

Learning everywhere



Michael Stephens

Biography

Dr Michael Stephens is an Assistant Professor in the School of Library and Information Science at San Jose State University. His research focuses on the use of emerging technologies in libraries and technology learning programs. He currently writes the monthly column 'Office Hours' in the Library Journal, exploring issues, ideas and emerging trends in library and information science education. Stephens has spoken about emerging technologies, innovation and libraries to audiences in over 27 states and nine countries. He is fascinated by library buildings and virtual spaces that centre around users, participation, learning, creation and encouraging the heart.

Introduction

A lot has changed in the years since I visited Australia and spoke at the ASLA conference in 2009. Rapid technological advances continue to change the way we communicate, share and learn. The landscape can be defined in these terms: participatory, connected, pervasive.

In A New culture of Learning: Cultivating the Imagination for a World of Constant Change

Transformative learning 'requires that new information be incorporated ... into an already well developed ... frame of reference, an active process involving thought, feelings, and disposition'

by Douglas Thomas and John Seely Brown, the authors discuss the impact of technology on education and on society. The authors argue that the old adage 'teach a man to fish and feed him for a lifetime' is limited because this assumes that there will always be unlimited fish and no changes to the concept and mechanisms of fishing. Change, however, is a constant and one of the things we struggle to adapt to in libraries while staying true to our mission.

Technology enhances that change exponentially. 'Today's networked technology', write Thomas and Brown, 'is more than just a conduit to communicate information; it is a platform to share and network imaginations. Technology, like never before has become a tool to build worlds'. I propose that with the power of emerging

technologies, the potential of the personal learning network, and the possibilities for newer methods of instruction, both teacher librarians and their students are on a positive path toward an emerging landscape of constant learning and growth. This article scans current research, the technology environment in library and information science (LIS) and recent trends to provide an overview and roadmap towards learning everywhere.

Transformative Learning 2.0

For the 2009 CAVAL project and now for a pilot study in the United States, I continue to explore and research the Learning 2.0 phenomenon, also known as '23 Things'. Created in 2006, by librarians at the public library of Charlotte Mecklenburg County, Learning 2.0 acquaints library staff with emerging technology via self-directed learning modules delivered via the Web. For CAVAL in 2009, we created a national survey of Australian library staff and conducted focus groups around the country. Three articles from the data, focus groups and case study site were published. Analysing the data of the study offers a chance to understand the impact and effect of Learning 2.0. In Australia, these thematic statements were

It is a personal change more than an institutional change.

Staff are more confident, comfortable and open to emerging technologies.

The library is using the tools to varying degrees of success.

Organisational blocks prevent use of the tools.

These four statements paint a picture of what is possible with Learning 2.0 as well as what some of the barriers might be. We discovered that it was a personal change for participants

more than a sweeping organisational change. Words such as 'confidence', 'comfort' and 'ongoing exploration' were used by those who described their experience.

Sadly, one underrepresented population in our national survey was that of the teacher librarian. The data gathered included only 10 respondents who identified as teacher librarians. Although a small amount of data, the responses from teacher librarians included statements that echo the above findings. These include: 'I have enjoyed learning about new applications and have used them at work and personally — without being specifically encouraged other than given the opportunity to participate in 2.0' and 'It was like a kick up the behind in getting me actively learning about this very important area, and helped me to get back into continuing education after a period of stagnation'. Blocks and barriers impact teacher librarians as well: 'I have used applications when developing displays and I can see many other opportunities to use these tools if allowed to!'

This semester I am teaching a class I developed called Transformative Learning and Technology Literacies based on Mezirow's concepts of transformative learning as a framework to study the impact of Learning 2.0 on library staff. 'Education that fosters critically reflective thought, imaginative problem posing, and discourse is learner-centered, participatory, and interactive, and it involves group deliberation and group problem solving' (1997, p. 10). In the Australian study, we discovered that program 'champions', those designated as helpers for staff in each department, were beneficial to the process as were group work on the modules.

For my class, we partner with library sites globally and groups of students act as champions themselves, developing and implementing a miniature Learning 2.0 program. This semester, I'm excited that two of our site libraries are in Australia, as the CAVAL project comes full circle to influencing the learning of library staff three years later. We also partnered with the American School in Japan to deliver an augmented version of Learning 2.0 for the staff of the school library there. This program will feature an exploration of emerging technologies with individual reflections posted to Twitter and group blogging activities to reflect on the impact of these technologies on teaching and learning.

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Transformative learning 'requires that new information be incorporated ... into an already well developed ... frame of reference, an active process involving thought, feelings, and disposition' (Mezirow 1997, p. 10) with the potential to dramatically impact the learning process. With each new idea, affordance or thought, learners amend and expand their paradigm, reframing their view of the world.

I tell my students the class and the Learning 2.0 project will be fun, messy, chaotic and can seem rather daunting, but I promise them they will learn. I think we could say the same for learning in our own organisations and for learning in general. Space for learning should be safe and encourage play and exploration — along with those comes chaos and messiness. Creativity can be encouraged as well. Mobile devices and applications make this an even easier task.

Going mobile

I look to the *Horizon Report* published by the New Media Consortium and EDUCAUSE each year for insights on what technologies are impacting teaching and learning this year is no exception and examining what the various reports say can be beneficial to understanding how our students learn. Although focused on higher education, we can learn a lot from these reports. For example, the report focused on tertiary education in Australia points to some of the same technologies that will be impacting K–12. These include cloud computing, mobile devices/applications and tablets. All of these technologies share a common ground: portable, everywhere access.

The *Horizon Report* for K–12 education describes the impact of mobile devices and applications and says 'once banned from the classroom, mobile devices and apps have become such a compelling tools that schools are beginning to rethink standing policies, and some are even beginning to implement "bring your own device" (BYOD) programs'. Students, they report, want to use their own technology in their learning.

Mobile devices and applications can also transform the process of discovery for ourselves and our students. Not only can access occur anywhere, but the possibilities for learning and sharing creative projects grows. Have you created a digital story with photos snapped on a smartphone or other device? How about a video sharing a new

idea or plan you are using in your practice? In the hands of youth, a mobile device can be a powerful tool for expression and discovery. Let them tell their own story via images, video or sound. Turn assignments upside down with the inclusion of a media-based component. Work with teachers to help them understand the potential.

Personal learning networks

Richardson and Mancabelli (2011) define learning networks as 'the rich set of connections each of us can make to people in both our online and offline worlds who

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help us with our learning pursuits (p. 21).' Creating a model of a personal learning network (PLN), Rajagopal et al. describe it as such:

A personal learning network (PLN) is a network set up by an individual specifically in the context of her professional activities through online platforms to support her professional non-formal learning needs. Therefore, a professional who intentionally builds, maintains and activates her strong, weak and very weak ties with contacts within her personal network for the purpose of improving her learning — and uses technology to support this activity — is creating a personal learning network (Rajagopal 2012)

The creation of a personal learning network (PLN) via current and emerging communication technologies may be one positive result of participation in Learning 2.0 programs, as evidenced by the Australian study. Survey respondents reported utilising emerging technologies, specifically blogs and RSS feeds in many instances, as a means to keep up with library news and thought. In light of these responses and findings, I see a strong relation between the self-directed program as foundational for development of a learning network for library staff.

Time to play

Jenkins (2006) argues that our emerging participatory culture brings a need for new skills: 'The new literacies almost all involve social skills developed through collaboration and networking. These skills build on the foundation of traditional literacy, research skills, technical skills, and critical analysis skills taught in the classroom.' He defines play as 'the capacity to experiment with one's surroundings as a form of problem-solving'. He asserted that play is one of the emerging social literacies for education. The Learning 2.0 model combines transparency,

play and opportunities to explore new spaces into a unique approach to self-directed professional development.

A focus on play, innovation and experimentation is needed for 21st century learning success, argue Thomas and Brown. These concepts were foundational to the original Learning 2.0 program and continue to be emphasised when the program is utilised in libraries. Thomas and Brown also argue that the world is changing faster than ever and acquired skill sets have a much shorter life in this new landscape.

This is a concern for library staff as technologies change so quickly. New forms of learning — play and experimentation — can ameliorate this problem: 'Much of what makes play powerful as a tool for learning is our ability to engage in experimentation ... Most critically, play reveals a structure of learning that is radically different from the one that most schools or other formal learning environments provide, and which is well suited to the notions of a world in constant flux' (Kindle Locations 1376–1379).

Navigating multiple channels

As we become more adept at curating our own PLNs, we might find that we have moved beyond just reading blogs and news sites to other channels of interaction. What

begins as a Twitter conversation may lead to Facebook, back to a blog and on to another site that's new.

Jenkins writes that 'Transmedia Navigation' is the 'ability to follow the flow of stories

allow even more sharing. Understand what it means to follow a story across a wide spectrum of modes and formats. Master it and then teach your students the same. This will be a factor in the world they grow into.

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and information across multiple modalities'. This is one approach to exploring emerging literacies centred around technology as well as how we might think about navigating the information in our PLNs. It's also good to consider the impact of technology in relation to mindfulness — sometimes these multiple channels can seem overwhelming! When we understand how to participate in the ebb and flow of our information channels, the technology fades into the background and content comes to the forefront. Stories are powerful things for teaching and learning. The Center for Digital Storytelling notes on its 'What We Do' page: 'Technology is a powerful instrument of creativity' and 'Sharing stories can lead to positive change'.

Roadmap to everywhere

I would urge teacher librarians and others working with students in library media centres to consider the following based on this scan of the current technological environment above.

Launch an ASLA '23 Things' initiative: In my talk at ASLA, I detailed the initial findings of my research in Australia concerning Learning 2.0. After further analysis of the data and recent publications, I'd strongly urge the

Incorporate mobile devices and apps into your learning: The original '23 Things'-style programs were Web-based. Now, we can also create modules and learning objects centred around mobile devices, tablets and the plethora of apps available. Use this to demonstrate to administrators and governing bodies that mobile devices offer enhancements to learning and creativity on a scale never before available.

Advocate to break down barriers: Use the above ideas and evidence cited in this article to demonstrate the usefulness of access to potentially blocked tools in your setting. Explore the possibilities of allowing students to bring their own devices into the classroom to utilise during lessons and collaborative searching.

Encourage creativity: Explore resources online devoted to digital storytelling of all kinds. Share with teachers and students and urge assignments to take on a media-focused component. Writing a script, recording and editing the final product for sharing online with classmates and teachers hones multiple skill sets needed for a decidedly digital, technology-enhanced future.

Be the change: Be a model for all of the characteristics of a 21st century information professional.

association to explore the program for the membership. Work together to discover the current technologies of the days as well as those on the horizon. Participants will understand not only how the tools work but how they might utilise the tools for their own ongoing PLN. Share with your teachers and administrators what the program can do for building comfort and confidence with emerging tools.

Explore transmedia learning: Follow developing stories in your field across blogs, Twitter, Facebook and more. Delve into newer channels you haven't yet discovered. Personal curating tools such as Scoop It or Pinterest

Be the change: Be a model for all of the characteristics of a 21st century information professional. Move effortlessly in the networks of your PLN, sharing, learning and growing. Pay it forward. Promote discovery, curiosity and creativity to your students and do everything in your power to give them the tools to do so.

Play. Every day, find something to explore or experience. Puzzle out a solution to a problem. Imagine scenarios involving new services and disrupted version of conventional ones. 'Where imaginations play, learning happens' write Thomas and Brown. Use this as a guide for your own learning and for the atmosphere you create in your library.

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