# Is school librarianship in crisis and should we be talking about it? Judy O'Connell, Charles Sturt University

#### **Abstract**

The information environment of a good school library has been undergoing a transformation, powered by technology and trans-media influences in our classrooms. The role of the teacher librarian is to promote books, reading and research, in old ways and new ways, so as to promote conversation and learning. The importance of the teacher librarian is intrinsically linked to effective and responsive information curation and dissemination in distributed environments within and beyond the school. School libraries that adapt to the digital needs of their students not only continue to build a reading culture in the school, but provide the divergence and convergence in media needed to provide the materials for motivation, differentiation, collaboration and connections necessary for 21st century learning. Yet there are new schools being built with no school library, and many schools that downplay the importance of a school library and trained teacher librarian in their midst. It is too simplistic to assume that technology and financial considerations are the driving force behind this shifting change. Is there also a crisis of competence? How should a teacher librarian utilize technology and social media to empower library services? How does a teacher librarian stay 'in touch'? While organizations already provide benchmarks and standards, the reality 'on the ground' is that teacher librarians, as individual in schools, are faced with many challenges in this changing media landscape. This study sought to provide a small overview of information services in primary and secondary schools, to elucidate some of these foundational issues in 21st century teacher librarianship. By shining a light on key elements of the conversation, we can begin to understand what teacher librarianship needs to become in a 21st century globally connected world.

School libraries and teacher librarians can lead learning in today's interactive knowledge environments. Leading learning is no small task and the leadership challenge placed before teacher librarians is both exciting and challenging, encompassing many aspects of literacy, technology and professional development in collaboration with students and teachers (Fontichiaro 2010; Howard 2010; Killeen 2009; Milam Creighton 2009).

While teacher librarians and school library services continue to adapt to the needs of their students and school community in response to student learning needs, the future is not always rosy. We have been given comprehensive evidence that in Australia there is indeed a crisis in school librarianship, and that we need to be talking about it.

# The big picture

On Monday 23 May 2011, the House Standing Committee on Education and Employment tabled its report on the inquiry into school libraries and teacher librarians in Australian schools entitled *School libraries and teacher librarians in 21st century Australia*. The representations tabled to Standing Committee covered a wide range of issues related to the role, adequacy and resourcing of school libraries and teacher librarians in Australia's public and private schools.

The extensive presentations provided material to the Standing Committee on the following terms of reference (Inquiry Report 2011, pp.13):

- the impact of recent policies and investments on school libraries and their activities;
- the future potential of school libraries and librarians to contribute to improved educational and community outcomes, especially literacy;
- the factors influencing recruitment and development of school librarians;
- the role of different levels of government and local communities and other institutions in partnering with and supporting school librarians
- the impact and potential of digital technologies to enhance and support the roles of school libraries and librarians.

The inquiry elicited a large response from former and current teacher librarians, whom, between them, have an abundance of experience in the field. Evidence was also provided from school library stakeholders in New Zealand, Asia, and North America (*Inquiry Report*, 2011, School Library Report chapter 6 point 6.4).

For practitioners working in and involved with teacher librarianship, this report has been of significant importance in highlighting the evolving context and changing needs of encompassed in providing quality library and information services in our schools. By providing this report, practitioners have also been challenged to look further into the field of school librarianship, and the factors influencing the status of teacher librarianship in that context.

The report confirms the anecdotal evidence that is often discussed related to school arrangements, that on the one hand attach higher value to the purpose and expanding functions of a school library with its Australian Library and Information Association (ALIA) credentialed staff (O'Connell, 2010 September 4), to the other extreme where schools remove a school library by adopting other arrangements to focus on innovation and learning without the involvement of an information professional (Sydney Centre for Innovation and Learning).

6.6 It is indisputable that the value of teacher librarians' work has been eroded over the years and undervalued by many in the community, be it by colleagues, principals, parents or those in the wider school community. *Inquiry Report, 2011* 

There are many forces at play within schools that impact on provision of library and information services that support learning, and school libraries are caught up in that potential crisis of budgeting as schools continue to adapt to 21<sup>st</sup> century learning needs. It is when competing constraints are in operation that school librarianship inevitably comes under scrutiny, resulting in adaptations and changes that can have long-term implications.

6.7 The profession has unfortunately been subject to the many competing priorities that school principals find themselves contending with in an environment in which education budgets are ever stretched.

Inquiry Report, 2011

Perhaps one of the most disheartening conversations that have emerged has been in relation to the leadership and staffing of a school library. Many have noted the shift that can take place in a school where teacher librarianship is sufficiently undervalued, so that teaching staff are appointed to 'run' a school library, with little or no qualifications in the field appropriate to the nature of the services that a school and its students deserves. Conversely, staff may be appointed who may have a library qualification, but who are not teachers.

The implications of this shift relate directly to appropriate post-graduate training being available for teacher librarianship; to workplace demand for their appointment; and to ongoing development in the professional capacity of teacher librarians to lead their schools in new and emerging literacy and information environments.

6.9 A vicious cycle has resulted from under-resourcing school libraries and having insufficient numbers of appropriately qualified staff in them, leading to a poorer quality service, which reduces the demand for teacher librarians as well as the attractiveness of the profession to prospective students. *Inquiry Report, 2011* 

### Should we be talking about it?

This inquiry has provided us with a substantial review that indicates the vital need to continue the conversation about what a teacher librarian is, does, and can do into the future. (*Inquiry Report*, 6.17). This conversation (i.e. research activities and professional development opportunities) will ensure that individuals, groups and organizations will be better placed to continue advocacy on behalf of the profession.

The Australian Government tabled its response (The House of Representatives Standing Committee Report, 2011) to the school library inquiry report essentially leaving it to stakeholders and those responsible for funding and management of school libraries to address the concerns.

The Australian School Library Association (ASLA) has committed to preparing a *Futures Paper*, which will focus on 21st century learning in Australian schools.

Working collaboratively with representatives from government and non-government departments of education, national principals' associations, education unions, universities offering training in teaching librarianship and ALIA, to prepare the futures paper, with recommendations for the national and state governments. This paper will be available in the last guarter of 2012.

ASLA has confirmed the need to sustain the conversation at all levels. This conversation is grounded in the findings of the Enquiry, but is also affected by the ongoing influences that continue to put the nature of schooling onto a new trajectory.

A good place to gain an overview of these influences is in the *Learning in a Changing World (2010)* series (commissioned by ASLA and ALIA), which addresses how the learning environment and the services to support it are evolving. The series presents the core areas for teacher librarians and school leaders to consider for 21st century learning: the digital world, virtual worlds, curriculum integration, resourcing, and the physical environment. The ASLA Futures Focus group examined this series, and identified key themes that contribute to the ongoing conversation:

# 1. Successful learning for 21<sup>st</sup> century students is shaped by the digital environments within society and in our schools

- a. Learning involves connecting, communicating and collaborating in multimodal environments
- b. Rate of technology change is accelerating as it a teacher's responsibility to facilitating learning in current and emerging digital environments
- c. Resources are being managed with better technology tools and refined digital integration
- d. Curriculum innovation depends on integration with digital and multimodal approaches to learning

# 2. The scholarship of teaching is influenced and shaped by digital environments

- a. Models of learning are being developed that accommodate multimodal learning environments
- b. Mobile devices and virtual environments are essential components of learning
- c. Learning theories are responding to creative, cognitive and metacognitive engagement with literacy and information needs that have emerged as a result of digital environments.
- d. Curriculum innovation depends on adopting a teaching and learning approach that is flexible, student-centered, and incorporates a range of tools and devices for digital connectivity

# 3. School libraries need to respond to a 21st century information ecology

- a. Literacy and research frameworks need to be developed to respond to the unique developments in digital environments
- b. Action-based research needs to drive the decision-making cycle
- c. Guided enquiry is an essential tool for curriculum integration
- d. The school library is a virtual and physical learning commons for whole-school library services

# 4. The teacher librarian must be a curriculum leader with responsibility for supporting whole school learning frameworks that meet challenges that the digital context has created

a. The teacher librarian leads information provision in their schools, with an increasingly strong focus on digital resources and environments

- The teacher librarian designs the learning environment of the library to respond to the pedagogic and technologic changes in learning and teaching taking place
- c. School libraries are hubs of professional development and collaborative
- d. The teacher librarian leads the ethical and responsible use of resources underpinned by the mix-and-match environment of creativity, literacy and knowledge activities that digital environments have fostered.

Technology would seem to have become a key driving force affecting the context of curriculum engagement and driving changes in the information ecology within which library and information services are positioned.

The longitudinal research study of emerging technologies in K-12 education *The Horizon Report K-12* (Johnson et al, 2012) has been charting ongoing technology changes and highlighting the impacts and evolving needs in the teaching, learning, and creative inquiry practices in education globally. Schools have a responsibility to prepare students to move from the world of school to the world of adulthood, employment, further education, vocational training, and community participation. Schools can meet future learning needs by creating a sustainable learning ecology that is shaped by the ubiquity of information, globally responsive pedagogical practices, and driven by collaboration and informal learning in multiple access points and through multiple mediums.

The evidence is that technologies and social media platforms are driving an unprecedented reorganization of the learning environment in and beyond schools. These disruptive shifts are already reshaping the workforce landscape and the skills required (Davies et al, 2011), establishing *lifelong* and *life-wide* learning as the central paradigm for the future (Redecker et al, p.10). There is a need for schools to develop a sustainable and responsive technology-rich learning ecology that has adaptability at its core to support 21st century learning needs.

#### What is the conversation?

Understanding the breadth of technology change, and its impact on school libraries, is an essential step in leading the way forward in unraveling the potential of school libraries to meet the challenges of 21s century learning.

Ongoing work in Australia has already contributed significantly to promoting new directions. For example, the research column of SCAN – a journal for educators - published by the NSW Curriculum and Innovation Centre < <a href="http://scan.nsw.edu.au/">http://scan.nsw.edu.au/</a> > continues to provide ample evidence for and discussion of future directions for 21<sup>st</sup> century libraries. The NSW Department of Education and Community has also committed to the retraining of teachers for leadership of school libraries through a post-graduate scheme with the School of Information Studies, Charles Sturt University.

The State Library of Victoria provides the Personal Learning Network (PLN) program <a href="http://www.slv.vic.gov.au/pln">http://www.slv.vic.gov.au/pln</a>, which is a self-paced online program for school library staff, educators, learning support personnel and curriculum leaders. The program is designed for those new to the world of web-based learning, as well as people keen to enhance their existing online skills and experience. The PLN program is presented in association with the <a href="https://www.slv.vic.gov.au/pln">School Library Association of Victoria</a>, and was

developed with support from the <u>Department of Education and Early Childhood</u> <u>Development</u>.

While some organizations continue to provide direction and support for school libraries and teacher librarians, the reality 'on the ground' is that teacher librarians in schools, often working as the sole information practitioner, are faced with many challenges in this changing media landscape.

Within this context it is important is to continue the conversation through a multiplicity of channels to understand how school libraries and teacher librarians are adapting to the digital needs of their students, and how they are providing the divergence and convergence in media needed to provide the materials for motivation, differentiation, collaboration and connections needed for learning in today's media rich and connected world.

Using digital mediums to connect, communicate and collaborate is an important means for teacher librarians to build collegiality, beyond academic and professional development programs, professional networks, and personal learning connections.

# Turning on the torch

There are significant opportunities to research this digital conversation, in order to shine a light on the key elements of this conversation. If we are to understand what teacher librarianship needs to become in a 21st century globally connected world, then the daily interactions, workplace successes and challenges need to be considered within the broader context of the way that professional interactions take place. We need to understand how digital connectivity assists in the process.

Anecdotal stories of change continue to highlight the variety of influences (both positive and negative) at play in the organization, funding and support of school libraries and teacher librarians. Students entering the Master of Education Teacher Librarian program at CSU share their own anecdotal stories about the purpose and place of school libraries during their study program.

"The principal thought of the library simply as release time for teachers and did not care what was taught, if anything."

"The opportunities depend on the Principal's understanding of the possible contribution to the learning and teaching in the school."

"The school didn't have a TL and only a small room filled with books. There was no borrowing allowed. I took my year two class into the library and they didn't even know it existed".

"The TL and principal collaborate often as does the TL and other staff. It is amazing to see the difference in how students research and enjoy books."

"It seems that support from the principal in terms of budget, time and collaboration is a necessity in order for a TL to gain the respect and trust of the staff in order to make a real difference to the students. You can't have one with out the other!"

"It is evident that the role of a TL has changed dramatically over the years and now takes on a large range of functions and responsibilities. The role of TL and the library in general appear to be a very important, even central part of a school community and the way in which the school and students develop and grow. It is amazing, but not surprising, the extent of the use of technology in teaching and learning within a school."

# **Continuing the conversation**

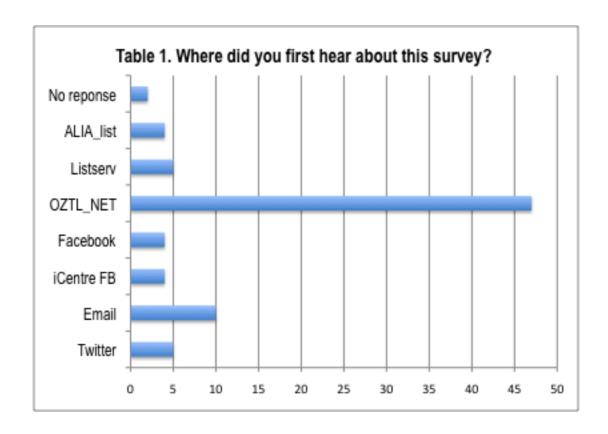
A series of informal meetings in March to May were held with teacher librarians representing primary and secondary schools in the public and private sector, to discuss foundational issues in 21<sup>st</sup> century teacher librarianship based on the 2011 Enquiry Report, to *continue the conversation*, and in so doing elicit fields for future investigation.

Three foundational areas were identified:

- The school context
- The professional practices
- The use of online tools

These three areas were used to develop some preliminary survey questions to gain further personal perspectives on these elements which are impacting on school libraries today.

A survey Valuing our services: Teacher Librarianship in 2012 was promoted for one week via the OZTL\_Net listerv, ALIA schools listserv, iCentre Facebook, CSU single subject Facebook Group, and Twitter. Subsequently, the survey was also promoted by others via email and other system listservs.



There were 85 responses (Table 1), which provided a rich additional source of input for future discussions and research. The proportion of responses from the OZTL\_Net

listserv indicated a clear willingness to *join in the conversation*. Of these 15 students are currently studying teacher librarianship, 46 have postgraduate qualifications in teacher librarianship, 17 have other information sciences qualifications at postgraduate level, have TAFE or no library qualifications.

Of these respondents 53 were working full-time; 20 part-time; 1 on leave; 4 seeking appointment; 2 retired; and 5 working in other roles in school libraries or to support school libraries.

## Let the conversation begin

The responses to the question "What are the key responsibilities in your role as Teacher Librarian?" provided a descriptive landscape of activities that practitioners are only too familiar with including:

- literature, literacy and literacy events
- information literacy and trans-literacy
- teaching and collaboration with teachers
- collaboration with faculty, subject and year level teams
- provision of exemplary services in physical and virtual spaces
- community involvement and literature events;
- events management
- ICT integration and leadership
- digital citizenship initiatives
- student support and tutor groups
- library and information services management
- curriculum integration
- professional development services
- responsibility for mobile devices such as iPads
- copyright information
- content management systems
- multimedia and audio visual services

Facilities were as varied as small primary library to multi-campus primary/secondary, and responses were detailed and extensive. Yet the most notable feature was the breath of work that is undertaken by a teacher librarian, and the significant contribution to the overall learning and teaching life of a school.

"Keeping teaching staff, students and parents informed and trained in the use of information resources"

"Leading research and development of information resource provision in new formats"

"Management of physical and digital information resources and spaces, including research and development of changing spaces to meet community need and evolving education paradigms.

However, the responses to the question "Have these key responsibilities changed in the last two years?" provided a sobering reflection of the *Inquiry Report* point 6.6 'value of teacher librarians' work has been eroded over the years'

Only 10 responses indicated that there had been no real changes made at their school in the nature of their key responsibilities as teacher librarian. Of the other

responses the majority provided a range of changes showing the complexity of influences affecting school libraries and the work of the teacher librarian:

- decrease in staffing
- decrease in budget
- increase in ICT resources, management, training and integration
- increase in student supervision
- increase in work for individual teachers and faculty
- addition of a teaching load

"I sometimes feel like I have to be 'two steps' ahead."

"The main change has been teaching in a subject discipline area"

"More online work, more library supervision"

"As the student body has increased the workload has increased while staffing has not"

"Additional playground duties as well as lunch time duties in the library"

"Increased leadership roles"

"Increase in RFF"

While many statements often reflected an erosion of previous levels of time and resourcing, the responses to the questions regarding the initiator of these changes also highlighted good levels of support, and that not all change was of a negative nature.

Teacher librarians were being valued by the leadership team on the one hand, and were also active advocates for the developing new directions in school library services. Teacher librarians are keen to make learning visible, and to support the evolution of library and information services in the emerging learning contexts.

"The school leadership has always supported any progressive changes that positively impact on the school. They allowed me to visit school libraries in New York and Canada."

"The Principal was happy to reduce my teaching time as she prioritises the library and wants to see the information skills and enquiry program taught, and requests that I take place in other projects"

"The new Principal is very supportive of the library and my role, and is keen to make the most of my expertise and experience"

The responses also show that librarians understand that collaboration between teachers and teacher librarians is core business, as students benefit from team teaching, curriculum planning, helping them deepen their levels of knowledge of both information literacy and subject content. They understand that students are already immersed in creative, collaborative and socially networked environments and that the need to harness these environments involved teaching our students to be literate, information literate and knowledgeable in these 21<sup>st</sup> century environments will help determine the success perceived future relevance and importance of our school libraries (O'Connell 2012).

"I have been in this position about 18 months and I am a shameless promoter of library services"

"I have only been here two years and have introduced many new technologies, have delivered PD on these to staff"

"Increase in wide-reading requests and information literacy integration has grown through word of mouth due to my initiatives"

"Changes over the last two years have occurred as a result of being approached by members of the school administration team and through my regular volunteering to be involved with initiatives"

"Coaching in the classroom has happened because I offer my services, and I have built up a friendly understanding with staff"

"All initiated by me!"

## **Digital environments**

Within the context of these developing environments within schools and school libraries lies the field of information organisation and dissemination in digital environments. Becoming a model for lifelong learning has been a recurring theme because school libraries are in the knowledge business. By building a future-ready personal learning network a teacher librarian can engage in new and emerging media to assist in promoting creative and authentic knowledge work in their schools (Cox, 2010) (Harlan, 2009).

How does a teacher librarian utilize technology and social media, and what is considered important as reflected by personal use of online tools. Web 2.0 revolutionized the means at our disposal to filter and share information, therefore it is of interest to know what teacher librarians actually choose to use within their own personal online toolkit.

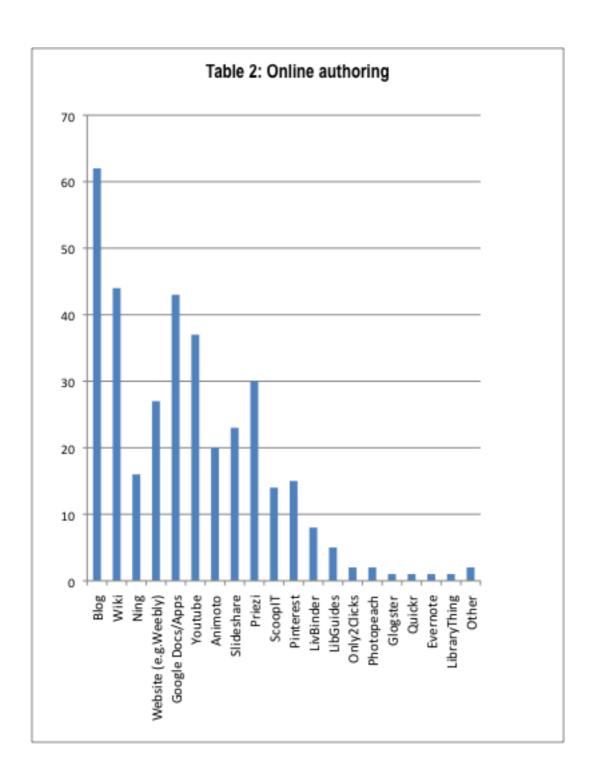
#### The use of online tools

Reponses from the survey (*Online authoring, Table 2*) confirmed a consistent use of online tools for information organization and management for personal professional learning and information organization and dissemination. It also showed that use of blogs was by far the most common form of online publishing, indicating at these levels to have entered 'mainstream' practice for teacher librarians. Creditable percentages were also using Google Docs and online presentation tools. Interestingly Pinterest, one of the more recent tools, had already gained popularity.

Few teacher librarians were making use of Libguides (commercial information product chosen by many libraries) or Livebinders (free product used by many educators) – though the question that cannot be answered from this survey is the nature of information organization that might be undertaken via a school intranet.

Many of these tools include an element of online collaboration (Online collaboration, Table 3). However, when it comes to specific means of communication and collaboration, Facebook and Twitter showed some prominence, with listserv communication still the most common amongst this group of respondents. When the distribution of this survey is taken into consideration, this result would confirm that the most common connection point between the respondents was OZTL\_Net, a more

'traditional' form of communication, even though newer forms of social media are being used.



In the same way there is evidence that there is limited use of newer and emerging Web2.0 tools for social bookmarking or resource sharing (Table 4). Yet surprisingly there is strong use of could storage with Dropbox, iCloud and perhaps Flickr falling into that category. A similar observation can be applied to the use of RSS readers

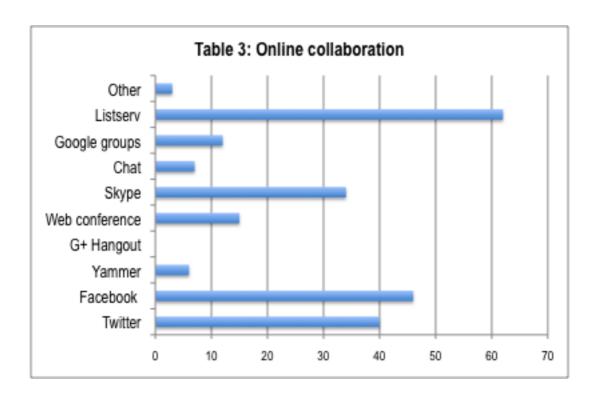
(Table 5), where Google Reader/iGoogle remains the staple tool. However, the iPad and iPhone is pushing some usage into newer tools such as Fliboard.

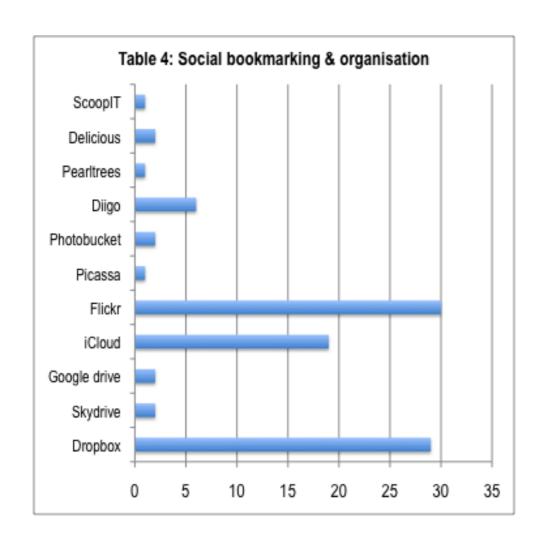
# Is there a crisis of technology competence?

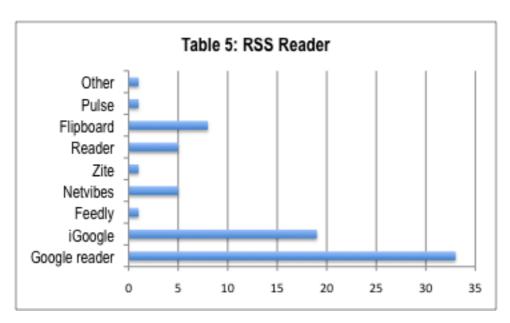
Simply using the latest 1:1 device, or the latest website, or the latest App is itself not the solution – though the 'shiny' new toys can provide an illusion of advancement and success. Inquiry remains the foundation of learning, and it is the teacher librarian who can provide the broad knowledge of the extensive resources in the (physical and virtual) library, on the Internet and in the community. Without this expertise teachers can only minimally accomplish the information literacy requirement of 21st century learning standards (Kuhlthau, C. C. 2010).

The responses to the survey would indicate a degree of importance attached to the use of online tools. Yet the underlying question that begs attention is the nature of and importance of online tools to support personal professional growth and the development in the capacity to lead and promote school libraries in a climate of change?

The interactive nature of social tools on the Web has produced related actions of 'participatory organisation', 'sourcing', 'corroboration', 'connected meaning', 'deep reading' 'media literacy' and 'ethical participation' (Stripling, 2010).



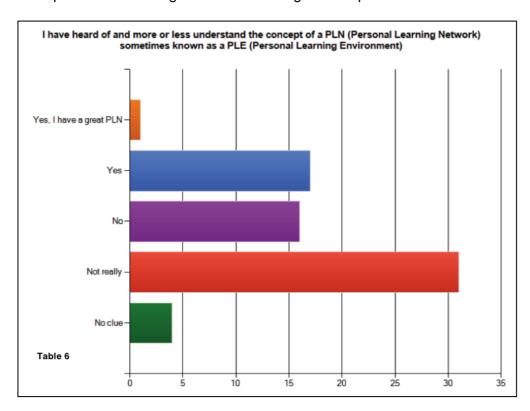


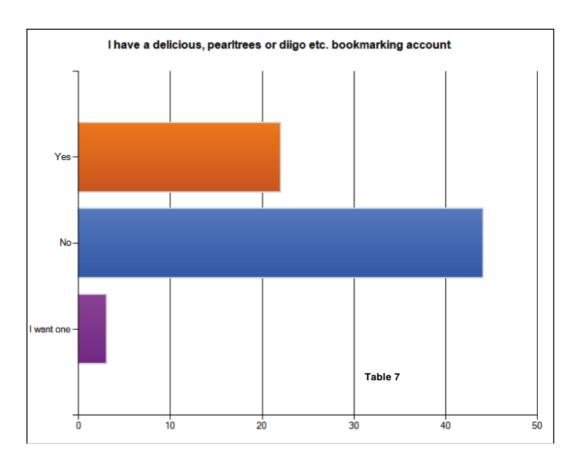


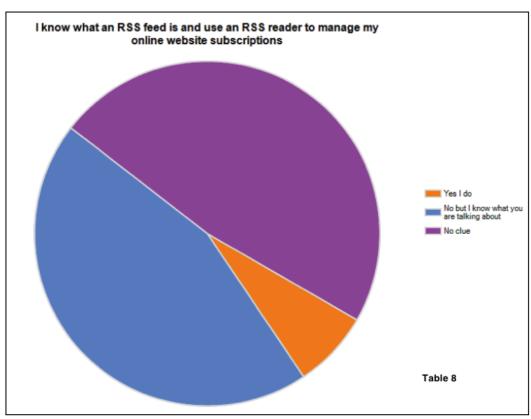
#### A little more conversation

Samples (Tables 6, 7 8) taken from a survey of 75 attendees (Moore, 2012) in preparation for the Northern Sydney Regional Teacher-Librarian conference in May 2012 (75 attendees), for a keynote on the topic of *savvy teacher librarians*, also indicated the growing capacity of teacher librarians in new media environments, but also the ongoing need for professional conversation to continue about tools, strategies, ways to influence the learning environment.

Teacher librarians will continue to benefit from assistance in developing their knowledge of social media, cloud computing and other emerging technologies to improve the library experience of members of their school community, and to build resources for learning through connected pathways. Hamilton (2012) provides a comprehensive study of tools and practices in the school context that demonstrates the importance of striving for more knowledge and expertise in these areas.







### Shining the light on technology

Students use technology to research online, anytime, anywhere, and because of this students in primary and secondary schools need to be nurtured in ways to learn *how to learn* from the multiplicity of resources at their disposal, using the best information organization and critical thinking strategies that that we can show them. We need to build a strong digital culture of enquiry at the heart of each of our schools. As Gordon, (2010, p. 79) explains, a culture of inquiry emerges as teachers become learners, and learners are self- and peer-taught, and everyone becomes a researcher.

This information organization requires a familiarity with and flexibility of communication channels to help teacher librarians develop these new dimensions of information and digital fluency. While the technologies continue to change, and the resulting approaches to learning curriculum presents new challenges, the cognitive and meta-cognitive transactions that underpin information literacy in a digital era will remain a constant.

So teacher librarians need to make learning visible in new and challenging ways. There needs to be a synergy between new and emerging technologies, a familiarity with these tools as benchmarked by the Horizon Report, and a capacity to use multimodal and mobile devices to model life-long and life -wide learning.

Teacher librarians are already acknowledged as being creative and wholly competent in the traditional literacy and information literacy aspects of their role. Despite this, the challenges within schools continue to promote or erode the 'status' of the teacher librarian and the school library depending on a variety of circumstances.

While a *crisis* in teacher librarianship is continuing, one of the key elements that we should be talking about is technology and the use of online tools.

The ongoing evidence provided in this preliminary study seems to indicate a need amongst teacher librarians for further development in the range of skills and capacities in the use of online tools; a need to engage in conversation in flexible online environments; and a need to grasp the opportunity to use technology to become learning leaders in within schools.

The reality is that teacher librarians can be the best person to have in a school – but only if they have actually learnt how to fill that role well, and have understood and assimilated the principles, tools and practices of a 21<sup>st</sup> century teacher librarian.

In other words – poor school, rich school, country or city school – we need a great teacher librarian at the helm to lead learning and innovation with and beyond technology!

#### References

Cox, E. (2010). Building a future-ready personal learning network. *School Library Monthly*, *27*(3), 34-35.

Davies, A., Fidler, D., & Gorbis. M. (2011). *Future work skills 2020*. Institute for the Future for the University of Phoenix Research Institute: California

Fontichiaro, K. (2010). Pride and prejudice and technology leadership. In S Coatney (ed.), *The many faces of school library leadership*, Libraries Unlimited, California, pp.101-113.

Gordon, C. A. (2010). The culture of inquiry in school libraries. *School Libraries Worldwide*, 16(1), 73-88.

Hamilton, B. (2012). Embedded librarianship: Tools and practices. ALA Techsource: Chicago III.

Harlan, M. (2009). *Personal learning networks: Professional development for the isolated school librarian*. Westport Conn.: Libraries Unlimited.

Howard, J. (2010). The teacher-librarian as a curriculum leader. In S Coatney (ed.), *The many faces of school library leadership*, Libraries Unlimited, California, pp. 85-97.

School libraries and teacher librarians in 21<sup>st</sup> century Australia: Inquiry into school libraries and teacher librarians in Australian schools [electronic resource] / House of Representatives Standing Committee on Education and Employment Canberra: The Parliament of the Commonwealth of Australia, 2011. Retrieved from <a href="http://www.deewr.gov.au/Schooling/QualityTeaching/researchandpublications/Pages/Home.aspx">http://www.deewr.gov.au/Schooling/QualityTeaching/researchandpublications/Pages/Home.aspx</a>

School libraries and teacher librarians in 21<sup>st</sup> century Australia: Inquiry into school libraries and teacher librarians in Australian schools [electronic resource]. Australian Government Response. Retrieved from

 $\underline{\text{http://www.deewr.gov.au/Schooling/QualityTeaching/research and publications/Pages/}}\\ \underline{\text{Home.aspx}}$ 

Johnson, L., Adams, S., and Cummins, M. (2012). *NMC Horizon Report > 2012 K-12 Edition*. Austin, Texas: The New Media Consortium.

Killeen, E. (2009). Yesterday, today, and tomorrow: transitions of the work but not the mission. *Teacher Librarian*, 36 (5) pp. 8-13.

Kuhlthau, C. C. (2010). Guided Inquiry: School libraries in the 21<sup>st</sup> century. *School Libraries Worldwide*, 16(1), 17-28.

Learning in a Changing World (2010) Five volumes. Joint publication of ASLA, ALIA and ACER. ACER Press: Camberwell.

Moore, D. (2012, May 8). Need savvy teacher librarians. [Web log comment]. Retrieved from <a href="http://darcymoore.net/2012/05/08/teacher-librarians/">http://darcymoore.net/2012/05/08/teacher-librarians/</a> [survey data shared with permission]

O'Connell, J. (2010, September 4). Hybrid synergy - the future of school libraries [Web log comment]. Retrieved from http://heyjude.wordpress.com/2010/09/04/hybrid-synergy-the-future-of-school-libraries/

O'Connell, J. (2012). Change has arrived at an iSchool library near you. In P Godwin & J Parker (eds), *Information literacy beyond Library 2.0.*, Facet Publishing, London. pp. 215 – 228.

Redecker C, Leis M, Leendertse M, Punie Y, Gijsbers G, Kirschner P, Stoyanov S & Hoogerveld B. (2011). *The future of learning: preparing for change*, Institute for Prospective Technological Studies, JRC European Commission.

Stripling, B. (2010). Teaching students to think in the digital Environment: Digital literacy and digital inquiry. *School Library Monthly*, 26(8), 16-19

Sydney Centre for Innovation and Learning. (n.d.) Northern Beaches Christian School. Retrieved May 2, 2012 from http://scil.com.au/