

# The Evolutionary Stages of Schooling

## Key Indicators

### A Discussion Paper

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This paper emerged out of an analysis of that as yet rare cadre of schools in the UK, US, NZ and Australia that have or nearly have succeeded in normalising the use of the digital in all their operations, educational and administrative.

The research was undertaken as part of the preparations for a forthcoming publication on **Digital Normalisation and School Transformation** I'm writing.

The belief was that the work had so many implications for schooling globally, and in particular for the use of digital technology in schools it would be beneficial to place the thoughts on the evolutionary stages online and allow all interested to read, and they wish to comment.

Over time and with feedback the paper will be updated.

If you would like to feed me a comment do email me at – [mallee@mac.com](mailto:mallee@mac.com)

An abridged version of this discussion paper will be published in the next edition of **Educational Technology Solutions** (<http://educationtechnologysolutions.com.au>).

Complementing this discussion paper are two other papers on the site

- i. A graph of the major evolutionary issues schools and their communities need consider when analysing the stages
- ii. A list of the near 50 key variables that all the schools that have or nearly have reached the digital normalisation stage have addressed in their journey.

### The Evolutionary Stages

At this point in the evolution of schooling I've identified six main development stages.



The transformative Digital Normalisation stage has only come on to the radar this year, even though there were strong signs in 2012 of its emergence.

The stages are a construct designed to assist schools with their planning and development. They have emerged after noting the remarkably similar journeys of all the pathfinders studied. The indicators within each of the stages are intended as guide, full well recognising that in different situations a particular development might come earlier or later.

The crucial variables at each stage are italicised.

In considering the below it is important to appreciate all the schools displayed an excellent understanding of organisational change, with all throughout the stages being highly proactive, consciously seeking to foster a culture of change and understanding the imperative of the leadership being politically astute.

## **TRADITIONAL PAPER BASED**

- *Test focus*
- *Culture where the professional educators unilaterally control the teaching*
- Educational agenda strongly shaped by external tests
- *Organisationally and teaching wise school's operations strongly impacted by the use of paper technology*
- Paper technology reinforces constancy, continuity, the use of the physical place and the operations happening within the school walls
- *Highly insular in outlook with educational professionals unilaterally controlling all facets of the teaching and learning*
- Segmented silo like operation with limited links between units
- *Paper, pen and the traditional teaching board the dominant instructional technology*
- Decade plus

- *control of the digital by ICT experts in school*
  - *adoption of standard operating system, technology, applications software*
  - *use of the digital technology within the school administration/finances*
  - *development of the school's internal network, with all schools having own URL*
  - *efforts by a cadre of early adopter teachers to integrate use of the digital in all teaching*
  - *preoccupation with occasioning change via latest technology*
- *Loose nexus between school's educational agenda and deployment of the technology*
  - *Digital and website usage peripheral to school's teaching*

## **DIGITAL TAKE OFF**

On reflection I now view the next four phases - that have only been apparent for the last 10 odd years – normally as the precursors to schools achieving full digital take off and normalisation.

### **Early Digital**

In using the term digital in this and the next phase I'm referring to the movement from a paper to digital operating base and the concomitant changes that occur both attitudinally and operationally within the school with that shift.

- *Apposite shaping educational vision for digital and networked world*
- *Leadership expectation that all staff will use the digital in teaching and administration*
- *Desire – often unwitting - to move from paper to predominantly digital teaching base*
- *Recognition each school, with its unique setting has to shape its own evolutionary solution*
- *Focus still insular - on using digital within school walls*
- *All staff provided/have own digital teaching toolkit*
- *Teachers expected to handle key administrative duties digitally*
- *Appropriate suite of digital technology in every teaching room*
- *Deployment in each room of an easy to use whole of class presentation technology – such as an IWB or data projector - that enables teachers to transition from paper to digital teaching mode placed in all teaching rooms*
- *Critical mass of teachers using the digital in everyday teaching*
- *School's administration largely digital*
- *Ever rising expectations by teachers using the digital in teaching*
- *Significant in house professional development*

### **Digital**

- *All or nearly all teachers using the digital in their everyday teaching*
- *Whole school in class digital usage coupled with digital administration begins moving school from paper to digitally based operational mode*
- *Concomitant shift from constancy to on-going evolution, change and natural growth*
- *Insular mindset still dominant*
- *Increasing moves by staff to extend the education beyond the school walls*
- *Digitally empowered parents and students seek greater voice in school's use of the digital*
- *The shift to a digital operational base and digital convergence occasions ever-greater organisational and operational integration*
- *Significant home-school educational and digital divide*
- *ICT team responsible for choice, configuration, deployment maintenance and replacement of all hardware and software*
- *School – or school using parent monies – funds all digital technology used by school*
- *Moves to ensure all students have ready usage of/ access to personal computers*
- *Access to the Net tightly controlled and filtered*
- *Standard operating system, instructional technology and applications software*
- *All other technology banned*
- *Closed, password protected school website*
- *On-going in house staff development*

### **Early networked**

In this and the next phase I'm referring to the transformation that occurs when schools reach the evolutionary stage where they recognise that their digital and networked facilities removes the school's long-term reliance on students attending a physical place for learning and the necessity to continue operating as a largely insular organisation.

They now begin to recognise the plethora of opportunities for human networking, and genuine collaboration with all the teachers of the young from birth onwards.

It recognises the physical networks open the way for ever-greater and more effective human networking.

- *Principal/school leadership promote the provision of a holistic C21 networked, ever more collaborative education that transcends the physical school walls*
- *Growing leadership/teacher recognition of extent and impact of the young's normalised 24/7/365 use of the digital upon learning outside the school*
- *School evermore aware of the natural growth and evolution flowing from its going digital*
- *Dismantling of internal school walls and adoption of more integrated school ecology*

- *Staff adopting networked mindset*
- *Increasing teacher recognition of the educational opportunities for networked collaboration – and the ease of doing so with the digital*
- *Escalating collaboration between school, its homes and community – with school taking the lead*
- *Willingness of key staff to begin distributing control of the teaching process*
- *Pooling of home and school educational expertise and digital capability*
- *Concern for equity with school ensuring all children have requisite personal technology and ready home 'Net access*
- *Move to more collaborative mode of teaching that puts learner at centre*
- *Growing empowerment of all staff, teaching and support*
- *Areas of rapid and pronounced change impacting upon whole school ecology*
- *Leadership concern to ameliorate the growing pressure of change and on staff*
- *Change seemingly chaotic, spotted and non-linear but indeed common globally within schools at same stage of their evolution*
- *Moves to ensure all students have ready usage of/ access to personal computers*
- *Enhancement of Wi-fi networking and bandwidth*
- *Shift from paper based to digital communications with home and community*
- *Increasing centrality of a core, working school website*
- *Schools seeking to make greater use of online and networked teaching*
- *On-going in house staff development, plus concerted school initiated moves to educate parents and students on paradigm shift*

## **Networked**

- *Leadership committed to providing an internationally competitive, holistic 24/7/365 education for life and work*
- *Staff adoption of networked mindset*
- *School operating within networked paradigm where it reaches out beyond the school walls in its educational quest, begins dismantling the old walls and increasingly questions past practises and seeks to involve all the teachers of the young in the education of the children*
- *Positioning of the school to readily accommodate change and sustain the desired evolution*
- *Continuing development of tightly integrated school ecology that embraces the in and out of school contributions and learning*
- *Emergence of networked learning community that increasingly integrates the in and out of school student learning*
- *Escalating empowerment of and trust in professionalism of all staff*
- *Desire to use the digital in all operations to enhance effectiveness, efficiency, synergy and productivity*
- *Tightening nexus between the schools shaping educational vision and its use of the digital technology in the school's community*
- *Escalating collaboration between the school, its homes and community*
- *Pronounced school wide shift to more collaborative, networked and personalised mode of teaching*
- *Networked resourcing where the school pools its resources and expertise with that of its parents and community*

- Escalating use of parent and community resources in addition to those provided by government
- *Distributed control of teaching among all the teachers of the young*
- School's digital technology leadership focussed on facilitating ready Net access and use by all within the school's community
- *Digital technology and Net core to all the school's operations*
- *School's website has been opened to all interested and is central to the school's operations, teaching, communication and on-going development*
- *Willingness to move to a position of trust and respect for the children and their homes*
- *Preparedness to accord children responsibility for choosing own suite of digital technology that want to use in class*
- Embarkation on strategy to normalise the total in class use of the students own choice of technology
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## **DIGITAL NORMALISATION**

Entails all the key players within the school's community – the students, parents, teachers and support staff – using their own choice of digital technology naturally in all the school's operations, teaching and administrative to the extent they rarely give thought to the actual kit they are using.

The focus is on the functionality and desired benefits and not the tool.

It recognises that a suite of ever evolving technology will be used 24/7/365 in all facets of the people's lives – and not simply for education, and that in using the technology everyday all will teach themselves its workings and position themselves where they can use the apposite functionality when required.

What is already becoming apparent is that it will only be when schools reach this stage, and create the desired school wide ecology will we finally see

- a significant widespread change/enhancement in pedagogy
- schools finally providing an education apposite for today's world
- schools positioned to evolve at pace in keeping with society's ever-rising expectations and technologies growing capability.

Am envisioning – as with the Take Off stage – that this too will move thru multiple phases.

### **Early normalisation**

- *Digital used as a natural part of all school operations by all within the school's community*
- *Student use of their own technology in classes is normalised*
- *BYOT as a term drops from the operational vernacular*
- *School factors recognition of out of school learning into its everyday operations*

- *Mechanics on the workings of the student's suite of technology no longer taught by the school – student responsibility*
- *Use of student's digital functionality in higher order teaching*