

Teaching in a Digital School: The Differences and the Attributes Needed

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Teaching in schools that have normalised the use of digital technology by all teachers, in all the teaching rooms - schools that have gone digital – is dramatically different to teaching in the traditional paper based school and is on track to become ever more so.

It is a fundamental difference requiring of the teachers a suite of skills and mindset that few teaching institutes, national teaching standards or indeed teacher education organisations recognise as being required. Explore the work of the teachers in the pathfinder schools in the US, UK, NZ or Australia and you'll see they are all rapidly developing a suite of distinct attributes to assist them thrive professionally in the schools of an ever more digital, networked and collaborative world, where that human networking is daily aided by ever more sophisticated network technology.

In 2014 it is both extraordinary and disturbing than one needs to make the above observation, for in virtually every other knowledge profession it has long been accepted that the attributes have to be appreciably different. What is of even greater concern is that the vast majority of educational decision makers don't appear to even recognise the need for the new, let alone to begin work on them.

Globally there is still the all-pervasive sense that schools are the same and will ever more so remain, with the teaching skills also being constant.

Digital schools, operating to the fore of the school evolutionary continuum (<http://www.schoolevolutionarystages.net>) are already fundamentally different environments to the traditional, are evolving and transforming at pace and in so doing are daily escalating the already considerable school variability. Where the traditional paper-based school has been characterised by

- its insularity
- focus on the teaching within the physical place called school
- its unilateral control of the teaching
- by solitary teachers teaching class groups, invariably behind closed doors for X hours a week for Y days a year

the schools that have normalised the digital

- are increasingly socially networked 24/7/365 operations
- have distributed the control of the teaching and learning
- are beginning to genuinely collaborate with all the teachers of the young – the parents, grandparents, carers, community organisations and the children themselves - from birth onwards in the provision of an increasingly personalised apposite 21st century holistic education.

Where traditional teaching has for generations been distinguished by its constancy, continuity, risk adverseness and fear of change teaching in the digital schools is dynamic, attractive, often messy and uncertain, conducted in

a culture of change, ever evolving, ever more integrated and vitally ever higher order. The former schooling is strongly shaped by the paper organisational base while the latter by the digital (*Digital Operational Base* – <http://www.schoolevolutionarystages.net>).

The traditional is about solitary teachers, working with mass groups of children, moving along a clearly defined linear teaching path while the networked (Lee and Finger, 2010) is working towards ever greater collaboration, marrying the teaching of the school with that of the home, becoming increasingly personalised and understanding that learning and teaching can occur anywhere, anytime 24/7/365 and that much will be non-linear.

Vitally the mindset of the teachers is dramatically different. The traditional teaching is inward looking, concerned with only that within the school walls, in the operational hours, often within one's own silo, where it is a given that the teachers will unilaterally decide what will be taught and assessed and will work only with the resources provided. The teacher's thinking in the digital is socially networked, flexible, outward looking, seeking to draw upon the apposite local and global community, highly collaborative and yet tightly integrated where the teachers, while playing a lead role understand the benefits of distributing the control of the teaching and learning and genuinely trusting the other teachers of the young (Lee and Ward, 2013).

Teachers thriving in the digital and networked schools

- possess many of the attributes that have always distinguished good teachers
- have skills that while always important have taken on a heightened significance
- are also developing a suite of new attributes essential to thrive in ever-evolving schools.

Conscious of the amount already written on the traditional attributes the focus of this article will be on those of greater importance and new to teaching. Mishra and Koehler's work on TPACK (<http://www.tpck.org>) (Finger and Jamison-Proctor, 2010) succinctly encapsulate the 'traditional' attributes that will always be required of good teachers. They have to know the pertinent content, they require excellent pedagogy and vitally very good people skills. But as the research on the pathfinder schools in the UK, US, NZ and Australia attests they need to adjust the old suite of attributes by adding some and deleting others.

Space precludes elaborating upon each. That is done in the forthcoming book on *Digital Normalisation and School Transformation*. Most are largely self-explanatory.

Of interest as you'll see below many of the new attributes are antithetical to those deemed important in the paper-based mode.

- **Digital teaching base**

Every teacher in the school – permanent and casual - needs to have normalised the use of the apposite digital technology in their teaching. It is not good enough to have 50% or 90% doing so - it needs to be 100%.

- **Empowered professional**

The teachers ought to be fully empowered educators possessing the professional wherewithal to contribute meaningfully to the continued evolution of higher order, ever more complex schools. They can no longer be mere line workers.

- **Macro understanding of school evolution**

All – here stressing all - the teachers, and not simply those atop the apex should understand the purpose and macro workings of ever more integrated and networked schools, as well as being expert in their designated area/s of responsibility, and daily be able to assist the school realise its vision.

- **Independent risk taker**

Paradoxically they need also be independent thinkers willing and able to lead and to take personal risk to enhance the school's quest, understanding that at times mistakes are likely to be made. This as you'll appreciate is antithetical to the traditional approach but as the literature on networked organisations attests (Lipnack and Stamps, 1994) it will be increasingly vital.

- **Networked mindset**

The having of a networked mindset, of instantly seeking solutions in and for a networked organisation and society rather than simply seeking the answer or resources in-house is one of the attribute that sets the teachers apart from colleagues in traditional schools (Lee and Ward, 2013). It is mode of thinking that is seemingly not easily developed and appears primarily to emerge from working in a digitally based and networked culture, where the leadership, the teachers and the wider school community work naturally in a networked paradigm.

- **Networker**

Allied is the importance of being able to network, of using one's networks, contacts and social capital, and while it has always been a vital 'old' skill that rarely rated a mention in the traditional teaching standards the ability is vital in ever-evolving networked organisations.

- **Collaborator**

While good people skills and the ability to work with moderate needs in teams have always been important the facility to collaborate aptly with all within the school's community is essential. As Lee and Ward reveal in their study on *Collaboration in learning* (2013) teachers are relatively new to genuine collaboration in the workplace and its many finer nuances and have some distance to travel to acquire the sophisticated collaboration found in many other industries (Beyerling and Harris, 2004), (Hansen, 2009).

- **Willing delegator of educational control**

Another of the major differences between the teaching in the digital and paper based mode is the teacher's willingness to distribute the control of the teaching and learning process; in brief to cede some of their traditional power and rely more on their educational leadership. It is a major change that a sizeable number of teachers, even those new to teaching find difficult to make.

- **Preparedness to trust**

That delegation of responsibility requires the teachers to work from a position of trust, trust in and respect for the parents, carers, grandparents and community mentors and vitally the children, and the recognition that virtually every parent – regardless of their situation – has worked from birth onwards providing the best educationally for their children.

Interestingly the history of the use of electronic and digital instructional technology in schools over the last century has been characterised by distrust, of the children, their parents and in many instances the teachers (Lee and Winzenried, 2009). The vast majority of schools and teachers in 2014 are still unwilling to trust the children, parents or teachers to choose the apt instructional technology but until they do those schools won't achieve digital normalisation or the desired school evolution (Lee, July 2012, <http://www.byot.me>).

- **Lead teacher**

All teachers, and not just the experienced need begin playing a lead teacher role from the first day in the school, ensuring they contribute to the on-going evolution of the school's ecology.

- **Eternal quest for the ideal**

This has been evident in good teachers for thousands of years, but is ever more important in ever-evolving, ever higher order schooling.

- **Unerring focus on the desired educational benefits**

Linked is the imperative of all teachers focussing in all they do on the realisation of the school's education vision and the benefits the school is seeking to provide its students.

- **Ease with constant change and evolution**

The teachers need to thrive in, to enjoy a culture of on-going evolution and enhancement with all its associated messiness, uncertainty and seeming chaos. One finds in the teachers of the pathfinder schools a palpable excitement and a driving desire to grasp the emerging opportunities.

- **Flexible**

In such an environment, where there are often no maps to show the way teachers have to be highly flexible and willing to take alternative paths.

- **Reflective practitioner**

While this attribute has long been expected of school leaders (Schon, 1987) with all staff fully empowered and expected to lead it is important all teachers become reflective practitioners.

- **Networked and connected learner**

This ability ties closely with the reflective practitioner for in an ever-evolving scene while the staff does at times need to address personal development collectively it is important all the professionals assume prime responsibility for their on-going enhancement by making astute use of the networked world.

- **Time smart and efficient**

Lastly but by no means least is the imperative of teachers in schools awash with information and educational opportunities is to work smartly and to take advantage of the efficiencies accorded by the digital technology.

Conclusion

These are the attributes that have emerged out of the current research, and as such are not a 'wish list'.

Vitality they are not intended to be the basis of a 'silver bullet', 'how to succeed in teaching' solution.

Rather they are the key attributes that have come to the fore in the pathfinder schools in 2013 the UK, US, NZ and Australia and the research undertaken by Nacce (UK) in identifying the teaching skills desired in what it terms the 3rd Millennium Award schools.

The list, while extensive is likely not exhaustive. It most assuredly will continue to evolve.

It nonetheless succinctly highlights the many different attributes teachers will need to contribute fully to ever-evolving digital schools.

Bibliography

Beyerling, M.M and Harris, C.L (2004) *Guiding the Journey to Collaborative Work Systems* San Francisco John Wiley

Finger, G and Jamison-Proctor, R (2010) 'Teacher readiness: TPACK capabilities and redesigning working conditions' in Lee, M and Finger, G (eds) 2010 *Developing a Networked School Community* Melbourne ACER Press

Hansen, M.T (2009) *Collaboration* Boston Harvard Business Press

Lee, M & Winzenried, A 2009, *The use of instructional technology in schools: Lessons to be learned*, ACER Press, Melbourne.

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

Lee, M and Ward, L (2013) *Collaboration in learning: transcending the classroom walls* Melbourne ACER Press

Lipnack, J & Stamps, J 1994, *The age of the network: Organizing principles for the 21st century*, John Wiley & Sons, Inc., New York.

Schön, D 1987, *Educating the reflective practitioner*, Jossey-Bass, San Francisco.