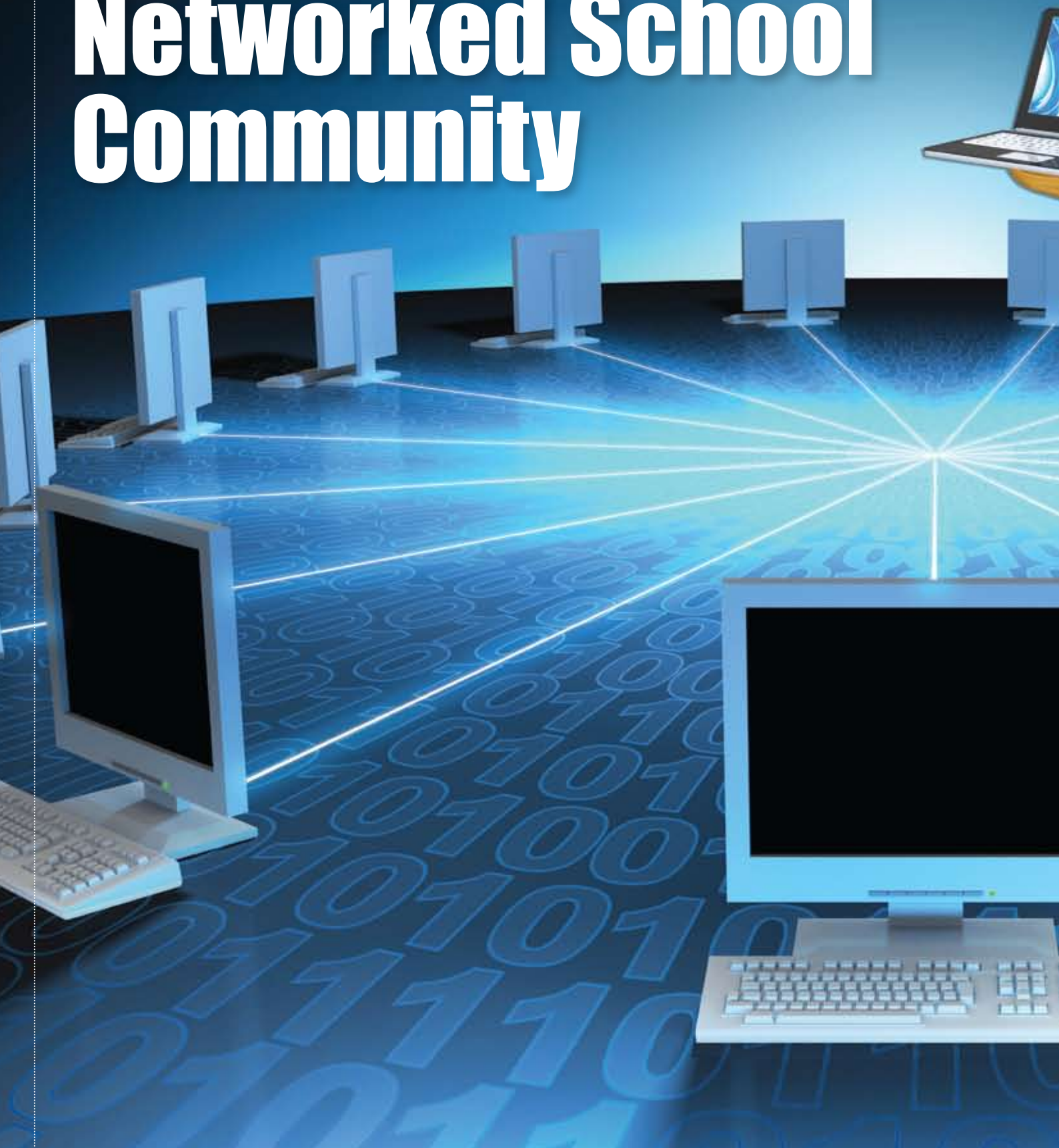


Developing the Networked School Community





By Associate Professor Glenn Finger
and Mal Lee

The authors of this article believe that networked school communities will characterize the next phase of formal schooling, and they argue that an ever-closer relationship needs to be forged between the home and the school in the education of the nation's young.

The pathfinding schools have moved from the traditional paper-based mode to a digital mode. The next phase will be an increasingly networked and collaborative mode. Most importantly, schools that have normalized the use of the digital in their everyday operations can and are beginning to make that shift now as networked school communities.

Those moves are tentative, and both educational and administrative.

They build on the existing situation, they recognise what they want to retain of the existing school operations and gradually and incrementally move to the new, networked mode.

While the digital schooling phase described by Mal Lee and Mike Gaffney in the book *Leading a Digital School* (2008) offers immense potential for schools moving forward, the digital school can still operate within the traditional school walls, with the omnipotent hierarchical structures and the teaching and learning unilaterally controlled by the professional educators and the educational bureaucrats.

As soon as a school opts to use the network technology to dismantle its school walls and traditional operational parameters, and begins creating a new, rich networked learning environment to better educate its students, the nature of the schooling will gradually be transformed. Not only will the removal of the walls enable the school to reach out to harness unimagined opportunities, but it will enable parents and the student community to once again begin contributing meaningfully to the formal and informal educational process in partnership with schools.

Strategically, the authors argue for a positioning which conceptualizes the home-school divide as the home-school difference, enabled by a more sophisticated understanding of the power

and potential of student personal and home access to, and use of technologies. Adopting this paradigm, schools struggling to acquire the much desired digital resources will be able to draw upon the ever-growing digital capacity of the vast majority of their students' homes to begin providing an education that:

- creates educational experiences that are meaningful and relevant to students' present lives in the 21st century;
- better prepares students as digital citizens in today's world and for digital futures, using technologies they have embraced now;
- markedly improves student engagement in schooling, such as assisting in addressing the current deeply concerning year 12 retention rates; and
- is world class and enhances Australia's national productivity.

It is imperative that formal schooling provides an education that is relevant and attractive to every student, to the disenchanted, the alienated and the gifted, and which uses the technologies and the

preferred learning mode of today's youth to personalize learning.

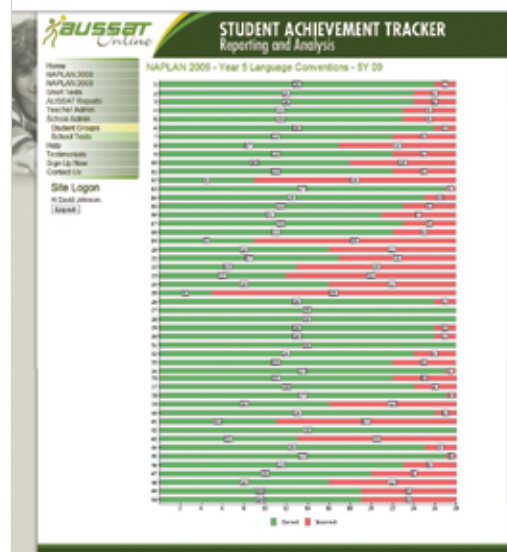
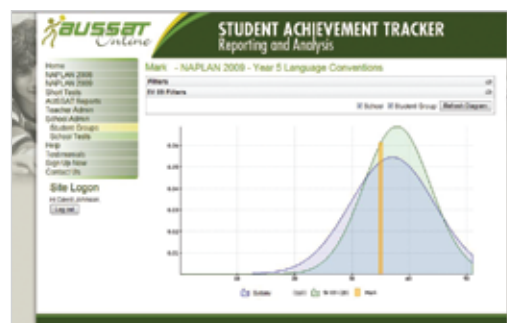
Commentators worldwide have expressed alarm at the growing divide between the home and the school. For example, Buckingham (2007) and Becta continue to express concern about the divide. The digital divide is increasingly being perceived as creating a knowledge gap, between those students who can access the new technologies and those who cannot.

The authors do not share this as a concern, but instead view it as an opportunity. Rather, they believe it is important to approach the situation positively; to appreciate that what Australia has in homes and classrooms is a difference – rather than a divide – in a situation that is unlikely to ever be overcome. Subsequently, the authors suggest that this should be constructed as a home-school difference and seen as an incredible opportunity to get the school and home to pool their very considerable resources to provide an ever more vibrant, attractive and relevant education for our youth.

What the authors do see as a given for any school or education authority wanting to move to the networked mode is the need for every student to have at home internet access, and if the economics of the home do not enable that access it has to be provided. The UK's current Home Access program that aims to provide home internet access to every young person in England provides both the rationale for and a means of providing that universal home access. (Becta, 2009)

The Vision

To date, very little has been written on the concept or practice of networked school communities. While many have talked about the educational and administrative opportunities made possible by the Internet over the last decade, few of those ideas have been incorporated in an overall vision for future formal schooling, which attempts to create a new vision about a home-school nexus through developing networked school communities.



AUSTRALIAN STUDENT ACHIEVEMENT TRACKER ONLINE

AUSSAT Online has been designed to put school principals and classroom teachers in control. AUSSAT Online helps schools answer the most fundamental questions:

- At what level does a student function in literacy and numeracy?
- How will a student perform during NAPLAN tests?
- What instruction will best help the student?
- Is the student progressing?

AUSSAT Online is a performance measurement and student achievement tracking tool. A secure tool that helps classroom teachers to manage class and student performance, measure student improvement, conduct longitudinal analysis and set individual student targets.

AUSSAT Online measures student improvement and value add from one term to the next, and from one year to the next. AUSSAT Online puts school principals and classroom teachers in control of the information they need to support their students.

sales@aussatonline.com.au

T 02 8889 4072

F 02 8889 4079



This article is a first step in the identification and implementation of that vision.

The vision the authors have in mind is that of the networked school community, where the school and the home work collaboratively, pooling their respective resources to provide the best possible education for all, with agency being shared in a partnership between students, their homes and schools.

In opting for the term 'networked school community', the authors wanted a simple phrase that embodied the essence of what was both happening and desired.

When talking about networked school communities, the authors imagine a mode of formal schooling that is evolving, that will continue to grow and take on its own distinct form. They envisage this evolution to occur in a similar way to that which occurred with previous technological changes – such as the move from manuscript literacy, to print, video, to the more recent digital, multimedia, hypertextual mode of schooling. We believe that networked school communities are required to reflect uLearning (ubiquitous learning). uLearning which combines eLearning and mLearning, characterized by the ubiquitous, seamless, access to and use of technologies by the young at school and at home – where the technology becomes more affordable, has enhanced capabilities, and becomes 'invisible'.

The term covers all facets of the school

operations, and not just the curriculum intentions, associated teaching and learning undertaken to meet those curriculum expectations. The term 'the hidden curriculum' has been used to refer to those aspects of school life not specifically addressed in the formal teaching program, such as the socialization of students, the ability to relate to and network with others, the education acquired on the playing fields and in the cafeteria, and many other aspects of a school education. It also encompasses the administration and communication of the school and the facility for the wider school community to contribute to its on-going development.

Most importantly, the term has to do with fostering a close working relationship between the students, the parents and the school, and further developing a mutually supportive learning culture where the needs of every student are recognized and respected.

The contention is that both students and parents have a vast amount to contribute to the appropriate education of the young, and that the quality and appropriateness of education can be markedly enhanced by schools taking fuller advantage of networking technology, and by working collaboratively with parents and students. The desire is to shift to a model of schooling that is in keeping with the ways of the contemporary world, which is inclusive, makes much greater

use of social networking and teamwork, and appreciably less use of the 'we know all' approach that has come to be associated with hierarchical and bureaucratic organizations.

"Schools need to become network organizations, establishing themselves as hubs at the center of diverse, overlapping networks of learning, which reach out to the fullest possible range of institutions, sources of information, social groups and physical facilities. To solve this problem schools need to become nodes on a network instead of isolated factories." (ID, 2007, pp. 24-25)

Over a decade ago, Tapscott (1998) observed that, for the first time, developed societies had a generation of young people who knew more about a technology than their teachers. While one might query the finer semantics of that claim, few today would dispute that the students from kindergarten onwards have an awareness of, and an interest in digital technology, and a set of digital skills that should be harnessed by educators. Yet there continues to be evidence that suggests that this has barely happened for many students in their schooling.

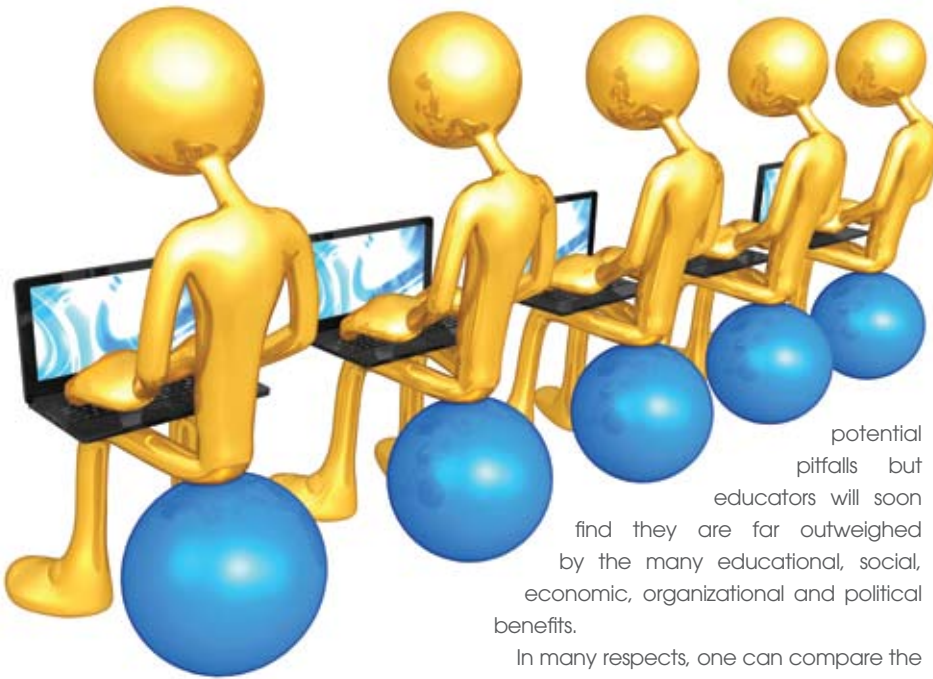
What the authors are advocating is the adoption of a mode of schooling where that can happen, not only in terms of use of new technologies in schools, but where the parents are able to use the technology and play a renewed and more significant role in the formal educative process in

Go Forward to a Green Future with Virtual Computing & WinWorld Computer Services (WWCS)



- ✓ **Virtual Servers** with Terminal Services, VirtualBox, Microsoft 2008x64 Server with Hyper-V®
- ✓ **Virtual Desktops** SUN Rays®, Wyse, HP Thin Clients
- ✓ Use Smart Cards for your session mobility/security and also Student id/Library circulation
- ✓ Very low Total Cost of Ownership (TCO) over time eg., less insurance cost
- ✓ @ Desktop, very low electrical power requirements, low heat output, small footprint, less cable clutter, no noise
- ✓ **Lower IT costs**, re Desktop Support, no loss of data or virus/spyware issues @ Desktop
- ✓ **30 seconds to e-learning** = Switch-on, Log-on, Launch Applications
- ✓ **Eliminate Desktop refresh cycles** & only **upgrade Servers** as required
- ✓ Use **Standard Network** infrastructure, protocols, no 'imaging' required
- ✓ **Very quick set-up** of the Computing Environment
- ✓ **Best of All Worlds** > Open Source, MS Windows Apps, Apple Mac Multimedia
- ✓ Satisfy **Curriculum** needs, be **Financially** responsible & **Technically** superior
- ✓ See the **Virtual Computing Future @ WWCS @ ACEC2010** > <http://acec2010.info/>
- ✓ See **Reference School** > Our Lady of the Southern Cross > www.olscwyn.catholic.edu.au

WWCS supporting ICT in Education for 15 years – Call Brian 0419-592095



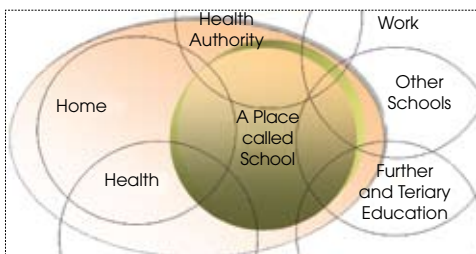
partnerships with educators in schools and school systems.

The authors' vision is to value and build upon all that is great with the present schools, and to capitalize upon new opportunities, and in the process, move some distance towards redressing the limitations of technology provisions in schools and to provide schooling more appropriate to the contemporary world for all students.

Therefore, the concept of a networked school community is that it is viewed as a legally recognized school that takes advantage of digital and network technologies, and is characterized as a more collaborative, networked, inclusive operational mode which involves its wider community in the provision of a quality education appropriate for digital futures.

Diagrammatically, the networked school community can be viewed this way as shown in Figure 1 below.

Figure 1: The Vision – Networked School Communities



The Rationale

The reasons for educators to seek to move their present school to a networked mode, and to create a greater nexus between the school and home are becoming compelling and diverse. There will be

potential pitfalls but educators will soon find they are far outweighed by the many educational, social, economic, organizational and political benefits.

In many respects, one can compare the shift to the networked mode of schooling to that from traditional modes of doing business to the shift to e-commerce. There are, and will always be, concerns that need to be addressed but, on balance, the benefits of the new will far outweigh the operations of old.

In addition, it is also important to note the impact that the major societal and technological megatrends are having upon the life and education of the young, and recognize the now very considerable and ever growing digital capacity of most students' homes.

One of the major but little noted megatrends impacting on the education of the young across the developed world is the shift of resources that has occurred over the last 150-plus years – from ownership provided by the state to the ownership of technological resources in the home. To illustrate, when free, compulsory schooling was introduced in the 1870s, the vast majority of students' homes had little educational capacity or resources, and thus it had to be provided by the state, even though these resources were also severely limited. The funding of schools was shaped with this in mind.

Today, the situation is dramatically reversed and this trend is likely to continue. For example, there are currently more mobile phone accounts in Australia than there are people, and in contrast to these trends in the wider community outside schools, schools are tending to ban student use of mobile phones at school. This is also reflected whereby governments still use a recurrent school funding where the state tries, ever more unsuccessfully, to increase

students' access to computers and the Internet at school, without understanding the often rich access to and use of digital resources by young people in their personal lives and the resources available in the home.

The creation of a home-school nexus allows societies to adopt a new conceptualization of a model of recurrent funding for the networked school community that recognizes and builds upon the home's already considerable investment in digital technology, and which reduces the unilateral responsibility of funding and provision by the state.

It has been apparent for the last decade that it is in the home (Meredyth et al, 1999) where the young acquire most of their digital competencies and confidence. While everyday use of the digital by the young has been normalized in the vast majority of young people's homes, it remains rare in schools. Interestingly, while governments globally promote formal schooling as the route to enhancing national productivity, at this stage it is mainly the homes of the young that are fulfilling that role.

Conscious of the national importance of every young person's home contributing to the enhancement of national productivity, it is essential as mentioned that the small but significant number of families that don't have the funds to acquire the requisite digital technologies to access the Internet be assisted in a manner like the UK is doing today with its national Home Technology initiative. (Becta, 2009)

The Now

Internationally, there are proactive schools, education authorities and nations using the networks to reach out beyond the school walls and to provide a richer, more collaborative, networked mode of schooling. The previously mentioned UK initiative that seeks to ensure every young person has Internet access in their home by 2011 is the most ambitious, but there are many important initiatives emerging elsewhere.

Readers will find across Australia, and throughout the world, examples of pathfinder schools and education authorities making the first tentative moves to take advantage of their links with the

home to improve the school's operations. While the main moves are linked to the use of online learning platforms, there are also significant developments in school administration and communication.

Virtually all of the initiatives are, as is normal with new technology, characterized by using the new to better perform the ways of old; to complete the homework; to register for parent teacher interviews; to use the students' laptops to lift their grades or to send out the school newsletter.

Professional educators exploring networking have initiated the vast majority of the moves. Some significant developments in the US involve parents using Web 2.0 tools to 'reach in' and pressure the school to improve its performance.

None appear to be consciously linking their work at this stage to a fundamentally different mode of schooling, but each is in its own way making the shift in that direction.

This is what happened with the shift to digital schooling and it was only after Lee and Gaffney (2008) articulated the shift occurring with the pathfinders did the

wider educational community begin to appreciate what was taking place.

The desire with this article, the forthcoming book, and the online facility mentioned below is to help schools put into the wider schema what they are doing and thus facilitate their work and that of others.

As always, the articulation of the vision – desired big picture – and the focusing of and directing of one's energies to realizing it are fundamental.

While the proactive are at the embryonic stage, the more reactive schools, education authorities, and nations as indicated in previous writings (Lee, 2009 a, Lee and Winzenried, 2009 b) remain years behind, with many still harbouring a negative attitude to the networked world, placing ever greater constraints on the use of the Internet within the classroom and ever more disadvantaging their students.

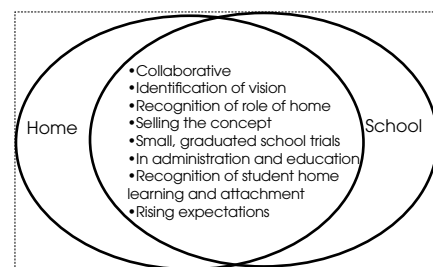
The Possibilities

The possible forms of the networked school community and the home-school nexus the

school wishes to create are many. Indeed, one of the challenges school leaders will need to address as they seek to envision their ideal networked school community is to keep the vision and the rate of movement toward the vision attainable.

Below are but two possible scenarios. The first (see Figure 2) can be achieved with no structural or legislative change while the second (see Figure 3) would probably require those changes. All the authors want to do here is to help clarify the concept of the networked school community and begin opening educators' minds to the possibilities.

Figure 2: Networked School Community First Steps – Prestructural Change



engage... your staff in continuous improvement
- report by workgroups on pressure points, innovations, satisfaction indicators

measure... how well your school or school cluster is tracking with its strategic KPIs, identifying blind spots and quality practice

evaluate... using evidence based principles, gauge benefits and identify areas for action

report... your school's compliance with professional standards and benchmarks

build... the capability of your emerging leadership team through 360° feedback

think and plan we help you go beyond "just a survey" into communication and actions

Take your school's pulse

We are specialists in designing and delivering secure web-based surveys for schools, with customised reporting

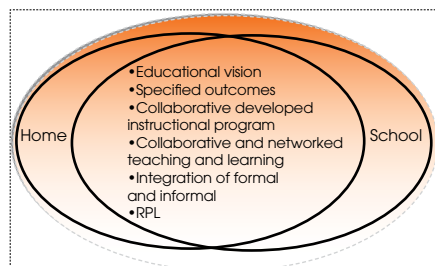
- Rapid secure data acquisition technology for surveys and electronic forms
- Presentation quality customised analysis and reports
- Logos and photos embedded in surveys and reports
- Securely run on your intranet inside your school, or on an intranet site for your external community
- Each solution tailored to your strategic context
- Supplied by a team of surveying, analysis and engagement experts

The School Survey People

Call us for a complimentary consultation

www.theschoolsurveypeople.com
+61 8 8981 0880
info@theschoolsurveypeople.com

Figure 3: Networked School Community – Mid-range Structural Change



When school leaders begin identifying and developing their version of the networked school community, it is suggested that the following six point plan is used as a guide:

1. Adopt a graduated approach, which builds upon and values the best practice currently occurring.
2. Conduct small trials in several school operations, administrative and educational and review these to inform further planning and action.
3. Employ both a networked and a collaborative approach.
4. Identify the desired vision for the school, and the major educational outcomes.
5. Understand the necessity of 'selling' and politticking every move.
6. Realize how much can be done within the existing structures.

Networked Schooling Ning and Publication

The authors are very conscious of the

magnitude and the importance of the change in formal schooling flagged in this article.

Clearly, all they have attempted to do in this space is to open the eyes of Australia's educators to the possibilities.

Glenn and Mal are currently working with ACER Press and a team of international writers to have a book available on this topic by March 2010.

In the meantime they have created a Ning at <http://networkedschooling.ning.com> to help test their thinking and to provide the opportunity for parents, students, politicians, public policy developers and educators worldwide to contribute their ideas to the development of the concept.

Feel free to join in those discussions, to post your ideas, to pose the hard questions and to invite your friends and colleagues to join.

Conclusion

The development of networked school communities provides the rare opportunity to markedly enhance existing schooling, to use the networked in conjunction with the best of the traditional, to redress long term structural shortcomings, to develop an ever closer bond between the school, the students and the parents, and provide an effective and efficient, quality education which is attractive and relevant to all.

It is a significant change that might initially seem challenging.

However, the authors encourage schools to have the confidence and courage to approach the task thoughtfully in a graduated manner, and to work collaboratively with parents and students. You can begin the quest today. ●

Mal Lee is a former director of schools, secondary college principal, technology company director and a member of the Mayer Committee that identified the Key Competencies for Australia's schools. A Fellow of the Australian Council for Educational Administration (FACEA), Mal has been closely associated with the use of digital technology in schooling, particularly by the school leadership for the last decade.

*Associate Glenn Finger is Deputy Dean (Learning and Teaching) in the Faculty of Education at Griffith University, Queensland. Dr Finger has contributed to the scholarship of teaching through more than 50 peer reviewed publications and major reviews, including being the lead author of *Transforming Learning with ICT: Making IT Happen*. Visit Glenn's Professional Page at <http://www.griffith.edu.au/professional-page/glenn-finger> or email Glenn at G.Finger@griffith.edu.au.*

Online Subject & Elective Selection

MYSUBJECTS.COM.AU





Compatible with all major timetabling packages

Web Based Interface - accessible from anywhere in the world!

Charging / Invoicing Module Available

Support / Training Included

No More Messy Paperwork





**solution
one**

SolutionOne Pty Ltd

e) info@solution-one.com.au
w) www.solution-one.com.au
p) 1300 782 793