

School libraries building capacity for student learning in 21C

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Colleen Foley is Leader, School Libraries and Information Literacy Unit. In this paper, Lyn and Colleen provide an overview of the research and professional literature about ways in which student learning is enhanced through school libraries. The paper supports teaching partnerships and suggests that a common vision is essential as we move into the future. It outlines how a capacity building approach can be used to achieve this goal, and suggests a model.

In a world of constantly changing information and technology, it is timely to reflect upon our vision for school libraries, and proactively build their capacity to support student learning for the future.

This paper considers a capacity building approach to ensure that school libraries are seamless, flexible learning centres which engage students to become discerning readers and critical information users in their learning, vocational, personal, recreational, social and cultural growth. It informs a vision of school libraries wherein students, teachers, teacher librarians, resources and

technology come together to create engaging and meaningful learning experiences for all.

Setting the stage

Building capacity through learning and teaching

An effective school library contributes to the school's program for integrating the development of information literacy and digital literacy, and works with teachers to support the learning needs of students. The basis of student learning through the school library is an inquiry-based instructional program that exhibits the three dimensions of pedagogy prescribed by the NSW Department's *Quality Teaching* model: Intellectual quality, Quality learning environment and Significance.

School library programs build students' deep knowledge and understanding through effective inquiry when they connect with students' existing knowledge and interests to establish relevance, and engage students in learning about and solving real world problems. Such programs enable students to:

- build their background knowledge
- develop curiosity and motivation for their topics
- formulate relevant focus questions
- engage with complex information sources pertinent to their focus questions
- deal with conflicting information
- negotiate the representations of knowledge that reflect the real world
- cope with the affective dimensions (e.g. doubt, uncertainty, anxiety) of the inquiry process.

Todd, 2007c; Kuhlthau, 2004; *Quality Teaching*, 2003

Inquiry-based programs make use of curricular units that employ a variety of analytical methods to sort, organise and structure ideas, e.g. cause/effect, error analysis, compare/contrast, etc. Such units are well suited to the online learning environment. They allow students to:

- apply critical thinking skills to identify, interrogate and construct ideas so that personal understandings emerge
- build arguments and establish evidence based points of view and perspectives
- generate meaningful conclusions, imaginative solutions, action plans, predictions and actions
- understand how to build and represent new knowledge in safe, ethical and responsible ways
- develop skills in reflection and metacognition to build and verify new knowledge
- gain confidence and independence in their own learning.

Todd, 2007c; Kuhlthau, 2004; *Quality Teaching*, 2003

Research shows that a school library program contributes to building student confidence, independence and sense of responsibility for learning (Kuhlthau, 2004; Lonsdale, 2003; Dyer, 2001; Murray, 1999). Students use terms such as *more comfortable, confident, incentive* [to learn] and *motivated* when describing how the school library supports their learning (Hay, 2006b). This notion of feeling comfortable with the library as a place and with the library staff, is fundamental to students' sense of achievement and motivation as learners.

Teacher librarian instruction building capacity

A teacher librarian has the expertise to build the capacity of students as effective information users through class-based, group and individual instruction. The teacher librarian also provides support for students with project management and time management when completing assignments and projects, as students require assistance to be more efficient in research planning, locating and evaluating resources, selecting appropriate information, synthesising and ethically using appropriate information, and writing their assignments (Hay, 2006b).

Todd argues that the real role of teacher librarians is one of instructional intervention that moves students beyond information seeking and helps them to 'transform found information into personal knowledge' (2006, paragraph 1). Kuhlthau and Todd (2007) suggest a guided inquiry framework, where the goal of instructional interventions is to 'provide students with the necessary procedural knowledge and processes to construct deep knowledge and understanding of their topics; guide them in their inquiry; provide cognitive, affective and behavioural support; and enable [teachers and teacher librarians] to diagnose learning dilemmas before failure sets in' (Todd, 2007b, slide 5).

Research has shown that students can articulate a connection between an instructional intervention and their success in learning, their ability to complete quality research and receiving good marks for project work (Hay, 2006b; Todd, 2004b; Todd, Kuhlthau & OELMA, 2004). Students appreciate this intervention when it occurs at the point-of-need or at a critical time in the research process.

Building a literary learning culture

An effective school library also has the capacity to build a reading culture in the school (Lee, 2005; Krashen, 2004; Lonsdale, 2003, p. 25). Teacher librarians achieve this through collaborating

with teachers and specialist staff, such as reading recovery teachers and literacy coordinators, to develop programs and initiatives that provide rich reading experiences for students. Laycock (2007, p. 17) argues the literary learning dimension of the teacher librarian role as central to curriculum praxis:

With their understanding of the reading needs and interests of students across the school, their knowledge of the range and diversity of literary texts, and their familiarity with the curriculum, teacher librarians are in a strong position to collaborate with teachers and take a leadership role in the development and implementation of curriculums that facilitate relevant and meaningful learning experiences for students.

Laycock (2007, p. 17)

Boyd (2006) and others provide numerous examples of effective practice in building a reading culture and students' literacy capacities. Practices include reading aloud to students (Webb, 2007; Munsie & Hill, 2006; McLoughlin, 2005); coordinating reading challenges (Nay, 2007; Stevens, 2006; Lee, 2005); developing a graphic novel collection (Laycock, 2007; 2005); integrating literature circles into the curriculum (McLean, 2007; Reynolds, 2006; Cleary, 2005); using book raps to support literature and literacy units (McLean, 2009; Cutler, 2005); and using internet and Web 2.0 technologies to support literacy skill development (Patten & Craig, 2007) and online engagement with authors and e-literature (Kirk, 2009; Sneddon, 2009).

Resources and services for the 21C curriculum

... school library collections inform, educate, entertain, and enrich students at all levels ... When students are able to ... explore information that is meaningful to them, they not only learn faster but their literacy skills grow rapidly; they learn how to learn.

C. Beth Fitzsimmons, Ph.D., Chairman, National Commission on Libraries and Information Science (NCLIS) in *School Libraries Work!* 3rd edn. (2008, p. 5)

A responsive, well organised, accessible collection, and expert assistance to use it successfully and critically in multiple ways, enables students working at school or independently from home, to engage with a broad range of information in order to construct knowledge.

An effective school library builds capacity for student learning when:

- it is accessible to the whole school community, on site and remotely
- access to the collection for all students is flexible and timely
- a broad range of quality resources including print, multimedia and online are offered to meet curriculum needs, reading and developmental needs, and recreational needs and interests
- new resources are added throughout the year to keep collections dynamic (Roscello & Webster, 2002)
- resources and services (including teaching), support the professional needs of teachers (Williams & Wavell, 2006).

Students of effective school libraries view their library as the main provider of resources when working on assignments, projects, homework or study. They recognise the teacher librarian's knowledge and expertise as a resource specialist and value the school library's teaching support in helping them find and use quality information on the internet, as well as the right mix of resources to support their information needs (Hay 2006a; 2006b).

An effective school library works with its learning community (e.g. computer coordinator, library committee, teachers, nearby schools, local libraries) to build capacity to provide online and digital resources and services that support student learning (Hay 2006c) and to find new ways of connecting with its students (McLean, 2009; Ferry, Foley, McLean, Williams and Westoby, 2008; Maugle, 2008; Parnis, 2008). Such practices support the view that:

... the school library's role in the 21st century: a place for collaboration, performance, creativity, interactivity and exploration, both online and offline.

Schibsted, (2005)

Developments in technology, such as the Web 2.0 environment, are placing increasing demands on students as learners. They also have the potential to reshape online service provision and resource-based learning experiences of students. Some examples of Web 2.0 tools and their applications include:

- **blogs:** support posting of entries chronologically; ideal for publishing learning journals, book reviews, commentaries on issues, creative writing, brainstorming for peer review, encourage feedback from readers, e.g. <www.wordpress.org> and <www.edublogs.org>
- **wikis:** collaborative websites for groups and individuals to build and revise web content; useful for group projects and problem solving tasks where reader feedback is encouraged; successive versions of content can be viewed and reviewed, e.g. <www.pbwiki.com> and <www.wikispaces.com>
- **social bookmarking sites:** allow users to create a collection of shared bookmarks of recommended web resources where each item is allocated tags based on topic content; excellent support for class-based units of work, e.g. <www.del.icio.us> and <www.blinklist.com>
- **podcasting:** share live or recorded audio material; many podcasts containing educational content are freely available; also ideal for oral presentation of student projects,
- **digital storytelling,** student interviews; allow students to download audio files onto their iPods or computer at home, e.g. <www.audacity.com> for recording audio
- **web syndication (or RSS):** provides automatic updates of school-based web content for students, teachers, parents and wider community. Aggregators provide these feeds, e.g. <www.google.com/reader>
- **web calendaring:** create an online calendar that can be accessed anytime using any computer, e.g. <www.calendarhub.com/> and <calendar.google.com/>
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Flexible access to computers, printers, internet and other resources, including teaching expertise, before school and at non class times, is valued highly by students, and they link their academic success to such support (Hay, 2005b; 2006b). A school library that becomes a high-end production facility, builds capacity for student learning in the 21st century.

Where to now?

While it is difficult to predict what school libraries might look like in the future, we believe research, professional practice and current trends can inform the journey towards a common vision as we move towards 2020. Noah and Brickman (2004) advise that:

... a strategic sense of your library's future direction clearly impacts how you will think about your capacity-building needs ... You need to consider what your needs for organizational capacity are in light of the strategic directions you have chosen, and then assemble the resources to build capacity in the key identified areas.

(pp. 105)

This article will now outline how we might adopt this model in terms of vision and capacity building for school libraries.

Building a vision informed by needs, challenges and trends

New and emerging research examining the digital information behaviour of young people, commonly referred to as the *Google generation*, points to trends and challenges which help shape our vision and inform our

capacity building. We know that for young people:

- information literacy has not improved with widening access to technology
- speed of web searching and moving rapidly from page to page means little time is spent evaluating information
- poor understanding of their information needs makes it difficult for them to develop effective search strategies
- little use is made of advanced search facilities because they assume that search engines understand their queries
- the relevance of materials is difficult to assess when presented with long lists of search hits
- facilities such as *Yahoo* and *Google* have become the primary sources used for internet searching because library systems are not seen as intuitive or user-friendly
- other level of online access determines level of online expertise, and directly influences breadth of online opportunities, and potential risks

Rowlands & Nicholas (2008); Gross & Latham (2007); Large (2006); Heinström (2006); Heinström & Todd (2006); Livingstone & Bober, (2005); OCLC (2005)

School libraries users of the 21st century demand 24/7 access, increasingly look for *the answer* rather than a particular format, and 'scan, flick and power browse' (Rowlands & Nicholas, 2008, p. 8) through digital content using new forms of online reading.

Other challenges include:

- an information landscape containing a growing e-book industry, publishing-on-demand and other electronic publishing initiatives that use mobile and Web 2.0 tools
- the development of library systems that are more user-friendly, integrated and seamless in their delivery as information and resource portals (blended digital collections, federated searching)
- the effect of the diversification of access platforms on remote and digital information service provision

- finding a balance in providing levels of access that allow for creativity, collaboration, and safety as Web 2.0 and emerging technologies rapidly evolve
- the need for students to develop greater understanding of information ethics for their privacy and online safety, and respecting that of others
- the explicit integration of information ethics in curriculum and school practice
- the increasing popularity of data mashups, transforming the way information is represented, making it harder to determine the authority and authenticity of information
- the demand for education to reflect those features of the global economy that represent the changing nature of the 21st century workplace (interconnect-edness, immediacy, interactivity, communications and community)
- addressing emerging issues related to the digital divide and resulting inequalities
- the influence of parents' internet use and expertise on their children's internet use
- the use of evidence based practice and action research by teacher librarians to measure the impact of the library on student learning and to build the library's capacity.

Drawn upon and adapted from Rowlands & Nicholas (2008); Devaney (2008); New Media Consortium (2008); Solomon & Schrum (2007); Foley & Hay (2007); Livingstone & Bober (2005)

Leadership in vision and capacity building

... we have focussed on developing the library as an information processing centre, which complements classroom programs ... We have a passionate, highly skilled and innovative library team. Our staff believes that the most strategic way we can use this great resource is to emphasise the teaching component of the teacher librarian's role.

Chambers, 2006 (p. 6)

The above quote from a NSW school principal captures precisely what Noah and Brickman (2004) mean by 'a strategic sense of your library's future direction'. Leadership underpins effective vision and capacity building. A large body of research identifies the essential role the school principal plays in developing and supporting an effective school library program, and the importance of a successful partnership between principal and teacher librarian (Farmer, 2007; Morris, 2007; Morris & Packard, 2007; Hartzell, 2003; Henri, Hay & Oberg, 2002). Oberg and Henri (2005, p.79) argue that these findings are

... consistent with a broad range of educational research identifying the principal as the key agent of school improvement and of program implementation in other areas such as reading education and technology integration.

The NSW Department of Education and Training's policy on school libraries states, 'The principal and the teacher librarian together are

responsible for implementing the school's library policy' (*Library Policy – Schools*, PD/2005/0221/V01). This implies significant collaboration and communication across the school community.

Working closely with the principal and teachers, the teacher librarian develops knowledge and understanding of school based information issues. The principal can support and develop the teacher librarian's leadership role in the school using the capacity building approach espoused by Crowther, Hann & McMaster (2001), which:

... engages teacher leaders and administrator leaders in collaborative action, while at the same time encouraging the fulfilment of their individual capabilities, aspirations and responsibilities.

(p. 141)

They argue that this:

... leads to strengthened alignment between the school's vision and the school's teaching and learning practices... [and] facilitates the

development of a professional learning community, culture building and school wide approaches to teaching and learning.

(p. 141)

In turn, the teacher librarian provides the principal with the information needed to build a greater understanding of information policy issues that impact on the daily life of teachers and students. These include students' online safety and cyberbullying, issues regarding privacy and copyright, plagiarism, integration of Web 2.0 tools and emerging technologies in curriculum. Teacher librarians work with principals and teachers to find a balance that allows for creativity, collaboration and safety in this digital age (Devaney, 2008).

Clearly articulated philosophies, goals and roles are the hallmark of a collaborative relationship between principal and teacher librarian. Such a relationship equips them to lead their school community towards a 2020 vision for the school library.



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A capacity building framework for school libraries

Noah and Brickman (2004) present a framework consisting of 10 elements that may be used to assess and build a library's capacity for strategic short- and long-term planning. These have been adapted for principal and teacher librarian teams to consider, so they can initiate a capacity building process, in keeping with a shared vision, with their school communities.

Element	Examples of what capacity building looks like in practice
<p>1. Organisational clarity and alignment An effective school library develops its vision, mission, priorities and programs through a strategic planning process. This ensures the school library's future is built on broader Departmental and pedagogical directions, and strongly aligns with regional, community and school-based needs and priorities.</p>	<ul style="list-style-type: none"> • a common vision is formed with input from the principal and school executive team, all class teachers and specialist teachers, all library staff, and student, parent and community representatives • the vision informs the strategic planning process • all stakeholders maintain ownership of the strategic directions • a library committee or working party, convened by the teacher librarian, may be involved.
<p>2. Human resources An effective school library is supported by a knowledgeable and committed library staff, and a well-aligned Principal and teacher librarian leadership team. The school library team has sufficient skilled staff and volunteers to support programs, services and administrative functions.</p>	<ul style="list-style-type: none"> • the school supports training for newly recruited staff and volunteers, and ongoing professional development for existing staff • library staff are encouraged to participate in further education, local networking and professional association activities • individuals share new knowledge and skills with the team through in-house training sessions, mentoring or peer support programs • the principal and teacher librarian have regular conversations about the effectiveness and impact of school library programs and services on student learning, staff development, and explore ways of developing and supporting innovative practice.
<p>3. Facilities An effective school library is a multi-functional facility, where learning spaces are flexible and can be arranged and re-arranged to meet changing needs and priorities.</p>	<ul style="list-style-type: none"> • the facility, furnishings, equipment and technology adequately support school library programs and activities • the library continues to evolve in terms of space, layout, and design to address needs • technology infrastructure in the library is part of the school technology plan, and is regularly updated, maintained, evaluated and developed • the teacher librarian regularly monitors and adapts the facilities of the school library to best meet a variety of learning experiences • the teacher librarian explores appropriate ways that Web 2.0 and emerging technologies can be used to create collaborative, online workspaces to support teaching and learning needs.
<p>4. Collections The capacity of an effective school library program is dependent upon the selection and maintenance of a collection of print, multimedia, digital and online resources that meets the varied curriculum and recreational needs of its community.</p>	<ul style="list-style-type: none"> • collection management policies and procedures are carefully developed to ensure the collection remains balanced, dynamic and relevant • the collection and buying power are broadened through alliances with national, state and public library collections and resource services • the potential of freely available websites, online resources and digital media to build a customised hybrid collection is harnessed.
<p>5. Collaborations Teaching collaborations are central to an effective school library, including collaboration between the teacher librarian and teachers, principal, students and parents. Productive partnerships with other libraries can also be developed to support strategic goals. These collaborations may assist in building the school library's capacity in terms of resourcing, skills, expertise and supporting student learning.</p>	<ul style="list-style-type: none"> • the teacher librarian collaborates with teachers in planning, teaching and evaluating resource-based and inquiry-based learning activities • the principal supports and celebrates successful teacher – teacher librarian collaborations • advice and instructional scaffolds are provided to assist parents in supporting their children's information, technology and learning needs at home • other partnerships are sought with school libraries and public libraries in the local area, or local businesses and organisations.

Element	Examples of what capacity building looks like in practice
<p>6. Service delivery School library services should be dynamic, developing and changing as new curriculum and technologies emerge (see also element 5).</p>	<ul style="list-style-type: none"> • a customised web portal connects 24/7 with staff, students, parents, and the wider community • Web 2.0 technologies are used to build service capacity • the ethos of service delivery is to maximise the school library's connections with its users <ul style="list-style-type: none"> – to be responsive, adaptable and deliver! • school library staff: <ul style="list-style-type: none"> – evaluate existing services – keep up-to-date with new programs, services and emerging technologies – trial innovative ways of servicing the school community.
<p>7. Management systems An effective school library builds capacity through leveraging the potential of its staff, resource management system, content management system, financial and administrative systems.</p>	<ul style="list-style-type: none"> • the teacher librarian regularly collects data to effectively document evidence of the school library's use and impact, and identify areas in need of improvement (see element 9) • SCIS is used for cataloguing, thus saving library staff time for other support duties and, in particular, allowing the teacher librarian more time for teaching and learning activities • <i>OASIS Web Enquiry</i> is used to effectively support learning and teaching • the teacher librarian harnesses the potential of financial and administrative systems to develop budget plans, monitor income and expenditure, and to generate budget reports • the school library employs a range of tools from the school's intranet, content management and/or learning systems, and those freely available via Internet and Web 2.0 to build web services and online learning spaces to support teaching and learning activities.
<p>8. Communication An effective school library continually promotes what it has to offer and employs a marketing strategy to ensure this promotion is on target with each audience and message.</p>	<ul style="list-style-type: none"> • the school library taps into a range of formal and informal communication channels and media, for example: <ul style="list-style-type: none"> – school's daily notices or regular newsletter – weekly or fortnightly email update to staff and students – displays and a school library blog – design local, customised posters and bookmarks – present at school assemblies, KLA and Stage meetings, executive and committee meetings, parent and community meetings – write articles or announcements for the school magazine, local newspapers and radio, local council or community websites • all communications generated by library staff is disseminated and responded to in a timely and professional manner using the most appropriate medium, whether face-to-face communication, phone, email, online or print.
<p>9. Continuous improvement and flexibility An effective school library evaluates, documents, plans, prioritises, implements, and re-evaluates. The teacher librarian employs evidence based practice (EBP) and capacity building approaches to support this continuous improvement cycle.</p>	<ul style="list-style-type: none"> • evidence based practice demonstrates the impact of the school library's program and services on teaching and learning, and in achieving the school's goals and objectives • use a range of sources and strategies to evaluate programs, services and impacts, e.g. surveys, focus groups, student evaluations of project work and assignments, teacher evaluations of units of work, and evaluation sheets from professional development and in-service training sessions • analyse data collected from a range of sources and strategies to identify trends, predict demand, reconsider relationships and make timely decisions (Boyd 2006) • reallocate school library space, staff, and resources in response to changes in curriculum, user needs, technology or infrastructure.
<p>10. Funding School libraries need sufficient funding to contribute significantly to the daily life and needs of the school community. This includes the provision of a quality collection, responsive services and effective instructional programs. While capacity can be built using existing funding or the reallocation of funding within the school or library budgets, an effective school library is also proactive in gaining access to diverse sources of funding to build capacity.</p>	<ul style="list-style-type: none"> • budget submissions are clearly aligned with the school's strategic directions and priorities • the teacher librarian uses evidence of past and current impacts to secure funds to support new programs or projects to increase the school library's potential for further and future impact. These might include: <ul style="list-style-type: none"> – presenting project-based submissions to the P&C – applying for a national or state-based action research or teaching innovation grants – organising fundraising initiatives within the school and local community – seeking donations from local business and community organisations for new projects • the teacher librarian works closely with the principal, and members of the school library and technology committees, to seek potential sources and leverage ideas, evidence and collaborations to be successful in these endeavours.

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School libraries and continuous improvement: a case study



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There are four critical challenges that I see as central to capacity building and continuous improvement of school libraries, and to re-imagining school libraries as purposeful and powerful in the school. We all need to engage in vigorous and frank discussions around these challenges:

1. Re-imagining the school library.

2. Building teams and partnerships.
3. Engaging Web 2.0 tools to develop deep inquiry.
4. Evidence based practice.

1. Re-imagining the school library as an inquiry centre, where enabling the information-to-knowledge journey of students, central to school education, is also central to the professional role of the school librarian.

Recent research points to some confronting findings: students are using libraries less since they first began using internet research tools. They typically begin their information search with a search engine, not a library catalogue, database or librarian. They appear to spend very little time on e-book and e-journal sites, and databases in school libraries, and, when they engage with information seeking, it is like a sport, bouncing in and out, skimming large amounts of information, and stockpiling large amounts of downloaded

information which contribute to superficial knowledge development.

I am pleased to see the recent *Statement on guided inquiry and the curriculum* by the Australian School Library Association and Australian Library and Information Association (2009). This reflects a critical priority. In an internet driven information environment, without inquiry there is no reason for school libraries. An instructional agenda targeted towards deep inquiry and knowledge development has to be the centrepiece of a transformed school library and the central dimension of the work of a teacher librarian. This agenda, along with the NSW *Quality Teaching* model (2003), goes beyond the development of a discreet set of information skills, to competencies, attitudes and values that focus on knowledge development, critical thinking, problem solving, creativity and innovation. Information is the foundation. This goes beyond simply teaching students to find information, to creating deep understand-