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Enough Already?: Blazing New Trails for School Library Research

An Interview with Keith Curry Lance, Director, Library Research Service, Colorado State Library & University of Denver

Interview questions and discussion by Daniel Callison, Professor, Indiana University

A call for studies with convincing evidence derived from investigations that are experimental in

What have we done so far?

The basic question tackled in school library impact research to date have been if school libraries or librarians make a difference? And, if so, how much and how? At least in recent years, more attention has gone to measuring the impact of school libraries than to explaining how that impact is achieved; but, the focus is beginning to move from the former to the latter. Four studies, or sets of studies, illustrate the formative history of this line of research.

The Gaver Study

In 1963, Mary Gaver of Rutgers University reported a quasi-experimental study involving 271 schools in thirteen states. She compared the test scores of students in schools with classroom libraries only, those with centralized libraries run by non-librarians, and those with centralized libraries run by librarians—with predictable results. Students in schools with centralized libraries managed by qualified librarians tended to score higher than their counterparts in schools without centralized libraries or qualified librarians. In discussing her findings, Gaver noted the many obstacles to conducting a compelling experimental study on a sufficiently large scale (statewide vs. one or two schools, schools vs. students) and involving a persuasive number of control variables (i.e., other school as well as community conditions). The sheer volume of the data involved made it difficult to conduct large-scale studies, and the difficulty of gaining access to room-sized university mainframe computers (then usually monopolized by mathematicians, astronomers and physicists) prohibited the consideration of numerous control variables. Yet, she could see what needed to be done; the computing resources (ubiquitous desktop computing and user-friendly statistical analysis software) simply did not exist to achieve it.

SLMR Questions and Comments A

The School Match Episode

Two and a half decades later—and after a decade (the 1980's) in which virtually everything published on the topic was a review of the literature from the 1960's, and '70's—new life was breathed into school library impact research almost by accident. In the summer of 1987, William L. Bainbridge of SchoolMatch, a commercial vendor of school data—primarily to relocating parents concerned about school quality—was interviewed on National Public Radio's *Weekend Edition*. Once it was established that SchoolMatch had a treasure trove of data about the nation's schools and students, the interviewer asked what single factor exerts the greatest influence on students' school performance. Without hesitation, Bainbridge identified spending on the school library. This off-the-cuff answer to an unexpected question was not documented by any published study, rather it was an observation based on in-house analysis at SchoolMatch. A flurry of publicity ensued as the news of this claim was published widely in the professional literature of librarianship, beginning with the American Library Association's own magazine, *American Libraries*.

SLMR Questions and Comments B

Indeed, across the "Colorado"-style studies that included this critical analysis, the two most consistent predictors of test scores, when all potential predictors were considered, were the prevalence of students from poor households and the level of development of the school library. Many are surprised that other often-noted factors—such as the teacher-pupil ratio, per pupil school expenditures, and adult educational attainment—did not weigh in more heavily in these analyses. [I] speculate that the probable reason they did not is that such factors are more likely to g 7.44 0 Tdss

this research, they now spend more time planning collaboratively with classroom teachers (63 percent), teaching information literacy skills to students (62 percent), and identifying materials for teachers (60 percent). Almost half of respondents (48 percent) also reported spending more time teaching collaboratively with classroom teachers.

School library programs have also been affected in substantial ways by the sharing of this research. Almost half of respondents report that, as a result of sharing the findings, their students now have access to more electronic information (48 percent) and larger collections (45 percent). Two out of five respondents report that classes and other groups now visit their school libraries more frequently (40 percent) and on more flexible schedules (39 percent). More than a third of respondents (37 percent) report increased library visits by individuals.

SLMR Questions and Comments H

Why is it time to move on to something new?

If replicating the Colorado studies has been so popular and replicating the Ohio study seems to be the obvious next step, why is it time to change the course of school library impact research? There are several

SLMR Questions and Comments I

Clearly, the political context of contemporary school library research—like all education research—demands stronger cau

schools receiving the peer-to-peer training involving principals, teachers, and librarians could have been offered that training randomly, or, in the worst case scenario, if schools that volunteered for Library Power could have been matched on key control variables, such as socio-

How can those answers make a difference?

How can answers to the questions suggested above make a difference? Several things might be done differently, or better, to maximize the reach and outcomes of future school library impact research.

In disseminating the results of future studies, high priority should be given to reaching teachers, administrators, and public officials as well as school librarians and school library advocates. Reaching these audiences will depend on the success of efforts to publish books and articles in their professional press and scholarly journals. Similarly, when future findings are ready to be shared, they should be shared at conferences attended by teachers, administrators, and public officials. While pursuing such a strategy for reaching key decision-makers and supporters will require tremendous effort, it could yield very dramatic results at local, state, and national levels.

As long as the current regime is in place at the U.S. Department of Education, it will be important to share future studies in such a way as to infiltrate the No Child Left Behind movement. One very substantial way to do that would be by submitting future studies for review by WWC, a Web site run by the department's Institute for Education Sciences. Everything submitted to this clearinghouse is eventually rated as meeting their evidence standards—with or without reservations—or, somewhat ominously, as not meeting them. Thus, extreme caution is advised in pursuing this strategy. The potential payoffs are great, but so are the risks. Before deciding to submit a future study report to WWC, it is recommended that a thorough methodological review be solicited from a competent authority.

Perhaps the most strategic option, albeit a long-term one, is to infiltrate schools and colleges of education. Most school administrators and teachers never had to take a course, or even part of a course, that introduced them to what constitutes a high-quality school library program. Add to this the age demographics of many of these individuals, and it is apparent that some of them have no useful frame of reference for school libraries. Part of working with administrator and teacher preparation programs to advocate for stronger school libraries should be an effort to persuade them to introduce some required content about school libraries, including an introduction to the extant research about school library impact.

SLMR Questions and Comments K

What increases or decreases our chance to make a difference?

Many factors are at work in determining what increases—and decreases—the likelihood that research-based advocacy for school library programs can a difference. Three factors are working against successful advocacy for school libraries: (1) the age demographic of librarians, (2) the lack of institutionalization of librarianship in K–12 schools, and (3) the lack of support from educators due to their lack of education or training about libraries and good experiences with libraries and librarians. Unfortunately, the fact that librarians, like other educators, tend to be older than other workers means that the number of librarian positions becoming vacant is unusually high. A Colorado study indicates that half of that state's school librarians expect to retire within the next five years. These vacant positions are highly vulnerable to being downgraded or eliminated in these times of tight budgets, not merely because there is less money to go around, but because superintendents, principals, teachers, and other education decision-

makers do not understand the role a school librarian can and should play. This lack oT69g/aThias laawo f(IS)(1)-

SLMR Questions and Comments A. Q&A

Q. There is no doubt of the debt our field owes Mary Gaver. The study you describe is often referenced as the basis for funding that came in the late 1960s to establish thousands of elementary school libraries. Gaver's work also lead to creation of hundreds directorships for coordination of district-level school library media services and helped to support efforts to establish a school media director at the state level in all fifty states. Dramatic results indeed.

There are several issues related her studies on the "Effectiveness of Centralized Library Service in Elementary Schools Phase I and II" (Gaver 1960, 1963) that I ask you to consider and for the reader to keep in mind as they review the content of the rest of our discourse. Several questions are also posed for your response.

- 1. The Iowa Test of Basic Skills, one exam used to determine the standard measure of student performance for her study, contained a specific section on library skills. While it is true that elementary students scored higher if they were from a school with a centralized library, they were also the students who had received sessions in learning about library-use skills similar to those on the exam. Students not exposed to such skills, or without access to a school library, were not likely to score as high on the exam. Based on your recent experience with standardized exams around the country, do they lack content that adequately tests the information skills we expect school library media programs to teach and enhance? What information skills could be added to standardized exams to make them more relevant to the instructional goals and purpose of school library programs?
- 2. To a large degree in her 1960 pilot study and then to some degree in the follow-up study, Gaver tended to draw the greatest amount of responses from the emerging, growing, and wealthier suburban schools from the sample invited to participate. Although there were some rural and inner-city schools added, the sample in both phase one and phase two was dominated by new schools with predominately white populations. Did the suburban school districts continue to dominate the data in the recent state studies? Are there examples you can describe of extensive date from inner-city schools? Was it clear that the school library media program was having a reasonable impact on student learning in these disadvantaged schools?
- 3. Gaver saw the need to measure not just the number of holdings, but to try to determine the quality of the collection and the quality of the library staff service. She went into a great deal of detail, far beyond just certification or amount of time the librarian was available. She established very specific definitions for ratings of accessibility, collection quality, and reading levels, and defined membership for local review panels to make evaluation judgments on local collections. Quality, in her studies, was much more than quantity. How did your team learn to define quality and translate such measures so that they could be compared againo a

- 5. Gaver's phase one and phase two studies in the early 1960s were focused on emerging elementary school library programs. Such a focus was very reasonable for what she wanted to accomplish, from what I understand. Measures of the impact of school libraries in high schools, however, seemed to be even more complex and in studies conducted by researchers other than Gaver, the impact on learning in secondary schools has not been clear. Did you find measuring the impact of school library media programs in secondary schools to be more difficult than in elementary schools? What, if anything, might account for the additional complexities in measuring the impact of school library programs on student learning in high schools?

research design, focusing more intensively on the rare cases of exemplary staffing, will be necessary.

SLMR Questions and Comments B. Q & A

Q:

SLMR Questions and Comments C. Q & A

Q: When the first Colorado study was presented to a group of reviewers (1992 American Library

the school librarian. That was a great challenge, particularly the first time out, for the second Colorado study. School librarians were asked to report how many hours during a typical week that they or their staff spent on various activities. As the list included a couple of residual items, the total for this list was required to match the total number of staff hours reported. Thus, the list of activities had to be sufficiently concrete and specific that respondents could determine for which activity to report each hour or fraction thereof. In addition to the activities listed in the previous answer, this list usually included time spent identifying materials for teachers, teaching collaboratively with classroom teachers, providing in-service training to teachers, meeting with the principal, attending faculty meetings, serving on school committees, and attending meetings with other librarians at building, district, or state levels. In later states, time spent developing collections was added to the list.

In a third Colorado study, tentatively titled "How School Librarians Teach Critical Thinking," we will be taking this type of question to a new level. Rather than utilizing general reading, writing, or language arts scores, we will be employing building-level summary results for specific sets of test items corresponding to the information literacy objectives embedded in our state's reading and writing standards. A new, more specific list of staff activities has been created, and it will be targeted as precisely as possible to the information literacy objectives for which we now have item-level scores for each school. We are hopeful that this refinement will generate findings that will have a stronger claim to cause-and-effect status. While, in the first year, we will be doing the same types of statistical analysis we have done in the past, we are hoping that, in a second year, we will be able to marshal the cooperation of a sufficiently large number of schools to attempt a controlled randomized trial—that is, the type of study that will be eligible for inclusion in the U.S. Department of Education's WWC.

Another concern about the level of impact of school library media programs suggested from several of the state studies is, " $\,$

SLMR Questions and Comments E. Q & A

Q: Site-based management has left many local decisions at the building level. School library media specialists have had to demonstrate their value directly to their local principal. Some have and many have not. Could one result over the past decade be a growing gap between schools who have adequate school library media resources and staffing and those who do not because the school library media specialist has not fully communicated and demonstrated an effective instructional role? Are there schools where decisions have resulted in less investment in school library staff and resources but more in reading programs and classroom collections and the results have been more direct access to books and teaching of reading for less money leading to student performance that is as good or better than when all funding went into the school library media program? School libraries work, but do they work well enough? As well as other program investments?

A: There seems to be little question that site-based management has been bad for school library programs. There was no direct investigation of this issue as part of our studies, but the declining fortunes of school library programs since the advent of

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SLMR Questions and Comments G. Q & A

Q: The Todd and Kuhlthau (Whelan 2004) studies in Ohio are similar to many of the evaluations conducted in the 1960s and 1970s of "demonstration" library media centers. Identification of the "best" and then analysis of what seemed to work at those programs. From that exercise came descriptions that could be adopted for state and national standards or models toward which other schools could aspire. The Ohio sample, thirty-nine high-rated school media programs, is very suburban with more than a 90 percent white population base. Clearly there will be some important characteristics of the effective professional information agent for future national guidelines, but is this also an example among the state studies where the disadvantaged schools have not been examined? Do you have examples of how the state studies have illustrated the special problems and potential solutions of the inner city schools? Your reports indicate that social-economic factors were controlled in your data. Can you explain how that was accomplished and what it means in the data interpretation?

The qualitative approach for most of the Todd (2003) and Kulthau work in Ohio is different from many of the interviews and testimonials gathered in the past in that it is client-based. What do students and teachers have to say about the value of the school library program and media specialist, rather than just hearing from the library media specialist alone. This approach is especially important because it moves impact on student achievement away from a narrow definition associated only with standardized tests and opens an array of valuable services provided by the school librarian. In most of your state studies testimonials were offered as well. As you have mentioned in your presentations, these help to illustrate the context for actions taken by school library media specialists to improve their local learning environment. Please elaborate on what you see as the value of the testimonials gathered for your studies.

Only positive testimony from teachers and students was accepted for examination in the Ohio study so that conclusions could emphasize the constructive role the library could play in providing services with a staff of qualified librarians as "information agents." Again, this is a useful model, from selected exemplary programs, but when testimony has been gathered from a more generalized sample there is a clear message that parents and students value the idea of a school library, but find, in many cases, the person they identify as the school librarian to not be engaged with meaningful learning efforts (KRC Research 2003). Often, they characterize the school librarian as a person who does little and perhaps even gets in the way of learning. How can we ignore such data? Shouldn't we be experimenting with models of library media center learning environments that can have potentially even greater impact on student learning than the state studies have tended to indicate?

A: Our findings relating test scores and selected library staff activities—particularly clusters of activities that manifest the leadership skills of library program administrators and the engagement of credentialed librarians in collaborative teaching and learning with educator colleagues—have already had some demonstrable impact on standards and guidelines at the state level in Colorado. Those documents have been used as models by some other states.

Of course, the current edition of *Information Power* was written before the second Colorado study or any of its successors was published. But, the findings of the first Colorado study are cited in the current *IP*. It was not the purpose of any of our studies to compare library programs in inner-city, suburban, and rural schools.

SLMR Questions and Comments H. Q & A

Q: Perhaps a major benefit from the recent state studies is that the evidence presented has given a larger number of school library media specialists confidence to initiate arguments for local changes in scheduling, resource support, professional development, and additional clerical support. Responses from practicing school library media specialists through LM-Net seem reasonable. This probably does represent some serious effort to apply findings locally. Perhaps practices in local action evaluation will help give further evidence if some of these steps make a difference. Are there any indications that the state studies will have an impact on the "larger picture," such as major new funding for resources or mandates for additional professional staff? Will the state studies help to make a convincing case for more funding to improve school library collections through federal title initiatives? Will these studies help to make the case to regional school accrediting agencies of the need to maintain or increase the number of and quality of school library media professionals during a time when we see, especially at the high school levels, a decline in full-time school media specialists in the secondary schools?

A: The Colorado and other state studies were cited frequently by Senator Jack Reed and others as evidence for passage of the Reed Amendment, which is providing the first federal funding dedicated to school libraries in several decades. Needless to say, it was by no means the only evidence, and the successful passage of that amendment is owed most of all to the lobbying

SLMR Questions and Comments I. Q & A

Q: Your team has gathered a remarkable amount of data and the reports for various states are filled with correlations that are tagged as significant. As you explain to the reader in each report, significance is an indication that we can assume your sample is representative of your overall population, and that the findings are not merely by chance. Some interpret the levels of

A: The authors of the Lance and Rodney studies are diligent about characterizing the correlations we report as "positive" and "statistically significant"—where that is the case—without characterizing the strength of the relationship as weak, moderate, or strong. While familiar with the standard "breaking points" for using those terms, I consider them problematic for the reasons discussed earlier. The educational enterprise is a decidedly complex and complicated business. By the usual statistical standards, it is a rare finding indeed that could be characterized as "strong"

SLMR Questions and Comments J. Q & A

Q: With or without the standards of the federal research clearinghouse, wouldn't such a progression in the development and testing of measures of the impact of school libraries be expected? There is a systematic progression in such investigations conducted over many years and by many different researchers. The correlation studies have helped to identify some relationships that need deeper examination before we can draw clearer conclusions. To do this we should build on previous work, refine the methods, and draw on, eventually, strong measures to test the validity of findings. Thus, movement toward application of experimental methods is not only expected, it is essential if any findings of the relationship between school media programs and student achievement are to be validated. Those who practice such a progression are certainly "skeptical" along the way. It is a fundamental characteristic of a scientist in any field to doubt. Caution should be used to not misrepresent evaluation studies targeted and funded to find positive influences alone as research studies that also identify problems and shortcomings in school library media programs. The state studies have tended to look at data from the education system as it is. This is fine, but we should keep in mind that they do not test for new approaches to delivery of information services and skills, teaching of inquiry and information literacy, and measures of student performance beyond standardized exams. Staying with data that represents limited actions of the school media program and measures of achievement limited to standard exams seems to place restraints on the thinking we should engage in to establish more authentic learning environments in the Information Age.

From the beginning it is unlikely that many in the school library media research circles believed the correlation studies to be headed toward any conclusive cause and effect statements. Such does not mean there is a resistance to the findings, but there should be a great deal of accepting such studies for what they can and can not do. All along it has been clear that such correlative data are welcomed to help us identify relationships and then hypothesize as to why these relationships exist or not, and why they are not stronger. Regardless of the barriers and limitations, steps toward more controlled and experimental studies need to be taken. Your call for a new direction is important, although perhaps it could have been made a state or two sooner. There are at least two more states conducting studies as of this writing, both similar to the Colorado model, and by the end of 2005, nearly \$750,000 will have been spent on such studies. Has it been worth that much investment? Do the state studies establish enough foundation and raise enough questions that similar funding or more can be attracted to conduct the more experimental studies? What do you see as the potential for attracting the necessary funds and researchers in order to conduct the empirical studies needed to gain the more conclusive evidence we need?

The action research movement is promoting what might otherwise be called "self-assessment." While it is clear from a host of anecdotal accounts that the data yielded from such efforts are being used persuasively by many teacher-librarians with administrators and classroom teachers at the local level, it is difficult to imagine it passing muster with the NCLB establishment as being objective and considering competing causes. Practically, it also seems doubtful that such research is ever going to be pursued on a large scale, especially in a time when fewer and fewer teacher-librarians have support staff and, indeed, fewer and fewer school libraries have teacher-librarians. For the foreseeable future at least, might the field be better off channeling this energy into encouraging local participation in the type of large-scale controlled randomized trials we need to be doing? It is difficult to argue with the potential value of action research at the local level, but it does require a substantial investment of time to be done well. One has to wonder: can we afford to do both?

I will suggest an answer to that question in my response to your question about whether or not the Colorado studies have been worth their cost. The answer to that question depends entirely on one's perspective. It is no mystery why the first Colorado study was never replicated on a statewide basis (at least, to my knowledge), whereas the second one has been replicated, to greater and lesser degrees, more than a dozen times. What changed between the first and second Colorado studies? Standards-based testing roared in like a lion. When the first Colorado study was done, only a very small subset of respondents to our statewide school library survey could be studied, because they were the largest group among the respondents who utilized the same standardized test—the Iowa Tests of Basic Skills. By the time the second Colorado study was done, students in selected grades in every elementary and middle school in the state were required to be tested under the Colorado Student Assessment Program (CSAP). High-stakes testing has been the engine driving the demand for these studies; make no mistake about it. Politically, it does not matter in my state if all the studies have been done in other states, utilizing teoul(s)-1(;)-je

does not emanate from the U.S. Department of Education. So, anybody who wishes to pursue a qualitative study for their state, district, or school has several viable funding options (chiefly LSTA grants from state library agencies, perhaps National Leadership Grants from IMLS). The risk of focusing on this type of study, however, is that we will continue to be open to charges of "preaching to the choir." If the larger strategic goal of school library advocates is to engage the NCLB-driven education establishment, resources should be focused on studies that meet the narrow WWC definition of scientific research. Indeed, if we are wise, we will seek to communicate with the federal Institute of Education Sciences, which is responsible for WWC, about proposed research designs in advance of future studies. Why not invest our time, money, and effort wisely by seeking advance approval of proposed designs? There is likely no single authoritative voice on that issue, but surely some dialog with WWC representatives is possible. In the absence of that, we should study carefully the types of studies that are and are not approved for whatever clues we can derive about what is and is not acceptable to WWC reviewers.

A: The quality of practicing teacher-librarians is as variable as the quality of administrators and teachers. When speaking about these studies to practitioners, I usually introduce the topic of leadership like so:

Who does this remind you of? [With an exaggerated hang-dog, pouting expression] "Nobody loves me. Nobody understands me. Nobody appreciates me." Does that remind you of anybody? Imagine yourself in the place of a principal or a teacher. Would you want to work with this person? Would you seek out her or him as a colleague? Of course not!

From there, I report the second Colorado study findings that leadership by teacher-librarians leads to collaboration with other educators, not the other way around. Many years ago, the Colorado Library Marketing Council—notably, a group made up almost exclusively of special librarians—decided to do something about the generally poor marketing—especially self-marketing—skills of librarians by offering a series of workshops. They did not have the resources to address this need as broadly as they would have wished so they chose one sector to focus upon: school librarians. Why school librarians? Because this group of expert self-marketers (as special librarians, their survival depended on it) could see what was happening to school librarianship under site-based management. And what they saw was that far too many school librarians had no idea how to ensure their own and their profession's survival. This problem is precisely why I find some cause for optimism in the huge wave of school librarian retirements that has already begun. Yes, sadly, some of those jobs will disappear with the retirees. But, the jobs that are filled are likely to be filled by younger people, just beginning their careers, and hopefully emerging from LIS or educational media programs that have equipped them to survive in the "brave new world" of No Child Left Behind.

What should be done about under-performing incumbent practitioners? It seems impertinent to offer an op0 Td [fullyeh110(L)1(I)13(S)-d-0.021, igun. oHh-6(y)22(tionene)-6(w)4(f)3(ulv3()-10(ao)4(a)4(t))

needed. As I ask when speaking to principals, can you imagine abolishing the teaching of math or science on that rationale?

Perhaps school library consultants in state library or education agencies—where those positions still exist—or state library or educational media associations should consider their options for strengthening state certification programs for teacher-librarians in ways that discourage poor

SLMR Questions and Comments L. Q & A

Q: What are the plans for future dissemination of the findings from the state studies? Describe the likely paths to publications in trade and refereed research publications outside of the school library media field? How accepting do you believe these journals will be to the methods used and findings reported from the state studies?

A: As the Illinois study is the last such study for the Lance and Rodney team, it seems the proper time to sum up our contribution to school library impact research. Actually, such a summary and overview has been in progress for some time. The original purpose was to summarize the findings of the studies in three separate chapters—elementary, middle, and high school—for another author's book about school libraries aimed at principals and other administrators. The fate of that book is somewhat up in the air, for reasons that are not germane here and which I am not at liberty to discuss. Suffice it to say that, if that book does not materialize, the chapters will likely be reworked into articles for submission to appropriate journals, preferably journals read primarily by administrators or teachers rather than librarians. As there is nothing unique about the methodologies employed in our studies, I would anticipate the reception such articles would receive to be determined almost entirely by how they are written—specifically, what findings are asserted, how acceptably they are asserted based on standard scholarly practices, and how well the detailed evidence for the claims is presented—and by whom such articles are read.

To be sure, all of us who do research on school libraries need to make more regular, timely, and diligent efforts to report our work through established channels for publication and presentation—in the library and information science field, to practitioners, and to other educators and education decision-makers. Doing so is another of the WWC criteria for endorsing research with which it is difficult to disagree.

Special challenges will likely have to be surmounted in order to publish in other fields. Practitioners and even academics in most fields tend to focus on keeping up with the literature of their own fields, but the pressures to read ever more widely are certain only to become stronger in the future. We may find that, if we want to be published in other fields, we may have to modify our research questions or methodologies somewhat—at least in perspective—to be considered relevant, and therefore publishable, beyond the library and information science literature. Publishing more widely might also be made easier by collaborating on research projects with colleagues from the other fields whose attention we seek.

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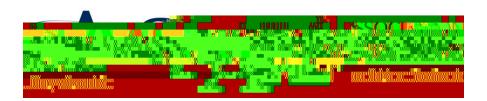
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