

Facilitating System Change
with a
Hub and Spoke Networking Model

Paul Morris, Mal Lee and Sue Lowe

May 2015

The movement of schools globally to a digital operational base has, largely unseen, fundamentally changed the way those schools, and schooling in general needs to be developed.

Like all other digitally based organisations, be they banks, newspapers or retailers schools in going digital very much need to take charge of their own evolution, drawing where they can on the apt support of the pathfinder schools and their education authority.

What is now evident globally, both within industry (Westerman, et al 2014) and schooling (Lee, 2014 b) is that the digital masters who have taken control of their growth are evolving at an accelerating rate, daily becoming increasingly different to their more traditional confreres.

The digital pathfinders in all areas are fundamentally transforming their 'industry' at pace and obliging the later adopters to employ growth strategies apposite for a rapidly evolving digital world (www.digitalevolutionofschooling.net) and to forego the ways of the paper based world.

That is happening worldwide, again largely unseen with schools. The pathfinder schools have taken charge of their evolution, have attuned their ways for the digital, have already transformed the mode of schooling they are providing and are on trend to accelerate their difference with the traditional paper based school.

...what can safely be said it is now clear is that the new norm with schooling globally will be the accelerating differences between schools, and the mode of schooling each provides (Lee, 2015).

The digital transformation literature (Solis, et al, 2014) talks of 'Digital Darwinism' where those organisations that capitalise upon the ever evolving technology thrive, and those which stay in the past struggle. Projections are made of the number of Fortune 500 companies that will fall out that group in the next five years unless they become digital masters.

Atop the transformative impact of the digital technology have been the global moves to give schools and their principals a greater voice in and increased responsibility for the running and growth of each school. In New South Wales (Australia) that devolution is expressed in the Government's 'Local Schools, Local Decisions' policy.

The immense - and only slowly realised - challenge facing education systems globally is how do they best facilitate whole of system change in a digital

environment, where the differences between the schools is accelerating. How do they contend with in the one system astutely led digital masters where the students want to go and slow mover schools clients see as irrelevant? The traditional 'one size fits all' model cannot accommodate the vast and growing differences.

The Far South Network of the New South Wales Department of Education and Communities (NSW DEC) has opted to employ an educational variant of the hub and spoke network model to address that challenge, and to facilitate whole of Network change.

It is a significant step in the search for a solution apposite for school systems seeking to lead and provide schools the appropriate support in an ever evolving digital world, where schools will increasingly be 'surfing at the edge of chaos' (Pascale, Millemann and Gioja, 2000), needing to thrive and deliver while living with on-going rapid, often uncertain non linear change, evolution and transformation.

The Context

The Far South Coast (FSC) Network of NSW DEC has challenges not experienced by urban communities.

Four hours drive south of Sydney it is a region of widely dispersed small coastal and rural villages and towns, as yet lacking the kind of bandwidth found in the major cities.

The schools in the Network sit along the digital evolutionary continuum (Lee, 2014 a) (Lee and Broadie, 2015), with only one, the proposed hub of the network anywhere near digital normalisation.

Local Schools, Local Decisions

In 2015 the full impact of the NSW Government's decision to move prime operational responsibility for the enhancement of each state school (<http://www.schools.nsw.edu.au/media/downloads/news/announcements/yr2011/aug/local-schools-local-decisions.pdf>) kicked in. School principals were given responsibility for the school's allocated funding, the school's operations and growth at the same time as departmental business units external to the school contracted.

Schools Taking Charge of Growth

Serendipitously as the research on digital evolution of schooling (Lee, 2014 a) and industry (Helbing, 2014) (Westerman, et al, 2014) attests in the digital world each organisation, each school has to take charge of its own growth. The magnitude of the digital revolution (Helbing, 2014), its chaotic nature, the uniqueness of each school and the pace of the digital evolution necessitates that each school should shape the desired future.

Significantly the recent research by Lee and Levins (in press) on BYOT and digital normalisation undertaken with the pathfinder schools in the UK, US, NZ and Australia affirms that the successful ones, like the digital masters in the business world are the ones increasingly attracting the 'customers'.

That should not come as a surprise, for as the young, their parents and society in general normalise the 24/7/365 use of the digital so they will want schools that do the same.

While Digital Darwinism is very much more an issue in the business world it is becoming more significant in schools, with digitally empowered parents increasingly going to considerable lengths to secure what they believe to be a digitally relevant schooling.

Far South Coast Synergy

These two developments paved the way for a pathfinder school, Broulee Public School (<http://www.broulee-p.schools.nsw.edu.au/Home.html>) and the NSW DEC to come together and fashion a solution that could assist move all schools within the Far South Coast Network to a digital operational base. It is a solution that would enable the schools to capitalise upon the autonomy provided by 'Local Schools, Local Decisions' while at the same time assisting all the within the Network, primary and secondary begin their digital transformation.

It was very much about creating synergies that could have all manner of benefits.

Broulee PS wanted to generate resources for its on-going evolution and in particular the development of its highflying staff while the Network's Director recognised the importance of all the Network's other schools in time in normalising the use of the digital.

It was thus decided to work together, to implement a whole of Network school change model and to seek some financial assistance from NSW DEC's Rural and Remote Blueprint initiative.

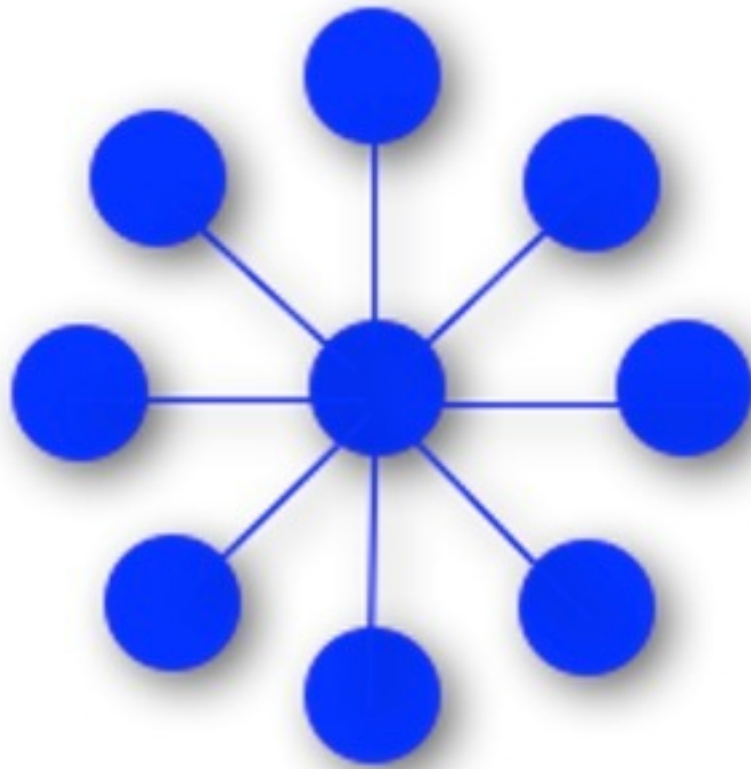
The Hub and Spoke Networking Model

It was decided the most appropriate approach would be a variant of the hub and spoke networking change model, a variant designed specifically for schools, and for moving all the schools in a Network, all in unique settings and at very different stages on the evolutionary continuum to a digital operating base.

Finding a model applicable for the digital transformation of schooling was critical.

While it is appreciated the hub and spoke networking model has been used in an array of industries for years, is employed in developing school curriculum expertise (http://www.editlib.org/p/42331/article_42331.pdf) and variants under other titles have been used to bring about school change we have been unable to find in the literature or via Google the model designed to facilitate digital transformation system wide.

The Far South Coast (FSC) model uses at the hub a school – like Broulee PS – well along the digital evolutionary continuum that is able to network with and advise those schools on the spokes.



Hub & Spoke

In general terms it matters not with the model whether the school at the hub is a primary or secondary school, although on many of the specifics there would be benefits from working with schools at the same level but only if, and it is a big if, that school is well along the evolutionary continuum. A traditional paper based high school has much to learn from a digital primary ecosystem and but nought growth wise from another paper based high school.

The hope is that in the not too distant future the hub and spoke will move to the dandelion phase where the 'spoke' schools network with and impact other schools, with they in essence working like the original hub school.



Principal readiness

It is appreciated the model is dependent on the readiness of the school principal to take and lead the school on its digital evolutionary journey.

The readying of those principals can be a major challenge.

One of the striking attributes of school principals operating at the Paper Based school evolutionary stage (Lee, 2014 a) is their insular mindset, strongly believing that the mode of schooling they provide, and have provided for the last 50 plus years is the only way to school children. Most appear unable to envision any other approach or the need to change. Bhaduri and Fischer ask 'Are You an Analogue or Digital Leader?'

(<http://www.forbes.com/sites/billfischer/2015/03/19/are-you-an-analog-or-digital-leader/>) succinctly describing the 'analogue leader' the thinking of school principals operating at the Paper Based evolutionary stage.

Under 'Local Schools, Local Decisions' until the principal is ready to change that mindset the school will not change, regardless of the wishes of other staff or the community, such is the importance the principal.

The willingness of the principal to lead is however a reality of all school change models, amplified however in shifting to a digital operational base.

That said the FSC model communicates to each principal the high expectations by both the Government and the Department, and allocate funds to support the realisation of those expectations. It provides all the leaders an insight into the digital evolutionary journey, practical advice in planning the school's journey and collegial support while of that journey

It also openly articulates the potential benefits of the hub and spoke networking model.

Potential benefits

The benefits of the model, as used with school digital transformation, appear to be that

- it allows each school to adopt a solution appropriate for their current evolutionary stage and situation
- it accommodates on-going fundamental organisational change and evolution
- the hub school acts not as exemplar but rather as a school well into its on-going evolutionary journey that is able to show in very practical terms what is possible, to discuss the lessons it has learned and the mistakes made, and to provide an idea of the path ahead
- It brokers a commitment from spoke schools to contribute to collective capacity building by acting as a hub school once it has evolved to a position where it is able to do so. As such, it is committing the spoke school to achieving a level of effective digital operation that will provide a model for other schools in their digital transformation
- it is readily scalable and can be employed in other NSW DEC Networks

- it pressures the slower evolving schools to lift their play – particularly if they begin losing students
- the education authority is able to tailor its support for each school and provide that school the assistance desired
- it requires little funding to operate on a long term basis - although the regular injection of funds can clearly assist. The suspicion is that finances spent on supporting this approach will be far more effective than the older models with their substantial administrative overheads
- it accommodates both the planned and unintended benefits.

The last is an important point to note for as industry found from the 90's (Thorne, 1998) when organisation's move to a digital operational base even with the most prescient of planning there will be significant unintended benefits; benefits that will need to be quickly optimised.

The free wheeling nature of the networking model very much allows for unintended benefits.

The Hub and the Network Launch

The FSC has opted to formally launch the model with its schools and to give all a strong start by capitalising upon on the hub school's two-day conference on Building Digital Schools (<http://buildingdigitalschoolsconference.weebly.com>). The plan is to have the Network's educational leaders learn from Broulee's 15 plus years journey to digital normalisation, to appreciate where their school sits on the school evolutionary stages continuum, to better understand the road ahead and by the conference's end to have begun identifying their own digital vision and likely journey.

Significantly those schools will be aided at the Conference the Broulee staff, the NSW DEC and the State Government.

Challenges

The FSC hub and spoke networking model is very different to what the schools have known and is being applied to a development – the fundamental transformation of schooling – that many school leaders still find daunting, and others unwarranted.

It is a huge challenge that will likely take some of the leaders at least out of their comfort zone, at a time when many are managing the daily realities and complexities of schooling.

The related reality is that it takes years, not months even with the most astute and capable of school leaders to transform the ecology, the culture and mindset of a school and to normalise the use of the digital.

The school leaders will need network support and regular access to the wisdom of those who have undertaken the journey, and who can provide the crucial advice.

Conclusion

How well the model provides the Network's schools the requisite understanding and support will be examined in a follow up article in 2016.

The model appears apt but how well it works and how it might be refined to assist a collection of unique schools in their digital evolution needs to be tested.

Bibliography

- Bhaduri, A and Fischer, B (2015) 'Are You an Analogue or Digital Leader?' *Forbes* 19/2/2015 - Retrieved 20 April 2015 - <http://www.forbes.com/sites/billfischer/2015/03/19/are-you-an-analog-or-digital-leader/>
- Helbing, D (2014) 'What the digital revolution means to us'. *Science Business* 12 June 2014 - Retrieved 20 April 2015 - <http://bulletin.sciencebusiness.net/news/76591/What-the-digital-revolution-means-for-us>
- Lee, M (2014 a) 'School evolution: A common global phenomenon'. *Teacher* ACER Press - Retrieved 20 April 2015 - <http://teacher.acer.edu.au/article/school-evolution-a-common-global-phenomenon>
- Lee, M (2014 b) 'Taking Charge of Your School's Evolution' - *Teacher* ACER Press - Retrieved 20 April 2015 <http://teacher.acer.edu.au/article/taking-charge-of-your-schools-evolution>
- Lee, M (2015) 'The Accelerating Differences between Schools'. Retrieved 20 April 2015 - <http://www.digitalevolutionofschooling.net>
- Lee, M and Broadie, R (2014) *A Taxonomy of School Evolutionary Stages: Evolution within the Threads*, Broulee, Australia Retrieved 20 April 2015 - <http://www.digitalevolutionofschooling.net>
- Pascale, R.T, Millemann, M, Gioja, L (2000) *Surfing at the Edge of Chaos* NY Three Rivers Press
- Solis, B, Lieb, R and Szymanski, J (2014) *The 2014 State of Digital Transformation* Altimeter - Retrieved 20 April 2015 - <http://www.altimetergroup.com/2014/09/the-2014-state-of-digital-transformation-infographic/>
- Thorpe, J (1998) *The Information Paradox* Toronto McGraw-Hill
- Westerman, G, Bonnett, D and McAfee, A (2014) *Leading Digital. Turning Technology into Business Transformation*, Boston, Harvard Business Review Press
-

