Digital normalisation, school evolution and BYOT Positioning the school library

Mal Lee

Biography

Mal Lee is an educational consultant and author specialising in the evolution of schooling and teaching, the concepts of the school evolutionary continuum, evolutionary stages of school development and the impact of digital normalisation on school transformation.

His focus in recent years has been on the structural transformation occurring in the pathfinders globally and the lessons flowing from those schools. In that context, he has written extensively on the move to a more collaborative mode of teaching and learning, the inevitable shift to BYOT and the importance of schools adopting an educational benefits realisation approach.

Introduction

One of the great and constant challenges for school librarians has been to position their work in relation to the rest of the school and schools generally across the developed world.

In researching and writing *The Use of Instructional Technology in Schools* (2009), Arthur Winzenried and I noted the particular challenge teacher librarians as a group had had over the previous 20 years in contending with constant, rapid and uncertain technological change, and its transformative impact. There has been an ongoing desire to position their work within the wider educational context, particularly at the time when most other teaching was still paper-based and largely static in nature.

Since making that observation, the situation with the other teachers has begun to change at pace, with ever more shifting to a digital teaching base and experiencing the rapid, ongoing, uncertain change and evolution teacher librarians have known for decades.

While not as yet experiencing the uncertainty facing the school library, they too, nonetheless, are searching for context for their work.

Blessedly, we are finally able to provide all within the school community an indicative international measure against which they can position the work of the school, and you the work of the library and your own thinking.

Hopefully the observations below will not only provide you with context but also the understanding needed to assist the ongoing evolution of your school and vitally to ensure your operations are central to that evolution.

This is but a macro perspective. Fuller details can be found at: http://www.schoolevolutionarystages.net, http://www.byot.me and within *Bring Your Own Technology* (Lee and Levins, 2012) and *The Taxonomy of School Evolutionary Stages* (in press).

Digital normalisation

Digital normalisation is a phrase that I've coined to assist all associated with schools, be they teachers, students, parents, the media or politicians, to readily comprehend the scene when the digital technology that is already used naturally 24/7/365 outside the school walls is also used in all facets of the school's operations.

The normalised use of the technology is key. It is not simply the school having the technology for everyone, or indeed using that technology, but rather it is using it so naturally, so normally in every facet of the school's operations as to forget the technology is there. For centuries we have normalised the use of paper, the pen and the teaching board, with few giving a moment's thought to their power or impact.

That is where we are fast moving with the digital technology in schools. It is an extension of what is happening with the kids, in their homes and in society in general.

The young have long normalised the use of the digital. Their parents have done so and, importantly, schools are now teaching the children of digitally empowered 'Net Generation parents.

Sadly in 2013, only a wee fraction of schools in the developed world have normalised the use of the digital. While many more are on track to reach that stage in the next year or so, the vast majority of schools are still operating within a paper-based operational mode, lagging well behind societal expectations.

It is appreciated that virtually all reading this have long normalised the use of the digital as have their iCentres or libraries, but frustratingly are likely to be working in a school where only a portion of the teachers have done so and where the school is still operating within the traditional, insular, paper-based mode and mindset.

Pleasingly, in the workshops I've conducted in recent times with both school leaders and teachers, all present have accepted that, in time, all schools will normalise the use of the digital and build upon that platform.

It was very much a case of not if, but when.

School evolution

The answer as to when lies in where your school is positioned on the school evolutionary stages continuum.

In researching the forthcoming publication on *Digital Normalisation and School Transformation* and interviewing 70-plus pathfinder schools in the UK, US, New Zealand and Australia that had or nearly had normalised the use of the digital, it soon struck me how remarkably similar were their journeys, their present attributes and indeed the attributes they displayed at key stages in their evolution. It mattered not whether they were state, Catholic or independent schools, primary or secondary, small or large or vitally with a low or high socio-economic situation all, regardless of their government, demonstrated a remarkably common set of attributes.

When coupled with the other research that I'd undertaken with pathfinder schools since 2003 (Lee & Gaffney 2008; Lee & Winzenried 2009; Lee & Finger 2010; Lee & Levins 2012; Lee & Ward 2013) and placed alongside the work being undertaken in the UK by Naace (http://www.naace.co.uk/schoolimprovement) and Twining at the Open University (http://edfutures.

The normalised use of the technology is key. It is not simply the school having the technology for everyone, or indeed using that technology, but rather it is using it so naturally, so normally in every facet of the school's operations as to forget the technology is there.

net/Main_Page), it was apparent we had a common, global, ever-expanding school evolutionary continuum, where the schools evolved through a series of key stages, displaying at each stage a remarkably common set of attributes.

In brief, we finally had an international measure of a school's evolutionary position with the associated benchmarks. The present continuum has the following six key stages.

In general terms, the features of each stage are:

- **Paper-based:** The majority of teachers in a school are mainly using paper, pens and the teaching board (be it black, green or white) in their everyday teaching. This was still the norm in the vast majority of the classrooms of the OECD in 2009 (Lee & Winzenried 2009).

- **Early digital:** Around 60–70 per cent of teachers are using the digital in their everyday teaching and, as such, are nearing the critical mass stage and 'digital take-off' (Lee & Gaffney 2008).

- **Digital:** All the teaching staff have normalised the use of the digital in their everyday teaching, but the school is still operating as a discrete, 'stand-alone' entity, primarily within the traditional school walls. Notwithstanding, the school is now operating on a digital base and will begin experiencing significant natural growth.

- **Early networked:** Networked is used here to refer to the human networking. The staff have normalised the use of the digital in their everyday teaching and are beginning to use the physical networks to operate outside the school walls and the normal school hours, and are starting to 'teach' more collaboratively with the students, their homes and the wider networked community (Lee & Finger 2010).

- **Networked:** The staff have normalised the use of the digital in their everyday teaching, are collaborating authentically with all the parties inside and outside the school walls — professionally and non-professionally — in the 24/7/365 teaching of young people and, as such, have moved to the distributed control of the teaching and learning.

- **Digital normalisation:** The digital normalisation stage is reached when schools that have adopted a distributed mode of control of the teaching process and which are collaborating with their homes in the provision of a holistic, networked education for the 21st century, normalise the use of the digital technology in all facets of the school's operations, educational and administrative, in and outside the school.

The fuller attributes of each of those stages, the benchmarks can be downloaded at http://www.schoolevolutionarystages.net or read in greater detail in the forthcoming *Taxonomy of School Evolutionary Stages* (in press).

It is important to appreciate the distinguishing attributes of each stage include far more than the nature of the use of the instructional technology. The *Taxonomy* identifies 24 areas within the schools where there is clear evidence of ongoing evolution, covering the likes of the school's educational vision, the operational mindset, the leadership of the principal, the empowerment of staff and students, pedagogy, home–school collaboration, technology support and school resourcing. The combination of those ever-evolving variables in turn impacts upon the ongoing evolution of the school's ecology.

What is particularly pertinent for teacher librarians is the evolution of an ever more focused, integrated school ecology that is embracing the teaching and learning occurring 24/7/365 in and outside the schools. As the digital convergence grows, so too does the integration of all facets of the school's operations. The traditional silo-like operations, where libraries can be an example are rapidly being superseded by highly integrated facilities, the likes of iCentres that perform a plethora of closely interrelated roles.

As is normal with the evolutionary process as the schools evolve they assume a higher order, ever more complex culture, with a concomitant change in the thinking of the staff and indeed wider school community. The thinking moves from the traditional, highly insular thinking about schooling, where the educators unilaterally control the teaching and learning to a far more networked and collaborative mindset, where the educators distribute the control of the teaching and learning among all the teachers of the young.

Where does your school sit on this evolutionary continuum?

What about your library?

Where would you position your thinking?

What is the likely path ahead?

All of the pathfinders moved through each of the evolutionary stages and needed to do so before successfully moving to the next. There were key variables at each stage that had to be addressed before they were ready to move to the next.

Vitally, most of the schools studied took 15–20 years to reach their present position. Later adopter schools should not take as long but one is talking years not weeks to make the requisite cultural shift.

Do all schools need to move through each of the stages? The theory says no, particularly

if one has a 'greenfield' situation, with an astute principal and a handpicked staff. The likely reality is that near on every school will need to move through each of the stages.

Approximately how long will it be before your school reaches the digital normalisation stage?

In examining the key variables, note the critical importance of the principal and the imperative of the school having all the teachers using the digital in their teaching and as such the school moving to a digital operational base.

When organisations, be they banks, travel agents, universities or schools move to a digital operational base they will experience significant natural growth and evolution. As the technology develops, as people's expectations and realisation of what is possible grows, so too will the organisation evolve.

BYOT

BYOT, bring your own technology, is but a phase, albeit a vital phase in the evolution of schooling and the move to digital normalisation.

1:1 computing and BYOD are also phases for some schools, but are not as critical as BYOT.

The reason is to be found in the definition of BYOT that Martin Levins and I compiled in writing *Bring Your Own Technology* (2012).

> *Bring your own technology (BYOT) is an educational development and a supplementary school technology resourcing model where the home and the school collaborate in arranging for the young's 24/7/365 use of their own digital technologies to be extended into the classroom to assist their teaching and learning, the organization of their schooling, and, where relevant, the complementary education outside the classroom* (Lee & Levins, 2012, p. 11).

... once schools normalise the use of the children's choice of technology, BYOT as an expression soon disappears from the vernacular and the use of technology, like the pen and paper, is simply regarded as natural

However, that won't happen while schools are still operating within the traditional paper base. Schools need all teachers to use the digital in their teaching and for the school to have reached the digital evolutionary stage before the natural growth and evolution will occur.

The initial moves will invariably be tentative, but as staff become more comfortable with the technology and the constant change, so ever more educational opportunities will open, the school walls, internal and external will begin to fall, collaboration with the children's homes and the community will grow and the rate of evolution will accelerate.

However, that acceleration will be limited while the school maintains its unilateral control of the teaching and learning.

The crunch will come when the school addresses the issue of the students using their own choice of technology in class.

Until schools are willing to cede their control and trust the children and their parents their evolution will be stalled.

Underpinning that definition is a very different educational philosophy to that expressed in 1:1 computing and BYOD.

BYOT is based on trust and respect for the child, the recognition of the learning and teaching every child is experiencing 24/7/365 outside the school walls and that if schools are to successfully educate the young for a highly networked world they need to distribute the control of the teaching and learning and genuinely collaborate with all the teachers of the young — including the children themselves — in the provision of an ever more personalised education.

It is a mode of thinking that only becomes apparent at the networked evolutionary stage.

1:1 computing and BYOD, in contrast, are an expression of a lower order mode of educational thinking that still sees the professional educators and the ICT experts as the only ones who know what is best for the children and their families. Both are approaches based on an insular mode of thinking, distrust — of the parents, the children and often the staff — and the unilateral control of the teaching. For some schools 1:1 computing and BYOD can be valid strategies in the long-term evolution of the school.

Others, particularly primary schools can forgo the need for 1:1 computing and/or BYOD.

However, to do so they need an ecology, to be at an evolutionary stage where the school is ready to make the move to BYOT. One cannot take a higher order concept like BYOT and transplant it in a lower order culture. It will be rejected.

You need to ask the crucial question: is your school and are your colleagues ready to support all children choosing the suite of digital technologies, hardware and software, they use in class, recognising that will entail working with multiple operating systems?

If the answer is no, the advice is to reflect on the school's evolutionary position, to address the key readiness variables addressed in *Bring Your Own Technology* (Lee & Levins 2012) and prepare an indicative timeline for when the school might be ready to make the move.

It is appreciated that sometimes the pragmatics take over and schools need to jump before they are ideally ready. That is life and provided the school makes the move knowing the issues it will need to address, success will invariably come.

What we do know is that once schools normalise the use of the children's choice of technology, BYOT as an expression soon disappears from the vernacular and the use of technology, like the pen and paper, is simply regarded as natural.

What is also evident is that when schools reach the digital normalisation stage, are looking to provide a tightly integrated holistic 24/7/365 education, recognise the teaching and learning occurring outside the school walls and have a learning culture that finds ongoing change and evolution exciting and rewarding, they are ideally positioned to evolve at an accelerated pace and to tackle teaching and learning opportunities. This is simply not feasible until all the children have in their hands the personal digital technology they can use 24/7/365.

Digital normalisation and the library

As you've read the above and considered your situation, and indeed your own

stage of thinking, you'll undoubtedly have contemplated the way forward.

What I've yet to stress is that the evolutionary continuum highlights the growing variability between schools and the reality that every school has to take charge of its own evolution, not wait for the 'system' and go ahead and adopt solutions apposite for its situation, at that particular point in time.

That holds with all schools, be they in a system or independent.

You'll have noted that as schools move along the evolutionary continuum they become ever more integrated and the silo functions disappear.

Tellingly, a number of the pathfinder schools interviewed had adopted the iCentre approach advocated by Hay (2012) and in all those situations that iCentre was playing both a lead and integral role in the school's evolution. That model clearly fitted those schools' situation.

You'll need to consider what is best for you.

Conclusion

That said, any judgement you make or thoughts you have must be shared with and actioned as part of the school's evolutionary journey.

For too long, and often for good reason, school libraries have had to fend for their own development and to push ahead by themselves.

What one can safely say is that the way forward in ever more integrated school ecologies, that are virtually daily undergoing some kind of transformation, is to ensure the library's evolution is integral to the school's holistic development.

Share the aforementioned research with colleagues and the school's leadership.

Bid them position the school on the evolutionary continuum, reflect on what is entailed in moving the school to the digital normalisation stage and beyond and the role that you and the school's information services might best play.

Bibliography

Hay, L 2012, 'Experience the 'Shift': Build an iCentre', *Teacher Library Journal*, June.

Lee, M & Broadie, R in press, The Taxonomy of School Evolutionary Stages.

Lee, M & Finger, G (eds) 2010, *Developing a Networked School Community*, ACER Press, Melbourne.

Lee, M & Gaffney, M (eds) 2008, *Leading a Digital School*, ACER Press, Melbourne.

Lee, M & Levins, M 2012, *Bring Your Own Technology*, ACER Press, Melbourne.

Lee, M & Ward, L 2013, *Collaboration in learning: transcending the classroom walls*, ACER Press, Melbourne.

Lee, M & Winzenried, A 2009, *A History of the Use of Instructional Technology in Schools*, ACER Press, Melbourne.