

# Working with technology is more than a trivial pursuit

The digital revolution is driving a rapid reorganisation of the learning environment, with library and information professionals increasingly required to engage with emerging technologies and social media platforms. **Judy O'Connell** reflects on the style and demands of an evolving learning culture.

Last year, I spoke to my mobile phone. I wasn't ringing anyone; I was asking my phone a question. With the power of Siri (Apple's iOS information navigator) my mobile phone gave me some answers, right there on the screen. With internet-enabled devices, playing a game of Trivial Pursuit will never be the same! Yet the future of technology and information is anything but trivial. If voice responses become the norm, there will soon be no need to read an answer to a question; and in another few decades, there may not even be a question! While we grapple with devices, interfaces and screens in our daily lives, the futurists tell us that we will be our technology, and information will be who we are.

As we watch the fast-paced changes taking place in technology, the web of data, and the social connections between us, the value of information as knowledge remains the core business of library and information professionals. The 'fourth revolution' proposed by Floridi (2012) describes the current information age: an era in which our understanding of both self and world is significantly altered by sudden changes in the information climate, and which is directly attributable to the advent of computing machinery from Alan Turing (1912-1954) onwards. As curators of knowledge and cultural history, the burning question in this fourth revolution undoubtedly lies in our ongoing ability to manipulate and manage information flow.

The digital revolution has given us instant communication and easy global connectedness, with mobile technology and its influences in particular growing at warp speed – in 2013, there are almost as many mobile-cellular subscriptions as people in the world. This digital transformation has produced some extraordinary tools for flexible learning – tools which are exciting for both students and teachers, and promise new and innovative methods of teaching. However, these tools can also be incredibly daunting and challenging for educators.

Thomas and Brown (2011) explained how much the internet has changed the way we think about technology and information. In

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this new culture of learning, information technology has become a participatory medium, giving rise to an environment that is constantly being changed and reshaped by the participation within information spaces. They argue that traditional approaches to learning are no longer capable of coping with this constantly changing world. Teachers no longer need to scramble to provide the latest up-to-date information because students themselves are able to take an active role in helping to create and mould it, particularly in areas of social information.

To support and nurture learning in these evolving environments is a challenge, but using digital mediums to communicate, curate and collaborate in the management and dissemination of information is important. Professional programmes in library and information studies should be designed to enhance personal professional networks and personal learning conversations.

### What is the conversation?

Since 2002, the New Media Consortium Horizon Project ([www.nmc.org/horizon-project](http://www.nmc.org/horizon-project)) has been undertaking international longitudinal research studies in higher education, museums and schools. The project charts the landscape of emerging technologies for teaching, learning, research, creative enquiry, and information management. It has helped educators and thought leaders across the world to build upon the innovation taking place at their institutions by providing them with expert research and analysis.

According to the project's 2013 report on higher education, massive open online courses (MOOCs) and tablet computing will see widespread adoption. Educational innovation – and hence the way academic staff and students can engage with information in their discipline – is taking a significant leap into online and multimodal environments. Blending formal and informal learning into university learning environments does, however, require library services to engage with – and be responsive to – the style and demands of a participatory culture; a culture which is device-driven and on the move.

Meanwhile, the project's report on primary and secondary education (K-12) forecasts that cloud computing and mobile learning will be the main areas of influence. These elements of emerging technology adoption are becoming more and more pervasive in everyday life across much of the world and, as a result, the increasing expectations of our future students to work, play, and learn via cloud-based services and apps on their mobile devices is gaining prominence. Cloud computing has already transformed the way we use the internet to help us manage information, communication, data storage and access, as well as collaborative work. Mobile learning provides a gateway to endless learning, collaboration and productivity, fostered by the internet.

Other research – such as that from Project Tomorrow ([www.tomorrow.org](http://www.tomorrow.org)) – reveals that school students are using social media to connect, collaborate, and create content in ways that are especially meaningful for them, but that are new to past generations. Students are adapting these tools and resources to enhance and extend the learning process, and to achieve learning goals. Where internet access is steady and reliable, students are already busy personalising their education experiences through ubiquitous online interactions. Social media and digital tools and resources have transcended the classroom and are emerging as key components of 21st century school to home communications.

The evidence is that technologies and social media platforms are driving an unprecedented reorganisation of the learning environment in and beyond universities and tertiary environments. These disruptive shifts are already reshaping the workforce landscape and the skills required (Davies et al., 2011), estab-

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lishing lifelong and life-wide learning as the central paradigm for the future (Redecker et al., 2011). Our work has to centre on helping to meet future learning needs by creating a sustainable learning ecology that is shaped by the ubiquity of information and by globally-responsive pedagogical practices, and is driven by collaboration and informal learning in multiple access points and through multiple mediums.

## Building online conversations with social media

The School of Information Studies at Charles Sturt University has over 1,900 students from around the world studying for professional library and information science degrees, and is mindful of the significant influence of emerging technologies. How could we miss them?

Because of this, social media is integrated into our courses, including subjects such as 'Social Networking for Information Professionals' delivered online using Facebook, Web 2.0 tools, and learning experiences in Second Life through our virtual learning centre.

There are many opportunities for building vibrant futures through online conversations and social media environments. Further information on libraries and social media is available at [bit.ly/librariansocialmedia](http://bit.ly/librariansocialmedia). This site is an example of the kind of professional development activities undertaken by our staff, as well as an example of an open resource made and shared online with anyone around the world!

Staff at the School of Information Studies make every effort to include the widest range of online tools in their work, providing our students with the experience needed to inform best practice in their own libraries, information agencies, museums, or other organisations. From areas as diverse as digital preservation to teaching 21st century students, graduates are challenged to integrate emerging technologies and environments into their thinking. We have to recognise the vital role that library and information services play in today's interactive knowledge environments, particularly where asking a question is synonymous with 'googling', and where 'catching up with the news' can happen in many formats.

Staff at the school have always reached out into their professional community to provide support and model best practice in inform-

ation environments. For example, the teacher librarianship team has been working voluntarily over the last ten years to facilitate and empower online conversations by supporting the Australian Teacher Librarian Network LISTSERV as a professional service to the sector. However, the growing importance of utilising web-based and mobile-device-enabled tools for communication meant that more was needed. Social media is a perfect way to allow synergy in discussion and sharing of resources. Social media also provides a strong platform for showcasing the day-to-day conversation, activities and achievements of a library. The Australian Teacher Librarian Network portal ([oztlnet.com](http://oztlnet.com)) brings a range of social media tools and conversations spaces together, with new choices to suit personal professional needs.

Academic and professional development is not a solitary activity and, so often these days, it is no longer even a face-to-face activity (at least in the traditional sense). The 21st century world demands information literacy practices and information services that include personalised and collaborative information aggregation and knowledge sharing. It is all about knowing, learning, sharing, and teaching – all in one!

Technology and social media platforms, interfaces, and spaces are here to stay. Be sure to join a group online today – in your region, your country, or the world – and make your professional connections count, while building your online library programmes to drive your services into the future. You will not look back! **L**

## References

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**A** royal baby is born and world interest erupts! Within 24 hours of his birth, there had been 19 million Facebook transactions on the topic and over two million tweets. People in the UK and even across the world were celebrating. What is this saying to us and what are the implications for libraries and human resource management within them?

Of course, some might be saying 'not much'. Yet the outpouring of public enthusiasm reminds us in Libraryland of two important points. Firstly, that the way we communicate, receive and share information has fundamentally changed, which has an impact on library resources, facilities, services and staff. Secondly, in a world too often filled with gloom and doom, it is uplifting to have cause to appreciate and celebrate.

In libraries worldwide, we are working through the changes in information communication technologies and developing innovative responses. This shows the resilience of the library workforce and the creativity of leaders and employees more generally. But do we take time to appreciate and celebrate library achievements and milestones in our transformative work?

At the University of Saskatchewan's library, the central theme of 'appreciate and celebrate' is one of four core strategies within our People Plan. Through this strategy, we seek to: 'Value and celebrate the contributions, innovations and achievements of individuals and teams by recognising, appreciating, and respecting one another and our diversity'. We are working to create a culture where employees feel appreciated for their day-to-day work, ideas, and contributions. We aim to support creativity, innovation and risk-taking, to celebrate personal, team, and library-wide milestones, and to provide the opportunity and environment for all employees to gather and celebrate.

Have you taken the time recently to appreciate the contributions of your employees or to mark those significant events in the history of your library? There is no shortage of daily challenges in our working lives, so let us be reminded – by the occasion of the birth of a royal baby – that the celebration of good news is a positive workplace behaviour, and one worthy of our time and attention. **L**

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