Evidence Based Library and Information Practice

Evidence Summary

School Libraries Play an Active, Transformational Role in Student Learning and Achievement

A review of:

Todd, Ross J. "Student Learning Through Ohio School Libraries: A Summary of the Ohio
Research Study." Ohio Educational Library Media Association
15 Dec. 2003. Ohio Educational Library Media Association (OELMA), 2004. 15
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<http://www.oelma.org/StudentLearning/documents/OELMAResearchStudy8page.pdf>.

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Abstract

Objective – This study explored links
between school libraries and student
learning outcomes that were defined in a
multidimensional context, using data
provided by the students themselves. The
researchers examined learning outcomes
that reached beyond the existing
correlations of school library services and
standardized test scores. Insight was
provided into the interactions between
students and school libraries that affect
student learning. An overarching goal of the
study was to establish ongoing dialogue to
focus on evidence based practices that may
lead to continuous improvement in school
library services and to provide the basis for
further research.

Design – Web based survey.

Subjects – Participants were 13,123 students
in grades 3-12 and 879 faculty at 39 schools
across the state.

Setting – Ohio Public school libraries.

Methods – Thirty-nine effective school
libraries, staffed by credentialed school
librarians, were chosen through a judgment
sampling process, using criteria based on

Ohio Guidelines for Effective School Library Media Programs. The guidelines are aligned to academic content standards, assessments, resources, and professional development.

Two web based surveys were used to collect quantitative and qualitative data from students and faculty:

1. The Impacts on Learning Survey, composed of Likert scale responses to 48 statements and an open-ended critical incident question for students.
2. The Perceptions of Learning Impacts Survey was a similar survey for faculty.

Survey questions were based on Dervin's theory of information seeking that advances the idea of 'helps' as the constructive process of bridging gaps in information use that lead to new knowledge or making sense (sense-making) in relation to a perceived information need (Todd and Kuhlthau). The term 'helps' includes both inputs (help that the school library provides in engaging students in learning) and outputs (learning outcomes of academic achievement and active agency in the learning process). The survey statements included a

combination of conclusions based on selections from school library research studies, and the Information Literacy Standards for Student Learning from the American Association of School Librarians' Information Power: Building Partnerships for Learning.

The two surveys were used to triangulate multiple sources of data to illustrate the "helps" provided by the school library to student learning. Students were also given the opportunity to describe "helps" in their own words in an open-ended critical incident question.

Main results – The data showed that the selected effective school libraries were perceived as providing 'helps' in dynamic ways that appeared to have a transformative effect on student learning. School libraries and librarians were viewed as having an active role in the learning process. Of the students surveyed, 99.4 % believed that school libraries helped them become better learners. The results were grouped into seven blocks of 'help' concepts that frame the contributions of the school library and the school librarian to student learning (Table 1).

	Help Concept	Summary of Survey Statements
Block 1	Find and locate information.	"How helpful the school library is with getting information you need."
Block 2	Use information to complete school work.	"How helpful the school library is with using the information to complete your school work."
Block 3	School work in general.	"How helpful the school library is with your school work in general."
Block 4	Using computers in the library, at school, and at home.	"How helpful the school library is with using computers in the library, at school, and at home."
Block 5	General reading interests.	"How helpful the school library is to you with your general reading interests."
Block 6	Outside school	"How helpful the school library is to you when you are not at school."
Block 7	General school aspects/reactions	"Now, some general things."

Table 1. Todd's Help Concepts

The study noted that perceptions of the effect of school libraries are strongest for elementary students, and perceptions of the effect decrease as students move through middle and high school. Comments from students indicate that mastery of information skills that lead to independent learning may contribute to the perception that the library is not as strong a 'help' in later school years.

In ranking the mean scores of the block concepts, the effective school library ranked strongest as a resource agent and technical agent, to support student research and projects with both print and non-print resources. The qualitative data further clarified student perceptions that the library contributed to individualized learning, knowledge construction, and academic achievement. Instructional interventions that benefited from contributions by the librarian included conducting research effectively; identifying key ideas; analyzing, synthesizing, and evaluating information; and developing personal conclusions.

In comparing student and faculty data, there was consistency in the perception of value in the top three conceptual groups of "helps": libraries as resource agents, as agents for information literacy development, and as agents for knowledge construction.

Conclusion – The data analysis illustrated that school libraries were actively involved in student learning and were perceived as important factors in student learning and achievement by both students and faculty. Consistency throughout the sample showed perceptions of multiple effects of school libraries in facilitating student learning for building knowledge.

Student comments and survey results showed that students perceived the library as providing strong support for reading for curriculum and informational needs and as

less helpful with regard to individual reading for pleasure or personal pursuits. The study speculates that perhaps the emphasis on academics and test-oriented schooling may leave students little time to pursue independent reading interests during school hours.

The study identified factors for effective school libraries: informational, transformational, and formational elements. These factors may be used as building blocks for shaping practices that help effective school libraries bring about student achievement.

- **Informational:** Resources, technological infrastructure, and reading resources.
- **Transformational**: Information literacy, technological literacy, and reading engagement.
- **Formational**: Knowledge creation, use, production, dissemination, values, and reading literacy.

The visual model of the factors for effective practice and their relationship to student outcomes will be of particular help to practitioners. (Todd and Kuhlthau 23)

Commentary

The methodology of this study was a departure from earlier research that used statistical modeling to draw correlations between student achievement and the presence of school libraries (Lance, Proof of the Power). The qualitative survey was used to gather data from the students themselves and to define and illustrate interactions between students and school librarians, providing a starting point for future studies.

In an interview with Lance for *School Library Media Research*, Callison noted that the surveys used in this study assessed only

positive responses to the perceptions of help. Todd and Kuhlthau had earlier discussed their choices in constructing the Likert scale survey in the report findings (4), clarifying that although they considered using a negative response (rather than the ""does not apply" option), they ultimately decided that their study was not about whether school libraries help students, which had already been established by repeated statewide studies that had determined a positive correlation between the presence of school libraries and student achievement (Lance, Proof of the Power), but was rather an attempt to look more deeply at how school librarians actively affect the learning process. They chose to use the surveys to focus closely on best practices by school librarians to "understand much more richly how effective school librarians do help students by identifying and elaborating the "helps" construct" (Todd and Kuhlthau 4), and illustrate the multidimensional effects of school librarians as active agents in the learning process.

Although the researchers described the student sample as being large in comparison to other school library research studies, they did not provide details about how the data was collected, other than to say that the survey was available online. Other data not given in the report was the overall size of the student population in the 39 schools, the percentage of total students who responded to the survey, and the number of student respondents who were regular library users.

The enormous strength of the study is that it very effectively achieved its stated objective to provide qualitative, descriptive evidence of the multidimensional effects of interventions by school librarians. It offered insight into the activities that build knowledge, contribute to student learning, and affect student achievement. The results provide scaffolding for further research. Devising methods to empirically measure

the effect on student outcomes is a next logical step. Research to quantify the measurable impact of the 'help' constructs may provide data that encompasses the broader dimensions explored by the researchers, and may at the same time provide data that aligns and substantiates the narrower measures of standardized tests.

The identification of a model to use in the pursuit of continuous improvement based on best practices is a useful tool for practitioners. The visual representation of the Essential Learning Foundations (Todd and Kuhlthau 23) for informational, formational, and transformational building blocks is an effective way to help translate the research results into daily practice. The model also serves as a framework for practitioners and future researchers to design investigations into the effect of school libraries on student learning outcomes.

Defining the specific interactions between students and librarians that promote knowledge building provides a perspective for the learning potential in school libraries, and a broader, substantial definition of school librarians as partners in the educational process.

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