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*a new way forward for
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Digital fluency:

Skills necessary for
the digital age

Issues facing IT and
academic tutoring

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Education & ICT



For a scholar and researcher like me there is no doubt that information technology has provided a suite of indispensable tools. With a variety of portable devices, I can stay in contact with and be on top of my work wherever I am: mixed blessing, but a blessing nonetheless. I am currently developing this piece in my hotel room in Paris, where I have been doing research at the OECD.

Email and other electronic media allow me to develop and maintain a wide network of colleagues dispersed across the space of the globe. Space and time distinctions have in some ways been annihilated by new ICT. I can also easily contact my students to give them the information they need, advise of a class timetabling change or arrange a meeting time, or to comment on their drafts. We live today in different spatio-temporalities. The eminent sociologist Saskia Sassen has argued that such technological infrastructures are central to what we actually call globalisation. An example that I have been looking at here in Paris might be the OECD's capacity through data infrastructures to conduct tests such as PISA and the new skills test, PIAAC.

The internet also provides ready access to a huge fund of information. In a few moments I can compose and submit a search that yields hundreds of thousands of 'hits'. The access to information is even more of a mixed blessing. However, to use the information requires a well-developed inbuilt internet filter: the capacity to sort and sieve information and of course remembering information is not the same as knowledge

Even where I know that the idea, educational program or intervention I am searching for has been tested and found wanting, this evidence will routinely be drowned under a deluge of promotions, advertorials trying to sell me something. It can be very hard to get the word out that wonder product 'x' just doesn't deliver, when 99 per cent of the

▶ voices on the internet want to persuade you otherwise. Our usage of the internet also contributes to the production of 'big data' that allows commercial interests to pursue us through specific email and product advertising. The 'datafication' of the world and its impact are things we need to contemplate as educators.

And there's a problem. Education has been told that it should be more like a market: more competitive, providing more choice. Schools and educational systems have become a lucrative source of income to those who have a product to sell, which can be packaged as offering a 'solution' to some actual or fabricated 'problem'. Edu-businesses are everywhere in contemporary education. Professor Stephen Ball, London University has written informatively about this phenomenon and its effects. We also know that the broader market ideology has enhanced inequality with real implications for policy and funding in schooling. One great strength of the OECD's PISA work is that it demonstrates clearly that quality and equity must go together, and not constructed as in competition with each other. This is a matter that the new Australian government needs to contemplate quite seriously.

“ *Education has been told that it should be more like a market: more competitive, providing more choice. Schools and educational systems have become a lucrative source of income...* ”

In his book *Teacher Proof. Why research in education doesn't always mean what it claims, and what you can do about it*, British teacher Tom Bennett has written about how teaching, which in truth can be practised very efficiently with very little equipment, has been targeted

as in some way inevitably inadequate without an array of expensive technology. Those manufacturing and marketing computers and related technology have done very well persuading educators and administrators to buy machines that quickly become obsolete and are run by software that similarly rapidly reaches its use by date.

Along with the machines comes an army of technicians to make sure they work at least most of the time, another considerable expense. Yes, schools should have computers. But they can do so without the claims that often accompany them, especially when these implicitly or explicitly disparage teachers' competence and professionalism. It is more than 40 years since we started to hear that computers would 'revolutionise' education. That they haven't is usually blamed on teachers' inability or unwillingness to use them 'properly'. Perhaps it's time to question the inevitability of the (always coming, never arriving) revolution. This is not to be a Luddite, but to move our focus to the productive educational usages of the technology and how it can benefit students and not further the educational gap between rich and poor students and in so doing deny the social justice imperative.

Our faith in progress and innovation is one of the key reasons we so easily accept that technology will transform education, despite its so far failing to do so. We as a society are transfixed by the new. Next time someone comes knocking to try to sell a new gadget feel free to ask 'who benefits'? As in who really benefits, you, your students, your school or community, or the person with something to sell?

This is my final editorial as National President of the College. It has been a privilege to be in this position in an association with such a proud provenance. I sincerely hope that during my term we have set the conditions for revitalising ACE. We have taken some difficult decisions, but all in the interests of strengthening the College for the present and future, especially in respect of our advocacy role, which in my view is more important today than ever before.

I should also say that I leave the College in very strong hands with Professor Stephen Dinham of the Melbourne Graduate School of Education taking over as National President from 1 January, 2014. I am certain that under Steve's leadership, the College will strengthen and improve our standing in national and local matters of education.

I also sincerely thank Dr Catherine Scott who stepped into the breach, as it were, and edited the October number of *Professional Educator*. Thanks so much Catherine. Your work for the College in this and many other ways is truly appreciated.

I would also like to warmly welcome to the National Office, Paola Ghirelli, as the new Manager, Communications and Publications. Paola has replaced Louise Reynolds who has moved to another position. I would also like to thank Louise for all her wonderful work.

In closing, I would like to thank all of those who have assisted in my work as National President. We achieve everything collaboratively and collectively. I would especially like to acknowledge Catherine Pickett, our CEO, and her wonderful, National Office colleagues in this respect.

Professor Robert Lingard
PhD FASSA FACEL AcSS
National President

Let's get serious about education

Norman McCulla writes on Professor Bob Lingard's 'Complexifying education policy for achieving social justice' October lecture.

Australian education faces somewhat of a dilemma. Once ranked highly in terms of its placement in the league table showing international tests in areas of literacy, numeracy, mathematics and science, Australia is now slipping to a position similar to the US and the UK. Professor Bob Lingard addressed this topic in the inaugural Jack Keating Memorial Lecture at the Melbourne Graduate School of Education on 31 October.

The other questions addressed by Lingard on the night included: So how should we respond if these international tests are held to be the global litmus tests of how well schools and school systems are performing? Will working harder at doing more of the same make any difference? Or in order to improve and stay among the top performing nations, do we need to do things differently? Why is it that, as a nation we do relatively well in terms of excellence at the top of the performance scale, even though the number of top performers is declining as well, but rate lowly in terms of equity and have a long tail of underperformance linked to socio-economic background?

If education policy is indeed an 'authoritative allocation of values' (Easton, 1953), a good starting point is to ask what values underpin our current education policy in this area. Lingard argued that what has emerged here and overseas is 'policy as numbers' and that this is obscuring not only the real reasons for the decline, but also other factors including funding and policy settings that need to be part of the policy debate.

We live in a world of 'big data'; of data management and infrastructure. An outcome of this singular focus on 'big data' in education has been to reposition social policy so that it places heavy responsibilities directly on teachers and schools. Lingard showed how the Australian Curriculum, Assessment and Reporting Authority's (ACARA) 60 statistically similar schools measure reported on My School, in controlling for contextual

variables, actually placed all onus for student improvement on the shoulders of schools and teachers, while neglecting the impact of inequality on the work of schools.

While schools accept these responsibilities, by itself as a social policy it is insufficient. Complementary social policies are needed if Australia is to achieve greater measures of social justice in levels of equity in the outcomes of schooling, as well as raise overall standards. In short, education policy and the discourse that underpins it needs to be 'complexified' by taking into consideration both within-school factors and societal/contextual factors. To demonstrate this Lingard drew on a range of research showing that more unequal societies have an equity problem on international and national testing and that this cannot be overcome by schools and teachers alone.

One starting point is to acknowledge the integral relationships between curriculum, pedagogy and assessment. It is totally inadequate simply to focus on the latter. Addressing the quality of teachers and supporting and enabling their teaching are also central to effective policy. As one example, we already have much richer understandings of productive pedagogies and of the ways that can make intellectual demands and foster the students' deep learning, given the right kinds of enabling conditions in classrooms and in the formal curriculum.

Nor can policy discourse afford to ignore issues of place, gender, ethnicity and indigeneity and simply focus on numbers. Not to site the accountabilities for learning in a broader socio-economic context is to place all the responsibility for learning directly on the classroom teacher. Policy in this area can never be simply 'evidence-based' in its use of test data. Instead, policy needs to be 'evidence informed'. Numbers by themselves can never constitute a policy position. Policy that is narrowly conceived remains part of the problem, not a contributor to its solution.

► We can probe deeper. The outcomes of international testing programs need to be situated and considered in the socio-cultural contexts in which schools and school systems are set. Western cultures, for instance, have become more individualistic in nature compared to Eastern cultures. The extent of homogeneity in a society in terms of ethnicity also influences test results such as Programme for International Student Assessment (PISA). The more egalitarian and socially cohesive a society is, the higher its performance appears to be and the better more disadvantaged students appear to do. Schools mirror the socio-economic circumstances of the countries in which they are set and these circumstances become reflected in overall test results. If we are to achieve higher levels of attainment for all students, we must first address the inequalities underpinning schooling and the divisions in society they reflect. This includes funding inequalities as well.

There is a further level that needs to be factored into the policy debate and that centres on the values and moral purposes that underpins what we do. What kind of schools do we want for our children and young people? We are clear on our goals for Australian schooling in the Melbourne Declaration. The question is whether or not the reality reflects the rhetoric. To answer this question, we need to fully understand how the social realities behind the numbers in test scores and league tables work. Education is like an ecosystem; you cannot address one part without influencing other parts.

These are some of the considerations by which we must judge the quality of the education debate in Australia today at both national and state levels. In practical terms, one of the shorter-term tests will be the policy response that is made to the Gonski review of school funding. A widely-held view among the profession is that the report be implemented in the spirit with which it was intended; that is, on a needs basis as recommended by the review committee. This includes the necessity of an independent statutory authority to adjudicate on a needs-based approach to funding all schools, framed by social justice, and for all schools, irrespective of sector. What matters most is how teachers might be enabled to do what they need to do in their classrooms and schools supported by needs-based funding. Indeed in his lecture, Lingard called on the Abbott government to implement fully the Gonski recommendations, including funding levels for the next six years and establishing an independent national body to oversee the development and implementation of needs-based funding for all Australian schools.

The policy debate on raising standards and addressing equity in Australian education has been framed against narrow data. It needs to move beyond considering policy as numbers and challenge the socially-divisive effects of test-based accountability. Political, moral and ethical issues to do with education and social justice in education have become reframed and data framed to be presented only as technical issues. We must avoid these narrow policies that decontextualize schools from the distinctive contexts in which they work and from the students teachers teach.

Professor Jack Keating FACE

Professor Bob Lingard's 'Complexifying education policy for achieving social justice' lecture (that generated a waiting list) was the first in the Jack Keating Memorial Lecture series.

Lingard opened the lecture by speaking fondly of the late Professor Jack Keating and of his work saying: 'Jack's influence ran deep in the Australian and international education communities, serving in an impressive variety of roles since the early 1970s, including as a high school teacher, union secretary, state ministerial adviser, consultant and university researcher.'

In line with Keating's research, Lingard's lecture was based on a policy approach exploring how policy might contribute to higher quality and more socially just outcomes for all students.

Keating was indeed one of Australia's foremost specialists in post-compulsory education and training. Highly respected nationally and internationally, Jack's professional life was underpinned by research and policy development dedicated to democratic schooling. It was an honour for the College to partner with the University of Melbourne in presenting this inaugural lecture.

The Jack Keating Fund has been established by the Melbourne Graduate School of Education to honour Jack's legacy and support policy-influencing research in the field of equity in education. Please visit www.unimelb.edu.au/alumni/giving for more information.



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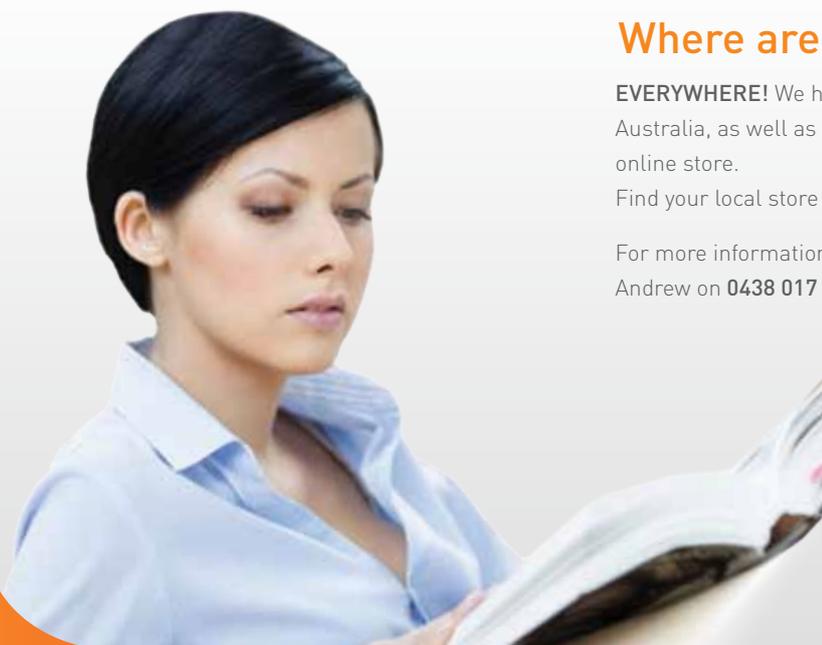
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Digital fluency: Skills necessary for the digital age

Technology has been changing the way that people learn and interact for thousands of years. Consider more recent historical innovations such as using maps, which enabled sailors to navigate the world, the telephone which enabled conversations over distance and now the internet with all of its variations. Innovations and inventions have encouraged the pace of social change throughout history, including in education. Now is no different, or have we become too entrenched in an obsolete system?

Many researchers argue that major innovations, especially the internet, adopted by society, have an effect on the structure of the human brain which may or may not be a change for the better. Certainly, there is little doubt that the internet, through its networked and mobile functions, has changed the way that people communicate and find information. If the structure of the human brain and ways of finding information and communication are changing as a result of the internet, then changes to the way that students learn, and probably what they are learning, would appear to follow.

This article examines the skills that will be required for the 21st century that will need to be embedded in educational curricula in order to achieve them. It begins by considering how communication between people has changed as well as current educational responses. A view of 21st century skills follows with an argument for a new core subject that will be necessary. Learning and teaching are then discussed leading to a view about what is needed in order to develop digital fluency in education, for now and the future.

Communication

The history of communication in education was discussed in a paper by James Bosco (2006) at an Australian e-learning conference at the Global Summit. Here Bosco argues that early civilisations used verbal communication passing on traditions and culture verbally. However, in the 14th century print-based communications emerged and in time came to dominate communication and recorded history. When education became universal in the 19th century, print was greatly valued and information was passed on both verbally and in print-based artefacts. A form of scholarship emerged that was based on the printed form which continues to this day.

However, with the advent of the internet and its digital technologies, for example, MP3s, tablets, smartphones the verbal tradition of communication has reasserted itself together with text and visual communication. Text and images are transmitted today through digital media as well as in print. The fact that print newspaper sales are declining and amazon.com sells more electronic books than print books indicates the importance of digital media, especially in education.

Curriculum

School education has responded to the application of digital media through a number of innovative programs such as Education Network Australia (EdNA) and the Digital Education Revolution (DER) in Australia, the Main Learning Technology Initiative (MLTI) (Silvernail & Gritter, 2007) in the US, and the National Grid

for Learning (NGfL) in the UK, to name a few. Although some of these, for example, EdNA in 2011 and NGfL in 2006 have now been closed, but they remain as examples of national or state responses to the impact of digital media in education. So, how has the impact of digital media affected curriculum?

A discussion about the changes that may occur in school education would not be complete without considering curriculum. In order to avoid the dilemmas of defining curriculum together with the controversies that surround each view, and to approach the use of digital media in a realistic way, this article discusses curriculum differently.

Bosco argues that what should be learnt is a political decision which would appear to be borne out by the Australian Curriculum, which has focussed on content. The Australian Curriculum is guided by the *Melbourne Declaration on Educational Goals for Young Australians* (MCEETYA, 2008) which nominated eight areas of curriculum: English, mathematics, sciences, humanities and the social sciences, the arts, languages, health and physical education, and information and communication technology and design and technology. The Australian Curriculum and Assessment Authority (ACARA) utilised these general MCEETYA capabilities with the view that, 'good teaching will always contribute to a student's development of general capabilities' (ACARA, 2011) and added that these, which include ICT, would be incorporated into each learning area content descriptions as appropriate.

The ACARA general capabilities comprise the following:

- literacy
- numeracy
- information and communication technology competence
- critical and creative thinking
- personal and social competence
- ethical behaviour
- intercultural understanding.

(ACARA, 2011).

There is no doubt that these general capabilities are important as skills for the 21st century.

Skills for this century

The question raised by the current focus on content followed by a statement of the above general capabilities is: 'What should we learn and what do we need to know to be a participant in 21st century society – that is, a globally connected society?' A number of projects have begun to grapple with this type of question, three of which will be mentioned.

The first is the *Partnership for 21st Century Skills* founded in 2002 in the US by the US Department of Education¹ with a number of large corporations. The partnership consulted widely and developed a framework² of skills needed by learners for the 21st century. The framework of student outcomes can be summarised as:

- Core subjects and 21st century themes
- Learning and innovation skills
 - creativity and innovation
 - critical thinking and problem solving
 - communication and collaboration
- Information, media and technology skills
 - information literacy
 - media literacy
 - ICT literacy
- Life and career skills

Although the traditional skills remain important in this framework, a range of new skills such as critical thinking, problem solving, communication and collaboration are asserted as important in the digital age. The framework is completed with consideration of support systems such as standards, assessment, curriculum and instruction, professional development and learning environments. The *Partnership for 21st Century Skills* brings these skills and content together in a statement of *Curriculum and Instruction*. The statement is clear that 21st century skills need to be explicitly taught, within other disciplines or as a discipline in their own right.

A second group is the not-for-profit Project Tomorrow³, which is responsible for conducting national research projects such as *Speak Up*, a national online survey of teachers, students and parents. In its *Speak Up 2010 National Findings*:

K-12 Students and Parents (2011) report, a number of trends were identified such as the prolific use of mobile devices including the use of e-textbooks, and the use of online and blended learning enabling 'a greater personalisation of the learning process and facilitates opportunities for students to collaborate with peers and experts' (Project Tomorrow; p. 9). The report concluded that the new three E's of education are 'enabled', 'engaged' and 'empowered', which 'paints a picture of the learning process for students that is visually and structurally very different than which most students encounter in school today' (Project Tomorrow, p. 14).

In the *Speak Up* report *Learning in the 21st Century: Digital Experiences and Expectations of Tomorrow's Teachers* (2013), Project Tomorrow provides evidence of the experiences and expectations of tomorrow's teachers. They include the capacity for teachers to be technologically savvy in both their personal and professional lives so that 21st century skills can be taught effectively.

A third major international project, the *Assessment and Teaching of 21st Century Skills*, has provided a strong research base in order to identify and define 21st century skills. Its conclusion (Binkly et al., 2012, p. 18-19) shows the following ten skills.

Ways of thinking

- 1 Creativity and innovation
- 2 Critical thinking, problem solving, decision making
- 3 Learning to learn, Metacognition

Ways of working

- 4 Communication
- 5 Collaboration (teamwork)

Tools for working

- 6 Information literacy
- 7 ICT literacy

Living in the world

- 8 Citizenship – local and global
- 9 Life and career
- 10 Personal and social responsibility – including cultural awareness and competence.

Core subjects

The *Partnership for 21st Century Skills* began by nominating 'core subjects as a major area of skills learning'. In Australia, literacy (reading, writing and language conventions-spelling/grammar/punctuation) and numeracy have been regarded as fundamental skills for all students to learn and master (ACARA, 2011). In fact, the *National Assessment Program – Literacy and Numeracy*⁴ (NAPLAN) program tests all Australian students in Years 3, 5, 7, and 9 in areas of literacy and numeracy and then posts results on a public website⁵.

English as a language is a human-evolved system that represents sounds with recorded graphics or symbols in order to communicate ideas, concepts and understandings. As such it is fundamental to the very fabric of a knowledge society especially as technology and transport enable global communication and exchange. Facility with the English language in order to engage fluently with the written word becomes the basis for literacy skill. Freebody (2007) argues that there is a strong correlation between aspects of literacy and material wealth and socio-economic status (p 24).

The discussion so far gives an indication of a broad view of skills needed for the 21st century with the added contention that literacy and numeracy are fundamental to the types of skills needed to engage with a knowledge society. So, what should students learn that is specific to the internet and what do teachers need to do?

Learning 21st century skills

Clearly skills are being learnt at random and possibly in harmful ways by children who are using the internet. The Australian Parliamentary report *High-Wire Act: Cyber-Safety and the Young* (Commonwealth of Australia, 2011), completed after wide national consultations, was very clear about the safety issues that needed to be addressed. They included: cyber-bullying, online grooming and secreting; illegal content such as pornography; cyber-stalking; gambling, drugs,

▶ violence, suicide and anorexia; privacy and identity theft; inappropriate behaviours; identities; personal information sharing; how and what to share; and critical thinking plus risk (Commonwealth of Australia; 2011).

Teaching 21st century skills

The teaching aspects of the curriculum have been centred on the content to be learnt and the learning process in the context of a learning environment or pedagogy for many years. Teachers are familiar with the finer details of the content that they teach and the learning methods that they employ, and are constantly seeking to improve both content and pedagogy. This was often discussed as pedagogical-content-knowledge (Shulman, 1987). However, content and pedagogy are no longer sufficient in a digital world because there is now a technological dimension for accessing information and for communicating.

The technological aspect was emphasised by Koehler and Mishra (2008) who introduced a way of conceptualising teaching in the digital age by arguing the need for technological-pedagogical-content-knowledge. Their acronym TPCK, now modified as TPACK, underlines the technological, pedagogical and content knowledge that is fundamental for teachers in the digital age. In fact, TPACK is now argued by Finger et al. (2010) as necessary for teacher education and if that is the case, then TPACK is also essential for teacher professional learning. The question remains about how education can change existing teaching practice to utilise TPACK and the perspectives that leaders need to embrace for teachers and students to become fluent in the use of digital technologies.

Mitchel Resnick et al. (2002) argued that the pervasiveness of digital technology will be necessary for a lifetime. In moving beyond information-centric views of education, Resnick stressed the importance of proficiency in multimedia. He says that students would need to be fluent online, text, audio, animation, video, remixing, design, downloading and uploading, and fluent in critical thinking, collaboration and deciding relevancy. This

article suggests the need for a K–12 digital fluency subject.

Digital fluency

A suggestion of topics to be covered in a K–12 education subject, for the effective use of the internet for learning, takes into account the skills that are needed to use digital technologies and for critical thinking and collaboration. It also includes aspects of online safety and legal issues such as copyright and privacy. The suggested topics for a digital fluency K–12 subject are:

- acceptable behaviour
- collaboration, communication, problem solving and research skills
- community involvement
- critical thinking
- design skills
- digital commons and copyright
- digital fluency
- ethics
- history of the internet
- identity and privacy
- project management
- safety
- technology terms

The benefits of such a subject would address the skills and safety issues that are needed by teachers and students in the digital age. No one would argue that 'technology' is the most important factor in learning because the research is quite unequivocal and quality teachers teaching have the most significant effect (Hattie, 2009). However for quality teachers who engage in a supportive learning environment, the gains from using digital technology are well documented. A subject on digital fluency from K–12 would also help to determine the knowledge, skills and attitudes that are needed to assess successful and safe use of the internet.

In fact, Tamim et al. (2011) have completed a second-order meta evaluation of educational research that has covered the last forty years of technology use in education and found that, 'the average student in a classroom where technology is used will perform 12 percentile points higher than the average student in a traditional classroom setting

that does not use technology to enhance the learning process' (p. 17). The need to teach students the knowledge necessary for the digital age is beyond question.

Conclusion

This article argues that the knowledge, skills and attitudes that are needed to harness the new digital media for teaching and learning in the digital age are an extension of many traditional skills but with the complex addition of new skills and a changed focus. These often occur in a context that is quite different from the centuries old traditional print-based context, with which is linear and so familiar.

In an industrial-age designed subject-based education system, where change is slow, this new knowledge is becoming increasingly urgent for students to acquire. However, teaching and learning these new skills, and different ways of working with information and communicating, need to be based on sound evidence and positive educational experiences. A subject called digital fluency is one, and maybe a significant way, to address the urgency of the digital age skills gap. Mounting a subject such as digital fluency in K-12 education will help to address the issues of professional learning, teaching pedagogy as well as assist students to learn new skills in a structured way, so that these new skills can be applied whenever the internet is being used.

Dr Gerald White is a principal research fellow at the Australian Council for Educational Research (ACER) and an Adjunct Senior Lecturer at Flinders University.

References

- ¹ US Department of Education at <http://www.ed.gov>
- ² The Partnership for 21st Century Skills framework can be accessed at http://www.p21.org/documents/P21_Framework_Definitions.pdf.
- ³ Project Tomorrow at <http://www.tomorrow.org/index.html>
- ⁴ National Assessment Program at <http://www.nap.edu.au/>
- ⁵ MySchool website at <http://www.myschool.edu.au/>

Visit research.acer.edu.au/digital_learning/ for a full version of this article and its references.



Overcoming road blocks on the information freeway

Computers have been in Australian schools for more than 30 years. Today the internet and the various devices used to gain access to the online world are ubiquitous in our educational institutions, just as they are in society at large. Most teachers and most students have the world, or at least the means to access it, in their pockets. Digital Literacy (information and communication technology capability) is one of the general capabilities of the Australian Curriculum.

The capability involves students in learning to make the most of the digital technologies available to them, adapting to new ways of doing things as technologies evolve and limiting the risks to themselves and others in a digital environment. (ACARA 2011)

This is a sensible and balanced statement. But far too often in practice the emphasis in our schools is on 'limiting the risks' at the expense of opportunities to 'make the most of digital technologies'.

Most people who organise conferences nowadays realise that free and easy to access Wi-Fi is essential, like real coffee, to ensure a constructive and pleasant experience for delegates. But when conferences and workshops are held in schools and universities, often this is difficult to organise. Far too often institutions are unable or unwilling to give a generic guest login access to conference participants. Or when they do grant such access, many sites containing educational and general information are found to be blocked.

A related problem is the difficulty of holding webinars (online seminars and meetings) across different jurisdictions. Firewall blocks to communication ports and blacklisting of certain sites combine to make it currently impossible to hold a webinar in which teachers from all Australian government education departments can participate at school.

These blockages are often explained as being used for 'security' reasons, which makes local school administrators and IT staff reluctant to override them. This is despite the fact that institutions, which do not have the same obstacles, suffer no negative 'security' consequences. It is more than likely that the communication ports are blocked to reduce demands on bandwidth by streaming video. ▶

That or commercial considerations, where a department has entered into a commercial arrangement with a particular webinar platform supplier, and as part of that commercial arrangement, has agreed to block access to all other platforms.

Currently, the only way to hold a webinar that includes teachers from throughout Australia is to hold it after school hours when teachers can use their own, unrestricted equipment and internet access. But even then, teachers using department-issue machines over which they do not have admin rights and therefore cannot install or upgrade applications may still have difficulties connecting using some platforms.

One solution is to encourage teachers (and students) to Bring Your Own Device (BYOD). This initiative is emerging in many areas as the only way to overcome arbitrary restrictions on internet access. And for many it is faster than using

a school network, very cheap (and becoming more so), and provides simple and easy access. Of course, wireless internet is not available everywhere, and there are equity issues involved in ensuring that schools, teachers, and students all have access, but how much more sensible would it be for limited resources to be devoted towards ensuring access for those who are disadvantaged rather than providing the same inadequate access across the board.

BYOD is very likely to become the norm in educational institutions in the near future, but in the meantime, what purpose is being served by restricting access in networks that are currently available? If teachers and students are to 'make the most of the digital technologies available to them', the first thing we need is an 'open skies' policy with regard to internet access. Websites and online platforms which allow teachers to share information and collaborate should be freely accessible

from within school networks. Censorship of internet sites should be the exception, not the norm, where both teachers and students are concerned. School and department policies should be designed to 'limit the risks' of digital engagement by teaching and modelling responsible and constructive use of the internet, not by banning and restricting access.

Nigel Mitchell is manager of online professional learning, Australian Science Teachers Association (ASTA).

References

ACARA Australian Curriculum, Assessment and Reporting Authority. (2011). The Australian curriculum: General Capabilities: Information and Communication Technology capability. Retrieved on 21 October 2013 at www.australiancurriculum.edu.au/GeneralCapabilities/Information-and-Communication-Technology-capability/Introduction/Introduction

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Is ICT being overused in schools?



DALE DOWN

The use of ICT in schools has been up for discussion for some years now. Issues of concern have included the ability of teachers to use the technology, how to use ICT in classes, safe use of ICT and the negative health effects of children and adults being exposed to wireless technology. However, there is one issue which has rarely been touched on to this day, and that is the overuse of ICT in schools, particularly in primary schools.

In 2006, Phillip Beadle's article in the *Guardian*: 'Not OK computer: Whiteboard wizards would be better off with a book', made some salient points about the use of ICT in schools. Beadle pointed out that: 'ICT has been presented to the education community as a panacea, and if you are not using it to its full capacity you are left feeling the aged inadequate.' However, he goes on to say, one of the problems with ICT is: 'the stuff it is replacing - books, human contact and language - (which) was so well designed in the first place'. The other problem mentioned is that 'much of ICT use in schools consists of the plug 'em in, shut 'em up, get to the end of the lesson mantra', which will cure all educational underachievement.

While Beadle was writing about schools in the UK, the situation is certainly not purely a British problem. The use, and indeed overuse of ICT in schools seems to be sadly common these days, yet nobody seems to be challenging it; particularly in primary schools.

As a parent of two primary school children, I worry about the overuse, and what I believe to be inappropriate use of ICT in Australian primary classrooms. This feeling is compounded every time I walk into a classroom at the institution where I work, and see post-secondary and tertiary level students in trances, who seem unable to function unless there is some kind of screen in front of them. They are the products of the digital age, having used technology all throughout their school lives. While they may be whizzes at computers,

“ *Research for assignments, for example, should be using books first and the internet second at home, under parental supervision. Books still are, and always will be, an amazing source of knowledge, and bring a great deal of joy to many children.* ”



some are unable to write coherently, spell, find information in a library, or even use a content list in a book. The problem with ICT use in schools is that we have thrown the educational baby out with the bathwater and lost focus of what is really important.

When it comes to using technology at any level of education, the first thought should not be to use it for the sake of using it. The thinking should be, whether or not technology can help to achieve the original objectives of the lesson. It should be appropriate for the subject and, most importantly for the age group of the class. It is at this particular point that I have concerns with the use of ICT.

Over the past year, my children have brought home information regarding cyber safety incursions at school - the latest one 'explores all facets of electronic bullying including emails and websites, social networking, chat rooms, mobile phones and text messages'. The issue it tackles includes 'how to prevent bullying, friendship and self-esteem'.

The question which *has* arisen any time my children have brought this kind of news home is how is this possibly relevant to the primary school curriculum? As far as I know children are not texting in class, or using mobile phones. Should they be using social networks of any sort or, for that matter, going into chat rooms? Why are friendships and self-esteem being discussed on the internet? Is this something that should be part of the culture of schools and not explored as a separate issue?

Perhaps my biggest issue with the overuse of ICT in schools, apart from the curricular issues, is that once again schools, whether by choice or mandate from the education department, are being turned into surrogate parents, whether we like it or not. They are taking on roles which, from my point of view, they should not be undertaking. Be it cyber-safety, drug or sex education, these are issues parents should discuss with their children. As parents, we know our children and what issues they are ready to confront. We know best how to explain issues to our children, and we know how much of an issue they are ready to absorb at one time. Teachers who only

see our children during school hours, who either do not have children in the same age group, or in fact do not have children at all are not necessarily the best people to be teaching our children about issues which should not be a part of the curriculum. Perhaps parents need to stop abrogating their responsibilities and take a more proactive role.

ICT use in primary schools needs to be reconsidered. There is absolutely nothing wrong with primary children being able to perform some simple functions on a computer, such as drawing shapes, inserting letters, formatting a document, making an e-profile and so forth. Any further use, such as going onto the internet or into chat rooms, should be a matter for the home. Research for assignments, for example, should be using books first and the internet second at home, under parental supervision. Books still are, and always will be, an amazing source of knowledge, and bring a great deal of joy to many children.

The use of ICT at all levels of schooling needs to be analysed carefully with a couple of questions in mind: Firstly, is it being used in such a way that it enhances the aims of the lesson, or is it a means for tired and/or poorly trained teachers to just make it through to the end of the lesson? Secondly, do the negative effects of the physical, mental, and intellectual health of children mean that we should be relying much less on the inclusion of ICT in the regular school day? And finally one more thought to ponder: Do we really need our primary-aged children being exposed to the darker side of technology when they are not ready or equipped to deal with such issues?

Dale Down MACE, MACEL has been teaching in primary through to tertiary levels for 25 years in Australia and overseas. He currently works at Monash College, Melbourne.

Issues facing ICT and academic tutoring

The growth of academic supplementary tutoring has been noted as both a domestic and also a global phenomenon. Professor Mark Bray from the Comparative Education Research Centre at Hong Kong University (CERC at HKU) has noted the remarkable increase in supplementary tutoring globally. However, while Bray's interest is primarily focused on face-to-face tutoring, there is no mention of online tutoring or ICT. As parents strive to have greater control over the outcomes of education for their family, they are not only opting to invest in private tutoring, they are also looking to the online space to find academic assistance for their children. As mainstream education faces general issues in regards to ICT, online tutoring and its implications to education is also becoming increasingly pertinent.

As computer technologies advance, the possibilities raised through the use of online tutors are piquing interest. Examples of this include certain schools in the UK using online tutors who are based abroad. A case in point is Ashmount Primary School in North London, which uses mathematics tutors based in India to support its students. The benefits here are that the students can access experts in mathematics and the school can access low-cost, flexible academic support. Another case is the news that Pearson, the largest educational publisher globally, has purchased Tutor Vista - a company that provides online learning to students in the US and also the UK.

The growth of private online tutoring has not been met to date by any cogent self-regulatory or regulatory action from governments - domestic or offshore. Furthermore and specifically, the issues that need to be addressed in this sphere are: plagiarism, tutor accountability, child protection and the curricular issues around what is being taught and how.

Let's consider plagiarism and the movable nature of cyberspace. Technologies such as Turnitin, that are being used by schools to detect work that draws on the ideas of others, cannot pick up examples of this unacknowledged

work in the online tutoring space because 'the work' is being created by the tutor in 'real time'. This poses the question 'do we need to revisit the definition of 'plagiarism' when it relates to the online space'? Traditional academic notions of plagiarism focus on the theft of IP that is passed off without credit. In the realm of online tutoring it would be advantageous to look at the commercial relationship and the creation of dependency. Thus, the education of students around issues of plagiarism and the use of online (or any other) tutors would also articulate the nature of dependence and independence.

Child protection issues can also arise with online tutoring. The current lack of national cohesion in the area of background checking of those who work with children is already problematic. Within Australia, ICT issues presented by online tutoring exacerbate the divide between the various jurisdictions. This is because it is difficult to check the background of online tutors in Australia as its child protection laws can vary state-by-state. Moreover email, Skype, the use of online 'blackboards', social networking sites and other soft technologies also allow for personal interaction between the student and tutor that had not previously existed. Such new





Technologies and now the online tutoring space are all contributing to the increasing threat of 'grooming'. This is getting harder to detect when the tutoring is undertaken through a tablet, mobile phone or other smaller internet-connected device. Therefore families, who opt to use online tutoring at home should ensure online learning takes place in an open space where parents can check all activity while it is occurring.

Moreover, while child protection and plagiarism are high priority concerns, there are further implications when using online tutors. The appropriate disclosure of tutor qualifications has been an important issue within the supplementary education sector. When working with the domestic industry through Standards Australia the issue of forming a 'national standard', for qualifications was never resolved. Shouldn't tutors globally have a duty to disclose the exact nature of their qualifications and work experience? In the online tutoring space one idea could be to include posting proof of a university degree.

“ The use of online tutors both during school hours and also after-hours is on the rise. ”

A further issue that has surfaced with regards to online tutoring is the subject matter that is actually being taught. School curricula are different in every nation and even within Australia these are generally state-based in nature. Thus, tutors from different states in Australia and other countries teaching students in another state or country may not have any idea of the requirements of the relevant domestic syllabus.

Laws surrounding the online tutoring space are also worth discussing. Firstly the usual commercial vigilance associated with any online payment is relevant to the online teaching space. Secondly the notion of 'privacy' is also

worth a mention; laws associated with privacy are all different and operate differently across multiple jurisdictions. For example, if a family gives personal information how will it be used by a business based in Australia, the US, Canada, New Zealand or China? Again domestic laws do not extend further than individual countries so how will they transfer to offshore providers of teaching services? Moreover, when the information relates to where a child lives, their age and gender, there is even further risk to be mitigated.

With the investment of a National Broadband Network (NBN) the use of online technologies to support the traditional forms of teaching will only grow. The use of online tutors both during school hours and also after-hours will only continue to gain popularity. The wider community must start to engage with the private tutoring market and assist to create appropriate accountabilities. In this way students and their families in Australia and globally can secure better protection today and in the future.

Mohan Dhall lectures Teaching Methods at UTS and teaches at PLC Sydney, he also runs the Australian Tutoring Association (ATA) Ltd and the Global Tutoring Association (GTA).

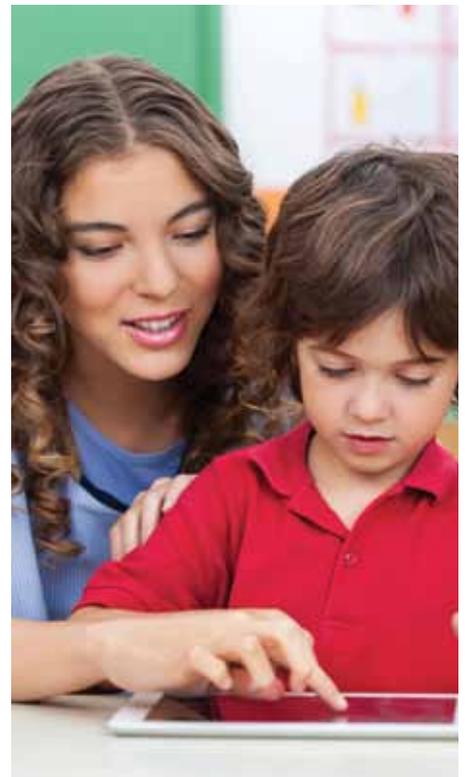
References

See for example Bray, Mark & Lykins, Chad (2012): *Shadow Education: Private Supplementary Tutoring and Its Implications for Policy Makers in Asia*. Hong Kong: Comparative Education Research Centre (CERC) in collaboration with Asian Development Bank (ADB)

L Craik, *A lesson from India: Primary pupils given maths tuition... by teachers 4000 miles away* from: <http://www.dailymail.co.uk/news/article-1310682/Primary-pupils-given-maths-tuition-teachers-INDIA.html> [10.09.10]

Abrar, P, *Pearson completes 100% acquisition of TutorVista, appoints Srikanth B Iyer as CEO*, **ET Bureau**, 25.0.13, from http://articles.economictimes.indiatimes.com/2013-02-25/news/37289148_1_tutorvista-krishnaganesh-pearson-education-services

“ Child protection issues can also arise with online tutoring. The present lack of national cohesion in the area of background checking of those who work with children is already problematic. The IT issues presented by online tutoring exacerbate the divide between the various Australian jurisdictions. ”





Q & A

with **Gerry White** – Chair of the ACE ITMS advisory committee

Recently, the National Office of ACE has been charged with the responsibility for updating its website and services that are accessible through the internet.

Gerry White will chair a newly-formed Information Technology Management Service (ITMS) Advisory Committee to lead development and provide advice to the National Office about the changes that are needed. I had the pleasure of interviewing Gerry recently about his role in this redevelopment.

PE: Thank you for accepting the role of chairing the new ITMS Advisory Committee. What do you see as your role?

GW: ACE is a membership-based organisation for leading Australian educators. Therefore, it needs to be able to have an up-to-date membership database and an easy method for membership renewals, a financial reporting system, events and announcements management service and provide information that is accessible to its current and prospective members. That is not a simple task. The ITMS Advisory Committee will help to guide that process and assist the National Office in that mission.

PE: This does not sound as simple as redeveloping a website, is this right?

GW: That's right. Generally speaking websites were originally simple graphical interfaces to access information on the web and everyone learnt how to make a website look attractive. However, they have evolved into very complex and expensive interfaces through which a range of services can be accessed. And that requires a high-level of sophisticated and constantly changing technological and web-based expertise and experience.



PE: Who will be on the committee?

GW: The ITMS Committee has invited ACE members with high levels of expertise and/or experience in databases, financial reporting, web-service functionality and information flows to join the committee. An Expression of Interest was recently distributed to members. The final composition of the committee will be known soon.

Currently, we are delighted to have David Munnoch (NSW), Kim Flintoff (WA), Jenny Luca (VIC), Wendy Teasedale-Smith and Carol Skyring (Qld) on the committee, together with key staff from the National Office, and we expect that two or three more members will be invited to join the committee.

PE: How long do you expect the task to take?

GW: We expect to go through three phases comprising a proof of concept, a prototype and then a near complete web-service for review by the National Board, and then some final adjustments, by approximately the end of March 2014.

In the meantime, the committee will meet by teleconference every fortnight and, in the intervening time, use Google Groups to drive the project. The work will be quite intensive although the committee will take a break over Christmas.

PE: Finally, how can members contribute to the work of the committee?

GW: The input of members is really important to the committee. Members who wish to comment on the redevelopment of the web-service should send an email to the National Office who will collate the information for committee discussion. In fact, the committee has already received invaluable contribution.

PE: Thanks very much Gerry. I expect that we will be hearing more about the web-service redevelopment as time progresses.

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High possibility
classrooms – a new
way forward for
technology
integration

JANE HUNTER

Recently I had the opportunity to observe what extraordinary teachers do when they integrate technology in classrooms in NSW public schools. I had wondered for some time, after working in a few large government-funded technology initiatives, why some teachers embraced technology integration while others felt marginalised and pressured by the ever increasing presence of technology in schools.

I found that in some classrooms where technology integration is welcomed, students didn't want to leave when the bell rang. Here, extended 'time in task' is nurtured and the idea of 'getting into flow' is also encouraged. Co-creation and the production of beautiful work are valued, and in these classrooms 'thick play' and 'imaginative narratives' dominate.

The teachers I observed in four phases over a two-year period for my doctoral study pressed on with education compliance requirements in their contexts, and yet they wanted to discuss the importance of students learning how to write computer code. One of the teacher's said: "it teaches students how to think", and another believed: "digital technology was the perfect medium for learning because it required active engagement". Furthermore, as the upper primary school teacher in the research explained: "questions are more important than answers" because: "every answer served as a starting point to ask more and better questions". These classrooms were fascinating places.

The full version of this new work will be published in a forthcoming book in 2014. In the meantime, here are a few insights from the teachers' practices. Indeed, significant funds have been invested in developing richer technology environments in Australian schools in recent times and it is useful to examine what some 'tech-savvy' and highly innovative teachers are achieving.

The teachers

The study was a 'purposive sample' of four exemplary teachers who taught students in diverse cultural contexts in Years 1 – 11 (approximately 6 -16 years old). Each teacher was observed and interviewed in situ and their practice was

carefully documented. Students in each classroom also participated in focus group discussions. The teachers in the study were Gabby, Gina, Nina and Kitty. The youngest students in the research were in Gabby's class; Gina taught in the upper primary school; Nina specialised in middle school learning and Kitty's domain was within the secondary context.

The students

In each context what students did in these teachers' classrooms was different to other learning at school. One Year 9 boy said:

"We do so many cool things ... animation, making short films for history and English ... we can try different things and if it doesn't work out we can re-do it, until it's just right. We learn how to learn and we can watch our learning afterwards."

For other students using technology meant a chance to do better work because someone, their peers, their own teacher, other teachers or even parents might view it.

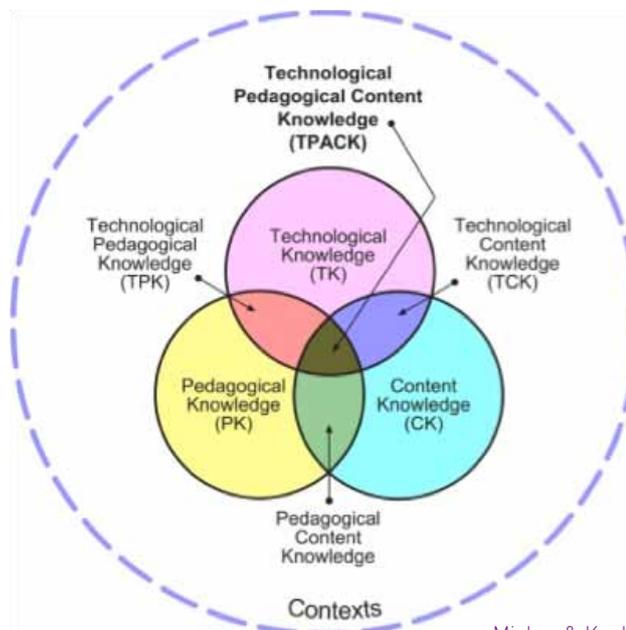
All teachers in the study remarked on the palpable lift in student performance. The evidence for better learning outcomes was made possible because 'the learning' had a public purpose.

Technology integration

Studies of technology integration in teaching and learning underpinned by theoretical constructs in the Australian context are limited. However, teaching with technology in schools is ubiquitous. The framework of Technological Pedagogical and Content Knowledge or TPACK (Mishra & Koehler, 2006) is an existing model that is quite well-known in Australian school and university contexts. This acted as the study's theoretical starting point.

For those not familiar with it, the TPACK construct articulates a relationship between content, pedagogy and technology both in isolation, and in pairs of content knowledge (CK), pedagogical knowledge (PK) and technology knowledge (TK). The framework, derived from earlier work done by Lee Shulman in the mid-1980s, evolved into pedagogical content knowledge (PCK), technological content knowledge (TCK) and technological pedagogical knowledge (TPK) and all three components came together in the seven-part framework of TPACK.

The case study methodology used in the research design combined with application of the TPACK framework uncovered particular conceptions of technology integration adding to what is now known about teachers' knowledge in this area.



So what was discovered?

Patterns in analysis of the data showed that the pedagogical approaches in all teachers' classrooms varied, as did the technology tools they used. Some made use of iPads, laptops, digital cameras, and student response networks, while others preferred blogs, wikis, educational games, robotics, apps, remote desktop sharing, iPhones and the interactive whiteboard. Subject matter was rich, relevant and sourced from multiple places and often pursued through open-ended inquiry-based processes.

All of the teachers created distinctive learning pathways for students in the teaching context. For example, in the early years' classroom and at the high school site both teachers believed their outcomes were similar even though their pedagogies were different, yet they all 'ended up in the same place'.

Looking more closely at the classrooms it was possible to articulate findings that supported purposeful technology integration in more detail. In all, five conceptions of exemplary teachers' knowledge of technology integration arose from the data analysis:

- theory
- creativity
- public learning
- life preparation
- contextual accommodations.

These conceptions are supported by a further 22 pedagogical themes creating a 'fresh' view of technology integration, in what are being termed, High Possibility Classrooms (HPC). In other words, classrooms where there are fewer constraints on what to teach and there is more focus on the possibilities of how to learn. The diagram below shows the final HPC model. The varying size of each conception suggests the relative strength of the underpinning themes of teaching strategies and student learning processes.

For more details refer to the unpublished PhD dissertation accessed through the University of Western Sydney library.

For space reasons, details of Gina and Nina are not included in this snapshot. However, a quick look at Gabby and Kitty's classrooms gives us understanding



Hunter, 2013

of the teachers' knowledge of technology integration from the larger study.

Gabby's early years' classroom

This teacher's foray into teaching began through adult education more than 20 years ago, and commenced with Teaching English as a Second Language (TESOL) to migrant students. Gabby's classroom was well-resourced and a composite mix of Year 1 and 2 students.

Her knowledge of technology integration revolved around giving students the opportunity to make their learning public through performance. Here, active engagement, better quality outcomes and audience were important. This added to Gabby's view of how creativity leveraged by technology must involve the continuous co-creation of products, peer support and modeled and guided practice.

Another conception of Gabby's knowledge of technology integration involved differentiation and negotiation. This notion featured themes of experimentation, 'going with the flow' and 'unfinishedness'. In this classroom there was always plenty of work under construction and the students were free to make their own learning choices.

Ann Craft, who has written in the field of creativity in education for more than a decade, suggests that empowering students like this can sometimes cause dilemmas for teachers on matters of 'principle and practice' and raise questions about 'who exactly is in charge'. The idea of a more distributed practice was something Gabby fostered.

Play and fun also characterised her knowledge of technology integration - concentration on storytelling, dressing up and developing mathematical thinking. She gave the students extended learning time and it is here where technology integration best supported imagination and 'getting into flow'.

Mihaly Csikszentmihalyi first wrote about 'flow' in the early 1970s where he suggested that 'flow was a necessary condition for people to achieve mastery'. This is something that was evident in the classrooms in the study. Students covered less content, but what was done was covered in more depth. Shorter blocks of learning time, where students move very quickly from one task to the next, was not evident in these contexts and the students liked it that way.

Kitty's visual arts classroom

Kitty was a filmmaker prior to becoming a teacher and has been working at a large, ethnically diverse, south-west Sydney secondary school for more than 21 years. The leading technology advocate in her school, she teaches Visual Arts and runs very popular multi-stage digital media projects.

This school provides laptops for students in Year 9 onwards (part of the Digital Education Revolution strategy) and there was never a problem with not having a technology tool to work with because of Kitty's simple '3 x 3 rule'. This rule means students 'either worked online, offline, or on paper'. Flexibility was a key pedagogic device and strengthened her planning and organisation. In the case of '3 x 3', students knew the rule and if their laptop was out of action this was not a reason not to do school work.

In addition, Kitty's knowledge of technology integration targeted experiential learning where authentic experience and developing students' subject matter knowledge was essential. For her creativity was about the aesthetic significance of technology and giving students opportunities to make their learning public. She believed providing students with opportunities for learning using technology was all about preparing students for life; it encouraged self-efficacy.



Technology enabled Kitty's students to take risks with their learning and it was apparent that her vision of young people and learning stemmed from ideas about 'children as empowered not at risk'. This view, according to Craft, is central to two dominant discourses that centre on notions of childhood as 'computerised' and therefore empowered, or children at risk and therefore needing protection where play is private.

Moreover, Kitty's knowledge of technology integration was critical to developing a whole school culture; this meant she took professional responsibility in the role of technology leader. I saw her mentor many other colleagues at her 'technology elbow' and she co-taught with other teachers who were 'less tech-savvy' and assisted them in improving their technology integration practices.

This new study is significant for three reasons

Firstly, because it is a collection of case studies of exemplary teachers' knowledge of technology integration, where each serves as a motivational exemplar of what can be achieved using technology in today's classrooms.

Secondly, the study is a clear response to persistent calls in education literature for more case studies of teachers' practices of technology integration in both Australian and international contexts. Previous studies of technology integration have, for the main part, revolved around studies of graduate or experienced teachers' contexts using particular technology devices, like laptops and desktop computers.

And thirdly the study fills a noted gap, in what is known about technology integration in practice from teachers' perspectives, thereby offering, 'fresh' insights which can inform future initiatives.

The theory-driven technology practice evident here acts to counter pressures some teachers feel to 'simply teach to tests' and disrupts the adoption of more limited views of learning. For these teachers, it supported a broader vision of what it means to learn effectively in schools.

Teachers *played* in these classrooms; they learned and so did their students, such that there was a sense, of 'hard fun' in what was going on (Papert, 1993). This form of pedagogy resists the performative cultures of standardised tests which defines learning in schools in very narrow terms (Darling – Hammond, 2010; Ravitch, 2013; Zhao, 2012).

The case studies of Gabby and Kitty presented show how technology integration can be about opening up creativity and encouraging students to take risks with their learning. If students are not given permission to do that at school with responsible adults, then where else can they do it?

Where to now with technology integration?

Futures for learning in education contexts like those in this study are much more about visions of students as empowered learners. The teachers' seamless and often invisible technology integration was the critical driver that enacted autonomy for students. Lehman (2008) describes this as a necessary condition for schools; in that 'technology just needs to be there'. This kind of vision for education has implications for current policy agendas in schools.

Education policy must recognise the importance of teachers continually renewing their professional knowledge of education theories and their applications. All four teachers in the study had continued their professional learning beyond initial teaching qualifications and they considered themselves active learners. Integrating what was learned from ongoing professional development experiences provided by their schools allowed these teachers to readily identify theoretical and pedagogical frameworks that were useful to their learning and teaching practices.

Of central importance to the achievements highlighted in this study is creativity. The term 'creativity' is on the lips of numerous educators right now and is found in education policy agendas in many countries. In Australia it has manifested most recently in a new policy titled *Creative Australia*. The focus

is on workforces skilled with people who know 'how to be flexible, think and create'. Therefore, schools do have a crucial role in preparing young people for future jobs in creative and innovative industries. This point to some degree is taken up in the National Curriculum in the Australian Curriculum Assessment Reporting Authority (ACARA) capability of information and communication technology.

I am optimistic in believing that virtually all teachers when presented with how a group of tech-savvy colleagues conceptualised their practice of technology integration are capable of creating those engaged spaces where all students can thrive and learn.

References

- Australian Curriculum Assessment Reporting Authority. *Draft Shape of the Australian Curriculum: Technologies*. (2013). Retrieved from <http://www.acara.edu.au/default.asp>
- Australian Government. (2013). *Creative Australia: National cultural policy*. Retrieved from <http://creativeaustralia.arts.gov.au/assets/Creative-Australia-PDF-20130417.pdf>
- Darling-Hammond, L. (2010). *The flat world and education: How America's commitment to equity will determine our future*. New York: Teachers College Press.
- Hunter, J.L. (2013). *Exploring technology integration in teachers' classrooms in NSW public schools*. Unpublished PhD dissertation. University of Western Sydney.
- Mackey, M. (2009). Exciting yet safe: The appeal of thick play and big worlds. In R.Willett, M. Robinson, & J. Marsh, (Eds). (2009). *Play, creativity and digital cultures*. New York: Routledge.
- Mishra, P., & Koehler, M.J. (2006). Technological Pedagogical Content Knowledge: A new framework for teacher knowledge. *Teachers College Record*, 108(6), 1017–1054.
- Papert, S. (1993). *The children's machine: Rethinking school in the age of the computer*. New York: Basic Books.
- Ravitch, D. (2013, February 8). *We must out-educate and out-innovate other nations*. Retrieved April, 2, 2013, from <http://billmoyers.com/groupthink/state-of-the-union/responses/we-must-out-educate-and-out-innovate-other-nations/>
- Zhao, Y. (2012). *World class learners*. Thousand Oaks, CA: Corwin.

Questioning creativity

ANDREW CLOSE



Over the last fifteen years, 'creativity' has become one of the buzzwords in education, to the extent that no document seems complete without discussing our need to become more creative, or to invest in the 'creative economy'. Why has creativity become so ubiquitous a concept? Can such a skill—or talent, or ability, or even gift—be taught independently from subject or field knowledge? And does the focus on creativity mean that the more traditional areas for creativity, such as the arts, are being undervalued?

I am not suggesting that creativity per se is an undesirable concept. As an artist and composer, I am well aware of the value creative minds bring to our society. But there are several dangers for our schools when speaking of general creativity: there is little research demonstrating whether teaching to 'be creative' is effective in the long term; that creativity is becoming understood as a standardised skill despite the unpredictable way in which it often manifests itself; that teachers often focus on their own creativity and not that of their students; that the shift towards generalised creativity risks leaving a generation without enough in-depth knowledge to make creative contributions of quality; and that the push to promote 'creativity' has, in some schools, hijacked the need to deliver valuable and effective arts programs.

Creativity in general ...

Creativity as an accessible and attainable skill has been recently embraced by a number of countries. In the English-speaking world, Sir Ken Robinson's *All Our Futures report* (1999) led to an enormous investment in what are termed 'Creative partnerships' in the UK; Howard Gardner, the guru of multiple intelligences, has suggested that if humankind is to survive we must develop 'creating minds' (*Five Minds for the Future*, 2007); and UNESCO declared in 2001 that 'the school of the 21st century must be able to anticipate the new needs by according a special place to the teaching of artistic values and subjects in order to encourage creativity, which is a distinctive attribute of the human species. Creativity is our hope'.

Equally in Australia, documents such as the Australia Council of Arts' *Creative innovation strategy* (2005) and *The Arts and Australian Education: Realising potential* report (ACER 2011) have led to many discussions at school management level on how best to encourage creativity in schools. The Melbourne Declaration on Educational Goals for Young Australians suggested that 'all young Australians become ... creative individuals' (MCEETYA 2008) and this led directly to 'critical and creative thinking' becoming one of the 'general capabilities' envisaged for all students in the new Australian curriculum.

Creativity in schools is not a particularly new idea, revealed in J.P. Guilford's work in the 1950s and E.P. Torrance's *Tests of Creative Thinking* (1960s). So why has the mention of creativity become so fundamental to almost every new educational policy in the western world? Anna Craft of the University of Exeter, has suggested that in the current globalisation of the economy, our demands for a more creative economy are really 'fuelled by a fear of obsolescence' (2003); our need to teach creativity is fuelled by similar concerns. It may also be a natural reaction against the over-standardisation of assessment and accountability that has come to dominate many western education systems.

Regardless of the reasons, creativity has become a big part of our 21st century curricula. Yet as Robert Sternberg points out in his introduction to the *International Handbook of Creativity*, 'what is perhaps most notable about creativity research around the world is how little of it there is' (Sternberg 2006). In other words, we have little real idea of how useful a focus on creativity will prove.

... And general creativity

Most recent curricula documents refer to what has been called *general* creativity; that is, creativity that is small scale and an everyday occurrence. General creativity is also referred to as 'democratic' (*All our futures* 1999), 'mundane' (Holzman 2010 after Vygotsky), 'ordinary' or 'little c' creativity' (Craft 2001). Posited on the notion that

“ ...one country has been teaching general creativity as a focus for some 40 years. In 1970 the Spanish government established the teaching of creativity as a principal element within education...”

creativity is a teachable asset that can be divorced from the knowledge of a particular field, general creativity lies on the opposite end of a spectrum from what has been termed high or *exceptional* creativity (an ability that requires great depth of knowledge as well as flexibility of mind).

Sadly, our language does not distinguish between general and exceptional creativity, and this has led to writers confusing the two ends of the creative spectrum. Professor of Knowledge and Creativity Management, Richard Greene has actually identified 42 different models of creativity in recent research literature (Greene 2001). Many of the texts quoted by promoters of general creativity really address exceptional creativity, and so the conclusions drawn are incompatible.

How can we be sure of the usefulness of teaching to 'be creative'? Mentioned earlier, we have little proof of how effective teaching general creativity will prove to be, but in fact one country has been teaching general creativity as a focus for some 40 years. In 1970 the Spanish government established the teaching of creativity as a principal element within education, emphasising both creativity and a critical mind (cf. Australian curriculum). However, despite the considerable support creativity has received, there are yet to be any comprehensive studies demonstrating that school-driven creativity has transferred into quantifiable skills in adult life.

Some limitations

One of the implications of descriptions of learners such as the 'general capabilities' in the new Australian Curriculum, and related international profiles such as the IB learner profile, is that they hint at model learners and balanced individuals; they also suggest a fairly linear path towards becoming a creative individual. But many creative individuals have personalities and working styles that are neither model, balanced nor do they follow a linear path. The disparity between the 'idealised' creative mind and the many variations of real-world creative thinkers becomes worrying only as far as we continue to adopt assessment criteria to measure each student's level of 'creativity' (see for example, discussions surrounding a 'European Creativity Index', and 'Creativity and Innovation Indexes' in Massachusetts and California). If we define and assess an idealised model for creativity, do we undervalue, or even discourage independent thinkers and alternative life paths?

A second difficulty for general creativity in education is the tendency for teachers to conceive of creativity in relation to *themselves*, and not their students. Often when creativity is mentioned in teacher workrooms, they will respond with how they are being creative – with little or no consideration for whether this is translating to the student. "Well, I've been very creative in my classes....," teachers will say, and this is commendable, but it is not promoting students' creativity. The reason for this is twofold: the pressure to demonstrate how we have adapted to a new curriculum and how the notion of 'creativity in the classroom' can be easily confused that is student creativity is not the same as teacher creativity.

What other claims do promoters of general creativity make? They will often point to lower absenteeism, greater test scores and so forth, as evidence of the effectiveness of creativity programs. The difficulty in making such claims is in separating the influence of a new approach (explicit teaching for creativity) from an increase in resources and energised teachers. Could it not be that the increased attention of class teachers, the (possible) introduction of

outside experts, and the use of a new and invigorated curriculum—one that appears to keep students engaged are just as valid reasons for improvement as the notion of creativity?

General creativity does not guarantee exceptional creativity

Malcolm Gladwell argues quite perceptively in his book *Outliers: The story of success* (2008) that creative genius is the result of many hours of work within a field of knowledge or skill. In fact, he puts a numerical value to the vague idea of 'many hours of work': 10,000 hours. But if high, or genius-level creativity requires approximately 10,000 hours of field knowledge/experience, what level of experience does general creativity require? In general creativity, it is the act itself of thinking creatively that is taught, not the field knowledge/experience. Our schools are being asked to produce creative thinkers who have almost no hours of experience within a field of knowledge or skill.

If a school did not teach to 'be creative' but allowed and funded students to develop specialist interest areas while delivering a solid theoretical base in literacy, numeracy, physical education and the arts, then students would each have the opportunity to develop a knowledge base first, then think creatively afterwards.

General creativity versus the performing arts

What has this got to do with the performing arts? The answer to this lies in another all-too-common misunderstanding of creativity. General creativity and the arts are not one and the same, yet administrators continue to confuse 'the arts' with the promotion of general creativity. Certainly this is the case here in the Northern Hemisphere, where the focus on creativity has not simply been confused, but has led to a wholesale rejection of the traditional arts, for example the new 'English Baccalaureate', planned to be taught in UK schools from 2015, contains no arts subjects.

How seriously does Australia take its commitment to performing arts programs? A 2012 study by Irina Petrova suggests that '62.74 per cent [of] primary [schools] and 33.78 per cent [of] secondary schools across Australia do not offer classroom music at all'. For those schools that do offer arts subjects, an examination of tuition hours is enlightening; students who wish to be creative writers will have spent approximately 2,300 hours studying English from reception to Year 12 and musicians may have spent up to 500 hours of music pedagogy, at best. More importantly however, is the quality of those hours, for in the current push to promote 'creativity' the nuts and bolts of performing arts programs are being forgotten. For example, we are not promoting widespread instrumental tuition, nor are we developing fully-funded drama, or dance programs in schools. One reason general creativity must be tempting for administrators is that it is a much cheaper option than many arts programs. An indicator that we are failing in our delivery of an inclusive arts program is the necessity for independent groups, to take up the reins. I am thinking of such wonderful initiatives as the Song Room, the Bell Shakespeare Company's educational arm, and many of Australia's symphony orchestra programs. It would be a wonderful comment on our educational system if such remarkable groups didn't need to exist.

As we develop towards a truly 21st century Australian curriculum, our students will need access to field knowledge/experience to inform their future creative abilities. If creativity is to

“ An indicator that we are failing in our delivery of an inclusive arts program is the necessity for independent groups, to take up the reins. ”

be imparted in schools, then it can be undergirded by curricula that traditionally develop skills-based creativity and divergent thinking, for example - the arts. Remember that UNESCO's 2001 declaration, referred to above, called for 'a special place to the teaching of artistic values and subjects' in our schools; these arts subjects must be delivered with equity, consistency and full-funding. If politicians and the business sector continue to ask where creativity is to be taught, and how can we broaden a student's intellectual outlook, I would argue that the answer lies in investing in those subjects that have traditionally encouraged the development of creative thinking. A response to the 'creative economy' has been with us all along; the arts in particular open our minds, develop our thinking approaches, broaden our interpersonal skills, deepen our intercultural awareness, and, ultimately help us grow into better human beings.

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References

- Craft, A. (2001). 'Little c creativity', in: Craft, A. Jeffrey, B. and Leibling, M. (eds.) *Creativity in education*, pp. 45-61 (Continuum, London)
- Gladwell, M. (2008). *Outliers: The story of success*. New York, NY: Little, Brown and Company
- Greene, R. T. (2001). *A model of 42 models of creativity*. Copyright 2001 by Richard Tabor Greene. Retrieved from: www.detaoma.net/studio/16447/StuworkPdf/20120408135326647JeEB.pdf
- Petrova, I. (2012). *What Makes Good Music Programs in Schools? A Study of School Music Across Australia and a Comparison with England and Russia*. (PhD thesis, University of New South Wales)
- Robinson, K. (1999). *All our Futures, The report of the National Advisory Committee on Creative and Cultural Education*. London: DfEE/DCMS

What does effective feedback look like?

KATHERINE WOODBURN



As I walk amongst the class overseeing the children's work I find myself saying 'well done', 'good work', 'excellent', and 'beautiful'. But, inwardly I groan and remind myself to use more meaningful praise; feedback that is purposeful and specific to the task. So, when the opportunity presented itself for me to conduct action-based research, I chose to explore the impact of feedback on student achievement and engagement in the teaching of reading.

While encouragement such as 'well done' may be appropriate at times, used regularly it does not contribute to a child's self-esteem. Personal feedback such as 'good girl' or 'great effort' typically expresses positive evaluations and feelings about the student but contains little task-related information. This type of comment is rarely converted into increased engagement, commitment to learning, enhanced self-perceptions or deeper understanding about the task. General praise addressed to students is unlikely to be effective for learning or for overall development of self (Hattie & Timperley 2007).

During the research Hattie & Timperley's Model of Feedback shaped the instructional dialogue when reading with the children. They state that effective feedback must answer three major questions asked by a teacher and/or by a student: 'Where am I going?' (What are the goals?); 'How am I going?' (What progress is being made toward the goal?);

and 'Where to next?' (What activities need to be undertaken to make better progress?).

I designed a template of observations that addressed particular reading behaviours across the different levels of achievement. I also created a rubric, which allowed me to track the children's progress while ensuring my feedback was appropriate to their level of reading, for example: experiencing difficulty/ working towards/satisfactory achievement/ high achievement/ outstanding achievement. I then devised verbal feedback (responses) that would address the questions above, for example:

1. When we read we want it to flow so that the story makes sense and sounds interesting.
2. I noticed you stopped and paused at the full stop. That gave you time to think about what is happening in the story.
3. When you next read the story, continue to stop at full stops and have a brief pause when you see a comma.

The qualitative elements of this research value an intuitive way of knowing, which relates to my work as a Steiner teacher. I strive to observe the 'whole child' and to gain awareness and insight into their social realm. I look at their self-identity, emotional, physical wellbeing and academic needs as they impact on the child's ability to be present, to receive information and to engage in the process of reading. The child's sense of wellbeing directly affects their learning and hence informs my feedback 'in the moment'.

“ While encouragement such as 'well done' may be appropriate at times, used regularly it does not contribute to a child's self-esteem. ”

While the children read to me, I used Steiner's 4-Fold Model of Observations (1971) to make detailed observations on physical and emotional characteristics that gave some indication of the child's wellbeing, for example:

- Are the child's eyes focused? Dull? Clear?
- Is the skin pale? Clammy? Warm? Cold?
- Energy levels: Lethargic? Hyperactive? Withdrawn? Calm?
- Concentration: Fidgety? Focused? Restless? Engaged?
- Breathing: Labored? Contracted?
- Posture: Slumped? Upright? Hunched?
- Gestures: Rapid? Flitty? Calm?
- Emotional expression: Lively? Keen? Smiling? Frustrated? Tense? Teary?

I worked with five children during my action-based research over the course of a year, to observe the impact specific feedback had on their progress in reading. I heard them read one-to-one two to three times per week and wrote down my observations with regards to the feedback I provided as well as the strategies I used to deliver the feedback. This often led to modifying the delivery and content of feedback to meet the needs of the children. I will now showcase three of the children used in my study: Joshua, Timothy and Leyla*.

It was intuition and awareness of Joshua's emotional wellbeing that influenced the manner and regularity in which I provided the feedback. At a purely mechanical level Joshua displayed outstanding skills in reading. However, observations made during the sessions indicated that he was feeling highly anxious and tense while reading aloud. When I gently pointed out words that he missed or substituted with other words he would often 'tear up', his cheeks became flushed, his breathing shallowed, he would hunch over and his reading would become rapid with an increase in errors. Joshua tended to put a lot of pressure on himself and found it difficult to receive verbal feedback. So in his case I tried non-verbal feedback, where

I would point at the text when a word was misread. This technique was less intrusive and had a calming effect on Joshua. I also shared the reading aloud, so that I could model accurate reading and fluency while also trying to get him to relax into the reading. Over time I tried to balance the constructive feedback with conversation around the text so that each reading session was more enjoyable for Joshua. These strategies worked as I observed him become more relaxed and he was able to articulate my reading behaviours.

Leyla had specific learning needs and as a result progress was slow but gradual with her. The most positive aspect of this case study was witnessing how much she thrived on the shared reading experience. She was enthusiastic, bubbly and always took an interest in the story, regularly commenting on the characters and events within the story. Despite difficulties with phonemic awareness and short-term memory, she gained immense value from the individual attention and reciprocal relationship, so much so that her self-esteem has remained intact. Leyla displayed resilience and the reading experience and emotional connection with the adult during the session could not be separated, for her they went hand-in-hand. This led me to create as many opportunities as possible to read with the children one-to-one to encourage discipline and to satisfy the child's need for an emotional connection.

Timothy another child I worked with made quite a transformation, as did my feedback. Earlier in the year, Timothy was fidgety, distracted and disinterested. He was extremely conscious of his peers and what levels they were reading at and felt anxious and embarrassed that he was reading at a lower level than others. I particularly noticed how fidgety Timothy was when reading one-to-one. I wanted to engage him in the story in a more kinesthetic, fun way and to cater for his need for movement. In order to do this I encouraged him to 'act out' parts of the story while reading. This proved to increase his interest and enjoyment. By the beginning of term four Timothy demonstrated enthusiasm in wanting to read more challenging texts, which

► suggested his belief in his reading abilities had improved and he was feeling more positive towards reading.

Effective feedback must give children guidance on how to improve, which may include reminders, suggestions, and questions. At the end of each reading session I asked the children: 'What do you think you did well?', 'Where can you improve and what will that look like?' Responses included: 'I remembered to pause at full stops and I read with expression'. 'I missed some little words though and I need to slow down my reading, to pace myself'. This strategy was valuable as it identified whether the child was able to articulate reading goals and identify whether they were achieving these.

Throughout the year I collected a variety of data, some of which included:

- parent feedback on their child's progress in reading, for example: enthusiasm, engagement, involvement in the story, fluency, expression, autonomy and wellbeing
- reflective journaling on the development of strategies for providing targeted praise
- recorded one-to-one reading sessions with individual students
- observations of the 'whole child' using Rudolf Steiner's 4-Fold Model of Observations in order to provide a deeper understanding of the child's individuality.

As a result of my research I was better informed in order to provide targeted feedback to students who were learning to read, which led to significant improvement in reading; engagement was sustained by the children who displayed perseverance throughout the challenging process of learning to read; the children demonstrated awareness of what makes a competent reader and displayed autonomy in their reading independently at home and school.

“ Perhaps the greatest insight was the effect that the various strategies had when providing feedback on the children's progress. When reading one-to-one with a couple of children, I noticed that asking open-ended questions about the story's plot did not result in the children initiating conversation or elaborating on their answers. ”

Perhaps the greatest insight was the effect that the various strategies had when providing feedback on the children's progress. When reading one-to-one with a couple of children, I noticed that asking open-ended questions about the story's plot did not result in the children initiating conversation or elaborating on their answers. Instead I found when I modelled conversation around the text this elicited more interest and comments. By using Steiner's 4-Fold Model of Observations, I noticed how each child responded not just to the feedback but also to the strategies used for providing feedback. My detailed observations of the 'whole child' enabled me to cater to their individuality.

I chose to work with five children during my action research, and while it is obvious that the quality of feedback had considerable impact, I recognise that the regularity with which I have heard the children read over a sustained period of time had equal impact. The

rubrics provided valuable information with regards to the children's reading behaviours and skills and assisted me in identifying the kind of feedback that was required. It was however, my genuine concern and interest in the students that urged me on to make more detailed observations, which then deepened my understanding of them. The more I came to know each child's inherent nature and temperament, their vulnerabilities and nuances, the more I was able to reach the child with quality feedback.

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* Author has used fictional names to protect the identity of the children in the study

References

- Hattie, J. & Timperley, H. *The Power of Feedback. Review of Educational Research* 2007 77: 81, 2007
- Burnett, P. C. & Mandel, V. *Praise and Feedback in the Primary Classroom: Teachers' and Students' Perspectives. Australian Journal of Educational & Developmental Psychology*, Vol 10, pp. 145-154, 2010.
- Geertz, C. *Thick Description: Toward an Interpretative Theory of Culture. In The Interpretation of Cultures*. New York: Basic Books, 1973
- Steiner, R. (1971). *Theosophy: An introduction to the supersensible knowledge of the world and the destination of man* (H. Monges B., G. Church Dr. Trans.). Hudson, New York: Anthroposophic Press.
- Schon. *The Reflective Practitioner*, 1983.
- Online Resources:**
- Dale, K. (2006). *Providing Students with Effective Feedback. Academic Leadership. The Online Journal*, Vol 9, Issue 2, Spring 2011.
- NSW Board of Studies site. K-6 Primary Syllabus – English
- AIS site– AGQTP Funded Programs – Resources (PLC – Armidale)
- www.sackvillst-p.schools.nsw.edu.au/SWS%20SITE/rubrics.htm (maths)
- eltmedia.heinle.com/resource_uploads/downloads/1413014860_30912.pdf

Jean Blackburn – courageous scholar

Margaret Clark

Jean Blackburn has been variously described as the nation's philosopher queen of education; a ferocious intellect; a notable scholar; a courageous thinker; and a compassionate and inspiring advocate.

The Australian College of Educators has long recognised the need to honour her achievements and standing and is pleased to announce the establishment of a public oration. The inaugural Jean Blackburn Oration will take place at The University of Melbourne on 21 May 2014. David Gonski AC, Chair of the Gonski Review of Schools Funding, will deliver the oration.

Jean made a deep impression on all who met her, whether, like me, mainly through her written work and occasional unforgettable personal encounters, or, like many influential educators who worked with her and who came to know the woman behind the brilliant writing, the woman who struggled with and agonised over words to 'get it right'.

An economist by background, Jean first came to public notice as an educationist when Peter Karmel recommended that Jean, then relatively unknown, be appointed as the deputy chair of the Interim Committee of the Australian Schools Commission in 1972.

The Commission had an enduring impact on the schooling landscape in Australia: it created new education policies and programs directed to addressing educational disadvantage, multiculturalism and gender equity. It also embedded within the government budget, base level funding for the non-Government school sector -something quite unusual in the developed world.

Jean's contribution to the Commission was enormous: development of the Disadvantaged Schools Program and the Girls, Schools and Society Report. Both were of fundamental importance in shaping our core notions of equity in schools for more than a generation of teachers and education policy workers. Readers of her work today can find themselves marvelling at a sentence or paragraph that expresses complex significant ideas lucidly. Jean's words were not words to skim over.

In the 1980s, Jean was appointed head of the Victorian Government's Review of Post Compulsory Schooling.



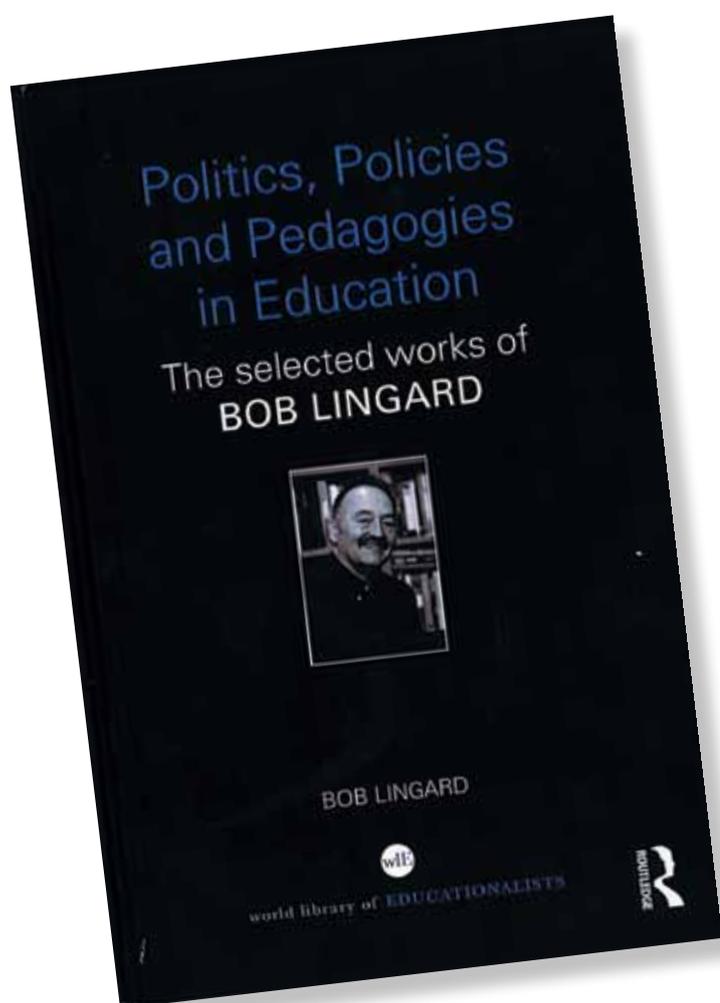
CASE STUDY

The review occurred at the point where Australian schooling was moving from a hierarchical 'sieved' schooling process where only the university bound completed 12 years of schooling, to a comprehensive system designed to serve all and engage all in a rigorous common certificate that was both general and vocational. Jean's work persuasively articulated this new vision and helped to shape the details of this significant change.

While Jean Blackburn was a late starter to the world of education policy, and the volume of her writing is not extensive, her impact was profound. She informed our understanding of what it means to shape a schooling system built on coherent and tested notions of academic rigour and social justice. Her brilliant outpourings, her deep intellect and her strong sense of morality, inspired and sustained others who came after her. Her work and her passion lives on.

Politics, Policies and Pedagogies in Education (The selected works of Bob Lingard)

Book review by Christine Redman



Politics, Policies and Pedagogies in Education (The selected works of Bob Lingard)

Written by Bob Lingard

Published by Routledge, New York, 2013

I felt immensely honored to review Professor Bob Lingard's book, *Politics, Policies and Pedagogies*. It is a wonderful collation of key works from Bob. The book provides the reader with an understanding of significant issues that impinge on education today. Indeed critically informing our thinking about what comprises the educational research and contexts that we deal with today. The arrival of this book will be well received with great pleasure internationally.

Bob has 30 years of scholarly writing and reflecting from with to draw from for our edification. I read this book in chapter order and, for me, this strategy functioned well, as the key issues and ideas were constantly weaving together, acting to meaningfully assemble the contemporary threads of global education.

The book is a very enjoyable and informative read, and feels a little like you are having a privileged conversation with Bob. He 'speaks to you' in the chapters, and integrates other relevant academic voices, ideas and thinking, through creating an opulent space of ideas and evidence that broadens thinking.

The field of education has been considered in the book as both informed research and as research informing ways of thinking that are useful to educational researchers and others in education. It has been constructed through a compilation of sociological lenses. Policy and politics are carefully unpacked and then considered for their impact

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Please block out these dates in your diaries and for more information please watch the website, www.austcolled.com.au for further details - coming soon!

and the ramifications of not considering the outcomes of any unintended 'epistemological innocence'. Many examples and subsequent actions have been held up to the light for examination. Ball, Bernstein and Bourdieu's thinking is repeatedly used to help clarify and inform these moments in time, and can be found well explicated in several chapters.

This book has been constructed to contribute to an understanding of the changing world of educational research and of the knowledge society, globalisation, the mediatizing of politics and the shifts towards effectively researching 'learning'. These changes are considered across very different sites and settings, and insightfully considered for the ways that they provide access to a range of empowering capitals, which are acknowledged as enablers for learning. We also encounter many policy texts and policy enactment that do not align. In this book we come to

understand why this might be so, and when, where and why this occurred. Chapter three on 'Policy borrowing, policy learning' acts as a key chapter in relation to these issues. It provides insights into this nation's 'testing' journey, the range of stakeholders and the focus on 'outputs and outcomes', rather than 'inputs and process'. Educators will come to understand their place in time, and the range of events and factors that have come to shape their pedagogical practices.

At the start of the book we are asked to think about theory as a thinking tool, and not a straitjacket. Throughout the book we are reminded that the world is a complex place, and that research must seriously take account of the context. In chapter eight, Bourdieu, and the works of others are utilised to show both how globalisation demands that we rethink the tacit elements in social theory and ways that theory and society might interact in

a nationally bounded space. The concept that text must be seen as productions of socio-cultural and historical times and places is made evident throughout many chapters. In chapter seven the Shakespearean quote 'What's past is prologue' resonated strongly in relation to this idea of how we use theory, and how we use it in particular contexts, and importantly, the recognition of the context as needing to include 'the prologue'. I recommend this book for contemplative reading enjoyment, and for the resultant thinking, conversations and actions that follow.

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Australian College of Educators

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