# Evidence-based practice: A practice towards leadership credibility among school librarians

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This paper examines the potential influence of evidence-based practice (EBP) in school libraries in affirming the role of the school librarian as leader. We begin with an examination of the most recently added role of effective school librarians, that of leader, and provide an overview of the current interpretation of this role. We then proceed with an introduction to the use of EBPs in school libraries, with an emphasis on the relationship of EBPs to student achievement. We articulate a potential relationship of EBP to building leadership credibility among school librarians by presenting examples of the use of EBP in linking student achievement to school library programs.

# Introduction

In 2009, *Empowering Learners: Guidelines for School Library Media Programs* (AASL, 2009) formally introduced the role of *leader* for school librarians. Though leadership had been a focus for librarianship in previous standards (AASL & AECT, 1998), this focus as a primary role to encompass all others was a new stride. School librarians were not just to see themselves as partners and collaborators, but a model and example for other teachers in teaching and learning, particularly in the areas of reading, technology, and curriculum collaboration (Dees et al., 2007; Everhart, 2007).

As school librarians begin to focus increasingly on their role as leader, almost in parallel, has been movement toward evidence-based practice (EBP) in school librarianship. School librarians are focusing less on the need to collect statistics on school library media program outcomes and more on student outcomes and how teaching information literacy is of benefit to student achievement (Geitgey & Tepe, 2007; Gordon & Todd, 2009). As accountability and assessment become increasingly pervasive in teaching and learning, school librarians must be able to show the effect their programs have on student outcomes. They must show evidence of their practice and the ways in which their practice affects their students.

These two phenomena – the focused prominence of the leader designation to school librarians and the awareness of EBP and its importance in school librarianship – should not be treated separately. School librarians can demonstrate leadership through EBP. By providing artifacts of collaborative work; assessments on information literacy; and portfolios of student progress on other offered programmatic elements in school library programs; school librarians can demonstrate their effectiveness and abilities as leaders in schools in increasing student achievement. In this paper, current research and understanding of both leadership and EBP will be discussed. Two case studies are described as examples of how EBP can provide a demonstration of leadership by school librarians and how that evidence can affect future practice.

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## Leadership

The leadership responsibilities of school librarians were a focus of professional guidelines before the introduction of leader as a formal role in *Empowering Learners: Guidelines for School Library Media Programs* (AASL, 2009). In *Information Power: Building Partnerships for Learning* (AASL & AECT, 1998), school librarians were encouraged to demonstrate leadership in collaboration with other teachers through building teams for learning, promoting and providing professional development, and by recruiting others into the profession. In *Information Power*, leadership is a part of the underlying vision of the school library program that affects all the roles of school librarians:

Leadership for the library media specialist involves 'leading from the middle' as well as assuming more visible, proactive leadership roles. This type of leadership includes coaching others to do for themselves, acting as a sounding board for key decision-makers bringing people together, and taking the risk of leading when the opportunity arises. (p. 53)

School librarians were to demonstrate leadership through collaboration with others and as the primary advocate and user of technology resources in the school (AASL & AECT, 1998). The four roles of school librarians detailed in *Information Power* are included again in *Empowering Learners*: teacher, instructional partner, information specialist, and program administrator. Through research conducted during the construction of the new program standards detailed in *Empowering Learners* at the Vision Summit of AASL in 2006, the role of leader was identified as an additional role necessary for the success of school librarians in the 21<sup>st</sup> century:

Leadership is integral to developing a successful 21<sup>st</sup>-century school library media program. As information literacy and technology skills become central to learning, the [school librarian] must lead the way in building 21st-century skills throughout the school environment. Doing so involves a willingness to serve as a teacher and a learner who listens to and acts upon good ideas from peers, teachers, and students. Leadership also requires increased professional commitment and thorough knowledge of the challenges and opportunities facing the profession. By becoming an active member of the local and global learning community, the [school librarian] can build relationships with organizations and stakeholders to develop an effective school library media program and advocate for student learning. (AASL, 2009, p. 17)

The role of leader in *Empowering Learners* was placed first amongst the five roles defined and the intent was that it be the focus, encompassing the remaining four roles. As leaders, school librarians are challenged to partake in a global society, build relationships with all stakeholders in students' learning, and plan for the future of each program and the profession (AASL, 2009).

School librarians' role as leader is also a focus in the National Board for Professional Teaching Standards (NBPTS). School librarians demonstrating as leaders appear throughout the NBPTS *Library Media Standards*, 2<sup>nd</sup> *Edition* (NBPTS, 2010); it is most prominently featured in Standard IV on leadership. "Accomplished library media specialists are visionary leaders in their schools and in the profession." (NBPTS, 2010, p. 17). In order to become a National Board certified educator, school librarians must demonstrate and provide evidence of leadership instructionally, administratively, and professionally. One component of leadership outlined by NBPTS (2010) is that of evidence-based practice, discussed in more detail later.

The need for more leadership from school librarians has developed around the idea of transformational leadership (Ballard, March, & Sand, 2009; Belisle, 2004; Smith, 2009, 2010). In looking at the need for more leadership among school librarians, Belisle (2004) specifically discusses the ideas of James McGregor Burns, who has written widely on the subject of transformational leaders outside of education. Burns (1978) defined transformational leadership as collaboration between leaders and followers and their inherent motivations to achieve the collective goals and desired change of the group. This type of leadership focuses on not only the leader, but also those being lead and the relationship that exists between those involved. "Because of the uniquely collaborative aspects of their role in the school, the teacher-librarian is in an excellent position to be a leader" (Belisle, 2004, p. 76). Rather than getting individuals to follow, which school librarians are typically in little position to do, transformational leadership can be about "leading from the middle" (AASL, 1998) in order to achieve the goals of an entire school, not just the school librarian.

Using the research on school librarian leadership, library and information science (LIS) education, and the standards from NBPTS, the School of Library and Information Studies at Florida State University created a program for teacher-leaders to receive a graduate certificate in school library leadership in a program called Project LEAD (Everhart & Dresang, 2007). The product of this program has been a cohort of school librarians with increased self-perception of their abilities in two areas of transformational leadership: "modeling the way" and "enabling others to act" (Smith, 2009). Pre-service students in the first cohort of Project LEAD believed they were well prepared to lead in areas of collaboration (Smith, 2009) and technology integration (Smith, 2010).

In addition to the type of leadership that may be best suited for school librarianship, the areas in which leadership may be demonstrated are discussed (Dees et al., 2007; Everhart, 2007; Frost, 2005). Dees et al., (2007) focuses on technology, reading, and the curriculum. "As the resident technology guru on campus, a [school librarian] can provide staff development on new technologies and model how they can be integrated into the curriculum" (p. 11). School librarians have done this by leading others to the use of tools like blogs, wikis, and podcasts and demonstrating these tools to other teachers in professional development (Everhart, 2007). Regarding reading, "[school librarians] can lead by understanding the reading process, how children learn to read, and by being aware of potential pitfalls in learning to read" (Dees et al., 2007, p. 12). Everhart (2007) notes that the school librarians can lead in the area of reading by matching the collection and reading development to their students' needs in standardized testing and by collaborating with teachers on diagnostic programs, reading initiatives, silent sustained reading, and event promotions for reading. As an instructional partner, school librarians may lead in areas of the curriculum by collaborating with teachers on projects that integrate content and information literacy standards (Dees et al., 2007).

Though the emphasis on school librarians as leaders has been present for more than a decade in school librarianship research and standards, the perception of school librarians as leaders is sometimes weak both within the profession and by others in education. In a study of school librarians in Georgia, Martin (2010) found that school librarians continued to rank program administration as the most important leadership role for their position. Perceptions of leadership in the area of program administration date back to previous standards in school librarianship in which the primary responsibility of school librarians was collection development and maintenance (AASL, 1960; AASL & NEA, 1969; AASL & AECT, 1979), not instruction and collaboration involving projects related to information literacy, technology, and reading. For school librarians to be fully a part of the current school community, they must become leaders as instructional partners and information specialists (Belisle, 2004; Dees et al., 2007, Everhart, 2007). Numerous studies (Lance, Rodney & Hamilton-Pennell, 2000, 2001, 2002, 2005; Lance & Russell, 2004) have shown that when school librarians are collaborators in the curriculum it contributes to overall student achievement. This perceived lack of leadership in areas of the collaborative planning and curriculum development is also seen in the principal's view of school librarians who have historically considered the prominent leadership role to be that of program administration (Shannon, 2009).

Along with perceptions of school librarians' leadership role, the evaluation of school librarians often does not assess leadership. Two major issues contribute to the improper evaluation of school librarians: (1) misconceptions about what school librarians do and (2) the use of formal evaluations for school librarians that were created for teachers (Owen, 2010; Pon, 2005). In conducting evaluations meant for teachers, Owen (2010) notes school librarians are not often assessed on the role of leadership at all. The evaluative piece is an important one in understanding how school librarians can contribute as leaders. As school librarians have previously collected data on their collections and circulations statistics, they must begin to collect evidence on their leadership practices. Through the collection of evidence that demonstrates the role of the school librarians as leaders in collaborating, teaching of information literacy skills, integrating technology, promoting reading and literacy, and providing professional development for teachers at their schools, school librarians can be properly evaluated on this new role, in addition to the four roles already prescribed by the guidelines for school librarians.

### **Evidence-Based Practice**

The EBP movement is firmly grounded in the evidence-based movement of the health care profession, which began in the early 1990s; however, historical and philosophical roots of EBP in library and information science (LIS) can be traced back several decades (Todd, 2006). Within school librarianship, EBP is relatively a new practice, with about a decade long history beginning with a discussion that took place at the International Association of School Librarianship in Auckland, New Zealand in 2001 (Todd, 2009). Ross Todd began the dialogue in 2001 and called for a paradigm shift to demonstrate the pertinent role of school librarians in student achievement. He suggested a move from an emphasis on a rhetorical and advocacy basis to sustain school librarians to using EBP that weaves research and evidential documentation into curriculum outcomes and the learning goals of the school (Todd, 2009). In the past decade, with the increasing pressure on high stakes testing and the need to demonstrate the vitality of school librarians in helping students to master content affiliated with high stakes testing, school librarians have been embracing the discussion on EBP, articulating various ways EBP can be conducted in their programs, and the benefits it brings to their programs (Ballard, March & Sand, 2009; Geitgey & Tepe, 2007; Gordon, 2009a; Gordon & Todd, 2009; Pappas, 2008; Todd, 2006, 2009).

The evolution of the meaning of EBP in school librarianship has been extensively discussed (Geitgey & Tepe, 2007; Todd, 2002a, 2002b, 2006, 2008a, 2008b, 2009). EBP in school librarianship can be summarized as "fundamentally about professional practice [of school librarianship] being informed and guided by best available evidence of what works" (Todd, 2008, p.17). It focuses on "conscientious, explicit and judicious use of current best evidence in making decisions about the performance of the day by day role" (Todd, 2002a, p.2). With the ultimate goal of increasing student learning and achievement, quality of teaching, and quality of learning, school librarians are encouraged to use research evidence, their professional expertise, and student feedback or assessments to inform their current practice (Todd, 2002a, 2009). In EBP, school librarians are trying to obtain local evidence from their very own students and staff to shape and plan teaching and learning initiatives and programs at the school library. According to Todd (2008b), in implementing EBP, school librarians are attempting to answer the following questions:

- 1) How does my school library impact student learning? How does my school library help student learning?
- 2) Do my students who have been taught information literacy skills perform better academically?
- 3) How do I ensure that my school library is sustainable and accountable in infrastructure, personnel, resources, and instructional processes so that my students achieve optimal outcomes?
- 4) How do I spread the word of the impact of school libraries on student achievement and demonstrate my library's educational, social, and cultural value?

Todd further refines EBP into three dimensions – evidence *for* practice, evidence *in* practice, and evidence *of* practice (Todd, 2006, 2008a) – "to collectively represent a holistic and integrated framework for professional practice that is robust, reflective and regenerative" (Todd, 2006, p. 36).

Evidence *for* practice is comparable to what formal research labels as a literature review. In evidence *for* practice, school librarians use empirical research to inform practice. The school library field has a wealth of research that substantiates the value of school libraries; articulates the dimensions of school library infrastructure, instruction, and services that contribute to student achievement; and exemplifies the impact of school libraries in student achievement (Callison, 2002; Neuman, 2003; Scholastic Research Foundation, 2008). In evidence *for* practice, school librarians examine knowledge of theory that derives practice, as well as studies that test or apply the theory. As a result of examination of research evidence in the field, they are able to articulate a clear vision of best practice that bridges theory and practice (Gordon, 2009a).

In a summarization by Todd (2008a), evidence *in* practice:

focuses on school librarians integrating available research evidence with deep knowledge and understanding derived from professional experience, as well as with local evidence, to identify learning dilemmas, learning needs, and achievement gaps to make decisions about the continuous improvement of the school library practices to bring about optimal outcomes and actively contribute to school mission and goals. (p. 19) In this dimension, the research evidence is meshed with the professional and local evidence that identifies learning needs and achievement gaps. Evidence *in* practice "activates professional expertise to direct how the evidence is collected, how it is analyzed, and how it is applied to the identified problem" (Gordon, 2009a, p. 69). School librarians are often puzzled, not knowing how to make the link between findings in research to their own wisdom of how students learn. A simple way to build this linkage is to map the research findings and activities that are done in their school libraries (including teaching, collaboration, program administration, etc.) to the implementation of *Empowering Learners: Guidelines to School Library Media Programs* (AASL, 2009a) and *Standards for the 21st Century Learner in Action* (AASL, 2007) in their program. Such mapping will direct what kind of evidence is most useful and how it needs to be collected, either for the program or for the instructional collaboration in the school library. Evidence *in* practice is a common framework for action research in school librarianship that is summarized and applied in detail in Ballard, March & Sand (2009), and Gordon (2009a, 2009b).

Evidence of practice has become the focal point of EBP in school librarianship (Todd, 2006), as measures and outcomes of the practice are derived from student-based data. The premise of evidence of practice is its focus "on impacts, going beyond process and activities as outputs" (Todd, 2009, p. 89). In other words, in evidence of practice, school librarians measure what the student has learned as a result of inputs, interventions, and activities administered in the school library program that the students participated. The evidence is extracted from student work or from evidence collected using qualitative and quantitative data collection methods (Gordon, 2009a). It is important to collect data directly from students - the voice of the students themselves, which provide school librarians the best description of the quality of the program that they offering (Geitgey & Tepe, 2007). With the introduction of information literacy standards (AASL, 2007), school librarians are expected to collaborate with teachers and design instruction that will allow students to demonstrate what they know and are able to do. As a result of this, school librarians are able to collect evidence on how school libraries are helping students to learn their content curriculum, rather than merely observing the quantitative evidence of collection, patron usage, and number of classes in library statistics that do not assess the value that the school librarian adds to the school's mission (Geitgey & Tepe, 2007; Gordon & Todd, 2009). This paper will primarily focus on third dimension of EBP as discussed above - evidence of practice.

Evidence *of* practice recognizes the need for triangulation – the use of multiple sources to obtain data and variation in the types of evidence (Todd, 2008b). School librarians can collect these data on a systematic or on diagnostic basis. Systematic data collection normally happens on a regular basis, captures the contribution of the school librarian over time, and informs school librarians' day-to-day teaching and learning decisions. The need for diagnostic type of data collection arise because of a contextual or specific instructional problem that needs to be addressed such as students inability to demonstrate ethical use of information (explained further in Ballard, March, & Sand, 2009) or due to data driven collaboration that stems from student test data such as deficit in the area of ratio (explained further in Buzzeo, 2008; Church, 2003). Both systematic and diagnostic data collection are vital, and will demonstrate the importance of the school librarian to the school.

The data collection methods can range from simple means such as using tools that school librarians can easily build such as surveys, checklist, comment cards, and rubrics to more advanced tools such as *Tools for Real Time Assessment of Information Literacy Skills* (TRAILS) and elaborate research methodology such as action research (Ballard, March & Sand, 2009; Gordon, 2009a, 2009b).

Pappas (2008) and Todd (2002b) suggest the use of several student self-assessment methods such as the use of checklist, conferencing, journal writing, and self-reflection prompts stored in "evidence folders" (Pappas, 2008, p. 22) and can become increasingly informative over time in tracking patterns and trends among students. The use of rubrics (whereby students are scaled according to an agreed criteria that clearly defines what range of performances is acceptable or not) and the construction of portfolios (whereby students collect samples of their work over time) are also data that can be used by school librarians to derive statements about student learning outcomes as a result of participation in the school library.

Gordon (2009a, 2009b) describes in length the use of action research methodologies in collecting data for evidence *of* practice. The methodological use of action research is contextual,

population-specific, and local, but yet is a widely acceptable methodology that collects verbal data through interviews, observation, surveys, journaling and descriptive statistics. Such comprehensive "local" data collection is rich and immersive, and provides a clear description of the issue and solutions for an instructional problem in the school (Ballard, Sand & March, 2009), thus, providing more voice for school librarians to indicate their pertinent role in the school.

One other evidence that is available, but often overlooked by school librarians, is statebased testing data. Geitgey & Tepe (2007) suggest drilling these data to obtain item analysis on how students are faring on various sections of the state-based test. These sections of the test can be referenced to a specific academic content standard, thus, allowing school librarians to obtain the correlation between the tested content standard and *Standards for the 21st Century Learner*. Tools such as TRAILS (developed by Kent State University, available at: http://www.trails-9.org/) allow the evaluation of information literacy skills at multiple grade levels. TRAILS can be used periodically as a pre- and post-survey to gauge the information literacy skills learning among students (Geitgey & Tepe, 2007). Additionally, the results from TRAILS can be combined with the state-based testing data, and can be used to demonstrate the importance of information literacy skills in mastering academic content standards.

All these tools are not meant to be used distinctively, but to be used in a dynamic, iterative, and integrative manner of "welding evidences from multiple sources in a cycle of continuous transformation of data, information, knowledge and wisdom to inform practice, to generate practice and to demonstrate outcomes of practice" (Todd, 2009, p. 89).

#### Leading with Evidence-Based Practice

As *Empowering Learners* (AASL, 2009) and the *Standards for the 21st Century Learner* (AASL, 2007) call for more leadership in all areas of school librarianship, using EBP is one of those areas and could prove to be the most advantageous to enhancing their work and perception by others in their school. In their role as leader, the AASL guidelines assert that school librarians:

- benchmark the program to school, state, and national educational program standards
- use research to inform practice and make evidence-based decisions; and
- create an environment that is conducive to active and participatory learning, resourcebased learning, and collaboration with teaching staff (AASL, 2009, p. 45).

The use of EBP as a component of leadership is also prescribed by NBPTS as a part of their standards for National Board certification:

[School librarians] use informed, evidence-based practices to identify strengths and weaknesses in library media programs and build knowledge to make informed decisions and modifications which result in stronger library media programs. [School librarians] use current technologies to gather, analyze, and share the results of evidence (NBPTS, 2010, p.17).

Much has been written in education literature about the move toward accountability, assessments, and the trending shift in education toward data-driven instruction (Isaacs, 2003; Marsh, Pane, & Hamilton, 2006; Noyce, Perda, & Traver, 2000; Wayman, 2005). The move toward EBP has gained momentum alongside the increased accountability mandated by No Child Left Behind, in which states are required to assess students at certain grade levels in core subjects to hold schools and teachers accountable for their adequate yearly progress. EBP is similar in such accountability, but the measures and data collection can be created and crafted by school librarians and do not have to be reliant on the state standardized tests, which are often criticized and rarely include any assessment of information literacy or technology literacy skills.

As is noted by Todd (2008a), school librarians have not embraced these EBP initiatives enough and are somewhat in danger of being left behind if they choose not to. If administrators and policymakers do not view school librarians as essential toward student achievement and progress on standardized testing, they may continue to suffer from budget cuts and shrinkages in staffing. In providing evidence of their work and showing what progress is made with student achievement, school librarians can help other stakeholders in education understand what school librarians do and the places in which they can best contribute to overall student success. As they move toward more data-driven practices and leadership in tying what is done in the school library to student achievement, it is timely for school librarians to embrace a collaborative form of leadership.

"Schools must move toward a more connected, collaborative form of leadership. [School librarians] must lead this revolution to make room for new models of teaching, learning, and organization to prepare learners for this collaborative environment and address the needs of a generation that has grown up participating, not just being broadcast to" (AASL, 2009, p. 46.).

Reading, technology, and the curriculum are areas already a focus for school librarians (Dees et al., 2007; Everhart, 2007) and present an opportunity for them to channel their leadership skills. The next step in this process of leadership is including EBP to show the effect that school librarians and their collaborators are having on student outcomes. While leading in these areas of collaboration, school librarians may also find the opportunity to model and present EBP.

The move of bringing EBP into the process of collaboration is aligned with the idea of transformational leadership and leading from the middle. School librarians are not in a position to direct others in the school or instruct on how things should be done. Rather, in collaboration with teachers and administrators in schools, school librarians can demonstrate evidence of practice in everyday collaborations conducted with other teachers. While there are certainly practices of collecting evidence of student outcomes that can be extensive (such as action research), the checklists and portfolios discussed by Pappas (2008) and Todd (2002b) are simple assessment tools that can be used every day and accumulate their worth as an evaluative tool. Such a practice, modeled for others, could be valuable to English teachers in assessing improvement in writing in a long-term journaling project or math teachers in collecting evidence of gained skills in computation or memorization of tables, as well as showing the importance of information literacy skills in learning these academic content areas.

While there are daily activities involved in EBP in which school librarians may actively demonstrate their leadership qualities, there are also more involved examples of data collection that can be extremely valuable and show the ways in which school librarians can practice collaborative form of leadership in their district and schools, modeling for others and showing the value of collecting evidence *of* practice. Two such examples are the use of TRAILS in Montgomery County Public Schools (MCPS) and the benchmark assessments for information literacy conducted in the 5th grade at Cecil County Public Schools (CCPS), both in Maryland. Both EBP initiatives are district-wide projects collecting large amounts of data and are examples in which school librarians have become leaders in showing their effect on student achievement in information literacy and academic content such as reading or social studies.

## **MCPS and TRAILS**

In 2009, under the guidance of Dr. Gail Bailey from MCPS in Maryland, almost all school librarians at MCPS participated in a county wide evidence *of* practice initiative that attempted to (1) determine the effects of the instructional services provided by school librarians on acquisition of information literacy skills and (2) determine the effects of the instructional services provided by school librarians on academic achievement; at different grade levels (Cooper-Martin, 2010). MCPS utilizes Maryland Library Media Curriculum information literacy standards (MSDE, 2010), and found TRAILS as an appropriate assessment for the MCPS information literacy standards (Cooper-Martin, 2010). To obtain evidence (1), the school librarians administered TRAILS to one to five class sections of grade 5, grade 8, and grade 11 students, with 42%, 22%, and 15% participation rate in each grade respectively. The results of the study showed that students in grade 5, 8, and 11 met the benchmark in acquisition of information literacy skills, with the exception of one category – using information responsibly, ethically, and legally (Cooper-Martin, 2010).

To measure (2), for each grade level, a multiple regression tested the relationship between TRAILS scores and reading scores in Maryland School Assessment (MSA) for grades 5 and 8 or High School Assessment (HSA) for grade 11. The differences in student characteristics were controlled. The results showed that students with a higher TRAILS score had higher academic achievement (higher MSA and HSA scores). "This relationship was statistically significant and

large enough to be practical significance to educators for each grade tested" (Cooper-Martin, 2010, p.1).

This evidence *of* practice provides information for school librarians and the administration at both the building and district level of how school librarians affect student outcomes. School librarians are able to show principals evidence of their work with students and how information literacy is linked to overall achievement in the mandatory tested subjects in Maryland of math, language arts, and science, which demonstrates the inherent importance of school librarians as leaders who help shape the performance of students in high stake testing in their schools. This data may be used as evidence with principals of the value of collaborative efforts with teachers in the curriculum.

## **CCPS & Benchmark Assessments**

In 2004, under the guidance of Patricia Stafford, the Program Facilitator for school library programs for the CCPS in Maryland, CCPS developed a benchmark assessment to be given to the 5th grade students for assessing mastery of information literacy skills at the elementary level (CCPS, 2011). What makes this assessment unique and vital to improving school library programs at CCPS is the following foundational basis for the creation of the assessment:

- 1) As a result of observations conducted by Patricia Stafford and school librarians in CCPS at that time, it was found that information literacy was often taught in isolation at CCPS;
- 2) The need to teach students the process skills in doing research using library services; and
- 3) The collaboration between the Social Studies department and school librarians to co-design scenarios for the benchmark assessments that would assess both the social studies and the information literacy outcomes (CCPS, 2011).

The goals of this benchmark assessment are to:

- Assist school librarians to determine areas of information literacy instruction that need to be added, improved, or revised, and the level of scaffolding (refers to appropriate assistance that are provided to students to accomplish certain tasks, that he or she could otherwise not complete without the assistance) needed in their instruction;
- Obtain data on how school librarians are supporting other curricula (such as social studies); and
- Determine what information literacy skills need to be taught in the middle and high school levels and the needed scaffolding based on students' performance on the benchmark assessment (CCPS, 2011).

The annual assessment to the 5th grade students primarily assesses how students approach a novel information problem independently. "Since the research skills tested parallel the skills and processes for social studies in the State Curriculum [Maryland], the school library media specialist administers the 1st and 3rd portions, while the 2nd portion is given by the classroom teacher" (P. Stafford, personal communication, April 10, 2011).

Currently, CCPS is embarking on the 10th year of administering this benchmark assessment to every student in the county:

Over the years, we have improved the test questions to more closely target the type of thinking we want to test or to scaffold more appropriately to students; analyzed the responses to identify the common mistakes that students were making in their thinking; and then refined our curriculum and adapted our instruction to reflect what we have learned about our students' cognitive levels" (P. Stafford, personal communication, April 10, 2011).

In the early years of administering this benchmark assessment, the actual performance of students in these tests served as "a wakeup call" to the school librarians in CCPS. For example, the Maryland Library Media Curriculum includes the instruction of Boolean operators and copyright laws, the assessment revealed that many school librarians were not actually teaching these skills (CCPS, 2011). This is an example of an easy problem to rectify – as these skills could be added to the instruction at CCPS. As a result of the added instruction, subsequent benchmarking assessment

showed dramatic improvement in the use of Boolean operators and copyright laws by students (CCPS, 2011). This is a way to model for other teachers on how evidence can provide information beyond what is thought of as common knowledge of current practice. Collecting evidence *of* practice prevents school librarians and teachers from basing decisions on what needs to be taught to students on previous observations and the personal experiences of an educator and instead focusing on the current group of students and their specific needs.

In addition to the learning objectives including Boolean operators and copyright laws, there were also some higher level skills that students were evidently lacking as shown in the benchmark assessment, such as the ability to form effective questions to conduct research. The CCPS elementary school librarians realized that they themselves needed to gain understanding how questions work before they could teach questioning to students. The school librarians did research on their own, on their professional days and categorized the type of questions and questioning that needs to be taught to students. Using the data obtained from the benchmark assessment, these school librarians improved their current instruction on forming effective research questions by developing charts and graphic organizers to illustrate the art of questioning to students. From subsequent benchmarking assessments, CCPS found that their students are making steady growth in understanding how to form effective questions (CCPS, 2011). This sort of evidence for practice is another example of highly transformational leadership. When done in collaboration with teachers, this pursuit of knowledge and professional development to better the teaching and learning experience for students is highly valued and will possibly have an effect on student achievement. To show in evidence that the school librarian is leading such a collaborative effort to an administrator would be advantageous in an evaluation.

Most importantly, the benchmark has changed perceptions across the county on the role of school librarians and the contribution of the SLMP to improve instruction and learning. The benchmark assessment also was able to disprove the link between common culprits associated with lower student performance, such as reading levels and demographics, as schools that emphasized the mastery of the research process scored well despite the challenging demographics. Leading a collection of such data by school librarians is further indication of how EBP is an effective form of leadership. By removing some of the myths associated with student learning, librarians can lead teachers to the new ways of teaching and learning indicated by *Empowering Learners* (AASL, 2009).

# Conclusion

School librarianship is shifting with its growing emphasis on the leadership role of school librarians and the collection of data on student outcomes in EBP. These two movements do not exist separately and together can have a powerful impact on student achievement. In their most recent guidelines for school library programs, AASL encourages school librarians to take on the role of leader in all that they do. In order for that role to be fully realized both within the profession and by teachers, administrators, and community stakeholders, school librarians must use EBP in coordination with their leadership. Doing so may provide the evidence necessary to show others the value of school librarians and their programs toward student achievement, potentially curbing trends in which the budgets and professional staffing for programs are being cut.

In school districts such as MCPS and CCPS, school librarians are using EBP to demonstrate:

- 1) Their capability as model collaborators in schools through practice of collaborative leadership with teachers and students;
- 2) Their inherent quality of a transformational leader in schools by serving as the model teacher who listens and acts upon ideas and feedback from students through the assessments administered to students; and
- 3) Their key role in increasing student achievement in high stakes testing by presenting evidence that exemplifies the link between mastery of information literacy skills and high academic achievement.

School librarians are using data to lead teachers and students in a collaborative environment, with opportunities to shed old assumptions about what students already know and what they need to

learn. With evidence, school librarians are becoming leaders in their schools and districts and are changing the way others see their role as school librarians. It is time that school librarians prioritize EBP as a matter of urgency in school library practice to achieve and sustain the role of the leader in schools.

## References

- American Association of School Librarians. (1960). *Standards for school library programs*. Chicago, IL: Author. American Association of School Librarians. (2007). *Standards for the 21st-century learner in action*. Chicago, IL: Author.
- American Association of School Librarians. (2009). *Empowering learners: Guidelines for school library media programs*. Chicago, IL: Author.
- American Association of School Librarians. & Association for Educational Communications and Technology. (1979). *Media programs district and school.* Chicago, IL: Author.
- American Association of School Librarians. & Association for Educational Communications and Technology. (1998). *Information power: Guidelines for school library media programs*. Chicago, IL: Author.
- American Association of School Librarians & National Education Association. (1969). *Standards for school library programs*. Chicago, IL: Author.
- Ballard, S. D., March, G., & Sand, J. K. (2009). Creation of a research community in a K-12 school system using action research and evidence based practice. *Evidence Based Library and Information Practice*, 4(2), 8-36. http://ejournals.library.ualberta.ca/index.php/EBLIP/article/view/5020/5319
- Belisle, C.-A. H. (2004). The teacher as leader: Transformational leadership and the professional teacher or teacher-librarian. *School Libraries in Canada Online*, 24(3), 73-79. Retrieved from http://www.clatoolbox.ca/casl/slic/archives.html
- Burns, J. M. (1978). *Leadership*. New York, NY: Harper & Row.
- Buzzeo, T. (2008). Make the move from collaboration to data-driven collaboration. *Library Media Connection*, 27(3), 28-32.
- Callison, D. (2002). The twentieth-century school library media research record. In *Encyclopedia of Library and Information Science* 71 (Supp. 34, pp.339-369). New York, NY: Marcel Dekker.
- Cecil County School District. (2011). The Cecil County school library media program. Retrieved from http://media.ccps.org/index.html.
- Church, A.P. (2003). Leverage your library program to raise test scores: A guide for library media specialists, principals, teachers, and parents. Wilmington, DE: Linworth.
- Cooper-Martin, E. (2010). Outcome evaluation of the library media program on information literacy skills. *MCPS Evaluation Brief from the Office of Shared Accountability*. Retrieved from http://montgomeryschoolsmd.org/departments/sharedaccountability/reports/2010/Brief%20Info %20Literacy\_09\_10.pdf
- Dees, D. C., Alexander, K., Bedara, R., Cambisios, R., Kent, T., & Delgado, J. P. (2007). Today's school library **media** specialist leader. *Library Media Connection*, 25(4), 10-14.
- Everhart, N. (2006). Principals' evaluation of school librarians: A study of strategic and nonstrategic evidence-based approaches. *School Libraries Worldwide*, 12(2), 38-51.
- Everhart, N. (2007). Leadership: School library media specialists as effective school leaders. *Knowledge Quest*, 25(4), 54-57.
- Everhart, N., & Dresang, E. T. (2007). Integrating research results and National Board Certification Standards into a leadership curriculum for school library media specialists. *Journal of Education for Library and Information Science*, 48(4), 272-284.
- Frost, C. (2005). Library leaders: Your role in the professional learning community. *Knowledge Quest*, 33(5), 3-5.
- Geitgey, G. A., & Tepe, A. E. (2007). Can you find the evidence-practice in your school library? *Library Media Connection*, 26(2) 10-12.
- Gordon, C. A. (2009a). An emerging theory for evidence based information literacy instruction in school libraries, Part 1: Building a foundation. *Evidence Based Library and Information Practice*, 4(2), 56-77.
- Gordon, C. A. (2009b). An emerging theory for evidence based information literacy instruction in school libraries, Part 2: Building a culture of inquiry. *Evidence Based Library and Information Practice*, 4(3), 19-45.
- Gordon, C. A., & Todd, R. J. (2009). Weaving evidence, reflection, and action into the fabric of school librarianship. *Evidence Based Library and Information Practice*, 4(2), 4-7.
- Isaacs, M. L. (2003). Data-driven decision making: The engine of accountability. *Professional School Counseling*, 6(4), 288-295.

- Lance, K. C., M. J. Rodney, and C. Hamilton-Pennell. (2000). *How school librarians help kids achieve standards: The second Colorado study.* San Jose, CA: Hi Willow.
- Lance, K. C., M. J. Rodney, and C. Hamilton-Pennell. (2001). *Good schools have school librarians: Oregon school librarians collaborate to improve academic achievement*. Terrebonne, OR: Oregon Educational Media Association.
- Lance, K. C., M. J. Rodney, and C. Hamilton-Pennell. (2002). *How school libraries improve outcomes for children: The New Mexico study.* Salt Lake City, UT: Hi Willow.
- Lance, K. C., M. J. Rodney, and C. Hamilton-Pennell. (2005). *Powerful libraries make powerful learners: The Illinois study.* Canton, IL: Illinois School Library Media Association.
- Lance, K. C., & Russell, B. (2004). Scientifically based research on school libraries and academic achievement. *Knowledge Quest*, 32(5), p. 13-17.
- Loertscher, D. V. (2009). Evidence-based practice: Evolution or revolution? *Evidence Based Library and Information Practice*, 4(2), 178-181.
- Marsh, J. A., Pane, J. F., & Hamilton, L. S. (2006). *Making sense of data-driven decision making in education*. *Education*. Santa Monica, CA: Rand Education.
- Martin, V. (2010). Perceptions of school library media specialists regarding their practice of instructional leadership. (Unpublished doctoral dissertation). Walden University, Minneapolis, MN.
- Maryland State Department of Education. (2010). Matrix: MSDE curriculum, state, and national information literacy outcomes and standards. Retrieved from

http://www.montgomeryschoolsmd.org/departments/media/programs/documents/Matrix\_outc omes\_Final.pdf

National Board for Professional Teaching Standards. (2010). Library Media Standards, 2nd Edition. Retrieved from

https://docs.google.com/fileview?id=0B0QYsEg2\_sjmNTEzYmJlYWUtY2NkMC00ZTBmLTgwYTct ODU3YWI1M2I1Njk0&hl=en&;pli=1

- Neuman, D. (2003). Research in school library media for the next decade: Polishing the diamond. *Library Trends* 51(4), 503-524.
- Noyce, P., Perda, D., & Traver, R. (2000). Creating data-driven schools. *Educational Leadership*, 57(5), 52-56. Owen, P. L. (2010). Evaluating teacher librarians. *Ohio Media Spectrum*, 62(1), 18-27.
- Pappas, M. L. (2008). Designing learning for evidence-based practice. School Library Media Activities Monthly,
- 26(5), 20-23.
  Pop T. (2005). Evaluation of the teacher librarian: Paviaty of the models. School Librarias in Canada, 24(2), 27.
- Pon, T. (2005). Evaluation of the teacher-librarian: Review of the models. *School Libraries in Canada*, 24(3), 37-43.
- Scholastic Research Foundation. (2008). *School Libraries Work!* Danbury, CT: Scholastic Library Publishing. Retrieved from http://www2.scholastic.com/content/collateral\_resources/pdf/s/slw3\_2008.pdf
- Shannon, D. M. (2009). Principals' perspectives of school librarians. *School Libraries Worldwide*, 15(2), 1-22. Smith, D. (2009). *Self-perceptions of leadership potential: A study of teacher-leaders educated to be school library*
- *media specialists who lead*. (Unpublished doctoral dissertation). Florida State University, Tallahassee, FL.
- Smith, D. (2010). Making the case for the leadership role of school librarians in technology integration. *Library Hi Tech*, 28(4), 617-631. doi: 10.1108/07378831011096277
- Todd, R. J. (2002a) Evidence-based practice I: The sustainable future of teacher-librarians. Scan, 21(1), 30-37.
- Todd, R. J. (2002b). Evidence based practice II: Getting into the action. Scan, 21(2), 34-41.
- Todd, R. J. (2006). School libraries and evidence-based practice: An integrated approach to evidence. *School Libraries Worldwide*, 12(2), 31-37.
- Todd, R. J. (2008a). A question of evidence. *Knowledge Quest*, 37(2), 16-21.
- Todd, R. J. (2008b). The evidence-based manifesto for school librarians. School Library Journal, 54(4), 38-43.
- Todd, R. J. (2009). School librarianship and evidence based practice: Progress, perspectives, and challenges. *Evidence Based Library and Information Practice*, 4(2), 78-96.
- Wayman, J. C. (2005). Involving teachers in data-driven decision making: Using computer data systems to support teacher inquiry and reflection. *Journal of Education for Students Placed at Risk*, 10(3), 295-308. doi: 10.1207/s15327671espr1003\_5

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