani), and time to collaborate (Lani).

The majority of studies analysed for this article were descriptive in nature, identifying existing factors and making recommendations for improvement. However, several studies did develop interventions to improve collaboration and its impact on student learning. Farmer, Farr, Heeks and Kinnell, and Murray ("Implications") asserted that training, provided either by the special educator or by the librarian, had several benefits: a greater frequency and depth of collaboration, better acquisition decisions, and improved lessons and instruction. Moyer explained that the school library media specialists and the special educators jointly supported an Accelerated Reader

program by developing a reading rubric and reading goals, and by providing incentives, which resulted in more independent student visits to the library, increased book circulation, and improved reading and grammar scores. Likewise, library aide programs included jointly developed training plans and assessments, resulting in improved library and communication skills (Appignani and Lawton; Jilbert). Studies by Gibson and by Heeks and Kinnell addressed the affective domain and found that providing a disabilities-friendly library facility resulted in more student visits and in improved student socialization.

These studies were not highly empirical in nature; even the case studies reporting specific student learning gains (Appignani and Lawton; Farmer; Jilbert; Moyer; Murray "Implications") did not always generate specific statistics, nor can their results be generalized. Jackson's incorporation of input from special educators and students into Web page design did not include follow-up to determine if the improved Website impacted student learning. With the current emphasis on data-driven decision-making, future studies might be more inclined to gather baseline data, develop and implement interventions, and then analyse the results to determine significant student learning effects due to collaborative efforts.

Conclusions

These research studies demonstrate how collaboration between school library media specialists and special education personnel can impact student learning. Even if uneven in methodology, these studies provide first steps in investigating such collaborative efforts, and suggest areas for further investigations.

Several findings cut across the studies, regardless of population or approach. One

of the main strands was the identification of factors that contributed significantly to collaborative efforts. The most important factor that emerged was shared knowledge between school library media specialists and special education personnel:

- about special education learners and learning (Allen; Cox; Gibson; Heeks and Kinnell; Murray "Implications")
- about relevant resources in a variety of formats (Cox; Farmer; Murray "Implications")
- about positive, safe learning environments (Gibson; Heeks and Kinnell; Murray "Implications")
- about formative assessment and its analysis and application (Jackson; Moyer)
- about appropriate accommodations and interventions for specific students (Appignani and Lawton; Farmer; Jilbert)

Such mutual information requires cross-training and regular professional interaction (Appignani and Lawton; Farmer; Farr; Jilbert; Moyer; Murray "Implications").

Other contributing factors to impactful collaboration included effective communication and management skills (Gibson; Murray "Implications"), time for collaboration (Lani), and staff support (Lani; Murray "Implications"). With such collaboration in place, students are more likely to achieve because of effective planning and co-teaching of meaningful learning activities in consort with classroom teachers (Farmer; Farr; Murray "Implications").

Noting the number of studies that developed assessment instruments but did not develop interventions or measures of their effectiveness, school library media specialists have many opportunities to conduct evidence based research to measure

their impact on student achievement. Specific areas of potential research might include:

- empirical data about the impact of paraprofessional library staff and special education staff patterns on school library media specialists' efforts in support of special education and the academic achievement of students with special needs
- empirical data about the impact of disability-friendly library facilities on the achievement of students with special needs
- empirical data about the impact of library assistive technology and other resources on the academic achievement of students with special needs
- identification of conditions or factors that facilitate collaboration between school library media specialists and special needs educators
- longitudinal data about the nature and impact of collaboration between school library media specialists and special education instructors: frequency of communication, extent of co-planning and implementation, partnership role, extent of interdependence
- impact of disability-specific interventions developed through collaboration efforts of school library media specialists and special needs educators on the academic and social development of disabled students
- data about special education content in school library media academic preparation program curricula and school library services content in special education academic preparation program curriculum; impact of incorporating this content

on the collaborative efforts of school library media specialists and special educators

- identification of optimum roles for school library media specialists and special educators in conjunction with classroom teacher efforts for students with special needs.

One promising suggestion for evidence based practice that might build on collaboration efforts between school library media specialists and special education instructors is the incorporation of response-to-intervention. This federally mandated strategy, grounded in the Individuals with Disabilities Education Improvement Act of 2004, focuses on inclusive classroom instruction and assessment. The teacher identifies those subgroups that do not meet standards and provides needed targeted interventions. The response to those interventions is then assessed to determine if additional help is needed. While the classroom teacher serves as the point person, response-to-intervention strongly encourages a team approach (Mellard and Johnson). With their combined knowledge base, school library media specialists and special educators can offer significant support to students with special needs as well as their classroom teachers. By documenting their strategies and student learning assessments, school library media specialists could build a persuasive case that they impact classroom instruction.

More generally, school library media specialists and special education personnel have much expertise to share with each other and with others in the school community. Increased research and documentation of those efforts can strengthen their collaboration and contribute significantly to student achievement.

Works Cited

Achieve: The National Post Secondary Education Disability Network Incorporated. (2003). <u>New Zealand Code of Practice Consultation Survey</u>. Wellington, NZ: Achieve.

Achieve: The National Post Secondary Education Disability Network Incorporated. <u>Kia Orite -- Achieving Equity: The New Zealand Code of Practice for Creating an Inclusive Environment for Students with Impairments</u>. Wellington, NZ: New Zealand Ministry of Education, 2004.

Allen, Kendra. "The School Library Media Program and Special Education Programs." MS Thesis. University of North Carolina at Chapel Hill, Chapel Hill, NC, Nov. 2008. 18 May 2009 <http://etd.ils.unc.edu/dspace/bitstream/1901/570/1/kendraallen.pdf>.

American Library Association. <u>Programming for Serving Children with Special Needs</u>. Chicago: American Library Association, 1994.

Appignani, Londa, and Deborah Lawton. "Partnerships at Work in the Library." <u>Book Report</u> 18.3 (Nov./Dec.1999): 10-11.

Blaum, Dawn, and Bryant, Cathy. "Happily Ever After: A Tale of Collaboration Between the Library Media Specialist and Special Education." <u>Knowledge Quest</u> 33.2 (Nov/Dec 2004): 34–5.

Council for Exceptional Children. <u>What Every Special Educator Must Know: Ethics, Standards, and Guidelines for Special Educators</u>. 5th ed. Arlington, VA: Council for Exceptional Children, 2003.

Cox, John E. "Accessibility of Rural Missouri Library Media Centers." Diss. Central Missouri State University, Warrensburg, MO, 2004.

Downing, Joyce A. "Media Centers and Special Education: Introduction to the Special Issue." <u>Intervention in School & Clinic</u> 42.2 (Nov. 2006): 67-77.

Downing, Joyce A. <u>Students with Emotional and Behavioral Problems: Assessment, Management, and Intervention Strategies</u>. Saddle River, NJ: Merrill/Prentice Hall, 1997.

Farmer, Lesley. Building Information Literacy through a Whole School Reform Approach." <u>Knowledge Quest</u> 29.4 (2001): 20-4.

Farr, William Joseph "Collaboration among Teachers of Literacy." Diss. University of Connecticut, 2004.

Gibson, Ava. "Disability Support Services, Victoria University of Wellington." <u>Improving the Quality of Library Services for Students with Disabilities</u>. Eds. Peter Hernon and Philip Calvert. Westport, CT: Libraries Unlimited, 2006. 57-66.

Heeks, Peggy, and Margaret Kinnell. "Learning Support for All? Special Needs Pupils and Learning Resources." <u>Journal of Librarianship and Information Science</u> 29.3 (Sept. 1997): 143–53.

Hopkins, Janet. "Extending Inclusive Learning: Library and Special Education Collaboration." <u>Library Media Connection</u> 23.6 (Mar. 2005): 17–9.

Hopkins, Janet. "School Library Accessibility: The Role of Assistive Technology." <u>Teacher Librarian</u> 31.3 (Feb. 2004): 15-8.

Hutchinson, Nancy G. "Beyond ADA Compliance: Redefining Accessibility." <u>American Libraries</u> 32.6 (2001): 76-8.

Jackson, Carolyn M. "The High School Library Web Site: Scaffolding Information Literacy Skills." Diss. Illinois State University, Bloomington, IL, 2006.

Jilbert, Deborah. "Vocational Instruction in the Library Media Center." In <u>Serving Special Needs Students in the School Library Media Center</u>. Ed. Carten Wesson and Margaret Keefe. Westport, CT: Greenwood, 1995. 67-78.

Jurkowski, Odin. "The Library as a Support System for Students." <u>Intervention in School & Clinic</u> 42.2 (2006): 78-83.

Lani, Janet W. "The Role of the Library Media Specialist in the Education of Learning Disabled Students in Southern New Jersey." MA thesis. Rowan University, Glassboro, NJ, 1999. 15 May 2009 <<u>http://www.rowan.edu/library/rowan_theses/RU1999/0199THER.pdf</u>>.

Loomos, Kathleen. <u>An Investigation of Urban Teachers' Attitudes toward Students with Disabilities in the Least Restrictive Environment.</u> Diss. Loyola University of Chicago, 2001.

Lucas, Jessica. "Stretching and Expanding: The Changing Role of Special Educators." <u>Missouri Innovations in Education</u> 32.1 (2004).

Matsudo, Hiroyo. "School Librarians' Anticipated Support for Students with SEN: Using a Modified Grounded Theory Approach." <u>Proceedings of the IASL Conference</u>, Berkeley, 2-5 August 2008.

McGrath, P.J. (1990). "Proactive and Reactive Responses to Support Teaching-Learning Difficulties." <u>Co-Operative Planning and Teaching</u>. Ed. James Henri. Wagga Wagga, NSW: Centre for Information Studies, Charles Sturt University-Riverina. 92-7.

Mellard, Daryl, and Evelyn Johnson. <u>RTI: A Practitioner's Guide to Implementing Response to Intervention</u>. Thousand Oaks, CA: Corwin Press, 2008.

Moyer, Mary. "Accelerated Reader Sparks High School Reading Excitement." <u>Knowledge Quest</u> 35.1 (Sept./Oct. 2006): 34-9.

Murray, Janet. "Enhancing the Skills of School Library Staff to Cater for Individual Student Needs." <u>Proceedings of the IFLA Conference</u>, Bangkok, 20-28 August, 1999.

Murray, Janet. "The Implications of Inclusive Schooling for School Libraries." <u>International Journal of Disability</u>, Development & <u>Education</u> 49.3 (Sept. 2002): 301-22.

National Board for Professional Teaching Standards. <u>Early Children though Young Adulthood/Exceptional Needs Specialist</u>. Arlington, VA: National Board for Professional Teaching Standards, 2003.

New Zealand Ministry of Health. <u>The New Zealand Disability Strategy: Making a World of Difference.</u> Wellington, NZ: Ministry of Health, 2001.

New Zealand Ministry of Education. <u>Tertiary Education Strategy 2002-07</u>. Wellington, NZ: Ministry of Education, 2002.

Noonan, Mary, and Violet Harada. "Special Education and Inclusion: Opportunities for Collaboration." <u>School Reform and the School Library Media Specialists.</u> Ed. Sandra Hughes-Hassell and Violet Harada. Westport, CT: Libraries Unlimited, 2007. 131-44.

U.S. Government. Office of Special Education Programs. <u>Individuals with Disabilities Education Improvement Act of 2004</u>. Washington, DC: Government Printing Office, 2004. PUBLIC LAW 108–446; 118 STAT. 2647.

Walling, Linda, and Marilyn Karrenbrock. <u>Disabilities, Children, and Libraries: Mainstreaming Services in Public Libraries and School Library Media Centers.</u> Englewood, CO: Libraries Unlimited, 1993.

Williams, Peter. "Using Information and Communication Technology with Special Educational Needs Students: The Views of Frontline Professionals." <u>Aslib Proceedings</u> 57.6 (2005): 539–53.

Wright, Keith, and Judith Davis. <u>Serving the Disabled: A How-To-Do-It Manual for Librarians</u>. New York: Neal Schuman, 1991.