



Can You Find the Evidence-Based Practice in Your School Library?

By Gayle A. Geitgey and Ann E. Tepe

Ask any school librarian what type of data they collect

and nine times out of ten they will begin by discussing circulation statistics and numbers of students using the library. With the advent of No Child Left Behind, Adequate Yearly Progress, and school budget cuts, school librarians have had to become more data driven than ever before. Thinking in terms of student learning and achievement has brought about an interest in evidence-based practice (EBP). Our school library community began discussing EBP several years ago, but just recently more school librarians have begun applying the methods and tools of EBP. Perhaps you have been wondering what EBP is and where to begin. You may even be thinking that you already collect enough data and are probably doing EBP already. Before you decide you are an expert on EBP, try answering these questions:

- Can you state the learning outcomes of your school library?
- Are you able to show how your school-library learning outcomes impact student achievement through data from your state tests?
- Are you a dynamic agent of learning?
- If your principal asked you for evidence of how your instruction affects student learning, would you be able to produce the data?

All of these questions can be answered with a thorough knowledge of EBP.

In 2004, Drs. Ross Todd and Carol Kuhlthau and the Ohio Educational Library Media Association (OELMA)

conducted a study called "Student

Learning through Ohio School Libraries: The Ohio Research Study" (referred

to as the Ohio study). This groundbreaking study asked over 13,000 students how their school libraries helped them with their learning. With over 10,000 qualitative answers from the students, school librarians began to realize that collecting evidence and knowing what the students have to say about their learning needed to be the utmost priority. The ultimate question for librarians became, How do we collect this type of data, and what do we do with it once we have it?

The answer came from Dr. Todd. He has stated, "You will know when you have achieved evidence-based practice when you are able to provide convincing evidence that you know: 'What differences do my school library and its learning initiatives make to student learning outcomes?' and 'What are the differences, the tangible learning outcomes and learning benefits of my school library?'"

It is also important for anyone beginning the EBP journey to realize that there are three steps to understanding the workings of EBP:

- 1 Know the research that demonstrates how school libraries affect learning.
- 2 Mesh this knowledge with your own wisdom to build student learning.
- 3 Work with your own school library to collect evidence that shows you do make a difference (Todd, R.J. (Aug/Sept, 2003); School Libraries & Evidence: Seize the Day, Begin the Future. LIBRARY MEDIA CONNECTION).

Knowing the Research

Two of the stated outcomes of the Ohio study were helping school librarians develop EBP for their own school libraries and encouraging continuous improvement in effective library services that support academic content. In order to accomplish these goals, OELMA began an EBP professional development campaign. What was needed was an intensive program of training on how to identify learning outcomes, how to do evaluations that collect data showing the knowledge gained by students from those learning outcomes, and what to do with the evidence once it is collected. Kay Gerspacher, a high school librarian for Xenia Community Schools in Ohio mused that:

I've always believed that the best way to show that I'm doing a good job is to throw statistics at my administrators. My end-of-the year report was full of numbers: how many books were checked out, how many holds were placed, how many students came to the library from study hall, how many classes used the library. Of course I also included information about what happened in the library, the projects that students worked on, the teachers I collaborated with, and the special events that took place, but what I really counted on were the statistics, especially if I could show that we checked out more books this year than last, or we had more students use the library than in previous years.... The bottom line is student achievement. Dr. Ross Todd reminded me that a school librarian is first and foremost a teacher who works with students to increase their learning. I know that, but with all the clerical tasks that need attention, it's easy to let that fact take a backseat to more pressing demands. So, I've been reminded: my first and foremost job is to boost/help student achievement. But if student achievement is the most important outcome of my job, how do I show/prove that the library makes a difference?

"With the advent of No Child Left Behind, Adequate Yearly Progress, and school budget cuts, school librarians have had to become more data driven than ever before."

The school-library community has a wealth of research that verifies the value of school libraries and the impact they have on student achievement. The Lance studies have demonstrated key common findings that school library media specialists do make a difference to students using the school library. The Ohio study (Todd, Kuhlthau, OELMA, 2004) showed how school libraries help student learning by surveying over 13,000 students about seven constructs of help based on how the school library helped them (<http://www.oelma.org/StudentLearning/default.asp>). From this study, a model was developed that shows the school library as a dynamic agent of learning. The school librarian, working as a curriculum-partner leader, moves the instructional agenda forward from the informational to the transformational and ultimately to the formational, with the end result being the transformation of learning. Each of the zones of the Dynamic Agent of Learning Diagram can be used as areas to focus on for data collection. (see Dynamic Agent of Learning Diagram).

Meshing Knowledge with Wisdom

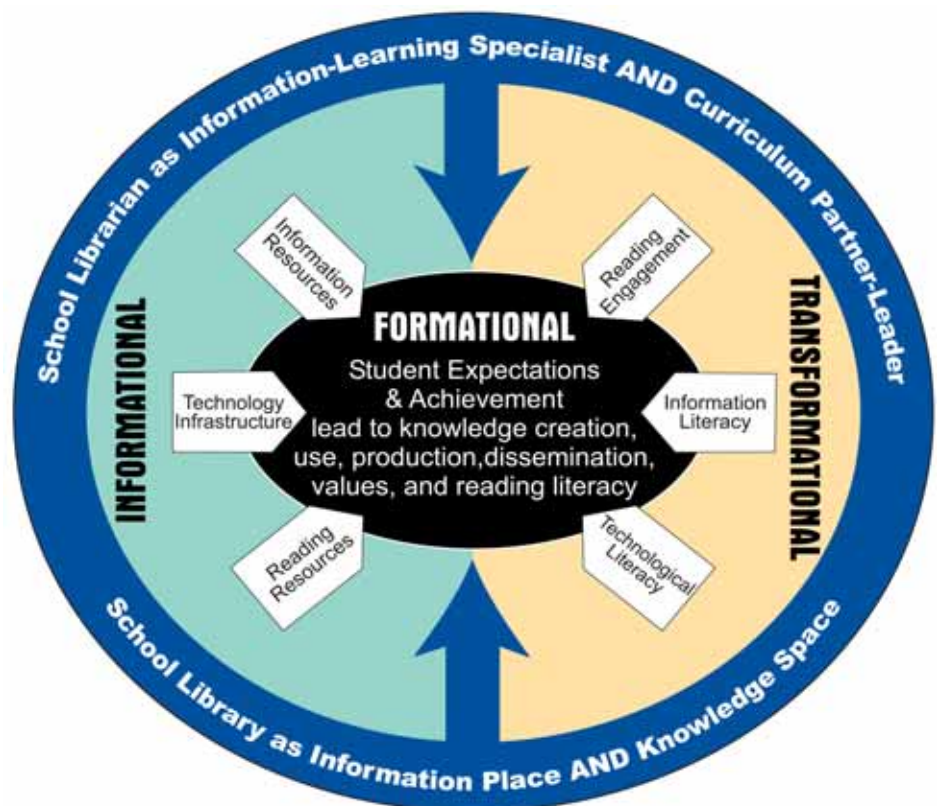
Next on the EBP journey is meshing your knowledge of the research with your own wisdom to build student learning. You might be puzzled about how to do this, but every school librarian has access to the student learning outcomes listed in *Information Power*. Also, practically every state has adopted academic content standards, which relate to what the students should know and be able to do. Using state-created academic-content standards in areas such as English language arts, mathematics, science, social studies, technology, foreign language, and fine arts can help the school librarian understand what instruction needs to be accomplished. If there are also state-designated school-library standards that focus on instruction, these are an added bonus for demonstrating EBP. An example of state library standards is the "Ohio Guidelines for Effective School Library Media Programs." Four of the guidelines are program oriented, and three are instruction oriented. This is where the "aha" moment occurs in EBP. In order to collect data about student learning,

the school librarian must realize that the data to be concerned with relates to instruction much more than program. School librarians have collected program data (collection statistics, patron-usage statistics, number-of-classes-in-the-library statistics) forever and a day. These program statistics, while valuable, do not show the learning outcomes of the school-library instructional program. What does is data that demonstrates what the students have learned. It is important to collect data directly from the students, which gives you, in the students' voices, how they feel about their learning. School librarians armed with their state academic content standards or *Information Power* standards are able to collaborate with their colleagues and design instruction where the students demonstrate what they know and are able to do. In addition, the librarian collects evidence that demonstrates how the library helped the student learn.

At this point in the EBP journey, it would be a good idea to stop and check the data available from your district's state-achievement tests. Most states are testing reading and math achievement at a variety of grade levels. Drilling down into your school's data about reading, for example, will provide you with an item analysis of how your own students scored on various sections of the test. Generally, these sections have a reference key to which academic content standards were specifically tested. This reference key allows the school librarian to find the correlation between the tested content standard and their school library standards. This information then arms school librarians with specific standards for focusing their collaboration effort. Rita Miller, a middle school librarian for West Carrollton City Schools stated:

I have learned to expand my knowledge of alignments and correlations of the academic-content standards with the library guidelines

Model of the School Library as a Dynamic Agent of Learning



(C) 2004 Ross J. Todd, Carol C. Kuhlthau and OELMA. Additional information about the Student Learning Through School Libraries research study may be found at <http://www.oelma.org/studentlearning.htm>.

and match them up with the achievement test my students take each year. Through this process, I learned more about the sixth-grade reading-achievement test and how to read and understand the outcomes. I feel more comfortable knowing what and how the achievement test aligns with content standards. This is the piece I was missing.

School librarians that have this knowledge will be able to focus their instructional work and collect data from the students on how they, the librarians, helped to improve that area of students' academic achievement.

Collecting the Evidence

This brings you to what Dr. Todd calls, "working with your own school library to collect the evidence that shows you do make a difference." Dr. Todd has suggested several techniques that can be used to collect the evidence. Examples of what some EBP techniques involve are comment cards, minute papers, rubrics, portfolios, and surveys. There are also several tools available that align with *Information Power* standards but also could be aligned with state academic content standards that a school librarian can use to begin the data collection work. The first tool is the student survey utilized for the Ohio study, which is available on the Ohio study's *Tools and Resources* CD. This instrument consists of the seven areas in which students were surveyed about school library "helps," including how the library:

- 1 Helped the student get information
- 2 Helped the student use information to complete school work
- 3 Helped the student with school work in general
- 4 Helped the student with computers at school, in the library, or at home
- 5 Helped the student with general reading interests
- 6 Helped the student when the student was not in school
- 7 Helped the student in general.

Within each of the seven areas there are four to five questions that relate to the constructs of help the library gives the student. Since EBP suggests that the school librarian use a variety of techniques to check how students demonstrate that the library has helped fulfill their academic needs, the questions

from the Ohio study's student survey can be very useful. The survey gives the school librarian a starting point for asking the students questions about what they learned after library instruction. The Ohio study's student survey does not need to be used in its entirety. Feel free to pick and choose questions from one area or all areas that relate to what you want to learn about how your library instruction has affected students. Also, the questions can be altered to fit your situation.

Another free data collection tool is Tools for Real-time Assessment of Information Literacy (TRAILS), developed by Kent State University's Institute for Library and Information Literacy Education (ILILE). Located at (<http://www.trails-9.org>), this tool was created based on *Information Power* and the Ohio Academic Content Standards. It is a survey of information-literacy knowledge. Although designed for usage with ninth-grade students, students in grades 7-12 can utilize the survey. The tool is Web based and can be used with a class or a grade level as a pre- and post-survey of knowledge of information literacy. The data reported from this tool gives a school librarian a clear pre- and post-survey picture of student learning.

If you are looking for training on EBP methods, the OELMA, in association with Dr. Ross Todd, has designed an EBP training module for the professional development of school librarians. This training module is called *Can You Find the Evidence-based Practice in Your School Library?* It is a one-day workshop that teaches the steps to use in developing a solid understanding of EBP. This module is conducted as a workshop or can be purchased for training by a district (contact info@oelma.org or (<http://www.oelma.org>) for more information). School librarians have a growing number of tools in their toolkit to help them collect evidence related to their instruction and to student learning, but it is also important to plan how to present the collected data.

Presenting the Evidence

Taking the data collection one step further, it is extremely important to have a plan for how to share the collected data with your colleagues, your principal, or your school board. It is truly important not to keep the data to yourself, and remember never to just drop the data in front

of your staff or principal. Early in the data-sharing process, begin by telling your colleagues about the nature of your EBP project, and then continue to supply them with the data from the students. Be sure to emphasize the collaborative nature of the project and the classes you worked with to collect the evidence. Don't hide the negative data, but rather show how this will help you make changes. Be sure not to use library lingo that no one but you will understand. Dr. Todd often reminds us that not everyone lives in "Libraryland," so it is important that we communicate with teachers and administrators in terms they understand. One helpful data analysis resource is the Ohio study's *Tools and Resources* CD, which includes articles written by Dr. Todd.

As you ponder how to begin your EBP experience, don't forget the major questions that drive EBP: What differences do my school library and its learning initiatives make to student learning outcomes? and What are the differences, tangible learning outcomes, and learning benefits of my school library? Before you start your data collection, lay out the data you have collected in the past and think about the new data you would like to collect and how this might be accomplished. Think about how you might use this data to demonstrate the true impact you and your school library's instructional program have on student learning. Keep in mind that "school libraries are all about student learning, and you are dynamic agents of learning." ■

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Collecting and Documenting Evidence of Best Practice

by JUDI MOREILLON

THE CURRENT AGE of accountability requires all educators to be responsible for collecting evidence that demonstrates improved student learning. It is, therefore, also imperative for school librarians to show how library instruction makes a difference. In the past, librarians focused almost exclusively on quantitative data to describe the value of the library program. Monthly and annual reports traditionally cited the number of books and other materials in the physical school library collection and circulation statistics for those items, the number of students and/or the number of classes that visited the library in each reporting period, and the number of literacy events held. While these numbers can indicate the relative strength of the library program, they do not necessarily provide accountability or indicate the quality of the librarian's teaching.

EVIDENCE FOR PRACTICE: A BEST PRACTICE FOR PLANNING INSTRUCTION

In order to demonstrate value in terms of student learning, it is imperative that school librarians follow the tenants of evidence-based practice. Evidence-based practice involves three phases: evidence for practice, evidence in practice, and evidence of practice (Todd 2009). School librarians who consider these three components as they coplan for instruction can become teacher leaders with exemplary practices. These three practices can improve student learning while positively influencing the instructional practices of colleagues.

School librarians should initially identify which research evidence in the fields of education, technology, or library science serves as the foundation of instruction. They must be aware of the research on which instructional initiatives are based in their schools, districts, or state. The work of Robert Marzano and his colleagues provides a case in point. These researchers studied the impact of educators' use of various

instructional strategies on students' standardized test results. They determined that nine strategies helped learners make the greatest gains:

identifying similarities and differences, summarizing and note taking, reinforcing effort and providing recognition, homework and practice, nonlinguistic representations, cooperative learning, setting objectives and providing feedback, generating and testing hypotheses, and questions, cues, and advance organizers (Marzano, Pickering, and Pollock 2001; Dean, Hubbell, Pitler, and Stone 2012).

School librarians who integrate and intentionally teach these strategies are basing their instruction on evidence for practice. It is possible to develop repertoires in teaching these strategies in order to improve student learning and influence teachers' teaching. For example, many educators rely heavily on tools such as K-W-L charts and Venn diagrams to support students in identifying similarities and differences. Scaffolding student learning with print and electronic category matrices and webs increases the types of graphic organizers offered learners. Teaching students to recognize and create metaphors and analogies further develops this ability. Ultimately, the goal is for students to have a wide variety of scaffolds in their learning toolkits so that they can best meet the requirements of the learning task.

COLLECTING EVIDENCE IN PRACTICE: A BEST PRACTICE OF TEACHING

It is very difficult to tease out the school librarian's unique contributions to student achievement from summative assessment data. Many of the skills taught, such as developing meaningful inquiry questions, evaluating websites, or using information ethically, are not tested on standardized tests. In addition, while the school librarian may be the only educator in the building explicitly teaching specific skills such as

note making (determining importance), other educators are requiring these processes in assignments, and students are complying, more or less, depending on their prior knowledge. Student achievement in these areas, therefore, does not necessarily reflect the school librarian's teaching.

School librarians can use many different methods for collecting achievement data. Some librarians use tools that have been developed specifically for the library field, such as the Trails9 information literacy skills assessments (<http://www.trails-9.org>). Such tools can be used as benchmarks for identifying various strengths and weaknesses in students' information-seeking skills. Others use locally developed pre- and post-tests to measure students' learning outcomes. Still others use student self-assessments as components on anticipation guides, admit slips, and exit tickets, and students gauge their own pre- and post-instruction skills, such as the ability to make inferences or to determine an author's authority. Allison Zmuda's article "Where Does Your Authority Come From?" offers additional ways to collect data (2006). Another method uses a form such as the one provided in "Use This Page," page 59 of this issue of *SLM*. This form provides a way to keep records of each lesson/unit cotaught. This allows for a point of follow-up with coteachers on the success of the lesson or unit and provides data that can be compiled for personal use and for sharing with administrators and others.

DOCUMENTING AND SHARING EVIDENCE OF PRACTICE

Once it has been determined if students have met the targeted learning outcomes, school librarians and coteachers need to determine the next steps in instruction. Is there a need to reteach a small group of students or the entire class? Would it be best to give students more opportunities to practice the skills being measured before they transfer them to another content area or context? Using data to inform the next steps in teaching is a best practice for continuous improvement.

School librarians are wise to use or develop a form that helps them reflect with their teaching partners on the relative success of their coteaching efforts (Zmuda 2006). These forms can be completed at the end of cotaught lessons or units of instruction; they provide evidence of practice. These forms can include the educators' observations and other data related to student achievement. Educators can note the effectiveness of specific research-based instructional strategies and make suggestions for improvement. They can comment on the benefits of coteaching and note ideas for strengthening their collaborative work. In addition, the forms can include the usefulness of library and Web-based resources for helping students meet the learning outcomes along with suggested

titles to be added to the collection for the next time the lesson or unit is taught. Combined with student learning data, these forms provide a complete picture of the depth of learning and teaching in which the school librarian is engaged.

A BEST PRACTICE FOR CONTINUOUS IMPROVEMENT AND ADVOCACY

Once these data are collected and analyzed, it is essential that educators use this information to advocate for instructional partnerships. This information should be shared with school administrators as soon as possible after the instructional intervention. Ideally, coteachers should schedule a joint meeting in which the principal, classroom teacher(s) or specialist(s), and the school librarian discuss student learning outcomes, teaching and assessment strategies, and the next steps for instruction.

As Allison Zmuda and Violet Harada note, "Informal leaders are better suited to coaching the work at the classroom level based on identified learning principles and practices, whereas formal leaders are better suited to the enforcement of such principals and practices" (2008, 31). As teacher leaders, school librarians are perfectly positioned to take a leadership role in enacting exemplary collaborative instructional practices with colleagues to continuously improve teaching and student learning. With evidence-based practice, school librarians can lead the way.

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See "Coteaching Lesson/Unit Plan Evaluation and Reflection" in this month's "Use This Page" (page 59) for a sample form that provides a way to keep records of each lesson/unit cotaught.

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