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School libraries and evidence-based practice: A position statement

Dr Ross J. Todd

Overview

This paper seeks to further our understanding of the professional arena of evidence-based practice as it relates to school libraries. It provides an analysis and synthesis of a diverse cross-section of ideas and formal input gathered at a leadership summit titled 'Where's the Evidence? Understanding the Impact of School Libraries' that was hosted by the US-based *School Library Journal* and which convened in Phoenix Arizona from November 30th - December 1st, 2007.

The paper presents the current collective thinking about evidence-based practice as it applies to school libraries.

The goals of the national summit were to:

- explore the multiple perspectives of evidence-based practice;
- investigate examples of evidence-based practice in school libraries, and
- develop guidelines to help lead evidence-based practice in school libraries.

The summit brought together a diverse mix of school library leaders, including school librarians from all states of the USA, school librarians leading school districts, experts from the medical field, education and library science, professors and researchers in faculties of library and information science and education, school administrators and policy-makers.

Two hundred participants engaged in intense and thoughtful presentations and discussions over the two days of the summit, and the position statement, as presented here, has been developed based on these discussions and presentations. Formal input was recorded and documented through a group discussion process, and this input served as the basis for the development of the position statement.

Such a position statement is not meant to be definitive; rather it seeks to further engage our profession in a continuous dialogue about evidence-based practice, so that quality practice in our profession and striving for continuous improvement can be sustained.

Background

The emergence of evidence-based librarianship

With its origins in the medicine and health care professions in the United Kingdom in the early 1990s, evidence-based practice as a best-practice framework has grown steadily, and its application has quickly extended to education and librarianship. Medical and health care librarians in particular responded to the initiative to propose the core characteristics of evidence-based librarianship (EBL).

A key voice in the explication of this approach to professional library work has been that of Dr Jonathan Eldredge, Associate Professor at the School of Medicine and the Health Sciences at the University of New Mexico at Albuquerque and the Academic and Clinical Services Coordinator for the Health Sciences Library and Informatics Center located at the School of Medicine. We were privileged to hear Dr Eldredge speak at the leadership summit.

Positioning evidence-based librarianship as a dynamic and evolving approach to integrating research into practice, Eldredge acknowledges that this does not take place in a "remote, ivory tower" microcosm; rather, it acknowledges that librarians "operate their libraries in the real world context of providing services and collections through managing budgets and other resources. Thus, EBL constitutes an applied rather than theoretical science" (Eldredge, 2000). It is an approach to practice, not merely a theory about professional practice. According to Eldredge, EBL seeks to improve library practice by utilizing the best-available research evidence, whether based upon either quantitative or qualitative methods, combined with a pragmatic perspective developed from working experiences in librarianship (Eldredge, 2000).

School libraries and evidence-based practice

Parallel with developments in EBL, the focus on evidence-based practice of school libraries

Dr Todd challenges us to consider the relevance and power of evidence-based practice to the field of teacher-librarianship as he explores the current state of this research approach and possibilities for the future. The editorial board encourages the submission of responses to this important discussion paper.

has emerged within the last eight years. One of its earliest elaborations was in my keynote address at the International Association of School Librarianship conference in Auckland, New Zealand, in 2001 (Todd, 2001). It emerged fundamentally out of not just my long term strong belief in the value of school libraries, but also deep concerns about how these values were expressed and documented, and particularly centering on our profession's tradition of public belief statements that invoke variously named rhetorical (and often elusive) ultimates, such as the development of 'independent lifelong learners', 'information literate students' and 'development of a democratic society', in the context of school libraries being 'learning centres'.

While we clearly value these outcomes, they do not necessarily give tangibility, concreteness and accountability to our profession, nor do they convey a sense of the direct and immediate value of the school library to a school community (Todd, 2007). In essence, I posited that the focus of the professional practice of school librarianship revolves around learning outcomes of students – the knowledges, attitudes, values and skills that students develop because of school libraries, and the demonstration of these – the explicit, immediate and concrete learning and achievement outcomes that can be evidenced and linked to school library service and instructional initiatives (Todd, 2001).

Evidence-based education

School librarianship is at the intersection of education and librarianship, and a similar trajectory is evident in the emergence of evidence-based education. The Institute of Education Science, in the US Department of Education, defines evidence-based education as the "integration of professional wisdom with the best available empirical evidence in making decisions about how to deliver instruction" (Whitehurst, 2001), evidence that is drawn from both education and a range of allied disciplines, such as psychology, sociology and neuroscience.

Driving EBE is a commitment to using scientifically-based research as a framework for professional decision-making and action, rather than approaches without the supporting evidence derived from empirical research. EBE recognizes that empirical evidence does not stand alone, outside the context of practice. Rather, it is melded with professional wisdom, defined by Whitehurst as the judgment that individuals acquire through experience and through views derived from professional consensus (Whitehurst, 2001), together with local circumstances, conditions and constraints.

Coe, in presenting *A Manifesto for Evidence-based Education*, argues that student learning and student learning outcomes are "too important to allow [them] to be determined by

unfounded opinion, whether of politicians, teachers, researchers or anyone else" (1999). Accordingly, the summit convened at a time of intense interest in the educational sector calling for education "to follow other fields in placing far greater reliance on evidence as a basis for adoption of programs and practices" (Slavin, 2008, p. 5) and amid deep concerns that over "the history of education, the adoption of instructional programs and practices has been driven more by ideology, faddism, politics and marketing than by evidence" (Slavin, 2008, p. 5).

The leadership summit: An overview

In addition to Dr Eldredge's input as mentioned earlier, summit input was provided by:

- Linda Perlstein, author of *Tested: One American School Struggles to Make the Grade* (Holt, 2007);
- David Watkins, Chair and Senior Principal at the architectural firm of Watkins Hamilton Ross Architects (WHR), one of the USA's leading health-care design firms, and one of the first to use an evidence-based practice approach to inform the designs of their health-care facilities;
- Ellen Fineout-Overholt, Director of the Center for the Advancement of Evidence Based Practice at Arizona State University and the College of Nursing and Health Care Innovation; and
- Lindsay Glynn, academic librarian at the Memorial University in Newfoundland and Editor-in-Chief of the open source journal, *Evidence-based library and information practice* published by the University of Alberta in Canada, which is our profession's first peer-review journal devoted solely to evidence-based practice in the library and information science field.

These speakers provided a range of professional conceptions of evidence-based practice for their professional fields, the history and status of evidence-based practice in their professions, and key evidence-based initiatives and impacts of these for professional growth and user benefit.

The summit also showcased a series of case studies of evidence-based practice being undertaken within the school library profession. These are elaborated in some detail here as they provide a range of diverse and innovative pictures of evidence in action. These were:

- The Delaware Evidence-Based Professional Development Program, led by Denise DiSabitino Allen (Delaware Department of Education Associate, Library/Media/Technology), Juley Harper (Delaware Department of Education Associate, English Language Arts), and Malik Stewart (School Improvement). Their work has centred on three sustained programs of professional evidence-based action for school librarians in Delaware which

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has engaged multiple experts at state and regional level to provide an experience-based and evidence-based program of development and implementation. These programs are:

School librarians and school improvement – To provide school librarians with an understanding of the range of achievement and general school data to underpin evidence-based practice; how to interrogate and analyse this data to inform school improvement, how to use this data in developing library interventions and measuring the impacts.

Literacy and school improvement – Working with reading/literacy specialist partners, the school librarians examined scientifically-based research and writing strategies and worked to develop library interventions which target Delaware outcomes in ELA and to systematically measure the impacts.

Unpacking the standards in the library – This program was in collaboration with Library Education Associates from the Department of Education in ELA, Math, Science and Social Studies and district content specialists. The collaborative teams worked together to identify content standards and AASL learning standards and to develop exemplars of collaborative curriculum inquiry units for all classroom teachers.

- *Principals and evidence* – Dr Nancy Everhart, from Florida State University's College of Information, discussed 'What Evidence do Principals Use to Evaluate School Librarians?' She reported on a study on what evidence principals gather to evaluate school librarians and discussed how school library leaders can implement the findings.
- *Getting a summer reading program online: A research-based approach researching summer reading* – This case study was presented by Dr Carol Gordon from Rutgers University. This presentation, based on the premise that summer reading programs are a mainstay of both public and school libraries alike, focused on the development, implementation and evaluation of an evidence-based online summer reading program, and how the evidence of impact of this summer reading is emerging as a factor in closing the achievement gap of students in a large public school in Massachusetts.
- *Using data from assessments* – This case study was presented by Judith Dzikowski, coordinator at the Onondaga, Cortland, Madison BOCES in Syracuse, NY. She discussed PALS – Partners in Achievement: Libraries and Students, a program for school librarians that focuses on improving student achievement through data use. PALS was designed to address the challenge to improve

library instruction, information literacy skills and strategies, and library collections by linking to identified student learning needs of English Language Arts and English (HS) standardised assessments. This case study focused on how the understanding of data derived from standardized assessments can be used to improve library instruction through making instructional and program decisions.

- *Collaborative Action Research – Building a Research Community* - This case study was presented by Susan Ballard (Director of library, media, and technology in the Londonderry Schools District) and Gail March (school librarian at Londonderry High School). It outlined how action research (led by Dr Carol Gordon of Rutgers University) was used initially by the school librarians in the Londonderry School District to examine the effects of their ICT and research process instruction and services through application of a disciplined, reflective methods, and how this evidence informed the collaborative initiatives with classroom teachers to inform instructional design, delivery, and assessment.
- *Score High with Data Driven Decisions* - This case study was presented by Louis Greco (Director for Instructional Technology and Library Media Services for the St. Johns County School District in St. Augustine, Florida) and Nancy Teger (Library Media Services Program Specialist for the Florida Department of Education). They examined how school librarians can tie state-test reading level scores, circulation statistics, and information literacy instruction together to help improve student achievement, monitor student achievement levels, and improved library media policies and programming.
- *Evidence-based Practice: Implementing Recommendations from the Ohio Study* - This case study was presented by Ann Tepe, Gayle Geitgey and Chris Findlay. It outlined the ongoing work of OELMA (the Ohio Educational Library Media Association) in building on the recommendations of the 'Student Learning through Ohio School Libraries' study (Todd & Kuhlthau, 2004) by offering professional development on evidence-based practice. To date, almost three hundred Ohio school librarians have been trained as a result of recommendations from this study. This training has been implemented through two evidence-based practice modules which focus on introducing the theory and practices of evidence-based practice, and on creating a formal plan to begin evidence collection on their instructional practices at the local building/district level.

The summit concluded with a presentation titled *Evidence-Based Practice: Building the Future* and group discussions led by Dr Ross

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Todd, which laid out some central tenets and challenges of evidence-based practice. Following this presentation, the participants, in table groups of 8-10, were invited to take part in discussion and documentation of substantive ideas that centred on developing/identifying:

- a working statement/definition of evidence-based practice
- core beliefs about EBP in the school library context
- key challenges that need to be addressed
- key actions for the school community, for teacher-librarians, for researchers and school

library educators, and

- key actions for professional associations (international, national, state and local), including the American Association of School Librarians as the national voice.

Both the collective views and disparate ideas were recorded on data collection sheets, and these formed the basis of developing the following position paper (adapted for the Australian context), which synthesizes current thinking about evidence-based practice of school librarianship, and identifies challenges and actions for key stakeholders.

School libraries and evidence-based practice: A position paper

Core beliefs underpinning evidence-based practice

The foundations of evidence-based practice of school libraries centre on the following beliefs:

- The fusion of learning, information, and technology presents dynamic challenges for teachers, teacher-librarians, administrators and students in 21st century schools. Providing the best opportunities for children to learn and achieve in this educational environment, and knowing that they do learn well is at the heart of quality teaching and learning, and is the central driver of evidence-based practice.
- School libraries as schools' information and knowledge commons are essential for addressing curriculum outcomes/standards, the complexities of learning, and quality teaching in information-intensive 21st century schools.
- School librarianship, as an applied science and profession, derives its practice mandate from a diverse body of theoretical and empirical knowledge; active engagement with this body of knowledge enables the profession to continuously transform and improve. Leading this transformation is the professional expertise of teacher-librarians who have qualifications in education and teacher-librarianship, and who possess expertise, insights and skills based on theoretical and empirical knowledge that they apply in practice, and who continuously develop their knowledge and skills through professional development. Thus the professional role of school libraries is founded on a strong evidence base, welding together research, experience, insights and systematic measures.
- All students can learn through engagement with school libraries.
- School libraries play a transformative role in the lives of students: the development of intellectual, social and cultural agency. School libraries, led by qualified teacher-librarians,

provide the spark for students' connections, interactions and use of information for developing deep knowledge and understanding, and achievement.

- The transformation of information to knowledge, and the development of attitudes, values and beliefs are enabled through carefully designed instructional interventions and reading literacy programs that guide and engage students in their inquiry, learning and reading development, and enable them to build new understandings, and to develop personal viewpoints and perspectives.
- School libraries contribute, not only to the development of students as intellectual agents as measured by national testing programs and state assessments, but also more holistically to the development of personal, social, and cultural agency.
- The value of a school library can be measured. The transformations as learning outcomes, as well as personal, social and cultural growth, can be documented, measured and disseminated.
- Evidence of this transformation and the development of intellectual, social and cultural agency is not fully understood, nor seen, nor acknowledged by many stakeholders. Evidence-based practice plays a key role in developing and disseminating evidence of the impact and value of school libraries.
- Professional school library responsibility is an accountable responsibility that centres on duty of care and striving for optimal outcomes. In the multi-faceted environment of school education, accountability binds the parts into a coherent and meaningful whole, with common intent and with multiple approaches. Accountability acknowledges responsibility for actions, products, decisions, and policies including the administration, governance and implementation within the scope of the role

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or employment position and encompassing the obligation to report, explain and be answerable for resulting consequences.

- Demonstrating value is future-oriented. Evidence-based practice is not about the survival of teacher-librarians, it is about the survival of our students – this is the social justice and ethical imperative for evidence-based practice.

What is evidence-based practice in the context of school libraries?

Evidence-based school librarianship is an approach to professional practice in school libraries that systematically engages research-derived evidence, teacher-librarian-observed evidence and user-reported evidence in iterative processes of decision-making, development and continuous improvement to achieve the school's mission and goals, which fundamentally centre on student achievement, quality learning and quality teaching. At the heart of evidence-based practice in school librarianship is the student's information-to-knowledge experience enabled through school library initiatives.

Evidence-based school librarianship is founded on the conscientious interpretation and integration of research-derived evidence to shape and direct professional practice. Its day-by-day practice meshes professional wisdom, reflective experience and understanding of user needs with the judicious use of research-derived evidence to make judgments and decisions about how to deliver the instructional and service roles of the school library to meet the goals of the school. An integral component of evidence-based school librarianship is the systematic collection, integration and dissemination of evidence of the tangible impacts and outcomes of school library practices, in terms of organisational goals and objectives, student achievement and the development of deep knowledge, deep understanding and competencies and skills for thinking, living and working. Evidence-based practice of school librarianship demonstrates the value-added role of school libraries to the life and work of a school – outcomes that centre on learning, literacy and living – and the development of students personally, socially, culturally and globally.

This holistic approach to evidence-based practice in the context of school libraries welds three dimensions of evidence: evidence for practice, evidence in practice, and evidence of practice:

- *Evidence for practice* focuses primarily on examining and using best available empirical research to form practices and inform current actions, and to identify best practices that have been tested and validated through empirical research. This is the *informational dimension* of school library practice.

- *Evidence in practice* focuses on reflective practitioners integrating available research evidence with deep knowledge and understanding derived from professional experience, as well as 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 on optimal outcomes and actively contribute to school mission and goals. It embraces the explicit and strategic integration of formative and summative assessment strategies and other feedback mechanisms to systematically gather evidence. This is the *transformational dimension* of school library practice.
- *Evidence of practice*, as the measured outcomes and impacts of practice, is derived from systematically measured, primarily user-based data. It focuses on the real results of what school librarians do, rather than on what school librarians do. It focuses on impacts, going beyond process and activities as outputs. Rather than being about "this is how I did it good" it is about "this is the goodness that was done". It establishes what has changed for learners as a result of inputs, interventions, activities, processes, and charting the nature and extent and quality of effect. This is summed up in Figure 1 (overleaf).

These dimensions or phases are neither linear nor static; rather, they are a dynamic, iterative and integrative process of welding evidence 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.

The central questions of evidence-based school librarianship

Set within the current and foreseeable educational environment that is increasingly calling for the production of measurable evidence for sustainability, continuous improvement and accountability, evidence-based practice in school librarianship is driven by central questions that give school libraries their *raison d'être*. The meta-question that underpins evidence-based practice of school librarianship is: why do school libraries matter today, particularly in the context of a learning landscape that intersects with diverse, complex and conflicting information sources that are increasingly digital, and external to the school?

The answer to this question lies in a student outcomes focus – what school libraries enable in the educational environment in which they are positioned, and through the instructional and service practices undertaken by teacher-librarians that ensure outcomes are achieved. Evidence-based practice, founded on research-based evidence meshed with locally-derived evidence

Evidence-based school librarianship . . . engages research-derived evidence, teacher-librarian-observed evidence and user-reported evidence . . .

places considerable focus on the actual work of the teacher-librarian, undertaking local school-based evidence initiatives that document, demonstrate the learning outcomes and value-added dimensions of the individual school library, and which, in the iterative cycle of continuous improvement and development, shape ongoing practice. Accordingly, evidence-based practice in school librarianship raises the specific questions:

- How does MY school library help students learn? How does MY school library impact on student learning?
- What/how does MY school library add to personal, social, cultural and global growth of students in my school and in my care?
- Do students who have been taught information literacy competencies through MY instructional interventions, in collaboration with teaching partners, perform better academically than students who do not have such instruction?
- How do I ensure that MY school library is sustainable and accountable – in terms of its infrastructure, personnel, resourcing, and instructional processes – so that optimal student outcomes are achieved?
- How do I disseminate the impact of MY school library and demonstrate its educational, social and cultural good?

The evidential warrant

Evidence-based practice moves beyond a rhetorical warrant for school libraries founded on our own valuing of the social and educational goodness of school libraries derived from personal and professional intuitions, personal experiences, testimonials and endorsements that advocate and extol the virtues and values of school libraries, and our own informal anecdotal evidence. It provides a declarative, accountability warrant for practice rather than a persuasive, advocacy warrant, challenging teacher-librarians to embed into professional work those strategies that enable

them to more rigorously make claims about professional impacts based on observable and more systematically acquired evidence.

By placing emphasis on outcomes, evidence-based practice in school libraries shifts the focus from the medium to the message; from articulating what teacher-librarians do in their day-to-day work, to articulating what students become. By placing emphasis on systematically gathered evidence, it moves school library advocacy from a 'tell me' framework to a 'show me' framework. Accordingly, evidence-based practice first and foremost validates that quality learning outcomes can be achieved through the school library; secondly, and through this, validates the important role of the teacher-librarian as an instructional partner in the school, and a key team member in achieving the schools mission and goals.

While evidence-based practice in school librarianship may be positioned as a theory of practice, fundamentally it is not about theory; rather, it is an approach to best practice. Evidence-based practice is action oriented. It asks teacher-librarians in their local contexts to take action. It goes beyond an awareness of the statewide studies and the evidence they provide about school libraries, and the assumption that this is enough to ensure quality school libraries for all. It goes beyond synthesizing such evidence and disseminating it to the school community. It asks teacher-librarians to engage in local initiatives which go beyond mere evidence-informed practice and information-based evidence, to a central focus on knowledge-based evidence.

This is not to diminish or remove the information measures that have traditionally been at the centre of school library practice, such as the number of classes in the library, the number of library items borrowed, the number of students using the library at open access times, the number of items purchased annually, and such measures as the usage of open access computer terminals.

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Figure 1: Holistic Model of Evidence-Based Practice for School Libraries

Evidence FOR Practice	FOUNDATION INFORMATIONAL Existing formal research provides the essential building blocks for professional practice:
Evidence IN Practice Applications/Actions	PROCESS TRANSFORMATIONAL Locally produced evidence; Data generated by practice is meshed with research-based evidence to provide a dynamic decision-making environment: librarian-observed evidence
Evidence OF Practice Results – impacts and outcomes; evidence of closing of gaps	OUTCOMES FORMATIONAL user-reported evidence learner changes as result of inputs, interventions, activities, processes

However, these are evidences of inputs and processes, rather than evidences of outcomes. They do play a role in making decisions that will lead to optimum outcomes, and should not be overlooked. But they are not the centrepiece of evidence-based practice.

Evidence-based practice with its focus on outcomes calls for teacher-librarians to adopt an outcomes mindset in describing what school libraries and teacher-librarians do. This means a shift in focus from information inputs to knowledge and skills outputs. Statements of curriculum standards/syllabus outcomes provide a framework for the evidence that should be generated, gathered, analysed and disseminated in the course of the work of the teacher-librarian. They provide a structure for making evidence-based claims about the school library's contribution to learning, and for giving focus to the specific evidence-collecting strategies. An evidence-based approach asks teacher-librarians to make claims about the deep mastery of curriculum content; critical thinking and knowledge-building competencies; mastery of complex technical skills for accessing and evaluating information and using them to construct deep knowledge; claims related to reading comprehension and enrichment; as well as claims related to attitudes and values of information use and learning, and the development of self-concept and personal agency.

Multiple types of evidence

Evidence-based practice for school libraries focuses on tangible, observed and reported data that is derived from systematic and replicable measures of learning outcomes. It moves beyond informal observations, personal experiences, advocacy, testimonials, intuitions, gut reactions and anecdotal evidence as basis of claims. Such approaches may facilitate the interpretation of data, but do not form the basis of verification, not the basis of evidence-based practice. Statements of outcomes based on casual observations and discussions tend to be characterised by lack of specificity and precision. "Without data, you are just another person with an opinion" (Boeing Aircraft Corporation).

Evidence-based practice in school libraries recognizes multiple sources and types of evidence and multiple ways of systematically gathering this evidence. The use of multiple sources facilitates triangulation, which is an approach to data analysis that synthesizes data from multiple sources. It enables you to analyse, compare and interpret diverse datasets to develop strong claims about impacts and outcomes. Different sources and types of evidence might include:

- Student interviews;
- Student portfolios;
- Reflection and process journals, search logs;
- Formative and summative assessment tasks;

- Standards-based scoring guides and rubrics;
- Surveys – students and teachers;
- Pre-test and post-test measures;
- Student-generated products as representations of new knowledge;
- Statewide assessments;
- Skills measurements;
- Ongoing performance-based assessments;
- General student data;
- Systematically recorded observations.

Key challenges of evidence-based practice for the school library community

Some key questions, as well as constructive answers, emerged from focus group discussions:

- *How do we make available research-based evidence more accessible, interpretable, and applicable – so that it can be integrated into practice in thoughtful, appropriate and time-effective ways?* Often, research is reported in the context of sophisticated methodological and statistical procedures that establish its validity and significance of the claims, and while this is of fundamental importance to the quality of the research, it at times presents barriers to accessibility and understanding the practical relevance and applicability. This has implications for the packaging of research to make it more accessible and to establish its practical utility and applicability. In addition, some key research from a range of disciplines that informs our profession is locked up in membership access only providers and publishers. Accessibility and utilisation also require a much closer working relationship and greater levels of collaborations with school library researchers and educators, and school library practitioners.
- *How do we build a stronger community of participatory research?* This involves both knowing what research is occurring in the educational field and having the opportunity to more actively participate in educational research. There is a sense that research is not consulted because it is perceived to inadequately address the real concerns of practice; or that it is not presented in ways that foster understanding and application.
- *How do we share and accumulate locally generated evidence?* This raises the question of the need for structures and processes for systematically storing data and for the evidence-claims derived from that data, as well as exemplars that showcase the claims. For example, what might a portfolio of locally-generated evidence look like? A widespread engagement in evidence-based practice is likely to generate a vast and important amount of local data that is potentially informative for the profession at large. How can this evidence be accumulated across individual schools, districts, and shared, and built upon?

Evidence-based practice with its focus on outcomes calls for teacher-librarians to adopt an outcomes mindset in describing what school libraries and teacher-librarians do.

- *How do we deal with negative evidence arising out of research? What should happen if research – at a local, state or national level – shows, for example, that school librarians are not making a difference?*
- *How do we build a widespread commitment to evidence-based practice? And how do we particularly address the negative profile of teacher-librarians who do not do the job as identified in role-statement documents, national standards for school libraries, nor who do not want to do the job? The 'inertia of the status quo', the fear of being accountable for learning outcomes, and the presence of teacher-librarians who neither see value nor necessity of evidence-based practice, nor care enough. Push-back from the professional community on advances in the workplace, or branding of such advances as passing fads, is not unique to the library profession.*
- *How do we address the use of simplistic, pervasive models of instructional practices that are not research-based? For example, simplistic linear models of information skills, reading schemes and strategies that are not based on a validated and tested research foundation, and acknowledge that common sense and the simple do not necessarily make sense in terms of instruction or effective learning outcomes?*
- *How do we provide systematic professional training in interrogating, synthesising and drawing conclusions and implications for action from both research-based data and locally collected data?*
- *How do we address the perception of time as a barrier to evidence-based practice? Time is consistently presented as the key barrier to implementing approaches to evidence-based practice, the belief being that it takes time to develop and implement measures, to analyse and synthesise data, and to disseminate findings. And in meeting the time requirement, there is the perception that additional support staff are needed to enable the teacher-librarian to undertake this 'additional' work. Evidence-based practice is not about scrambling to find additional time; rather, it is about making prioritized choices in utilizing time based on beliefs and values as to why school libraries exist, recognizing what is most important about school libraries and the work of the teacher-librarian, and making commitments to focus on those priorities.*
- *How do we convey to school administrators that evidence-based practice is a key component of the professional work of the teacher-librarian and build their support to enable infrastructure and processes and collaborations on which evidence-based practice is built to be put in place? Some school administrators may resist evidence*

evidence-based practices because the library is not perceived as a classroom and the school librarian is not perceived as a teacher. Does a teacher-librarian need the authority of school administrators to engage in evidence-based practices?

- *How do we embed a stronger valuing of research, and its evidence, in the profession?*

Key actions for teacher-librarians

At the heart of evidence-based practice is the day-by-day actions of teacher-librarians. The focus group discussions and input sessions identified a range of mindset/thinking actions as well as behavioural actions for teacher-librarians. These were:

- *Reorientation from an advocacy strategy in school districts and individual schools based on rhetoric of the goodness of libraries.* Ensure that district and local school library mission statements are articulated from a learner and learning outcomes viewpoint – they are the central subject of these documents, rather than the library being the subject that is, 'students will' rather than 'the school library will'; ensure that statements of goals and strategic initiatives are explicitly built on a research framework and argued on available research evidence of the profession; ensure that identifying learner needs and developing evidence-based strategies to address those need and close achievement gaps are made visible in the school library documentation.
- *Try it. Just do it. Be willing to take risks.* Step outside traditional comfort zones and deal with any perceived lack of belief about one's ability to impact. Engaging in outcomes-driven practices may need some adjustment of existing management strategies typically employed. It may mean some readjustment of tasks of support staff. Yes, acknowledge that it is neither easy nor simple to do, but taking small steps and building expertise are key mechanisms in dealing with the perceived barriers that evidence-based practice is time-consuming and complicated. The success of small initiatives builds a sense of the worth of evidence-based practice. Be part of the solution, not part of the problem; be solution-oriented. Begin to develop an evidence-based practice plan that makes you part of school's solutions, and not the school's problems where cuts, setbacks and redundancy become the only options.
- *Focus energies on charting and sharing outcomes in your school rather than seeking permission to engage in evidence-based practices.* Your mandate for professional practice is derived from the profession, and not on limited perceptions of those outside of the profession. It will take patience to deal with and overcome resistance to changes in your professional role. Presenting clear evidence of

Be part of the solution, not part of the problem; be solution-oriented.

alignment and direct contribution to the learning goals of the school is a far more convincing argument in building support than merely advocating for the opportunity. Just do it.

- *Establish evidence-based mentorships and partnerships in your school districts.* Identify some leading lights in your school and school district and learn together. Making it a collaborative endeavour will help address time concerns, but plan it according to the evidence-based practice framework and go through the whole experience – from evidence for practice, evidence in practice, to evidence of practice.
- *Use action research as a collaborative framework for building evidence-based practice.* Action research is a family of research methodologies which pursue action and change, and research and understanding at the same time. Through action research, educators work together to improve education by change through action and reflection on their daily teaching habits. In most of its forms it does this by using a cyclic process which involves four major phrases: planning, acting, observing and reflecting. Instructional partners alternate between action and critical reflection, continuously refining methods, data and interpretation in the light of the understanding developed in the earlier cycles. Action research is a natural fit with evidence-based practice. Action research focuses on the question, 'How can I help my students improve the quality of their learning? And its implementation provides the collaborating teams with evidence to guide the exploration of how teaching affects students' learning, and provides an evidence-based framework for making claims about learning outcomes.
- *Gain access to and examining data existing in the school.* This is likely to be test score and other kinds of achievement data which can be broken down in many ways to isolate particular achievement gaps with particular groups of people. Identify current baselines in data that exist in a school/district. Use this as a basis for developing strategic actions and interventions that are aligned to the school library's role. This might be focusing on interventions that build reading comprehension, writing techniques, information analysis, critical thinking. Syllabus outcomes statements provide a strong framework for looking at achievement gaps showing in local data and identifying where the teacher-librarian can work to close these gaps.
- *Engage with school and district improvement processes.* School improvement processes, particularly if they are mandated by the state department of education provide a natural avenue for developing evidence-based practices. Typically such planning processes

are data-driven, with data required to establish the need, the interventions, and to measure impact and change. Even if teacher-librarians are not already part of the school improvement planning team, be strategic by developing and providing the school library's contribution to the school improvement plan if it is not actively sought. A good starting point is to use local data as a basis for re-evaluating current practices in the school library.

- *Begin by building a visible research orientation to your school library practice in your school.* Embed evidence-based practice strategies as part of communicating your professional expectations and role in the school. This can open the conversation to facilitate broad collaboration, not just instructional collaboration. Aim to produce a weekly summary of some key research – both to build your own understanding of the research and to develop a consistent mechanism for sharing this with the rest of the school. Target particular research for particular leaders: principals, curriculum/subject leaders, faculty, parents. By building this explicit research culture, you are also developing a mechanism for sharing summaries of learning outcomes derived from your own instructional interventions and providing evidence of impact of the school library on student achievement. Share locally-generated evidence in strategic ways in school faculty forums, committee meetings, newsletters, websites.
- *Engage with Web 2.0 technologies to disseminate local evidence and formal research findings.* Set up a wiki or blog for the school to engage with this research. At your district or regional level, set up a district discussion board/wiki/blog for teacher-librarians to share research and to discuss how the findings might be applied to practice in the local schools. Sharing of understandings and applications of research and evidence-based practices builds experience, interpretive insights and the will to action.
- *Work within the existing data-driven structures in your school.* It is likely that teachers are interrogating school data, or involved in school improvement planning initiatives. Join them; work with them to drill down into data to find the gaps and where students need help, especially ones that lend themselves to school library interventions. Target one or two of these specific gaps, use published research to identify instructional and service strategies that might help you implement appropriate strategies, establish strategies that measure improvement, and share the outcomes to the existing structures in your school.
- *Build a community of evidence-based practice.* At district and regional and state meetings, make a permanent agenda item to share and

Action research focuses on the question, 'How can I help my students improve the quality of their learning?'

discuss recent research and how it informs practice. Create a forum for examining and discussing evidence – published research, school-wide data, local library data, and outcomes data.

- *Evidence-based advocacy.* Ensure every advocacy initiative at local school or district levels makes an explicit tie to research, and brings in national, district and school-based evidence. Advocacy without evidence, as mentioned previously, is self-interested opinion.
- *Begin constructing an evidence-based portfolio.* It is important that teacher-librarians systematically collect and build a portfolio of evidence; compile data from diverse sources into one place: library-based data; instructional processes, exemplars, assessment data; synthesized summaries; statements of outcomes; examples of students work that illustrates high quality learning. It provides an immediate, accessible pool of evidence when called on for various purposes, including negotiating for continuous improvement, and defending proposed cutbacks.
- *Identify your professional development needs in relation to evidence-based practice.* Call for and get training to learn how to apply evidence-based practice approaches in your situation. For example, expertise in interrogating state and school level test score data; learn the available tools used in district to gather data; develop expertise at interrogating school data to inform day-to-day decisions; develop expertise at designing and interrogating existing assessment practices in units of work to build an evidence platform; expertise in negotiating authentic formative and summative assessments that contribute to the evidence bank

Key actions for professional associations (international, national, state and local)

Participants at the summit highly valued the importance of professional leadership at the international, state and local association level to making evidence-based practice embedded in the professional work of school librarians in a continuous, sustainable, shared, and significant way. Professional associations at national and international levels have published and disseminated research through their peer-reviewed journals. This is highly important in building the profession's platform for evidence-based practice. Who reads and utilizes this research? In building a research-focused practitioner community, participants at the SLJ summit suggested a range of actions which focus on building and sharing the collective wisdom as derived through research and integrated with practice:

- *Building a much stronger research strand at conferences.* This includes (1) practitioner-led research discussion roundtables at state,

national and international conferences; (2) making an explicit research track in conference presentations; (3) Review of research as an essential and explicit criteria for all presentations to be made at school library conferences and to demonstrate how this research has informed and shaped professional actions; the expectation is that all presenters must show an explicit evidence-based practice approach as one criteria for accepting proposals.

- *The establishment of association blogs/wikis explicitly targeted for sharing and discussing research and showcasing evidence-based strategies that have been implemented in individual schools.* This would be both researchers and school library educators and practitioners interacting together and discussing research findings, methodologies, and applications and implications for practice, as well as providing feedback on ongoing evidence-based practices being implemented in schools, down to the level of curriculum units.
- *To establish a task force on evidence-based practice to build a strong commitment to evidence-based practice across the school library profession; to ensure that evidence is a central and pervasive concept of policies and processes, and in all public discourses of the profession; is embedded in grants and awards of the association (for example, establish an annual action research grant, to develop replicable professional development modules; to ensure that locally derived and published research evidence are explicit in all advocacy frameworks and modules, and to develop strategies, processes, exemplars and templates for presenting evidence in compelling ways to various audiences and to demonstrate how to integrate local and national and international evidence into compelling ways.*
- *Provision of opportunities and training for evidence-based mentorships.* Evidence-driven leadership is seen as a key need for the profession, given the predominant educational climate and emphasis on achievement, progress and accountability. Training in how to engage with evidence at all levels is seen as critical to the long-term health and sustainability of the profession.
- *Documentation and dissemination of evidence-based practice exemplars.* Standards and syllabus outcomes documents such as the VELS call for developing multiple approaches to measurement of impact, and how this might be done at an individual student, class, school and district level, and accompanied with implementation procedures so that evidence can be carefully and reliably charted, analysed, synthesized and disseminated. This also suggests the need for the development of an evidence-based practice clearing house, which provides practice-oriented syntheses of

It is important that teacher-librarians systematically collect and build a portfolio of evidence.

published research where findings are linked to potential professional actions in a range of contexts. Such a clearing house might include opportunities for practitioners to post action research, researchers to provide case studies of how their research has been implemented in practice, and where doctoral students can provide annotations of unpublished dissertations. In addition, it might include important grey literature that is otherwise lost in the profession.

- Evidence-based practice is clearly established as a criterion for school and library reaccreditation processes, as well as performance evaluation criteria of teacher-librarians that might be established at the state level. In other words, teacher-librarians see evidence-based practice as an expected dimension of daily best practice that is committed to high standards and leadership in schools, and professional growth, not simply as an add on to practice as time permits. This calls for district and state school library representatives to have a deep understanding of evidence-based practice and strongly advocate for it at that level.

Key actions for school library researchers and educators, and research centres

The iterative relationship between published research, professional practice and local action is an essential dimension of evidence-based practice. Central to this is enabling the transposition and integration of research findings into practice and enabling effective decision-making. This has implications for not just the writing and dissemination of research, but also the ongoing training of teacher-librarians. These include:

- The central importance of research methods, including action research as part of the pre-service preparation of teacher-librarians, as well as training in evidence-based practice approaches.
- Development, compilation and dissemination of research-based strategies that have proven to impact on specific needs of specific groups of students and created defined outcomes, for example, research-based reading for comprehension interventions; critical thinking interventions, knowledge construction interventions, interventions that foster conceptual change.
- Development of a data base of data collection and analysis tools tied to syllabus outcomes/ learning standards. This might involve gathering data from exemplary school library practices, and building some evidence-based practice models which gives a framework for teacher-librarians to systematically engage in and gather data and assess outcomes tied to the standards.
- Development of an evidence-based practice

database which enables teacher-librarians to construct and contribute to their evidence-based practice portfolio, to manage and engage with the evidence they collect, and which enables them to input a diverse range of data on inputs, processes, activities as well as extensive output measures and summaries/ syntheses of findings, and to construct reports of evidence-based practice initiatives.

- Improving the accessibility and readability of research – much of what is in peer reviewed journals is not openly accessible, as access is based on membership. Some research is not written to be applicable – it is often seen as too esoteric and not written in a user-friendly language. Material such as this can appear removed from trenches reality where the practical applications need to be made clear and where the strategies for applying it to practice must be clarified. A key challenge is to put the research results in simple terms for practitioners to understand. There is also the challenge to provide better indexing of research targeted to practical applicability. There is a real opportunity for professional journals that do not publish formal research studies to institute a practitioner-led research-to-practice column which discusses application of research to practice. This includes research not normally published in the peer-review journals of library and information science, such as broader research areas of education, curriculum, child psychology and cognitive science.
- There needs to be greater dialogue with practitioners in terms of their practice needs and how this might translate into research agendas.
- Providing leadership in the sustained professional development of evidence-based practice. A critical challenge centres on developing expertise in EBP in the professional community – working to build a systematic culture of evidence-based practice in the profession. This might include mentoring teacher-librarians in evidence-based practices, action research, partnering with practitioners to put research into practice and to publish results and to generate more collaborative, publishable research through these collaborations.

Postscript

Evidence-based practice centres on professional action that is informed by systematic research, guided by experience and wisdom, and which creates evidence for continuous improvement and program development, and for building active support for school librarians and school libraries. It is hoped that this statement will generate dialogue and informed critique, and will provide the basis for strengthening the

A key challenge is to put the research results in simple terms for practitioners to understand.

position and perspective of school libraries in the Australian learning landscape.

References

Coe, R. (1999) *A Manifesto for Evidence-Based Education*. Durham University, Curriculum, Evaluation and Management Centre, Available at: <<http://www.cemcentre.org/RenderPage.asp?LinkID=30317000>>.

Eldredge, J. (2000) 'Evidence-Based Librarianship: An Overview' in *Bulletin of the Medical Library Association*, 2000, October, 88 (4) pp. 289-302.

Slavin, R. (2008) What Works? 'Issues in Synthesizing Educational Program Evaluations' in *Educational Leadership*, 37 (1) pp. 5-14.

Todd, R. (2001) Transitions for Preferred Futures Of School Libraries: Knowledge Space, Not Information Place; Connections, Not Collections; Actions, Not Positions; Evidence, Not Advocacy. Keynote address: International Association of School Libraries (IASL) Conference, Auckland, New Zealand, 2001. Available at: <<http://www.iasl-slo.org/virtualpaper2001.html>>.

Todd, R. (2007) 'Evidence Based Practice and School Libraries: From Advocacy to Action' in

Harada, V. & Hughes-Hassell, S. (eds.). *Principles & Practice Volume 3: School Reform and the School Library Media Specialist*, Libraries Unlimited, pp. 57-78

Todd, R. & Kuhlthau, C. (2005) 'Student Learning Through Ohio School Libraries, Part 1: How Effective School Libraries Help Students' in *School Libraries Worldwide*, 11 (1), pp. 89-110.

Whitehurst, G. J. (2001) This quotation can be viewed at Evidence-Based Education (EBE) Available at: <<http://www.ed.gov/offices/OERI/presentations/evidencebase.ppt#2, ppt#3>>.

The editorial board encourages responses to Dr Todd's position paper on evidence-based practice.

Responses could explore the ideas and approaches or offer examples of practice.

A compilation of these submissions will be printed in the next edition of *Synergy*.

Editor

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