Between a Dropbox and a hard place

Hamish Curry

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As educators, we pour a lot of our energy into planning, preparing, discussing and debating how to create the best learning environments. Conferences are designed to generate these insights. So too are articles like this. In my recent transition from my role at the State Library of Victoria to working with NoTosh, I hadn't imagined the ways these worlds would connect and overlap. It has been refreshing to explore how design thinking helps find and reflect on problems and see them with fresh eyes.

So, it seems serendipitous that I was reminded last week of the New Zealand news story from 2012, comparing student lunch boxes in differently ranked Primary schools. The children left them on their tables before going to morning tea. The comparisons between schools was utterly stark: lunch boxes with sandwiches and fruit in one district, a can of soft drink or a packet of chips in the other. This simple story effectively leveraged the power of food to discuss the challenges of learning. I imagine that Maslow would be nodding his head in despair. I feel like I should have renamed my keynote 'Between a lunch box and a hard place'. It was an acute example of how the real problems can sometimes be 'lurking in plain sight'. They often have nothing to do with the curriculum or technology, and everything to do with better education.

"Access to Cloud/Ladder to Heaven" by FutUndBeidl Image available under Public Licence at Creative Commons via URL: https://www.flickr.com/photos/61423903@N06/8772045680/

Undoubtedly though, the digital revolution and subsequent changes in physical design in schools have created new challenges and opportunities for libraries and learning. The tools at our fingertips are diverse, networked, versatile, and present new ways to design learning. As a result our

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By now you would have heard of or been asked either in school or in your personal life to access something via a cloud tool like Dropbox. You have probably worked across documents on Google Drive, uploaded or curated videos on YouTube, or posted pictures to Twitter, Facebook, Flickr, Pinterest, or even a blog. Even from these cursory examples, are many of them allowed in your school?

I would hope so. It is evidently clear that cloud-based tools and increasingly cloud-based computing are changing our lives and the technologies that rely on them. It is almost ridiculous to comprehend that storage space is not a problem any more; unlike in physical libraries.

It is also ridiculous to comprehend that we place more implicit trust in the tools we use in the cloud than the students we teach in our schools; given some of the overly detailed ICT policies that restrict what students can do. Being digitally literate is a core part of a good education. We all have the capacity to explore what's reliable, appropriate and powerful information; time and resources are not the excuses they used to be. Poor application and appropriation of time and resources is instead the hurdle. The irony is that having the capability to effectively navigate the cloud is hard to achieve when the capacity is lacking. For education, the spectrum of proficiency in understanding and keeping pace with cloud tools is the new benchmark for ICT innovation.

So, in reality educators are faced with preparing children for the current standards of today's world, so that they may be more adept at adapting in the future; since even we don't really know where it is going to evolve next. It should come as no surprise then, that designing education to mirror real life has been a perennial challenge:

> *I believe that education, therefore, is a process of living and not a preparation for future living. I believe that much of present education fails because it neglects this fundamental principle of the school as a form of community life. It conceives the school as a place where certain information is to be given, where certain lessons are to be learned, or where certain habits are to be formed. The value of these is conceived as lying largely in the remote future; the child must do these things for the sake of something else he is to do; they are mere preparation. As a result, they do not become a part of the life experience of the child and so are not truly educative.*
> John Dewey, 1897.

If technology is simply an extension of our brains, our relationships, our memories, and our knowledge, we need to more widely

accept that this comes with good and bad components; and it is through education that we become more discerning of these. For schools and school libraries technology is often associated with taking a risk. However, a risk is only a risk when we're informed and aware of the implications; otherwise it's just ignorance. The pattern of buying products en masse without their proper application to the real problems has been another of the perennial patterns that squeezes education into a hard place.

So, what does it mean to integrate technology and pedagogy effectively? We often look to curriculum for these answers, but given that the most important ingredients in this are the General Capabilities, and are yet to be mapped or outlined, then we should not start there.

However, once they are finally published, my advice would be for every school library in Australia to jump on them and start demonstrating how their integration reflects the best of what libraries offer people in meaningful learning. Be careful though, curriculum tells you *what* but it doesn't tell you *how*. Pedagogy can make or break content in the delivery; as too can technology. Libraries can and should claim more of the innovative pedagogical approaches as their turf, since they are best placed to foster an environment of curiosity, experimentation, and build communities of learners. As Bob Talbert said, 'teaching kids to count is fine, but teaching them what counts is best'.

If I reflect on the manner in which Dr Laurel Anne Clyde explored opportunities and networks for using weblogs in libraries, now used widely in schools today, Anne seems to me to have been a disruptor and an innovator in a system at the beginning of an identity crisis. The clash of physical and digital resources has created problems for school libraries, but it has also generated incredible solutions. Consider the importance of a school providing somewhere quiet and motivating to blog and providing the technological capacity and personal capability to do so.

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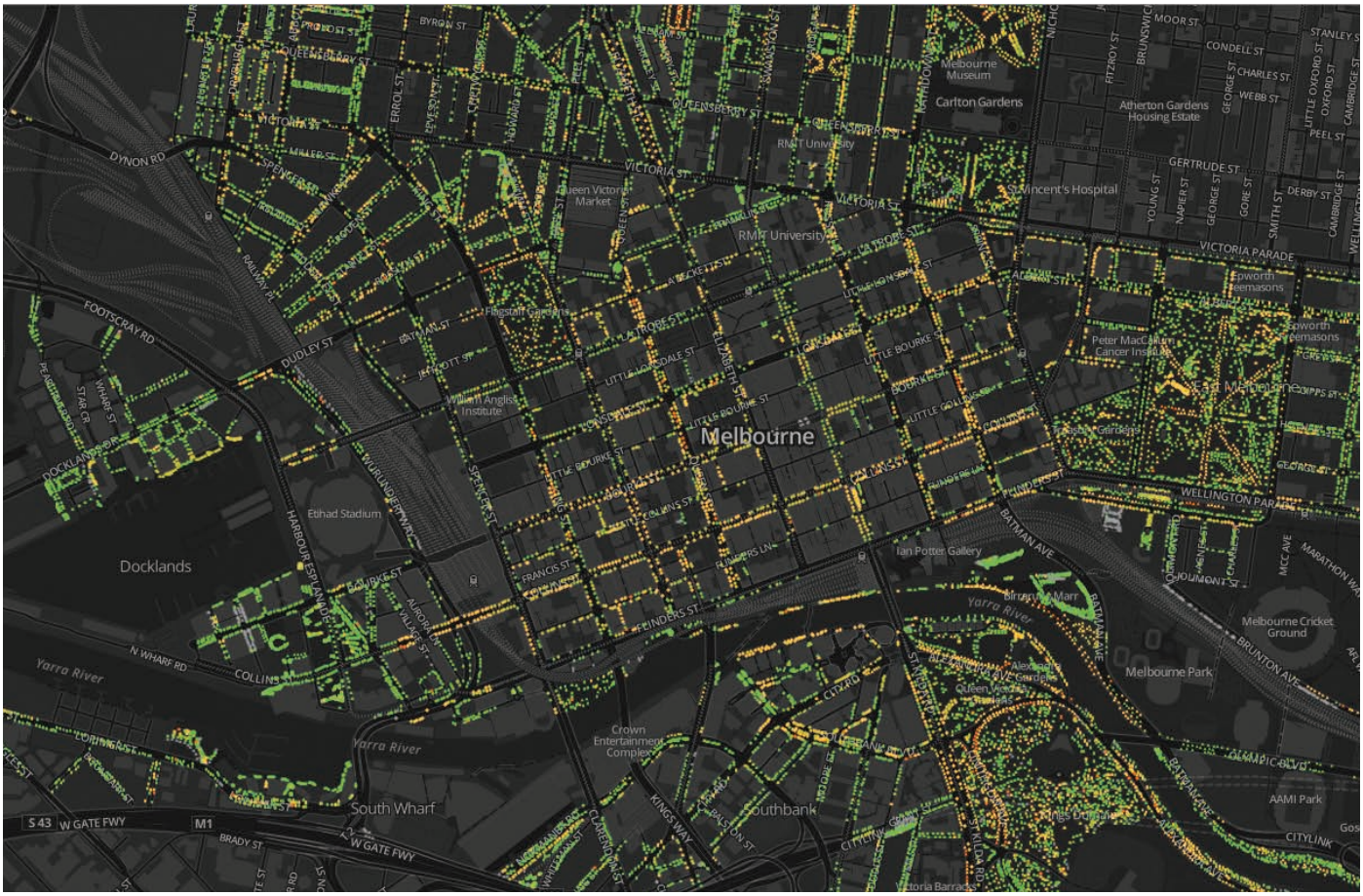
Our access and use of data is happening in ways unimaginable even five years ago. Take the Newspaper Map (http://newspapermap.com/) for example; it provides a way to navigate, contrast, and compare news mapped across the globe, in the same way that Trendsmap has mapped Twitter activity. Making data 'visible' has become a way for otherwise meaningless lists and spreadsheets to be plugged into live experiences. Urban Forest from the City of Melbourne (http://melbourneurbanforestvisual.com.au/bigmap.html) is a further beautiful example of something that can change our perception of what's right in front of our eyes. It brings information and patterns together so that you can even 'communicate' with the trees

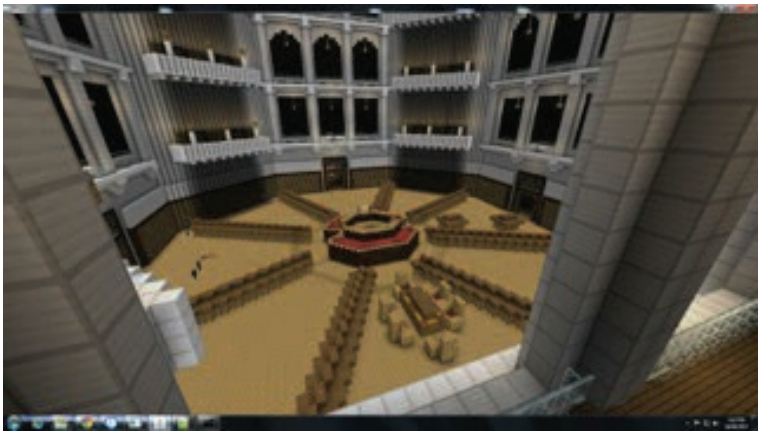


Urban Forest Visual: City of Melbourne

of Melbourne; data gives them a voice. School libraries should seize upon these as provocations for more curiosity: project them onto walls, ceilings or doors, inviting students to change perspective and explore. The next step is to come up with more creative ways to also make the learning visible.

Physical spaces are crucial in the digital game of helping learning reach new depths. Nowhere are they more precious and at risk of being seen as irrelevant than in school libraries. Libraries that are designed as the hub of the school can literally promote themselves as an intersection not a destination, a fulcrum or pivot point where people and information collide and evolve. As Lorcan Dempsey stated, 'we are configuring library space around user experiences rather than around collections'. Consider how different textures, heights, lights and furniture alters one small space. Play with the combination of the physical and digital elements so that they are designed to be 'disruptive', to help people rediscover a 'space' that hasn't had their attention recently.

One of the spaces that tends to 'push buttons' is the realm of games. Those that follow my links and comments online will know that this is a particular barrow of mine, one that I push because it deliberately disrupts the assumed agenda. If we are going to explore that space between technology and the 'hard place' then we must explore the world's biggest medium: games. Games are beautiful, immersive, captivating and powerful; just like great books I'm sure we've all read. In the same way we promote literacy through libraries, games are an



State Library of Victoria: Minecrafting the Dome

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excellent vehicle to promote digital literacy. Given that digital literacy can be defined as the ability to locate, organise, understand, evaluate, analyse and create content, so too do games encourage us to do the same. Take the example of a game like 'Run That Town' (http://runthattown.abs.gov.au), which fuses data from the Australian Bureau of Statistics with a postcode environment that has you questioning and assessing your decisions. At the State Library of Victoria in 2013 we ventured into a collaboration with young people in 'Minecrafting the Dome', taking blueprints from 1909 and translating them into a playful digital environment, which generated all kinds of creativity and problem solving. Further lifting the veil to explore coding as a language of the game world, as well as the building blocks of the Internet, is a another step in making more effective use of the ICT resources at schools.

A 'Library War' is brewing. Well, not literally I hope. However, it does sound a lot like the Japanese manga series *Library Forces*, which has its roots in this blurb:

> *In the near future, the federal government creates a committee to rid society of books it deems unsuitable. The libraries vow to protect their collections, and with the help of local governments, form a military group to defend themselves — the Library Forces!*

This is the challenge being thrown open to all educators, not just teacher librarians. That information is there to be filtered first, then distilled into learning. In the context of good digital literacy skills, however, filtering is learning. Furthermore, the expectation (or assumption, depends which side of the fence you sit) that technology will take over or even replace libraries is terribly myopic. The way we experience information and books has indeed changed, but the skills of navigating and reading this landscape remain to be addressed. Where is the open-world in which multiple ages can take this journey together?

Leading educator Greg Whitby tweeted that '21st century librarians need to reimagine what library walls are and move outside them'. This goes for within the school and within the community, but the 'walls' are digital too. Within these systems, finding advocates for innovative practices and approaches in library learning is crucial to making successful changes. Library associations should be supporting this, but so too do many other groups you may not have even considered, such as those in maker, hacker, tinkerer or literary communities. These have often emerged from the gaps in education, the things school doesn't allow or is too crowded to support.

Connecting and immersing yourself in these gives you the opportunity to discover new opportunities for integrating them into learning experiences at school.

Students are already packing the new school bags of the tech-century. Lots of devices and toys now carry processors and transmitters of all kinds. Sometimes referred to as the 'Internet of Things', these sensors, micro-monitors, as well as applications for speech, sight and audio recognition are powerful things putting us in touch with the information in the cloud. Giving students the opportunity to experiment and see them in action are significant learning experiences; even if it is trying out Shazam, Siri or Google Translate. Wearable technologies such as Fitbit or Google Glass are the current next wave of these tools. It starts to make Dropbox seem pretty mundane. Ironically it seems that the tools which have enabled the most change in society are the same ones to which schools have been resistant. Social networks are now repositories of significant semantic data. They are also powerful search engines; have you ever done a search on Facebook or Twitter around a topic? We can explore and teach many elements of ethical understanding and critical thinking through these kinds of examples. It also helps build awareness that searching is not always synonymous with Google.

This certainly leaves many big considerations for school leadership. Connecting vision with practice is fuzzy even for the most experienced organisations. Because of a crowded curriculum, we see children having even more homework, designed under the banner of 'flipped' classrooms. If education was really having the impact it desired, children would be making time for their own investigations and further learning based on the stimulating and provocative experiences happening at school. It's one of the roles libraries have always performed: being the outlet and resource for individuals to delve deeper. So it seems odd that in an age where schools are clamouring for innovation, their libraries are often marginalised. The same place where school culture and community is often seen in action. Perhaps what's needed, as Will Richardson puts it, is a new 'leadershift', one that empowers and trusts educators to be creative with their use of resources. As such I don't think schools have an innovation problem; they have a problem-definition problem.

I recall hearing a talk from Robyn Fawcett at Shock Records a few years ago, who shared their FAN strategy. It has elements in common with enabling positive change in learning environments. The first is 'Find and be found'. It encourages all of us to be more curious and spend time just looking and connecting. The next is 'Activate fans to be advocates'. This requires methods to reward, empower, acknowledge the people who champion your work. The last part is 'Nurture relationships'. Robyn reiterated the importance to listen, trust and be (unexpectedly) kind. Unsurprisingly, this was echoed in a recent report titled *Connected Learning: An Agenda for Research and Design* (http://dmlhub.net/publications/connected-learning-agenda-research-and-design). In it they described the best learning contexts as being peer-supported (shared purpose), interest-driven (production-centred), and had academic/deep knowledge (openly networked). Sound familiar?

Where does this leave the challenge of being squeezed between the cloud and a hard place in creating new environments for learning? The risks associated with privacy, copyright

and security are always looming. On the flip side, though, what are we willing to risk in order to prepare students for today? We hear about the opportunities of anywhere, anytime learning, but in reality this starts with sharing being a key ingredient. Whether that's using Dropbox, Google Apps, or Edmodo. We also hear about the advantages of understanding Creative Commons and, in turn, this exposes us to better ways of sharing open content, and the rules of being a 'poetic thief' in a hyperlinked world. In practice it leads to a better balance between the consumption and creation of learning and the involvement of community; who are often real audiences. Students who learn first-hand about the power of technology, also learn about the power of serendipity and amplification, and how to connect with experts.

Along these paths of discovery, where both students and teachers are supported to take reasonably calculated risks, we must increasingly accept that 'failure' is something we experience on the road to better learning. I've begun to describe this as the process of providing an environment of 'safe fails', while also ensuring there are 'fail safes' to protect people from harm or abuse. If schools are really sincere about fostering resilience, we need to be more creative with how we design activities and utilise people to do more than tick curriculum boxes. Design thinking provides a process that avoids people jumping to solutions and helps generate and test ideas. As games developer Steve Swink so aptly put it, 'everything that is worthwhile is hard, even if not everything that is hard is worthwhile'. We can begin by making 'time to explore' part of our professional learning. Bookmark it, share it, post it, blog it; things that Dr Laurel Anne Clyde would be proud of. A relevant quote that has seen a resurgence is this one from the mysterious Alex Trenfor: 'The best teachers are those who show you where to look but don't tell you what to see'. If you think about it, this could actually mean that teacher librarians are the best teachers!

Consider this as a final analogy: People are about 70% water. People, like water, tend to take the path of least resistance. Forging a more challenging path takes critical mass or relentless pressure. Water has a powerful impact on any system. It can penetrate and change the composition of soil (like pedagogy) or rocks (like curriculum). All it takes is time and volume; even if it is between a rock and a hard place. Technology may provide the solutions to some of our problems, but it is still going to be up to us to experiment with and champion the right ones. So, when you're between a Dropbox and a hard place — take a deep breath, look and listen carefully, and decide if you're ready to dive in.

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More about me and my work at NoTosh: http://notosh.com/who-we-are/hamish-curry/