
Ann E. Tepe
INFOhio Special Projects, Columbus, Ohio, USA

Gayle A. Geitgey
Media and Technology Services, Urbana City Schools, Urbana, Ohio, USA

Student Learning Through Ohio School Libraries: The Ohio Research Study, published in 2004, represents one of the largest studies to date that has sought to identify how school libraries affect student learning. Reflecting on the nature and scale of this study, the reader may wonder why Ohio, a state in the central United States with 3,913 public elementary, middle, and high schools, would consider conducting a statewide survey to establish how school libraries benefit learning. This question has several answers. Until 2000, schools across Ohio were required to have a licensed school librarian. However, in 2000, changes in the operating standards for school libraries introduced by the Ohio Department of Education meant that the requirement to have a licensed school librarian became subject to the interpretation of the local school superintendent, possibly allowing for school librarians to be eliminated. This change placed greater emphasis on the need for school librarians to be able to articulate their role in relation to student learning and to demonstrate more concretely the outcomes of their school library program through the provision of evidence. School library leaders in Ohio also saw benefit in a statewide study not just to be part of the growing list of states doing research in the area of school libraries, but to provide a statewide basis for continual improvement of the learning opportunities to be afforded to students through the provision of quality libraries.

In the light of important statewide studies undertaken by Lance and colleagues, including Colorado, Texas, New Mexico, Alaska, and Pennsylvania, many professional voices in Ohio had been recommending a study for a number of years. As the professional organization for school librarians, the Ohio Educational Library Media Association (OELMA) had been exploring the need for an Ohio study since 1998. In addition, the Library Services Technology Act (LSTA) Advisory Council of the State Library of Ohio had determined that an Ohio study was a high-priority goal for the use of LSTA funding. School librarians across the state continued to ask when an Ohio study would be conducted. During these conversations, a new organization was formed called Leadership 4 School
School Libraries Worldwide

Libraries. This group consisted of the Ohio Educational Library Media Association, INFOhio (the K-12 information network for Ohio), the Ohio Department of Education, and the State Library of Ohio. Leadership 4 School Libraries was a unique collaboration between all four school library stakeholders. Given the changes in the Ohio educational landscape, this group felt the time was right in the school community to begin the research for an Ohio study of school libraries and the benefits that result for student academic achievement and the effect on learning.

Ohio had joined states such as Texas, Virginia, and Oregon that had moved to standards-based education and accountability through demonstrated evidence of learning. At this same time, the Ohio Department of Education had begun to release the Academic Content Standards for English and Mathematics, which embraced alignments to information literacy. So with the advent of the new academic standards documents, Ohio school library personnel found themselves better positioned than ever to have a direct effect on curriculum decision-making processes, the improvement of literacy skills, and the integration of information literacy into the curriculum. Once the decision was made to apply for an LSTA grant from the State Library of Ohio, Leadership 4 School Libraries began to discuss the approach to take for the study that would best serve Ohio and who would undertake the research. The opening of the Center for International Scholarship in School Libraries (CISSL) at Rutgers, the State University of New Jersey, with its specific scholarly focus on understanding the relationship between school libraries and student learning, took place at this time. CISSL was seen to be able to provide the research infrastructure necessary to undertake a project of the scale envisaged by Ohio. CISSL’s researchers Ross Todd and Carol Kuhlthau, whose research focuses on information literacy, information seeking and use, and emphasis on learning through school libraries, were invited to consider undertaking the research.

Working with the CISSL researchers, the Leadership 4 School Libraries team began the process of securing grant funding to undertake the research. At this point in the process, Leadership 4 School Libraries hired a project director and an assistant project director. It was critical that all information disseminated about the project be managed consistently. The project directors were responsible for writing the grant proposal submitted to the State Library of Ohio for funding. This was a collaborative process of carefully considering a range of possible approaches in the context of Ohio’s educational climate and matching these options with funding levels, timelines, and infrastructure requirements. Once the project funding was secured, other responsibilities of the project directors included working directly with the researchers, managing the Ohio side of the entire project, coordinating with Leadership 4 School Libraries and the two panels created to assist with the research, and brainstorming with the project team to assist the researchers to develop the research instruments and the protocols.
for undertaking the study. The project directors were also responsible for designing and implementing the application process that schools would use to apply for participation in the research study and coordinating all the timelines and schedules. The project directors also worked directly with the selected schools to maintain the ethical research process required by Rutgers University.

As the Project Team met and discussed the scope of the research, we saw an exciting opportunity for the State of Ohio to lead the US in the provision of significant findings that could show the multidimensional relationship between an effective school library instructional program and student learning outcomes. The approach taken sought to build on the important research currently in existence that has clearly established the relationship between well-staffed, well-funded school libraries that have active information literacy instructional programs and statewide test scores. There is no doubt that knowing how the school library contributes to improved test scores is important. This cannot be overestimated. However, a key question that challenged the Ohio team was What else does an effective school library do? How else does an appropriately staffed school library with a dynamic information literacy program affect student learning, and once we knew this, what could we do about it in Ohio to provide school librarians with the knowledge and skills needed to improve learning through the school library? We saw the study providing the State of Ohio with an understanding of the specific and complex multidimensional dynamics of student learning, learning outcomes, and how these dynamics could be enabled through the school library. This would be important for professional action and change.

We saw a number of benefits for all education stakeholders emerging from the Student Learning through Ohio School Libraries research. In particular, we believed that the study could:

- provide statewide data on best practices and promising practices in school librarianship;
- help us identify pedagogy for teaching and learning in information-based schools;
- encourage continual improvement in effective library services that support academic content;
- identify professional development opportunities for reflective practice in order to build effective school library programs;
- provide a framework for dialog among parents' communities, school boards, administrators, school librarians, and teachers on the value of effective school libraries;
- identify how students benefit from school libraries;
- help school librarians develop evidence-based practice for their own school library; and
- confirm for school librarians that their role and school libraries affect student achievement and lifelong learning.
The grant was approved for LSTA funding by the State Library of Ohio in October 2003. With this approval, the researchers, the project directors, and Leadership 4 School Libraries began the work of planning how to conduct the research.

While Leadership 4 School Libraries was submitting the proposal, the Ohio Department of Education was developing new Ohio Academic Content Standards (http://www.ode.state.oh.us), which focused on the overarching goals and themes for the education of Ohio's children. These standards represented what all students should know and be able to do. The primary areas for the Academic Content Standards are English/language arts, mathematics, science, social studies, technology, foreign languages, and the arts. In each of the Academic Content Standards are standards, benchmarks, and indicators that reference information literacy instruction. In conjunction with the new standards, the Ohio Department of Education had formed an Effective School Library Guidelines Committee that was currently working to develop effective guidelines for school libraries. With the advent of state academic content standards, school library guidelines, and local report card ratings for districts, Ohio had all the instructional tools in place to create a benchmark study of how school libraries work for the students' benefit and help to improve learning. Currently, the Effective School Library Guidelines are being delivered to school districts in Ohio. These are divided into four program guidelines (library management; collection development and curriculum; literacy and reading support; and library-based technology) and three instructional guidelines (information literacy, technological literacy, and media literacy). These guidelines represent a standards-based approach to school library programs. Previously, Ohio library guidelines focused on resource-based education and the school library media specialist as a resource provider. Now the Ohio Library Guidelines view the school librarian as an educator and dynamic agent of learning. The benchmarks identified in the Ohio Library Guidelines became the foundation for developing criteria to help determine the effectiveness of the schools applying for participation in Student Learning Through Ohio School Libraries.

In Ohio when this study was conducted, public school districts received ratings based on their proficiency scores, attendance levels, and graduation rates. These ratings, which range from excellent to academic emergency, provided one approach to determining quality schools in Ohio. It was determined that only excellent and effective schools with school libraries staffed by licensed library media specialists would qualify as participants in the study. In addition, the project team used the criteria specified in the Ohio School Library Guidelines as the basis for selecting the participating school libraries. An International Advisory Panel comprising leaders in the field of school librarianship was created to review the school selection criteria, and their input and critical feedback enabled us to refine and specify the criteria. The additional criteria shown in Figure 1 were used in selecting the participating schools.
Selection Criteria

Any school (building) in Ohio may be selected for the research project if it meets the established criteria.

Minimum requirements:

✔ The school building includes at least one of the K-12 grades.
✔ The building library program is managed by a full time, certified library media specialist
✔ The school library media specialist and the library program are instrumental partners in a systematic information literacy instruction program taught within the school.
✔ A physical school library exists within the building
✔ A 2002 Ohio School District Report Card rating with supporting data must be available.
✔ The school must have a building IRN registered with the Ohio Department of Education.

The following areas (adapted from the January, 2003 draft of the Ohio Effective School Library Guidelines) will be used to evaluate the prospective school with regard to selection for the research project.

Criterion 1: (School Goals and Leadership)—Effective school library media programs support the mission and continuous improvement plan of the school district.

Criterion 2: (Curriculum)—Effective school library media programs support and enhance the curriculum and are an integral part of teaching and learning.

Criterion 3: (Information Literacy) (Including technological and media literacies)—Effective school library media programs provide information literacy skills instruction.

Criterion 4: (Reading)—Effective school library media programs promote and encourage reading for academic achievement and life-long learning.

Criterion 5: (Technology Resources)—Effective school library media programs provide, integrate, and utilize a technology rich environment to support teaching and learning.
Following establishment of the selection criteria, school nomination forms were produced and disseminated to all schools across Ohio. Schools were asked to submit documentary evidence of meeting the criteria. In parallel with this process was the establishment of the Ohio Expert Panel, a group of experts from around the state who were familiar with school libraries. The Ohio Expert Panel, drawn from leaders in school library education and service provision, were responsible for examining the documentation provided by the schools and to make recommendations to the project team about potential participants in the study. This was a careful, time-consuming, and necessary process built on the principle of judgment sampling. The expertise and local knowledge of the Ohio Expert Panel enabled a critical analysis of the documentation and the ultimate selection of 39 schools considered to have effective school libraries. These schools represented all areas of Ohio and grade levels 3-12.

The leadership team provided critical feedback to the researchers during the development of the data-collection instruments and the pilot testing of the instruments. The decision was made to use an online data-collection process for two reasons. It was hoped that an electronic survey would encourage more students to participate in the study, and also, given the potential for a large sample set, it was expedient to collect data electronically to avoid the time-consuming and costly process of transcribing hand-written completed surveys. This necessitated an extensive technical infrastructure: developing the database and submission protocols; testing the efficacy, stability, and security of the electronic collection process; and providing a technical support team for the duration of the open data-collection period. This complete technical program and its support were provided by the Office of Information Technology in the School of Communication, Information and Library Studies at Rutgers University. All schools participating in the study were provided with a hotline to immediate technical support in the event of any technical problem arising during the data-collection period. We were fortunate that only minor technical difficulties arose. No down time of the server was experienced. The only difficulty encountered was that some computers used for completing the survey in one school were not cookie-enabled, and this was quickly resolved with no further problems surfacing for the duration of the data-collection period.

Surveys were in place in the selected Ohio schools in April 2003, and data collection was completed by mid-June 2003. It was impossible to understand how much effort it would take the school librarians and all the students to complete the survey process. The school librarians had a large responsibility to coordinate the data collection in each school. They were given detailed protocols and procedures and had access to the project managers and researchers to deal with any aspect that arose in each school. Our original goal was 3,000-4,000 student responses, but early in the process, we knew we would surpass this goal. As we approached the 10,000-response mark, we began to realize the effect this study would have on sharing how students felt
about their school libraries. Closing of the surveys in mid-June was followed by an intensive period of data analysis and compiling the findings. The *Student Learning Through Ohio School Libraries* results were released in October 2003, and the effect of the results has exploded since then.

A major question we are often asked is What is Ohio doing now with the Study? Quite honestly, completing the Ohio Study was a huge effort on the part of all stakeholders, particularly with the relatively short timeline of the study, but sustaining its effect is an even greater effort. Since the release of the findings, stakeholders in Ohio have met on several occasions to ensure that all the goals of this study are realized, particularly in terms of improving practice in all the state’s school libraries. Currently in Ohio:

- OELMA promotes the study through publications including a Fact Sheet, a brief Summary, full documentation of the results, charts and models, a PowerPoint presentation, and other materials all available at the OELMA Web site (http://www.oelma.org).
- OELMA has produced a Tools and Resources CD that contains all the study documentation and survey instruments so that local school librarians can use the Ohio Study to improve their programs.
- OELMA is continuing efforts to implement the study through several professional development modules, the first of which is focused on evidence-based practice.
- Leadership 4 School Libraries continues to meet and focus on how to use the Ohio study to improve school libraries in Ohio. This group is looking at the major findings of the study and is currently assigning specific areas to each group to be sure that Ohio schools begin to implement the paradigm shift to dynamic agents of learning.
- OELMA has sponsored several conference presentations to make other Ohio stakeholders aware of the findings of the Ohio Study and to educate these stakeholders on the benefits to student learning when an effective school library is in place.
- OELMA and INFOhio sponsored a legislative day at the Ohio State House in April 2004. The purpose of this event was to inform the state legislators of the study and to raise the legislative understanding of the benefits of strong school libraries.

We look forward to the story continuing to unfold in Ohio, and particularly for each school in Ohio and beyond, to build on the findings and to implement actions to ensure that school libraries play a vital and visible role in helping students meet their learning expectations and achieve significant learning outcomes.

Author Notes

Ann E. Tepe served as the Project Director for the Ohio Research Study. She is INFOhio Special Projects Consultant and liaison for the Hamilton/Clermont Cooperative Association. Her experience includes 25 years in Ohio as a teacher, library media specialist at all grade levels, and district library direc-
tor, and Curriculum Director for major software company. Currently, she is directing INFOhio’s Parent Project to help parents use INFOhio’s electronic resources at home with their children.

Gayle Geitgey served as the Assistant Director for the Ohio Research Study. She is Director of Media and Technology Services for the Urbana City Schools in Urbana, Ohio. She is also an adjunct instructor for Wright State University and a workshop presenter on young adult literature and information literacy skills. She has served on the Ohio Department of Education Technology Academic Content Standards Advisory Committee, the Effective School Library Guidelines Committee, and the Library Alignment Team and is a past president of the Ohio Educational Library Media Association.