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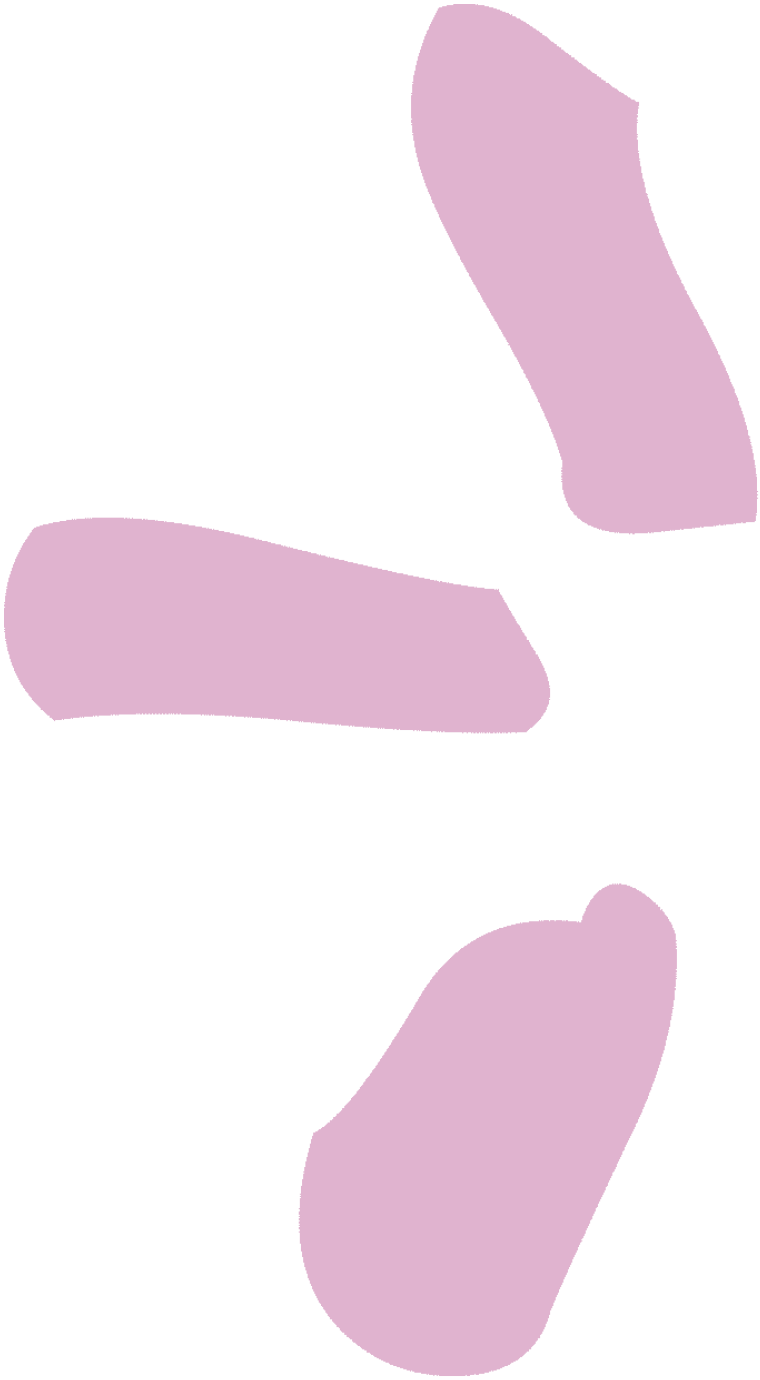

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BEYOND EDU-BABBLE

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Editorial: Learning and the accountability culture

JOHN GRAHAM

DON WATSON'S MOST recent book, *Bendable Learnings*, describes the way in which words derived from management theory and practice have invaded every corner of our lives. Education is not only not immune to this, it earns its own special cell within the wider prison of managerialist language. Watson's book contains an inventory of unleashed edu-babble, none more telling than this question posed by the New South Wales Education Department:

> *"Is it possible to evaluate dynamic, complex, unpredictable, multifaceted emergent processes where there is a shift from highly structured and linear professional learning and development to embedding enablers that support confident, capable, connected, curious and committed learners?"*

What this means is anyone's guess. However its flavour and push into meaninglessness would be instantly recognised by teachers in Victorian government schools.

During the 1990s, governments saw their salvation in a wave of neo-liberalist thought. The operation of the private sector was idealised and made into a paradigm which the public sector was charged to emulate. Consultants and "experts"

re-imagined public education through the filter of private sector management theorists and convinced the policy-makers that this was progress.

The documentation coming out of both state and Commonwealth education departments since 2000 illustrates just how successful they were. Policies become "blueprints" and "flagships". The Education Department Blueprints and their many offspring documents are littered with a standardised management vernacular. "Performance indicators", "outcomes", "performance and development culture", "client focus", "value-adding", "balanced scorecard", "SWOT analysis", "aligning and integrating" and more are used to express the ideas and improvement strategies the department wants introduced into schools. The latest performance pay document (*Rewarding Teaching Excellence*) adds the "performance dimension" of "teaming" to the list.

The desiccation of language, and the ideas attached to it, is just as pronounced at a federal level. Teachers and students have been transformed into "human capital" and competition between schools is called a "transparency agenda". Everything and everyone is "evidence-based", "quality assured" and "accountable". Watson refers to the purpose of such language as removing possibilities so a "culture of control" can be imposed. The problem for teachers is that they are required to implement policies written in these terms and find themselves looking at their work through a mesh of this language.

The accountability culture might have a few advocates in schools if it could be shown that it has achieved something worth achieving such as sustained improvement in the learning outcomes of students. Studies into teacher job satisfaction have found that nothing is rated higher than concrete evidence of student learning progress.

At the moment there is no evidence of a link between the introduction of the accountability culture into Victorian schools and an improvement in student learning. In his 2009 audit of Victoria's literacy and numeracy programs, the Auditor-General found that there had been "no marked improvement" in average literacy and numeracy achievement across age groups in government schools over the 10 years to 2007. This is roughly the same period in which the new accountability culture became the norm.

The one area of improvement noted by the Auditor-General was in the P–2 age group. He found moderate levels of improvement in student achievement in literacy and number. The clearly identifiable differences between the conditions of learning at P–2 and those of the following year levels are the existence of targeted P–2 intervention support strategies (such as Reading Recovery) and a cap on P–2 class sizes. The disappearance of these learning conditions after Year 2 coincides with the disappearance of the relative learning gains made by students. Such "old–fashioned" interventions fit awkwardly into an accountability culture which stresses the performance of teachers and schools rather than the responsibilities of education authorities.

The use of the 2008 and 2009 NAPLAN results by the State Government and the department to trumpet the success of their policies is at best premature. The cogency of the A-G's report came from its rigour, its longitudinal bench-marking and its independence. The NAPLAN results cover just two years and have not been subject to any

sort of rigorous analysis of this kind. Commenting on the 2008 NAPLAN results, the Auditor-General observed that they were not comparable to previous data and did not separate government from non-government school results. He dryly observed that it was "…unlikely (that) literacy and numeracy achievements could markedly change over the course of one year."

What has changed over the past two years is the political significance of national testing. The introduction of a common national test (NAPLAN) has been accompanied by a heightened media awareness of the achievements of students in each state compared to their counterparts in other states. A comparatively poor performance can give a state government a good media shaking, and led in 2009 to specific improvement strategies in states such as Queensland and Western Australia to prevent the same thing happening again. States which did comparatively well in 2008, observing the negative impact on their counterparts, also introduced improvement strategies for 2009 to keep themselves out of the media red zone.

The "improvement strategies" themselves are low-level, short-term interventions. They have less to do with improving learning than with being able to score better marks in increasingly high stakes tests. They are variations on training for the test. The introduction of nationwide school comparisons through a Federal Government website in January 2010 will only heighten this development as media naming and shaming penetrates to the level of individual schools. Margaret Wu from the Assessment Research Centre at Melbourne University has recently highlighted the level of measurement errors in the NAPLAN test results once they are combined at the school level. She stated that evaluating school performance through these results is "pure conjecture" and should not be done.

In some ways the Federal Minister for Education, Julia Gillard, has unwittingly helped to bell the accountability culture cat. In presenting New York as the model for the Australian Federal Government's reforms she has focused attention on the operation of the New York system. In October 2009 *The New York Times* reported a major discrepancy between the results from New York State's testing and US Federal Government tests. Between 2007 and 2009, state tests recorded large jumps in achievement for 4th and 8th graders while federal tests showed little or no improvement for 8th grade students and a decline in performance for 4th grade students.

Because the New York tests have high stakes consequences for schools and teachers (being linked to teacher and principal bonuses, school A-F gradings and the closure of "failed" schools), the discrepancy between these results and the more highly regarded federal tests throws doubt upon the whole state system of accountability. In September, when the New York City gradings of schools were published, it was revealed that 97 per cent of schools received an A or B compared with only 60 per cent in 2007. Even strong supporters of the school grading system, such as Rupert Murdoch's *New York Post,* described the results as "contrary to plain common sense". Rather than a fair and "objective" system directly linked to student learning achievement, the New York model looks more like an elaborate PR mirage designed to meet political rather than educational objectives.

Several recent studies have identified other weaknesses in the accountability agenda. A foundational study of the "teacher effect" on children's literacy learning found that it accounted for just 8 per cent of the variation in children's learning in their first three years of school. The results reported in July emerged from a 10-year international study of 500 identical twins in Australia and the United States. Supporters of measures such as test-linked performance pay have consistently placed the "teacher effect" between 20 per cent and 50 per cent. The study, led by Brian Byrne from the University of New England in NSW, also found that individual schools have negligible effects on children's literacy levels. This is important and highly credible research, the sort of evidence-based test demanded by accountability policies.

A recent OECD study raises additional evidence-based dilemmas for these policies. It investigated the effect of school markets on innovations in learning and found that there is no causal link between "quasi-market mechanisms of choice and competition in education and inducing educational innovation in the classroom". Diversity of school options was linked to the socio-economic characteristics of student intakes and the subsequent hierarchical ordering of schools rather than innovations in learning. Markets encouraged schools to compete for the same type of "desirable" middle class students (the most likely to exercise choice) and to standardise their approaches to attract them.

The "accountability culture" has become the water in which education ministers and departments of education now swim. It pervades everything they do and to that extent has become almost invisible to them. It is the accepted wisdom. However, if it cannot be linked to any substantial improvement in the learning achievement of students and is lacking any credible research base, its claims to being about "accountability" begin to evaporate. Diane Ravitch from New York University, referring to a similar situation in the US, wrote that the real justification of such policies is that: "They just happen to be the programs and approaches favoured by the people in power."

The major student learning initiative of the Victorian Education Department in 2009 is what it calls the "e^5 Instructional Model". In the preface to the department's publication (now known as "the black book" or the "bible"), the model is described as "the holy grail" of school improvement — "a working definition of what constitutes high quality instruction". The model is an elaboration of the American Biological Sciences Curriculum Study's "5E Instructional Model" developed in the late 1980s. The parent model reflects common inquiry-based/constructivist approaches to learning and a frequent teacher response to e^5 is: "So what's new?"

In fact the new part developed by the Victorian department connects the original model to the accountability culture — by standardising and boxing up the language and ideas into hierarchical and sequential levels for each of the five "domains". As a result, the model gains bureaucratic confidence and can act as a head office template to be implemented in schools, but it loses much of the professional space (available for the ideas and initiatives of classroom practitioners) needed to win over and inspire its intended end-users. It risks becoming part of what Robin Alexander has called (in

this edition of *Professional Voice*) a "state theory of learning" and raises questions about whether the "how" of teaching is for the government to determine.

The idea of this edition of is to see what might be out there when you set aside "transparency", "performance dimensions" and "balanced scorecards". Moving from the accountability culture to Guy Claxton and Howard Gardner is like opening the window of a large building and taking a breath of fresh air after a day spent working in air conditioning. They are writers who ask the big questions and provide new ways of looking at what we take for granted.

For Guy Claxton, schooling has lost its way and needs to rediscover the true purposes of education. Instead of preparing young people for their "complex and uncertain futures", schooling is narrowly focused on exams and tests. Claxton wants a different kind of change to the present "tinkerings" so that education can "rediscover its heart and soul". For Howard Gardner, education is simply the enterprise for "shaping the mind of the future". He identifies five different future-oriented "minds", each of which should be cultivated and integrated by everyone. The role of the educator is both to embody all five minds oneself and to develop the same sort of personal synthesis in their students.

Our other writers look at narrative learning and the needs of Indigenous students, the idea of transferring the practice of medical rounds to schools, a new framework for students with special needs which concentrates on their abilities rather than their disabilities, the role of social media in the classroom and a review of primary school education in the UK. We finish this edition with an interview with one of the most important current writers on education in Australia, Alan Reid, who wonders out loud if the emperor is actually naked or just needing a new pair of glasses: "I can't work out why the Prime Minister is critical of neo-liberal economic policy, but is happy to apply it to education."

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What's the Point of School?

GUY CLAXTON

The only time my education was interrupted was while I was at school.
— Winston Churchill

THE PURPOSE OF education is to prepare young people for the future. Schools should be helping young people to develop the capacities they will need to thrive. What young people need, and want, is the confidence to talk to strangers, to try things out, to handle tricky situations, to stand up for themselves, to ask for help, to think new thoughts. That is not too much to ask — it is every young person's basic educational entitlement.

But they are not getting it. There is no evidence that being able to solve simultaneous equations, or discuss the plot of *Hamlet*, equips young people to deal with life. We have lazily assumed that, somehow, it must do, but research shows that even successful students are often left timid and unsettled when they step outside the narrow comfort zones of their academic success.

We agonise about the content of the syllabus, and the dumbing down of examinations, yet the core failure of education to prepare young people for their complex and uncertain futures passes, year after year, almost without comment.

This is shocking; and it is dangerous. Education has lost the plot, and it urgently needs to recover its core purpose. Without the confidence that they are equal to the challenges they face, young people are at risk. They are, as all the surveys show, prone to becoming anxious and insecure, and to acting in the self-destructive ways that typify people under stress. This is bad for them, bad for their families, bad for their communities, bad for their employers, and bad for their countries.

We are familiar with the perspective of *qualifications*: the concern to monitor and measure how much of the curriculum has passed successfully into the mind of a student. And we are equally familiar with the perspective of *content*: the concern with selecting and organising the subject matter of schooling. But we are much less familiar with what I shall call the perspective of the *epistemic apprenticeship*: the idea that school is a protracted training in particular ways of thinking, learning and knowing (that's what "epistemic" means: to do with the ways people think, learn and know).

Just as an apprentice jeweller or mason carries out tasks that are designed to develop certain skills and sensibilities, so we can look at education as a long-term training in certain kinds of thinking, remembering, writing, researching and communicating.

When Albert Einstein said that "education is what remains after one has forgotten everything one learned at school", it is to those skills and attitudes that he was referring. If your schooling required you, lesson after lesson, to copy down facts, remember them accurately and reproduce them when prompted, it was the skills of note-taking and memorisation that you were practising, and the attitude of unquestioning acceptance that you were cultivating. If, on the other hand, your curriculum was built around groups researching self-chosen projects, then it was the skills of collaboration and discussion, and the attitude of self-organisation, that were being inculcated. This perspective is not an alternative to the other two; it is the inevitable third dimension of education..

To start paying attention to the learning habits children are developing does not mean you no longer care about the content, or about quality. The young jeweller or mason needs specific stones to work with, and someone to judge how well they are doing. But the point of the apprenticeship is not the immediate performance so much as the cumulative development that is going on behind the specific tasks. And if we are serious about education being a preparation for the future, it is the quality of these learning skills and attitudes that matters in the long run.

The core confidence that young people need, and many of them lack, derives from a number of personal qualities — what I will call their learning muscles. These are curiosity, courage, investigation, experimentation, imagination, reasoning, sociability and reflection. These are not just skills, although each has a skilful component. They are qualities of mind — pleasures and inclinations as much as abilities. When children have been helped to develop these learning muscles, they feel more confident and are more willing to engage intelligently with the difficulties in their lives. These vital qualities are perfectly capable of being strengthened and cultivated by education — but in the pressure to push up literacy rates and exam passes, most schools have

come to ignore and even subvert this most basic of their functions. All too often the quest for results serves to undermine the foundations of self-confidence rather than to strengthen them.

The research tells us that young people — some of them skilful exam-passers — become less curious as a result of their education, not more. They lose their capacity for wonder and critical questioning. Rather than becoming bolder and braver, they become more docile and fragile in the face of difficulty. They learn to think narrowly rather than broadly, to compete rather than cooperate, to be frightened of uncertainty and the risk of error that accompanies it. Education is in dereliction of its duty to the next generation if schools are jeopardising rather than fostering these strengths in their students.

We cannot — indeed must not — ignore the character-forming nature of school. But the question is: what capacities and attitudes towards knowing and learning do we want to help today's young people to cultivate. As a society, we can't afford to produce large numbers of young adults who see themselves as having failed at learning. They cost us too dearly. Each year in the UK, 150,000 school-leavers enter the post-school world unable to count properly — by any reckoning a failure of the system. As parents, we should not tolerate an institution that compounds our children's insecurity rather than ameliorating it, and fails to teach so many of them even the most basic skills.

In thrall to content and qualifications, we have forgotten the deeper purpose of education. In the rush to make young people into successful exam-passers, we have overlooked their deeper need to become successful people, eager to learn and grow in the real-life world of work, leisure and relationships — and to become successful people, they need a rich set of useful, general-purpose habits of mind that will stand them in good stead whatever they want or need to turn their hand to.

BUILDING LEARNING POWER

I first realised that school is, above all, a place where children go to learn how to use their minds through my work as a cognitive scientist. Since the publication of my first book in 1979, I have been fascinated by the ways people learn — and how they can get better, and worse, at learning. In 1984 I reviewed the research on learning in a book called *Live and Learn*, and I updated that work in another book in 1990 called *Teaching to Learn*.

But it was not until a chance encounter with a primary headteacher called Peter Mountstephen in 1997 that I began to work directly with teachers and pupils, to explore how to put practical flesh on the scholarly bones of my ideas. I was convinced that it was possible, in theory, to help young people become more powerful and effective learners. Working with Pete and the staff, governors, parents and pupils at his school enabled me to begin to devise the simple techniques that would translate psychological insight into educational reality.

My work in schools since that time led to the development of the practical program that schools know as Building Learning Power, or BLP for short. Working with a small

Bristol-based company, TLO Ltd, we have devised ways to help schools to see what is possible, and to shift their habits in small but critical ways. We have carried out research projects in Cardiff, Bristol, Oxfordshire and elsewhere, to monitor and evaluate the effects. With colleagues at the University of Bristol, I have developed ways in which pupils can keep track of their own developing "learning fitness" and monitor their progress. Working in schools and meeting teaching professionals at conferences has enabled me to refine the program and evaluate its success in classrooms both in the UK and internationally.

Here is a small example of BLP in action. Julie Green's Year 5 class is doing a lesson on magnets. A series of small experiments has been laid out around the room, and the children will go around in groups of three, carry out the experiments, and see what happens. But Miss Green explains to them that they will also be stretching their "questioning muscles", because when they have made their observations, she wants them to think up the kinds of questions they think a scientist might be stimulated to ask. "If the magnet does this, what would that make you wonder? What would you want to find out next?" she asks them. At the end of the lesson, the children share their observations and their questions — and then get involved in an animated discussion about "What makes a good scientific question?" and "How are scientists' questions special?"

These children are not only learning about magnets; they are, at the same time, sharpening their understanding of how different kinds of questions are good for different kinds of purposes. At the end of the lesson, Julie asks them to think of somewhere in their out-of-school lives where those kinds of questions would be helpful — and as they leave for their playtime, the children are happily discussing how they could use what they have learned in their swimming practice, or when they are watching a nature program on television.

These children may not ever need to use what they have learned about magnets — but learning about good questioning will be useful for the rest of their lives. They are having their powers of curiosity stimulated and refined, and they are thinking about how useful that can be in real life. Compare this to a more familiar kind of lesson, in which the aim is merely to learn the correct answers, and in which the only questioning voice is that of the teacher. Researchers have found that, in many classrooms still, children are too rarely stimulated to ask their own questions, or to think about the nature of questioning.

One study found that, in the space of a lesson, students volunteered just two questions to the teacher's 84. Over a school year, young people asked an average of just one question a month. What Julie Green has done is make a small, manageable shift to her classroom practice that, added to a dozen others like it, can make all the difference to her students' future confidence to think and wonder. You may think this just sounds like good teaching — but it is not yet the norm, even in schools getting good results.

Although many teachers are becoming familiar with the ideas and possibilities of "learning to learn", these ideas have not yet seeped out, as fully as they need to, into

the thinking of parents and the wider public. For I believe it is only when parents in their thousands truly realise what is at stake, and what is possible, that politicians will begin to respond with the speed and commitment that is required.

It is not more tinkering with syllabuses and exams that is needed. It is a wholehearted exploration of questions such as these:

- What kind of curriculum is going to be best suited to developing the mentalities and identities that will enable young people to prosper in the real world?
- What kinds of activities, based on that knowledge, will stretch and develop those qualities most effectively?
- How can we ensure that what is developed will be dis-embedded from the context of school, so that it will give young people a genuine purchase on the problems and challenges of their real lives, both presently and in the future (and not just at college or university)?
- How do we organise schools so everyone will feel that they are there to improve something useful, and are able to do so, and not that they are constantly being reminded how "bright" or "weak" they are?

To effect a thorough change, we have to start by facing up to what it is that young people really need, what schools are actually providing, and the gulf between the two. And then we have to establish, beyond all possible doubt, that the kind of educational reform that has been going on for more than 100 years is not going to work. We have to abandon the vain hope that such tinkerings are ever going to do the trick. Only once we have done that can we launch the argument that a different kind of change is both necessary and possible. With a bit of imagination, and a modicum of courage, education can rediscover its heart and soul.

HG Wells said that human history becomes more and more a race between education and catastrophe. A little dramatic perhaps, but there is no doubt that rediscovering the true purpose of education is a matter of urgency. This is the territory where the debate needs to be happening. The UK's authoritative Cambridge Review of Primary Education in 2008 found that literacy levels have remained almost static since the 1950s — an unpalatable fact that ministers seem loath to accept. Over the same period, children's enjoyment of reading — their feel for its pleasures and purposes — has significantly declined: an appalling and unacceptable cost that the same ministers appear blithely to discount. If politicians and policy makers are not going to do it, then parents and teachers will have to lead the debate about what should happen in our schools.

ENDNOTE

Adapted from Guy Claxton, *What's the Point of School? Rediscovering the Heart of Education,* Oneworld Publications, 2008.

The Five Minds for the Future

HOWARD GARDNER

AT THE START of the third millennium, we are well attuned to considerations of "the future". In conceptualising the future, I refer to trends whose existence is widely acknowledged: the increasing power of science and technology, the interconnectedness of the world in economic, cultural and social terms, and the incessant circulation and intermingling of human beings of diverse backgrounds and aspirations.

As one who has witnessed discussions of the future all over the world, I can attest that belief in the power of education — for good or for ill — is ubiquitous. We have little difficulty in seeing education as an enterprise — indeed, *the* enterprise — for shaping the mind of the future.

What kind of minds should we be cultivating for the future? Five types stand out to me as being particularly urgent at the present time. One by one, let me bring them onto centre stage.

1. THE DISCIPLINED MIND

In English, the word "discipline" has two distinct connotations. First, we speak of the mind as having mastered one or more disciplines — arts, crafts, professions, scholarly pursuits. By rough estimates, it takes approximately a decade for an individual to

learn a discipline well enough so that he or she can be considered an expert or master. Perhaps at one time, an individual could rest on her laurels once such disciplinary mastery has been initially achieved. No longer! Disciplines themselves change, ambient conditions change, as do the demands on individuals who have achieved initial mastery. One must continue to educate oneself and others over succeeding decades.

Such hewing of expertise can only be done if an individual *possesses* discipline — in the second sense of the word. That is, one needs continually to practice in a disciplined way if one is to remain at the top of one's game.

We first acquire a "disciplined mind" in school, though relatively few of us go on to become academic disciplinarians. The rest of us master disciplines that are not, strictly speaking, "scholarly"; yet the need to master a "way of thinking" applies to the entire range of workers — whether it be lawyers, engineers, craftspersons, or business professionals involved in personnel, marketing, sales or management. Such education may take in formal classes or on the job, explicitly or implicitly. In the end, a form of mastery will be achieved, one that must continue to be refined over the years.

Nowadays, the mastery of more than one discipline is at a premium. We value those who are interdisciplinary, multi-disciplinary or trans-disciplinary. But these claims must be cashed in. We would not value a bilingual person unless he or she can speak more than one language. By the same token, the claim of pluri-disciplinarity (if you'll excuse the neologism) only makes sense if a person has genuinely mastered more than one discipline and can integrate them. For most of us, the attainment of multiple perspectives is a more reasonable goal.

2. THE SYNTHESISING MIND

Nobel Laureate in Physics Murray Gell-Mann, an avowed multi-disciplinarian, has made an intriguing claim about our times. He asserts that, in the 21st century, the most valued mind will be the synthesising mind: the mind that can survey a wide range of sources, decide what is important and worth paying attention to, and then put this information together in ways that make sense to oneself and, ultimately, to others as well.

Gell-Mann is on to something important. Information has never been in short supply. But with the advent of new technologies and media, most notably the Internet, vast, seemingly indigestible amounts of information now deluge us around the clock. Shrewd triage becomes an imperative. Those who can synthesise well for themselves will rise to the top of their pack; and those whose syntheses make sense to others will be invaluable teachers, communicators and leaders.

Let's take an example from business. Suppose that you are an executive and your firm is considering the acquisition of a new company in an area that seems important, but about which you and your immediate associates know little. Your goal is to acquire enough information so that you and your board can make a judicious decision, and you need to do so in the next two months. The place to begin is with any existing synthesis: fetch it, devour it, evaluate it. If none exists, you turn to the most knowledgeable individuals and ask them to provide the basic information requisite to

synthesis. Given this initial input, you then decide what information seems adequate and where important additional data are required.

At the same time, you need to decide on the form and format of the ultimate synthesis: a written narrative, an oral presentation, a set of scenarios, a set of charts and graphs, perhaps a discussion of pros and cons, leading to a final judgment. At last, the actual work of synthesis begins in earnest. New information must be acquired, probed, evaluated, followed up or sidelined. The new information needs to be fitted, if possible, into the initial synthesis; and where fit is lacking, mutual adjustments must be made. Constant reflection is the order of the day.

At some point before the final synthesis is due, a proto-synthesis should be developed. This interim version needs to be tested with the most knowledgeable audience of associates, preferably an audience that is critical and constructive. To the extent that time and resources are available, more than one trial run is desirable. But ultimately there arrives a moment of truth, at which point the best possible synthesis must suffice.

What kind of mind is needed to guide the synthesis? Clearly, though he should have a home area of expertise, the synthesiser cannot conceivably be an expert of every relevant discipline. As compensation, the synthesiser must know enough about the requisite disciplines to be able to make judgments about whom and what to trust — or to identify individuals who can help make that determination. The synthesiser must also have a sense of the relevant forms and formats for the synthesis, being prepared to alter when possible, or advisable, but to make a final commitment as the deadline approaches.

The synthesiser must always keep her eyes on the big picture, while making sure that adequate details are secured and arranged in useful ways. This is a tall order, but it is quite possible that certain individuals are blessed with a "searchlight intelligence" — the capacity to look widely and to monitor constantly, thus making sure that nothing vital is missing; and that they also have the capacity to value the complementary "laser intelligence" that has fully mastered a specific discipline. Such individuals should be identified and cherished. It is crucial that we determine how to nurture synthesising capacities more widely, since they are likely to remain at a premium in the coming era.

3. THE CREATING MIND

In our time, nearly every practice that is well understood will be automated. Mastery of existing disciplines will be necessary, but not sufficient. The creating mind forges new ground. In our society we have come to value those individuals who keep casting about for new ideas and practices, monitoring their successes, and so on. And we give special honour to those rare individuals whose innovations actually change the practices of their peers — in my trade, we call these individuals "Big C" creators.

As a student of creativity, I had long assumed that creating was primarily a cognitive feat — having the requisite knowledge and the apposite cognitive processes. But I have come to believe that personality and temperament are equally and perhaps

even more important for the would-be creator. More than willing, the creator must be *eager* to take chances, to venture into the unknown, to fall flat on her face, and then, smiling, pick herself up and once more throw herself into the fray. Even when successful, the creator does not rest on her laurels. She is motivated again to venture into the unknown and to risk failure, buoyed by the hope that another breakthrough may be in the offing.

It is important to ascertain the relation among the three kinds of minds introduced thus far. Clearly, synthesising is not possible without some mastery of constituent disciplines — and perhaps there is, or will be, a discipline of synthesising, quite apart from such established disciplines as mathematics, mime or management. I would suggest that creation is unlikely to emerge in the absence of some disciplinary mastery and, perhaps, some capacity to synthesise as well.

4. THE RESPECTFUL MIND

Almost from the start, infants are alert to other human beings. The attachment link between parent (typically mother) and child is predisposed to develop throughout the early months of life; and the nature and strength of that bond in turn determines much about the capacity of individuals to form relationships with others throughout life.

Of equal potency is the young human's capacity to distinguish among individuals, and among groups of individuals. We are wired to make such distinctions readily; indeed our survival depends upon our ability to distinguish among those who would help and nourish us, and those who might do us harm. But the messages in our particular environment determine how we will label particular individuals or groups. Our own experiences, and the attitudes displayed by the peers and elders to whom we are closest, determine whether we like, admire or respect certain individuals and groups; or whether, on the contrary, we come to shun, fear or even hate these individuals.

We live in an era when nearly every individual is likely to encounter thousands of individuals personally, and when billions of people have the option of travelling abroad or of encountering individuals from remote cultures through visual or digital media. A person possessed of a respectful mind welcomes this exposure to diverse persons and groups. A truly cosmopolitan individual gives others the benefit of doubt; displays initial trust; tries to form links; avoids prejudicial judgments.

The threats to respect are intolerance and prejudice, what in the worst case forms into individual, state or stateless terrorism. A prejudiced person has preconceived ideas about individuals and groups, and resists bracketing those preconceptions. An intolerant person has a very low threshold for unfamiliarity; the default assumption is that "strange is bad". It is not easy to come to respect others whom you have feared, distrusted or disliked. Yet, in an interconnected world, such a potential for growth, for freshly-forged or freshly-renewed respect, is crucial.

5. THE ETHICAL MIND

An ethical stance is in no way antithetical to a respectful one, but it involves a much more sophisticated stance toward individuals and groups. A person possessed of an

ethical mind is able to think of himself abstractly: he is able to ask, "What kind of a person do I want to be? What kind of a worker do I want to be? What kind of a citizen do I want to be?"

Going beyond the posing of such questions, the person is able to think about herself in a universalistic manner: "What would the world be like if all persons behaved the way that I do, if all workers in my profession took the stance that I have, if all citizens in my region or my world carried out their roles in the way that I do?" Such conceptualisation involves a recognition of rights and responsibilities attendant to each role. And crucially, the ethical individual behaves in accordance with the answers that she has forged, even when such behaviours clash with her own self-interest.

My own insights into the ethical mind come from a dozen years of study of professionals who are seeking to do good work — work that is excellent, engaging and ethical (see **www.goodworkproject.org**). Determining what is ethical is not always easy, and can prove especially challenging during times, like our own, when conditions are changing very quickly, and when market forces are powerful and unmitigated. Even when one has determined the proper course, it is not always easy to behave in an ethical manner; and that is particularly so when one is highly ambitious, when others appear to be cutting corners, when different interest groups demand contradictory things from workers, when the ethical course is less clear than one might like, and when such a course runs against one's immediate self interest.

It is so much easier, so much more natural, to develop an ethical mind when one inhabits an ethical environment. But such an environment is neither necessary nor sufficient. Crucial contributions are made by the atmosphere at one's first places of work: how do the adults in power behave, what are the beliefs and behaviours of one's peers and, perhaps above all, what happens when there are clear ethical deviations, and — more happily if less frequently — when an individual or a group behaves in an ethically exemplary fashion? Education in ethics may not begin as early as education for respect; but neither "curriculum" ever ends.

Given the high standards necessary for an ethical mind, examples of failures abound. It is not difficult to recognise behaviours that are strictly illegal — such as theft or fraud — or behaviours that are obviously unethical — the journalist who publishes a story that he knows is not true, the geneticist who overlooks data that runs counter to her hypothesis. In each case, the ethical mind must go through the exercise of identifying the kind of individual one wants to be. And when one's own words and behaviours run counter to that idealisation, one must take corrective action. I would add that as one gets older, it does not suffice simply to keep one's own ethical house in order. One acquires a responsibility over the broader realm of which one is a member. And so, for example, an individual journalist or geneticist may behave in an ethical manner; but if her peers are failing to do so, the aging worker should assume responsibility for the health of the domain. I denote such individuals as "trustees": veterans who are widely respected, deemed to be disinterested, and dedicated to the health of the domain. To quote the French playwright Jean-Baptiste Molière, "we are responsible not only for what we do but for what we don't do."

TENSIONS BETWEEN AND AMONG THESE MINDS

Of the five minds, the ones most likely to be confused with one another are the *respectful* mind and the *ethical* mind. In part, this is because of ordinary language: we consider respect and ethics to be virtues, and we assume that one cannot have one without the other. Moreover, very often they are correlated; persons who are ethical are also respectful, and vice versa.

However, as indicated, I see these as developmentally discrete accomplishments. One can be respectful from early childhood, even without having a deep understanding of the reasons for respect. In contrast, ethical conceptions and behaviours presuppose an abstract, self-conscious attitude: a capacity to step away from the details of daily life and to think of oneself as a worker or as a citizen.

Whistle-blowers are a good example. Many individuals observe wrongdoing at high levels in their company and remain silent. They may want to keep their jobs, but they also want to respect their leaders. It takes both courage and a mental leap to think of oneself not as an acquaintance of one's supervisor, but rather as a member of an institution or profession, with certain obligations attendant thereto. The whistle-blower assumes an ethical stance, at the cost of a respectful relation to his supervisor.

Sometimes, respect may trump ethics. Initially, I believed that the French Government was correct in banning Muslim women from wearing scarves at school. By the same token, I defended the right of Danish newspapers to publish cartoons that poked fun at Islamic fundamentalism. In both cases, I was taking the American Bill of Rights at face value — no state religion, guaranteed freedom of expression. But I eventually came to the conclusion that this ethical stance needed to be weighed against the costs of disrespecting the sincere and strongly held religious beliefs of others. The costs of honouring the Islamic preferences seem less than those of honouring an abstract principle. Of course, I make no claim that I did the right thing — only that the tension between respect and ethics can be resolved in contrasting ways.

IN CLOSING

There is no strict hierarchy among the minds, such that one should be cultivated before the others. Yet a certain rhythm does exist. One needs a certain amount of discipline — in both senses of the term — before one can undertake a reasonable synthesis; and if the synthesis involves more than one discipline, then each of the constituent disciplines needs to be cultivated. By the same token, any genuinely creative activity presupposes a certain discipline mastery. And while prowess at synthesising may be unnecessary, nearly all creative breakthroughs — whether in the arts, politics, scholarship or corporate life — are to some extent dependent on provisional syntheses. Still, too much discipline clashes with creativity; and those who excel at syntheses are less likely to affect the most radical creative breakthroughs.

In the end it is desirable for each person to have achieved aspects of all five minds for the future. Such a personal integration is most likely to occur if individuals are raised in environments where all five kinds of minds are exhibited and valued. So much the better, if there are role models — parents, teachers, masters, supervisors —

who display aspects of discipline, synthesis, creation, respect *and* ethics on a regular basis. In addition to embodying these kinds of minds, the best educators at school or work can provide support, advice, coaching which will help to inculcate discipline, encourage synthesis, prod creativity, foster respect and encourage an ethical stance.

No one can compel the cultivation and integration of the five minds. The individual human being must come to believe that the minds are important, merit the investment of significant amounts of time and resources, and are worthy of continuing nurturance, even when external supports have faded. The individual must reflect on the role of each of these minds at work, in a favoured avocation, at home, in the community and in the wider world. The individual must be aware that sometimes these minds will find themselves in tension with one another, and that any resolution will be purchased at some cost. In the future, the form of mind that is likely to be at greatest premium is the synthesising mind. And so it is perhaps fitting that the melding of the minds within an individual's skin is the ultimate challenge of personal synthesis.

The Condition and Future of Primary Education

Behind the headlines of the Cambridge Primary Review

ROBIN ALEXANDER

EDITOR'S NOTE

The Cambridge Primary Review is one of the most extensive, detailed and important studies of education undertaken in the UK for many years, and made predictable headlines when it was released on October 16. In particular, its call for a debate on the start of formal schooling and its criticisms of England's testing regime were widely reported and quickly dismissed by the Government.

The review has particular resonance in Australia as we embark down a path already well-trodden in England, notably the adoption of a national curriculum and high-stakes testing and reporting, and see the Federal Government take an increasingly hands-on approach to education. Advisors from the Blair Government play key roles in the Rudd administration.

At the same time, the Rudd Government and the Brown Government in London are both influenced by US developments including the report cards of Joel Klein's New York City.

The review thus serves as a useful analysis of the likely consequences of continuing down this path — and perhaps too of the likely official response to those who dare to contradict ministers.

THIS REPORT IS the culmination of a three-year enquiry, preceded by nearly three years of consultation and planning. The Cambridge Primary Review was launched in October 2006, and was collecting evidence up to the last possible moment. It was undertaken by a team based at the University of Cambridge Faculty of Education, supported by 66 research consultants in 20 other universities and a distinguished advisory committee drawn from inside and outside education. Its scope is broad, its evidence is extensive, its authorship is diverse, its participants are many, and — of critical importance in the context of the way the government has personalised its attack on the report — its conclusions and recommendations have been collectively determined and agreed, by the 14 authors and 20 members of the advisory committee.

HOW WELL ARE WE DOING?

Perhaps the most reassuring finding of the review is this. England's primary schools remain under intense pressure after two decades of continuous change and reform and a great deal of public scrutiny, but they are in good heart and in general are doing a good job. Since 1997, investment has risen dramatically, many initiatives have had a positive impact, and government deserves credit for this. Primary schools provide stability and positive values in a world of change and uncertainty. Contrary to myth, they are not in constant danger of subversion by 1970s ideologues and they do not neglect the 3Rs.

THREE RECURRENT CONCERNS

Cutting across our evidence on specifics are three broad concerns which were voiced by many of the Review's witnesses: the condition of childhood today, the state of the society and world in which children are growing up, and the focus and impact of government policy.

Childhood: The report questions the conventional wisdom that childhood is in crisis, noting that children were the Review's most upbeat witnesses, and emphasising the research evidence on just how much young children know, understand and can do, given teaching that recognises their capability, heeds their voices, stimulates their interests and challenges their thinking. The real childhood crisis concerns the fate of the substantial minority of children whose lives are blighted by poverty, disadvantage, risk and discrimination, and here governments are right to intervene.

The report argues for an education which heeds the voices of children and empowers them for life as both learners and citizens. The report also argues that childhood's rich potential should be protected from a system apparently bent on pressing children into a uniform mould at an ever-younger age.

Society and the wider world: The review found adults and children anxious about risk, change, loss of community, global warming and much else. But we also found that fear turns to hope when education helps them to confront and address such challenges, and that's why the empowerment of both children and teachers and the

reinvigoration of communities are such important themes of the report. For if education is not about giving people the capacity to take control of their lives and make a difference, what is it about?

Policy: While the government's childhood agenda is applauded, its standards agenda is viewed less favourably — not from opposition to standards and accountability but because of the educational damage the apparatus of targets, testing, performance tables, national strategies and inspection is perceived to have caused for questionable returns.

But overriding concern about specific policies is a more pervasive objection to recent trends in the policy process itself, about which the word "centralisation" tells only part of the story.

In this, education appears to mirror the wider problems recorded by those who see British democracy in retreat. In common with other recent studies, the report notes the questionable evidence on which some key educational policies have been based; the disenfranchising of local voice; the rise of unelected and unaccountable groups taking key decisions behind closed doors; the "empty rituals" of consultation; the authoritarian mindset; and the use of myth and derision to underwrite exaggerated accounts of progress and discredit alternative views.

SOME SPECIFIC RECOMMENDATIONS

Aims: For too long, the aims of primary education have been confused or tokenistic; and, too often, aims tend to set off grandly in one direction while the curriculum follows a much narrower path. People rarely pause to ask what primary education is for. If they do, they tend to start with the 3Rs — and then stop. The report confirms the centrality of literacy and numeracy, though it takes a much broader view of what literacy entails, and argues strongly for oracy to be given the central place in teaching and learning and curriculum that it has in many continental European countries. Further, the report argues that although the education system as a whole would benefit from having a clearer overall view of what it is for and where it is heading, the needs of children at different stages, and the imperatives of their education at those stages, are also in certain ways quite distinct.

So, we propose a framework of 12 new aims for primary education. These should shape curriculum, pedagogy and the wider life of the school rather than be tacked on as an afterthought. The aims concern the individual, the individual in relation to others and the wider world, and the core experiences which schools should provide.

Structures: It was widely reported that we recommend that children should not attend school until age 6. This is incorrect; what our report actually recommends is the strengthening and upward extension to age 6 of the government's Early Years Foundation Stage, the simplification of the relationship between the early years and primary — and then a debate about whether the actual school starting age should be raised in line with international practice.

The English insistence on the earliest possible start to formal schooling, against

the grain of international evidence and practice, is educationally counterproductive. Early years provision should be strengthened in its quality and staffing so that children are properly prepared — socially, linguistically and experientially — for formal learning. The subsequent years to 11, currently divided into two "key stages", should be merged into a single phase, yielding a seamless journey through Foundation (0-6) and Primary (6-11).

Much of the discussion on this matter has confused *curriculum* with *organisational structures*. For us, the important issue is the nature, quality and appropriateness of the provision for young children, wherever they are. It goes without saying that if children are ready to learn to read, at whatever age, that is what they should do.

Assessment: Some have claimed that we propose to "scrap" the national tests at age 11 and leave nothing in their place. In fact, the report is adamant that children must be assessed summatively at the end of the primary phase, that they must also be assessed formatively throughout their primary schooling, and that schools should be publicly accountable. The issue, the report says, is not *whether* children should be assessed or schools should be accountable — they should — but *how*. We propose an approach to end-of-primary summative assessment which reflects our insistence on children's entitlement to a broad curriculum, and does not treat literacy and numeracy as proxies for the whole curriculum, or the current national literacy and numeracy tests as the only valid or rigorous form of assessment (though tests of some kind are not ruled out as part of the more rounded approach we encourage).

We call for greater use of teacher assessment within this process, supported by external moderation. So, properly viewed, what is proposed is in many ways more rigorous than what we have now. We don't provide a blueprint — that's for the best assessment brains in the country to work on, and it will take time — but we do set out the broad principles. We also argue for the separation of the functions that at present the tests have to combine — assessment of children, evaluation of schools and monitoring of the system as a whole.

Standards: The report contains a careful analysis of the vital matter of educational standards. It finds the current definition of standards — as test performance in literacy and numeracy, and in those alone — narrow and misleading. Subject to that considerable limitation it goes on to look at the national and international evidence, identifying the claims about standards — both positive and negative — which can be sustained, drawing attention to methodological problems with the current approach, and assessing the validity of a whole range of claims by which the political rhetoric of "standards" is flavoured: for example — testing of itself drives up standards … until 1997 English primary education was at a "low state" and primary teachers were "professionally uninformed" … the way to raise standards in the basics is to concentrate only on the basics … and so on.

The report argues that standards and entitlement should be precisely aligned, that children are entitled to the highest possible standards of teaching across the whole curriculum, regardless of how much or how little time a subject is allocated, and it repeats the recurrent finding of the schools inspectorate and at least one government

white paper that standards in the basics and the breadth and quality of the rest of the curriculum are intimately related. This broader definition of standards, we say, should inform aims, curriculum, assessment, teaching, inspection and accountability.

Incidentally, the Schools Minister has said that the government's new school report card will solve the problem. It won't: for while it includes welcome attention to pupils' wellbeing and personal and social development, the measure of *pupil attainment* at age 11 remains exactly as now, test performance in literacy and numeracy.

Teaching: It is of course teaching, not testing, that drives up standards, and pedagogy is a major theme of the review. The report finds that the highly prescriptive national literacy, numeracy and primary strategies introduced from 1998 onwards, which tell teachers not just what to teach but how, combined with testing and the focus of inspection, initial teacher training, continuing professional development and local authority school improvement strategies — all of which seek to secure compliance with the strategies — add up to what one of our commissioned research surveys called a "state theory of learning". We want that to end, and — to quote a much earlier secretary of state — we want the principle that "questions about how to teach are not for government to determine" to be reinstated. We want teaching to be grounded in repertoire, evidence and principle rather than recipe. We want to strengthen what, according to international research, separates the best teachers from the rest: their depth of knowledge of and engagement with what is to be taught, the quality and cognitive power of the classroom interaction they orchestrate, and their skill in assessing and providing feedback on pupils' learning — all day, every day, not just in Year 6.

The balance of national and local: The review finds England's system of primary education over-centralised, over-controlled and subject to excessive micro-management by government and the national agencies. The review's evidence was collected between 2006 and 2009, but it yields few signs of the decentralisation promised in 2001. The report argues for the tide of centralisation to be reversed, especially in the vital domain of teaching, and for the roles and relationships of national government, the non-departmental public bodies, local authorities and schools to be re-configured, leading to a greatly strengthened role in educational decision-making for schools, local authorities and local communities. This will simultaneously advance the causes of re-professionalising teachers and engaging communities.

Others: In the matter of funding, the historic primary-secondary funding differential, which has defied the recommendations of official enquiries since 1931, should finally be eliminated. There are many other recommendations — a new primary curriculum which at last places the 3Rs in a broader and richer curriculum context and addresses the needs of today's children and their world, a full review of primary school staffing to ensure that schools' tasks are matched by appropriate teacher expertise and numbers, a two-year postgraduate certificate of education, a review of special needs provision, more partnership and staff exchanges between schools, reinstatement and expansion of school libraries, and much more. I can't summarise them here and the only authentic account of what the Review concludes and proposes is that provided by the report itself.

WHAT REALLY MATTERS?

This report is not just for this week or month, to be reacted to on an instant accept/reject basis. Still less is it for pre-election posturing and point-scoring. We hope — and immodestly believe — that the report offers food for thinking and discussion for several years to come, and a vision of primary education which will not be achieved overnight. In that sense, for ministers to claim, as they have, that the report is out of date because the Review started three years ago, is to miss the point, and spectacularly. Not only is their assertion incorrect, but the very fact that the Review started three years ago, and was not a quick-fix enquiry of the kind that governments tend to prefer, is testament to its depth and longer-term value.

In any case, the report is not just for the makers and agents of policy, but for all those who invest in this vital phase of education, especially children, parents and teachers. And let it be understood, too, that the report above all seeks to encourage a new way of thinking and talking about primary education — a way which abandons the polarisation, sloganising, myth-making, misrepresentation and name-calling which have bedevilled the primary education debate since the 1960s and which have been so evident in recent days; which is alive to nuance and the problematic; which respects evidence but is also prepared to test it; which learns from history instead of saying "That was yesterday"; and finally, which embraces alternative viewpoints and gladly engages with new ideas, and thus gives newsreaders a break from that now routine and predictable phrase, "The government has dismissed the findings."

FOOTNOTE

This article is adapted from a speech to the RSA (Royal Society for the encouragement of Arts, Manufactures and Commerce) in London on October 19, 2009.

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A 42-page booklet, *Introducing the Cambridge Primary Review,* can be downloaded at **www.primaryreview.org.uk**.

Other material may be found at **www.primaryreview.org.uk**. Email: **enquiries@primaryreview.org.uk**.

Learning Through Narrative for Indigenous Children

NEIL HOOLEY

IT IS DOUBTFUL whether there is a single model of schooling that can be defined as having successfully achieved the complex learning and cultural outcomes desired by Indigenous communities throughout Australia. A more helpful approach involves description of the essential features of schooling that are required to constitute a model that will be supportive of Indigenous aspiration. This too is a difficult proposition if different models of schooling are being used to generate different outcomes for different communities. It is exceedingly complicated when a mixture of cultural and specific learning outcomes together with state benchmarks is involved. It may be that the usual indicators of attendance, retention, literacy, numeracy, credentials, pathways and community interest and participation, while necessary, do not give a totally accurate or detailed picture of the success of each school.

If evidence regarding a particular successful model was much clearer, it would have been implemented long ago. It is difficult for any school with Indigenous students to assemble the range of factors necessary and to implement them consistently over an extended period of time. Not all schools in Victoria have Indigenous students and for those that do, most have only a small number. This makes the argument for widespread curriculum reform very demanding. It seems apparent that either an

inclusive or separated model can be successful if it has community support, and if cultural and learning outcomes are agreed and the range of success factors can be implemented and be sustained.

Within Australia the overwhelming majority of Indigenous children attend the local neighbourhood school primarily down the east coast and encounter the same curriculum as other Australian children. It is most unfortunate therefore that the regular curriculum of Australian schools has found it extremely difficult to meet the learning needs of Indigenous children. While most Indigenous children complete primary school, many are not engaged with the broad spectrum of school knowledge and drop out during the middle years of secondary schooling, not necessarily moving to formal vocational training. The segmented approach to knowledge adopted by most secondary schools makes cultural inclusiveness very arduous.

For those Indigenous families who want their children to succeed in the regular curriculum, ways must be found of maintaining identity and cultural formation, while at the same time becoming immersed in non-Indigenous approaches to knowledge, teaching and learning. This requires community support and family commitment as well as professional sensitivity from teachers. Various models of schooling have been tried to overcome such problems, including assimilation on the one hand and an inclusive model on the other. Two-way schooling (Harris, 1990) and two-way inquiry learning (Hooley, 2002) propose to draw on both cultures as the basis of new understandings. With many attempts at curriculum reform, the main features of the regular curriculum continue to dominate.

For those Indigenous families who want their children to experience a more culturally-inclusive curriculum, it has sometimes been possible to negotiate different and separate arrangements with state and/or private providers. Decisions that need to be made by families include how to engage privileged school knowledge such as language, mathematics, science, history and, at secondary school, how to ensure access to credentials for ongoing progress. It may be that a community decides not to be dominated by non-Indigenous values and attempts to transit across cultures while establishing pathways that are considered personally and collectively satisfying. (For a compelling discussion of Australian Indigenous anthropology see Stanner, 2009).

MAJOR ISSUE FOR INDIGENOUS SCHOOLING

Issues highlighted by this discussion are broad and require ongoing research and elaboration. Similar issues are seen internationally as in Australia. Separate or inclusive schools can succeed or fail depending on the educational, historical and socio-cultural context that surrounds them. From the literature and above discussion, however, it is possible to distil a number of specific items that impact strongly on Indigenous education and curriculum. These have been grouped under seven themes and commented on as follows:

Models of schooling: A single model of schooling whether separated or inclusive cannot be defined for all places, but needs to be negotiated with each community within an agreed framework of key principles.

Curriculum structure: It is inappropriate to attempt to design a national or state-based model of curriculum that is applied to all locations in the same way. Elements of robust curriculum that need to be considered for Indigenous communities involve cultural inclusivity, Indigenous ways of knowing, cognitive and active engagement with knowledge production, community participation and two-way connections with the regular curriculum.

Knowledge: Indigenous knowledge must be respected within the school and form a coherent cultural context for teaching, learning and evaluation. This involves inquiry learning rather than verbal instruction, holistic or global learning, trial and feedback, group rather than individual learning, the incorporation of visual-spatial skills and imagery and contextual and spontaneous learning.

Leadership: Experienced leadership is required in all schools to establish a culturally inclusive, high-quality curriculum with high-quality teaching. Leadership exists at all levels, including principals, teachers and community, and involves capacity building for high expectations through the development of lateral school and community networks.

Communities of practice: Organisational arrangements of this type involve situated learning and knowledge management. This enables an alignment between participants and tasks so that progress can be made on innovative solutions to difficult problems. All those concerned work together and are respected for the contributions they make.

Community support: Realistic mechanisms of support are necessary if the appropriate steps are to be put in place for Indigenous education. The support of government and bureaucratic authorities is vital, together with on-the-ground assistance on a daily basis if any progress is to be made and sustained. Within Victoria the statewide Indigenous organisation VAEAI (2009) supports the operation of a number of Local Aboriginal Education Consultative Groups throughout the state for this purpose.

Teacher education: The issues raised in this summary are not complete without a consideration of initial teacher education programs and of professional learning programs for teachers and community alike. These are yet further difficult matters that require resolution by universities, schools, authorities and Indigenous organisations.

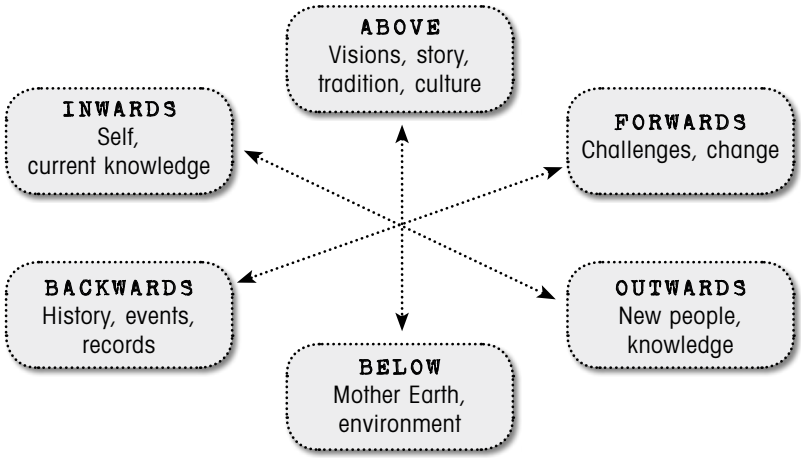
NARRATIVE LEARNING

The latest strategy released for Indigenous education in Victoria entitled *Wannik* (Victoria 2009) suggests what it calls a "culturally inclusive curriculum" as the centrepiece for Indigenous schooling. As is to be expected for a policy document, *Wannik* does not detail what this actually means. However, one approach that attempts to be culturally inclusive and which has been researched and implemented to some extent in Australia to take account of the issues above is that of narrative learning. Narrative can be defined in a somewhat restricted way as storytelling for informal learning, or the more formal construction of meaning from personal experience. It can be incorporated into various subjects, or form the basis of an entire curriculum. Narrative is seen to be supportive of Indigenous knowing, given it is language-rich, springs from

community activity and interest, and enables a consensus on meaning to be reached. As personal narrative is built, it can interact with different points of view from outside the immediate experience of the group, such as from the literature, or from other groups in different locations.

Based on the inquiry-learning ideas of John Dewey (McDermott, 1981), one form of narrative involves three dimensions of social and individual activity. These can be described as looking backwards/looking forwards, looking inwards/looking outwards and looking above/looking below. As shown in the diagram below, participants develop a sense of community as they reflect on what has gone before and what might happen in the future. They look inwards to themselves to consider their personal thoughts and outwards to the ideas of others. They look to the sky for the culture and tradition of their community and below to the earth for connections with the landscape. This is a process of clarifying one's personal viewpoint and developing proposals for the change and improvement of practice.

DIMENSIONS OF NARRATIVE



The process of narrative can take place over a period of weeks or longer depending on the circumstances, and involve the compilation of artefacts as evidence of learning in a student portfolio. Discussion of experience and artefacts continues and can refer to notes, photographs, articles, models, diary entries, painting, music, oral stories, posters, computer programs and ceremony, indeed any item and activity that relates to the student's experience and learning. Within a school curriculum or subject, students can negotiate a particular project or theme and how to construct a narrative around that theme. The starting point is the student's own community, cultural experience and discussion of items as they are collected in the portfolio.

As the process continues, and with the assistance of the teacher, key ideas are identified for ongoing consideration and investigation. Issues arising from individual

narratives are agreed as being significant and are summarised, with further evidence being collected regarding them if possible. A project on geometry for example might involve photographs of the land, rivers and plants from the local country and stories about particular aspects such as a hill or swamp. It is the teacher's role to introduce other and challenging ideas from a range of sources when appropriate. For school subjects that may normally have a considerable amount of specified content, agreement will need to be reached on the main ideas and outcomes that will be monitored throughout the study so that the content covered can be clearly defined.

Over time, the portfolio process results in exemplars of Indigenous knowledge being identified and being accepted by community members and elders as being accurate for display and consideration. As they accumulate, exemplars form the main structure of the curriculum and allow mapping of ideas across cultures. In this way, the process of narrative inquiry begins with the culture of the student and local community and builds connections with the dominant knowledge as reflected in the regular school curriculum. Across the curriculum, the normal process of imposing non-Indigenous knowledge on Indigenous children is inverted, with respect and recognition of the Indigenous child's culture forming the learning context and starting point.

ENDNOTE

This article is based on material from the book *Narrative Life: Democratic curriculum and Indigenous learning* by Neil Hooley, Springer Press, 2009.

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Improving
Teaching and Learning through Instructional Rounds

LEE TEITEL

Principal Randall Lewis stood at the front of the school library, where members of his district's instructional rounds network had gathered for coffee, muffins and conversation before the official start of the day's visit. "Welcome to Jefferson Middle School," he said. "We're excited to have you here today to help us with our problem of practice. We're also a little nervous, but that's okay. I've told the teachers that this is about my learning and the network's learning, and that we're going to get lots of good information from having so many eyes and ears in our classrooms."

Randall described the "problem of practice" on which he and the teachers had asked the visitors to focus: "Last spring, we rolled out a new literacy initiative that required a radical shift in teaching strategies for many of our teachers. A year later, we're trying to understand what we've learned and what we haven't, and whether it's translating into different kinds of learning for students." As participants greeted the other members of their observation team and gathered maps and papers for notes, there was a buzz of anticipation, much like a group of scientists about to embark on fieldwork for data collection.

RANDALL LEWIS AND his colleagues are about to spend the day doing something that most educators have never done: look at classroom instruction in a focused, systematic, purposeful and collective way. Along with other principals, teachers, union leaders and central office personnel, Randall is learning about improving instructional practice by participating in instructional rounds, an idea adapted from the medical rounds model that doctors use (see "Rx for a Profession", **www.hepg.org/hel/article/304**). A small but growing number of educators are using instructional rounds to look closely at what is happening in their schools' classrooms and to work together systematically to try to provide high-quality teaching and learning for all their children.

These teachers and school, district and union leaders work in networks with one another and in consultation with our team of faculty and students at the Harvard Graduate School of Education. They represent all types of educators: networks of superintendents in Connecticut and Iowa, principals in Massachusetts, and mixed teams (superintendents, chief academic officers, union leaders, teachers and principals) in Ohio. They spend much of their time in classrooms, looking at instruction in fine detail. They learn to talk in new ways with each other about what they see, replacing vague or judgmental generalisations ("She did a great job of transitioning from the whole-class lesson to independent work time") with precise and non-evaluative language ("At the end of the lesson, the teacher asked students what materials they needed to get for their upcoming independent work. She took a few responses and released students to go to their desks four at a time").

Unlike many educators who call for "increased rigour" or "critical thinking skills" with only a vague idea of what these terms mean, network members work together to develop detailed lists of what those abstract ideas should look like in real classrooms. They come to agreement on what teachers and students would be saying and doing if critical thinking skills were being demonstrated, or what students would be working on if their tasks were really rigorous. And when they don't see these signs of critical thinking or rigour, they don't blame teachers, students, parents or other external factors. Instead they look within the school and district to suggest new and powerful ways educators can work together to achieve the student-learning outcomes they desire.

GETTING STARTED WITH ROUNDS

This focused and purposeful work takes some getting used to. Our team at HGSE frames the rounds work in four steps. Before hosting one of the network's monthly visits, the host team identifies a problem of practice on which they ask members of the network to focus during classroom observations. The **problem of practice** is an instructional problem that the host team wants to solve in order to improve student learning. At the Jefferson School, Randall and his staff had spent a year's worth of professional development trying to weave literacy strategies into their classrooms and were wondering why students didn't seem to be benefiting from them.

The problem of practice is shared with the visitors at the start of the day and helps frame what is at the heart of any visit — **observation of practice**. Typically, groups

of four or five visitors will observe in five or six classrooms for about 20 minutes each. The host site selects the classrooms to reflect the problem of practice. Because Jefferson's literacy strategies were supposed to be embedded in all classes, the visits covered a wide range of classrooms and grades. In another setting, a focus on mathematics might bring visitors to a narrower swath of classes. The observers are guided by the host school's problem of practice. They learn to take careful descriptive notes and to pay special attention to students and the tasks they are doing — not just what students are being *asked* to do, but what they are *actually* doing. At Jefferson, the observers were given a one-page summary of 14 literacy strategies that teachers had been trained to use and were asked to look for evidence and patterns of student use of these strategies.

The third step of the rounds process is the **observation debrief**, in which participants sift through the evidence they collected together. There are three stages in the debrief process: description, analysis and prediction. The *description* stage keeps the focus on a factual description of what visitors actually saw — not their reactions, judgments or inferences. Only after sharing their observations and agreeing on a fine-grained, detailed description of what they saw does the group go on to the *analysis* stage of the debrief, looking for patterns within and across the classrooms they observed.

Groups then build on these patterns to move to the *predictive* stage of the debrief, where the goal is to connect teaching and learning. Participants ask themselves, "If you were a student at this school and you did everything you were expected to do, what would you know and be able to do?" By linking the task and the teacher's instruction directly to student learning, network members tackle the central question, "What causes the learning we want to see?" What specific teaching moves, what kinds of tasks, what forms of student engagement lead to powerful learning for students? This process ultimately helps identify potential areas for improvement and offers clues about how these areas could be improved, including the specific strategies and techniques that teachers could use and what the school or district could do to support them. Taken cumulatively, these debrief practices allow participants to describe the specific behaviours and structures they see that cause, enable or at times constrain learning.

At Jefferson, the patterns that emerged in the analysis section of the debrief were clear and quite consistent across the dozens of classrooms visited. Visitors saw the teacher use one or more of the literacy strategies, but they saw almost no independent student use of the strategies. This led to the prediction that students in these classes would be able to follow directions in using specific literacy strategies *when asked to do so by their teacher*.

The final step of the rounds process is identifying the next level of work, when network members think together about what kinds of resources and supports teachers and administrators would need in order to move instruction to the next level. Here again, the more specific and precise the suggestions, the more helpful they are. At Jefferson, the visitors suggested that the school be more explicit with students about

the goal of having them use these strategies in their own reading, writing and thinking. Concrete suggestions included giving students a version of the one-page summary of 14 literacy strategies and having them track their own use of the strategies, combined with teaching students about meta-cognition and making explicit to students and teachers alike that the goal was that students, not just teachers, use the strategies.

ACCELERATING INSTRUCTIONAL IMPROVEMENT

Our goal in doing instructional rounds work is to help schools and districts develop effective and powerful teaching and learning on a large scale, not just isolated pockets of good teaching in the midst of mediocrity. Accordingly, the network's suggestions for the next level of work are not about "fixing" any one teacher or group of teachers. They are about developing clarity, about good instructional practice, and about the leadership and organisational practices needed to support this kind of instruction at scale. Suggestions for the next level of work are intended more for administrators and other leaders than for individual teachers.

People often ask us, "Will doing rounds lead to an increase in student learning? Will it raise test scores?" The short answer is: by itself, no. Although the rounds process is not a silver bullet that will single-handedly lead to better test scores or increased learning for students, it is a powerful accelerant of school and district improvement efforts. Its focus on what goes on in classrooms anchors improvement efforts in the instructional core — the complex relationships among teachers, students and content. The rounds process provides a key source of data and a powerful feedback loop to tell educators whether their systemic improvement efforts are actually reaching students. And the collaborative learning approach used in rounds networks creates norms that support adult learning and make organisational learning possible.

As one deputy superintendent from Ohio puts it: "The 'next level of work' has become a very common phrase now in our district conversation. We are all thinking more deeply about the supports. Are the supports in place to help [teachers and students] make the transition [to the next level]? Rounds is helping give us that first-hand data and getting us to think more deeply about it."

FOOTNOTE

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A confluence of changes

ANDREW DOUCH

WE ARE NOW at the confluence of two streams of cultural and technological change that have been converging for some years. Firstly there is an increasing need for the widespread integration of social media across our curriculum in order to engage our post-primary students. Secondly the level of technical ability required to use technologies that half a decade ago were the preserve of IT graduates and the "computer savvy" has decreased and these tools are now so straightforward to learn that any teacher who sees the value in their use can master them.

ADOPTING SOCIAL MEDIA

There is now a need to infuse social media into the school curriculum in order to stay relevant to the lives of our students. In the last decade, informal communication between young people (and many adults) has been revolutionised by social media, including instant messaging, podcasting, blogging, microblogging, Web 2.0 services, wikis and mobile devices such as iPods and mobile phones that give instant access to information and people anytime, anywhere. Schools have largely failed to respond appropriately to these fundamental societal changes.

Podcasting, vodcasting, blogging, discussion forums, chat, YouTube, social bookmarking, social networking and the use of mobile phones mean that our students are more connected to each other and to the world than has ever before been the case. Secondary students now have access to the details of the human genome, up-to-date photographs taken by NASA space probes, and can watch live web-cams of thousands of places in the world.

But it is not just access to information that makes this revolution remarkable; our students are participating by uploading their own data such as blogs, podcasts, videos, weather observations and reviews of products. It is that interactivity that defines Web 2.0.

In this context, the role of teacher is inevitably changing. Where a teacher was once like a tap, controlling the flow of information to students, able to hold back some information while channelling other information to students, that is no longer the case. Now teachers stand with their students in a river of information. Teachers who still see their value as providers of information within a classroom, in five periods a week, are rapidly becoming redundant.

DEMOCRATISATION OF EDUCATION

Furthermore, as an increasing number of teachers produce quality podcasts, screencasts and vodcasts, set up nings, forums and other online learning communities, and make these available to anyone who wants to learn, students will have an ever-diversifying smorgasbord of learning communities to choose to belong to, outside the strictures of their school timetable. And this democratisation is crossing the traditional boundaries between not only one school and the next, but between public and private schools, school districts and even countries.

My own biology podcast during the Term 3 holidays was downloaded by more than 2000 students from 12 different countries.

At the moment we are only beginning to see this happen. But I think it is inevitable. And consider this: the most popular teachers in this scenario may not necessarily even be practicing teachers! They may be university students or retired teachers. Through its Maths Online project, McDonald's has stepped up (where education departments haven't) to offer free maths tuition to every secondary school student. Will going to class be relevant at all for students in this future? If the classroom teacher still sees him or herself as the font of knowledge for those students, then the answer is no.

There has never been a more important time for teachers to ask themselves, "What value am I adding to my students?" and even, "What is my role as a teacher?" Nor has there been a better time for schools to question the current models of attendance and timetabling.

WHY HAVE SCHOOLS FAILED TO RESPOND?

Lack of time and professional development: My experience is that teachers become users of technology when they have the time to experiment with it and support in the

form of PD. Over the past decade, as more and more computers have found their way into Victorian classrooms, there has been a lack of PD for teachers, and a lack of time given to teachers to explore the use of these technologies. As a result, in most cases, where teachers have integrated computers into their teaching and learning, it seems they have simply replaced the tools they used to use with new digital tools that use the same metaphor.

For example, many teachers take their students to a computer lab to do Internet research or to complete a webquest. These may be effective learning activities, but they are not particularly novel. They are simply using computers to do what teachers have always had students do. Likewise, interactive whiteboards (IWBs) allow teachers to present information that is more likely to engage students than if it were written on a conventional whiteboard, because they can incorporate multimedia, perform live Internet searches and so-on. But teachers have always sought to engage their students using interesting visual aids to supplement text-based learning. All too often, teachers with IWBs are still doing what they have always done — standing in front of the room, controlling the flow of information to a group of 25 students who have been timetabled to be together. The IWB makes the flow of information more efficient, more engaging, perhaps, but a teacher using an IWB in this way is not doing anything fundamentally different to what teachers did in the 20th Century.

In contrast, social media presents the opportunity, indeed the necessity for a radical re-thinking of what a classroom is and who comprises a class. It invites such fundamental questions as when and how class members should attend class — and does it need to be physically? During the school day?

Fear: Another reason for the lack of adoption of emerging technologies is the fear that students will use them inappropriately either to waste time or, worse, for nefarious purposes. These are real issues, but it is this author's opinion that we should be finding solutions to the inappropriate use of technologies rather than banning the technologies themselves.

As more and more students adopted the use of iPods and mobile phones in their personal lives, many schools moved swiftly to ban these devices. Similarly, chat and instant messaging services and social networking sites are still typically blocked in Victorian Education Department schools, as are Web 2.0 sites such as YouTube and photo-sharing site Flickr.

These prohibitions fail to protect our students from the "evils" of the Internet, of course, as they have ready access at home to all the Internet has to offer. Instead, these bans are a logical response to our fear of — or at least reluctance to embrace — the challenge of reimagining our roles as educators in a world where a 12-year-old can edit a Wikipedia entry or publish a video.

That role needs to shift toward influencing the learning behaviour of students, not controlling the flow of information. Schools don't really have a choice about whether or not their students use Facebook, MSN or YouTube. The only choice we have is whether to ignore the social revolution that is Web 2.0 and leave our students to their

own devices, or accept the charge that our vocation gives us and participate with our students, influencing their use of these facilities so that they are guided in the safe and beneficial use of technologies that are morally neutral.

LESS TECHNICAL COMPETENCE REQUIRED

Since I began podcasting, screencasting and using tools such as discussion forums just four years ago, the tools themselves have become much simpler to use.

A good analogy for this change can be found in the automotive industry. Initially, to own and drive a car, one needed a fair degree of mechanical savvy. But nowadays, a typical car owner does not even think of the mechanics of driving. And even the most mechanically illiterate person can drive a car. In the 21st century, we don't think about the car itself, but instead we think about where we are going and what we are going to do when we get there.

A similar change has happened with the tools required for podcasting, vodcasting, screencasting and creation of websites, nings, wikis, blogs and so-on. We don't need teachers who are technologically literate any more than we need drivers who are mechanically adept. What we need in the 21st century are teachers who are willing to question their 20th century paradigms and look for new ways of interacting with their students' minds.

Example 1 — Podcast hosting: When I started making podcasts four years ago, in order to distribute my podcast via RSS I had to put the podcast on my school server and then write an RSS enclosure for it. I had no idea how to do that — and it took me a long time, more time than most teachers would be willing to spend. But now sites such as **www.podomatic.com** do all that work for you. All one needs to do is create an account, and upload the recorded audio file. The RSS enclosure is automatically generated. The user does not even need to know what an RSS enclosure is!

Example 2. Podcast recording: Four years ago, I had to find out about microphones and mixers and learn how to encode a WAV file as an MP3. But microphones such as the inexpensive Easi-speak available from **www.edsoft.com.au** deliver surprisingly good audio quality, recorded directly as MP3. The device has a USB plug, enabling one to plug the microphone directly into any computer and simply copy the recording from the microphone — as one would do if it were on a USB memory stick.

MY EXPERIENCE

Between 2004 and 2005 I worked on a website for my Year 12 biology class. In the last quarter of 2005 I introduced a podcast. In 2006 I emphasised to my class that the website and podcast were no longer "optional extra resources" but were fundamental parts of the course delivery, and that actual class time was now to be a tutorial. This was emphasised even more strongly in 2007, and I also introduced the use of MSN messenger as a communication tool for class members outside of class time.

The following is an account of each of these tools, the use to which each was put, and the benefits that we have seen from its use.

Podcasting: A podcast is an audio recording of a lesson, which replaces lecture-style explanations of concepts in class time. While it is still essentially a lecture, it has numerous advantages. Students have the flexibility to choose when and for how long they listen. They can stop and start the lesson if they find 50 minutes too long to listen in one sitting. They are able to listen to the podcast during "down time" when they are walking to school, washing the dishes, or driving. They are able to re-listen as many times as they want to understand the concepts being explained. They can re-listen later in the course for revision. If they are listening and their mind wanders, they can rewind just that part and listen to it again. Students who are absent from school due to illness do not have to miss the teacher's explanation of essential concepts. None of these options are available to students if the information is presented in a traditional class, during class time.

Most importantly, teaching via a podcast saves actual class time for activities that are more engaging or interpersonal and truly require face-to-face interaction. Moreover they allow the flexibility to focus in class on only the most important, or difficult-to-understand aspects of a topic rather than having to cover the whole topic in class time.

Another significant advantage of teaching via a podcast is that it saves teacher time! VCE teachers spend a lot of out-of-class time re-explaining concepts that were taught in class — often to one student at a time. In contrast I find that students will go back and listen to the podcast again when they need to be refreshed. This frees up teacher time and thereby allows the teacher more preparation time.

The podcast is accessible to students in other schools, too, because it is published via an RSS feed over the Internet. My own podcast has a listening audience of over 3000 students. Many from other schools interact with my students and me by email, or by using their mobile phone to send voicemail which is played on the podcast for the benefit of everyone.

Screencasting: A screencast is a recording of audio as well as what is happening on the screen. There are a number of tools that can be used to produce a screencast, from the free Jing to the full-featured Camtasia Studio or Screenflow.

I use Screenflow to record explanations of concepts that require visuals, and I upload these to YouTube (see for example **tinyurl.com/ybbcd9n**). A screencast is more appropriate for some explanations such as maths or genetics, but does not replace the niche that is filled by the podcast, since a student really needs to be sitting down at a computer to watch a screencast. Still, it has many of the advantages offered by a podcast (apart from the portability).

Discussion board: On the discussion board, conversation about biology continues asynchronously around the clock. Students post questions at any time, and receive answers from peers, past students (several who still participate, now as mentors) or a teacher. This facilitates sharing between classes, thereby eroding the walls between "our class" and "their class". For many students the ability to ask a question at any time, anywhere, and know that when they return to the discussion board there will be an answer, is very reassuring.

The provision of a class discussion board also saves teacher time, as a student who does not understand something will ask a question on the discussion board. Then the teacher's answer can benefit all students, rather than just the one who asked. This is especially true of questions relating to assessment. There are always some students who ask questions about upcoming assessment tasks. In the past, such a question gave the asker an advantage over other students who were not privy to the conversation. But if all questions about assessment are posted on the discussion board, then all students have access to both the question and the answer. This is seen as being fair.

MSN: Most students already have effective communication networks using MSN instant messaging. I have taken advantage of this connectedness to provide students with a convenient avenue to ask for extra help, for example, much as they might otherwise do by coming to see the teacher after class. The convenience of this opportunity, and the non-threatening forum it provides has facilitated more candid feedback from students and greater willingness to seek help.

We also use MSN for group study sessions online, which students find very engaging.

OUTCOMES

If students did not learn better as a result of infusing ICT into teaching and learning, then there would be no reason for asserting that we need to change our paradigms. But I believe there is evidence that shows students learn more effectively and are more engaged with their learning when they are learning using social media. I have evaluated my use of podcasting, screencasting, a Sharepoint website and discussion forum, a GoogleGroup, MSN and mobile phones in two main ways: objectively, in terms of performance on VCE examinations and subjectively, in terms of student engagement.

PERFORMANCE ON VCE EXAMINATIONS

VCE median study score data: The median study score for this class in 2007 and 2008 was 36 (VCAA 2009). This is surprisingly good result for a Government school in a non-affluent neighbourhood. On the final exam, 50% of the class achieved A or A+. More importantly, perhaps when compared to like schools, there was a statistically significant difference between this class and other classes.

VCEDS adjusted study score data: Adjusted average study score data indicates that this class performed six study score points (12%) higher than expected, considering the students which comprised the class. A similar result was achieved in 2006, indicating that these results may be replicable.

It is also interesting to note that in 2007 every student in the class performed higher than their VCAA predicted score for biology. In 2008 all but two performed higher than predicted.

STUDENT ENGAGEMENT

The current trend of student disengagement with school runs contrary to their phenomenal engagement with social networking, iPods and mobile phones. Most adolescents engage with technologies that allow them to communicate with others anytime, anywhere. Adopting these technologies as the primary mode of communication between class members taps into the desires and expectations of their generation. This innovation is successful because it employs communication tools that make school relevant and engaging. It is meeting them on their own turf.

It cooperates with students' perceived need for connectedness via the Internet, but provides them with an educational platform on which to interact. In this way it establishes a genuine learning community of students and teachers, grouped, not by geography, but by interest.

In 19 years of teaching, I have not seen students so passionate about learning as in the past two years. Some students still participate in the learning community more than 12 months after graduating. I have collected ample anecdotal evidence that students learning this way view class as an experience rather than a chore. This sentiment is typified by Lachlan, who wrote:

> *I have never been in such an environment. In all honesty, being able to be a part of something as spectacular as last year has changed me in a very positive way. My complete outlook on life has changed and for that I thank you … thank you for letting me share the experience and making it so wonderful to be a part of.*

Helping Teachers to Recognise Abilities

THERESE PIERCE, PATRICK GRIFFIN, KERRY WOODS, BERNADETTE COLES-JANESS AND EILEEN ROBERTS

AS A RESULT of the need for assistance by teachers, directions taken by the Federal Government, and a Senate enquiry into education of students with additional learning needs (Senate Employment, Workplace Relations and Education References Committee, 2002), the University of Melbourne worked with the Victorian Department of Education and Early Childhood Development (DEECD) to develop a framework for monitoring the learning development of students with additional needs (SWANS). Three areas of development were undertaken. These were *communication and literacy*, *social and interpersonal* and *emotional and cognitive* development.

Australian schools are required to enrol students with a range of additional learning needs (Senate Committee, 2002), and to ensure equity of opportunity for all students. It is common to regard school and social reform in terms of additional support staff and resources. This is endorsed by the typical use of the "inclusion" concept and its increased exposure in the media pertinent to students with disabilities and their role in schools and community. There are also school programs endorsing an accredited alternative learning pathway such as Victoria's Vocational Certificate of Applied Learning (VCAL) that is a major milestone for many students, especially those with disabilities, enabling them to achieve with their non-disabled peers.

In mainstream schools, teachers can typically expect to have at least one student with additional needs in their class each year. However, many teachers have little formal training in working with students with additional needs (Senate Committee,

2002), and struggle to identify appropriate educational goals and teaching strategies for these students. Likewise in specialised school settings, not all students with additional needs are included in the assessment of literacy and numeracy. Teachers often argue that the test items are not appropriate for students with lower reading and writing skills due to the nature of their disabilities. The university project set out to help teachers evaluate those students' learning outcomes. The need to provide teachers with guidance about appropriate developmental goals and standards and effective teaching strategies for students with a range of additional needs was evident.

The innovative study, led by the Assessment Research Centre at the University of Melbourne, led to the emergence of developmental learning frameworks for students with additional needs. It was funded by an Australian Research Council linkage grant and supported by the DEECD and the Centre for Advanced Assessment and Therapy Services. This research, called the SWANS Project, was designed to help teachers in mainstream and specialist schools to monitor and report learning outcomes for individual students. The methodology was developed over a 20-year period, evolving from the original literacy and numeracy profiles of the 1980s.

The study is embedded in a developmental approach to improving student outcomes based on the seminal work of Vygotsky (1974). It offers support to students with additional needs, their families and teachers (in foundational learning areas such as literacy, communication, social processes, emotional self-management, and intrapersonal skills). Developmental progress can be mapped for these students in terms of abilities, rather than disabilities, and linked to successful teaching and learning strategies. Provision of better information to teachers about student learning progress and appropriate teaching programs is expected to lead to more rapid progress for students towards achieving their potential.

During the development of the frameworks, a total of 55 persons, representing researchers, experienced teachers and specialists, participated in the workshops, thus ensuring that the materials were grounded in both theory and practice of the classroom. The purpose of the workshops was to draft and review statements of capabilities for defining developmental frameworks in three learning domains:

1. Communication and literacy — verbal and non-verbal, reading and writing.
2. Intrapersonal development — attention, memory, task-based skills and emotional self-management.
3. Interpersonal processes — social interaction, social responsibility and transcending social difficulties.

Together, these learning domains provide a comprehensive picture of a student's strengths and abilities. The assessment frameworks were designed to capture important indicators of a student's ability and understanding that can be readily observed by teachers in the context of the school and classroom interactions.

Experienced teachers contributed to the interpretation of levels and content in relation to the learning domains relevant to teaching students with additional learning needs. This participation provided greater insight and ownership of the assessment process and its link to reflective teaching practice and analysis of student learning.

There is a positive shift in recognising students' abilities and skills in each of the three learning pathways, rather than focusing on students' disabilities. This is also a major shift in teaching focus and attitude when assessing and working with students with additional learning needs.

The SWANs assessments were formulated, designed and trialled in Victorian schools. The outcomes of the assessment process during the period 2007–2008 were as follows:

- 2007: Assessments of 1,700 students from the age of 3 years to 18 years and over (by 600 teachers in 77 schools in Victoria — including 21 mainstream schools and 56 specialist schools) were used to check assessment items and to produce shorter versions of materials
- 2008: Assessments of almost 700 students (by 70 teams of teachers in 60 schools in Victoria) were used to describe expected learning pathways and provide feedback on students.

The next phase of the research project in 2009–10 is focusing on teachers' ability to use the assessment materials to design and implement teaching programs for their students. It will examine the impact on student outcomes of the use of these materials by teachers working in teams to monitor student progress and target learning programs to the needs of students. It focuses on a team-based protocol, which provides opportunities for teachers to reflect on their teaching decisions and their ability to use the assessment materials to frame their communication about student learning.

The approach highlights the importance of evidence-based decision-making processes when assessing students' learning outcomes — using a competency-based model because they imply investigating changes in performance described in absolute terms that describe what the student *has learned,* what they are *ready to learn* and *where they are heading* in terms of their development. The project emphasises that teachers need to know how to use student data to drive the decision making processes. To support this, the project uses professional learning teams (PLT) of teachers as a base to address and discuss the theoretical and practical approaches to analysis, intervention and reflection. It provides a powerful and pervasive influence on the teaching and learning program in a school. The intent of a PLT is to assist teachers in making decisions that are evidence-based regarding students learning outcomes.

The approach of the PLTs is adjusted to provide for teachers working with SWANS with an opportunity to:

- Describe transitions and transformations in student learning
- Use teacher observations of students in everyday classroom and school context
- Determine what students can do, not how far behind they are.

The SWANS assessments help to recognise students' abilities, not their disabilities.

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Education under Rudd

INTERVIEW BY JOHN GRAHAM

ALAN REID IS one of Australia's leading authorities on curriculum and education reform. In this interview with John Graham he reflects on the first 18 months of Kevin Rudd's much-heralded Education Revolution.

JG: Do you believe there has been an improvement in the situation of school education since the election of the Rudd Government at the end of 2007?

AR: On balance, there has been an improvement. Education is now at the centre of national policy; there has been an overall increase in education funding; and the Government is clearly signalling an intention to promote an equity agenda. However, I think they have over-reached in describing it as a "revolution" — I can't see that it constitutes a fundamental change to policy and practice in education.

JG: What are the positives of the Rudd Government's "Education Revolution"?

AR: The Rudd Labor Government has certainly begun a new and more cooperative phase in national approaches to education policy. It has fostered cooperation with the states and territories through the Council of Australian Governments (CoAG) and the Ministerial Council on Education, Training and Youth Affairs (MCEETYA). This approach is in stark contrast to that of the previous government, which tried to achieve a national approach by coercing the states to sign up for certain agendas — such as having fully functioning flagpoles in every school and having values posters hung in every school foyer — or lose their federal funding. In my view, collaborative rather than coercive approaches to national policy on school education are far more likely to succeed in the long term — although it will be interesting to see if the collaboration remains intact once the states and territories change their political complexions.

Another positive is the amount of money that is going to schools through the Building the Education Revolution, the Digital Education Revolution and the various national partnership programs. While there have been some hiccups in the roll-out of these programs, it would be churlish not to acknowledge the positive effects this expenditure is having by bringing Australia closer to international benchmarks in expenditure on capital improvements for schools. Mind you, there is still a fair way to go to catch up.

Third and most importantly, the Rudd Government has returned equity to the centre of education policy making. It is taking seriously the fact that too many students from "disadvantaged" backgrounds have for too long been short-changed by the education system. For example, it has committed itself to such priorities as lifting retention rates to Year 12 or equivalent to 90% by 2020; sharply increasing rates of participation in higher education for students from "disadvantaged" backgrounds; and raising literacy and numeracy outcomes, especially for Indigenous students, where it has a target of halving the attainment gap in Year 12 by 2020. However I am worried that some of the Government's strategies may be counterproductive to its equity aspirations.

JG: What are the negatives?

AR: Although the Melbourne Declaration on Educational Goals for Young Australians contains a more expansive view of the purposes of education, the public rhetoric of the Rudd Government and many of its strategies limit the vision of the educational revolution to seeing students as potential human capital to be enlisted in the cause of economic recovery and growth. For example, education is not a stand-alone item in what is known as the CoAG agenda — it is listed under the priority of productivity. Such a stance

marginalises the cultural, social, political and relational aspects of education. It understands students as potential workers and consumers, rather than as local and global citizens. It is hardly revolutionary.

I also have some significant concerns about the recurrent funding model for schools, the developments so far with the national curriculum and the so-called "transparent accountability" agenda, but you have signalled that you are going to ask questions about these later, so I'll leave them at this stage.

JG: What's missing?

AR: In my view, the national education agenda is too disparate, with its component parts being disconnected or at least inconsistent, the one with the other. For example, the BER is really an economic strategy, rather than educational one. There has been no attempt to make some of the obvious links between new buildings and infrastructure such as computers with a coherent approach to pedagogy and the national curriculum. There is an urgent need to develop an overall narrative for the "revolution" which draws on the best research evidence and practice and involves the profession more fully in its development. This may help to iron out some of the gaps between aspirations and the strategies.

JG: The Rudd Government appears to have opted for a continuation of the Coalition Government's view of public education as just the government provider of education alongside the various non-government providers, rather than a system deserving priority because it represents a set of educational and social principles worthy of support. What's your view about the situation of public education under the Rudd Government?

AR: I am deeply concerned about the fact that there has been no change to the ways in which recurrent funding is calculated or distributed to the various education sectors. Essentially the Government has maintained all of the anomalies and inequities in the current approach to recurrent funding, including the Howard-initiated socio-economic status (SES) measure and its associated guarantees that no "private" school will be worse off under the system than it was before the introduction of the SES. This has ensured that many wealthy private schools are getting far more than they would under a criterion of "need", and many of these schools acknowledge this. Although Minister Gillard has foreshadowed that there will be a review in 2010 that will try to develop an approach for the next funding triennium starting in 2012, the Government has so far squibbed making the hard decisions on this issue.

JG: How do we strengthen the role of public schools?

AR: First, there is an urgent need for a national debate about funding purposes, priorities and levels in order to arrive at a comprehensive

national approach to recurrent funding that acknowledges the principle of providing universal access to quality schooling for *all* students. In my view we need to return to a needs-based funding model which recognises that some schools do a disproportionate amount of the heavy lifting by taking on the most challenging and difficult-to-teach students. Second, we need to focus more on the public purposes of education and ensure that schools which receive public funding are organised and operated in such a way that they do not work against, ignore or marginalise these public purposes.

JG: What's your perspective on the national "transparency" agenda?

AR: This is the Achilles heel of the education revolution. It unpicks many of the positives and is counterproductive to its equity aims. For Julia Gillard, "transparent accountability" means that each year ACARA, the new national curriculum and assessment authority, will publish an online profile of the results of the national literacy and numeracy tests for each school, along with other information such as numbers of teachers and attendance and retention rates.

This information will enable parents and the general public to look at the performance of an individual school, compare the performance of schools in a defined local area, and compare the performance of "like" schools across the country. It is the capacity to compare schools that lies at the heart of the current debates.

The Minister argues that such information should be available for two reasons: to help schools and education systems identify where there are problems in order to address these; and to provide parents with information to enable them to choose between schools. Whilst the first reason may be an argument for common testing information being used to inform decision making — where the tests are diagnostic and resources are available to address the identified problems — it does not follow that the results should be publicly available.

However, the second reason does depend on making school results publicly available in a particular form and it is this that demands scrutiny. Minister Gillard rejects the idea of "simplistic" league tables and argues instead that it should be possible to compare schools around the country that have similar characteristics, such as the socio-economic status of the communities they serve. That is, the Minister recognises the dangers of undifferentiated league tables, but believes that these can be averted by comparing "like" schools.

The Minister's opposition to simplistic league tables is based on sound evidence. When testing no longer has a diagnostic purpose but instead is used to rank schools, it becomes high-stakes testing with some toxic results. There is much research evidence to show that high

stakes testing and league tables have not worked elsewhere and are being questioned or abandoned in many countries.

South Australia's former CEO of Education, Dr Ken Boston, recently used his experience in England to warn against adopting a high-stakes testing approach. He argues that league tables have narrowed the curriculum as teachers are urged to teach for the test, damaging the breadth and quality of school education.

American research has shown how high-stakes testing with associated league tables has stigmatised whole schools — invariably those in the most disadvantaged communities; and caused schools to manipulate data and to hide problems as they fight to stay out of the bottom half of the table.

JG: So league tables have disastrous consequences. Does Minister Gillard's proposal to confine league tables to "like" schools address these problems?

AR: Even assuming that like schools can be identified — and there are plenty of concerns about the technical difficulties of doing so — the argument does not stack up.

For a start, under the Gillard proposal, when parents compare schools in a local area, they will be able to compare all schools, not just like schools. That is, there will be easily accessible local league tables. Surely if national league tables are bad policy, then so too are local league tables — perhaps even more so given that most parents will be choosing schools within their local area rather than elsewhere in the state or interstate.

The big problem, however, is that no matter how benign the intentions of the government, once test information is provided publicly it can be used by anyone to construct across-the-board league tables. The daily papers in Tasmania and Queensland did just that this year and the damage to some school communities in those states is still being counted.

So, in my view, Julia Gillard's proposal to sidestep the dangers of league tables by comparing like schools will run into the very problems that she is seeking to avoid. Educators need to continue to resist this policy direction.

One of the most frustrating aspects of this debate has been where those calling for the publication of test data accuse people who oppose league tables of not being interested in accountability or of wanting to hide something. This is nonsense.

We need to make the point that opposition to league tables of schools is not an argument against accountability. It is an argument against forms of accountability that reduce quality in schools and widen inequality between them. Rather than attacking the motives of those who oppose league tables, the debate should centre upon the research evidence about the consequences of adopting league tables as policy.

In my view there are more

powerful approaches to accountability available. These are based on a belief in the professionalism of teachers, diagnostic testing, adequate resourcing, rich sets of publicly available data about schools and a focus on developing rigorous system-wide processes of school self-review.

It is no coincidence that these are the features of those countries, such as New Zealand and Finland, which are considered on a number of indicators to have high-quality education systems. Why not look to these countries, rather than follow the failed policies of countries such as the US and the UK which do not do as well on the same indicators?

JG: There seems to be a contradiction in my mind between the Federal Government's espousal of market-based transparency and its policies of social inclusion. Can social/educational disadvantage be effectively addressed within the context of this type of education market?

AR: Yes, there is a real contradiction between market-based accountability and equity. At the heart of the Rudd Government's approach to accountability is competition — the belief that the best way to encourage quality is to get individuals and institutions to compete for custom, by providing "consumers" with comparative information about schools. As Kevin Rudd told the national press club last year, "… if some (parents) walk with their feet that's exactly what the system is designed to do."

This is at odds with the claim that the approach is designed to address disadvantage. Extending the education market and improving equity are incompatible polices. Education markets lead to greater segregation and exacerbate achievement gaps in schooling. They provide an illusory choice for many, and inevitably residualise public education by leaving public schools with the largest numbers of students in need of special attention, and thus to do the hard work on behalf of all schools. I can't work out why the Prime Minister is critical of neoliberal economic policy, but is happy to apply it to education.

JG: Are you optimistic about the development of the national curriculum from what you've seen so far?

AR: No. I am a great supporter of national approaches to curriculum and I had hoped that this time around we could develop a national curriculum that really met the challenges of the 21st century. Unfortunately, on the basis of the document that outlines the shape of the curriculum, there is nothing about which one can get excited.

JG: What are your reservations about it?

AR: There are many, so I'll just list a few. First, the lack of vision. There is a serious disconnect between the proposed curriculum and the stated aims and goals of Australian

schooling. Instead of a forward-looking curriculum designed to address the challenges of the future, the national curriculum will comprise four stand-alone subjects — maths, science, English and history. This is pretty much what made up the curriculum at the turn of the 20th century in most Australian colonies. Although some other subjects will be added in the following years, drip feeding subjects like this is no way to devise a curriculum for the future. Something as important as a national curriculum should be seen and planned as a whole.

Second, there are a number of serious design issues — I'll give three examples: (a) We are told that the national curriculum learning areas will "connect" with the curriculum of the states and territories, as though curriculum designs with very different conceptual bases can simply be cobbled together in this way; (b) The key documents refer to a number of generic "capabilities" and yet there is no attempt to grapple with basic questions relating to the content of these, how they might be sequenced across the curriculum or whether they are to be assessed and reported on; and (c) Despite a fleeting reference to cross-disciplinary learning, there is no attempt to explore what this means or how it might inform the development of the stand-alone subjects. I could give other examples, but these are enough to suggest that there are some serious weaknesses.

Third, I am deeply worried about the timeline. The drafts of each of the four learning areas will only be available for widespread consultation with teachers for about three months before they are published late in 2010 for implementation in 2011. In my view this is inadequate time for teachers to get their heads around these compulsory subjects and for the much-needed professional development that should accompany them. We have not had a national curriculum for the 109 years of federation — why the rush?

JG: *What is your view about the teacher quality debate which permeates media and political commentary and is found in various government policy statements?*

AR: In my view the "debate" is based on a simplistic and individualistic view about what constitutes quality teachers and teaching. The standards movement, with its mountain of dot point indicators, seems to lack a coherent philosophy about teachers' work. There is a view abroad that the best way to promote quality teaching is to get teachers to compete, and so performance and merit pay is starting to become policy commonsense. I think this tendency needs to be strongly resisted. It ignores the fact that teaching is a collegial practice. Far better to recognise that a quality school is based on the combined efforts of all, not the heroic efforts of some. In my view we should be arguing that teachers as a group are under-rewarded for the important work they do.

JG: One of the staples of the Howard Government education policy was dissatisfaction with, and pressure for reform of, teacher education. This seems to have become a CoAG position under the Rudd Government, exemplified most recently by support for the introduction of the Teach for Australia scheme. What is your view of this issue? How do you believe teacher education could be improved?

AR: We need some more detail about how Teach for Australia will work. But if it is based on the American model where the so-called "best and brightest" graduates are given six weeks' training and then put into the most disadvantaged schools, then I am deeply concerned. Such a model demeans the knowledge base of teaching as a profession, suggesting that it can be almost entirely learned on the job. It also presupposes that if a person is, for example, a star physics student then they will by definition be a good teacher. I would contest both of these propositions.

This is not to say that current models of university-based teacher education cannot be improved. They can. But I think we need to explore the possibility for better partnerships between schools and teacher education faculties, that are based on the understanding that teaching is at once both a theoretical and deeply practical practice.

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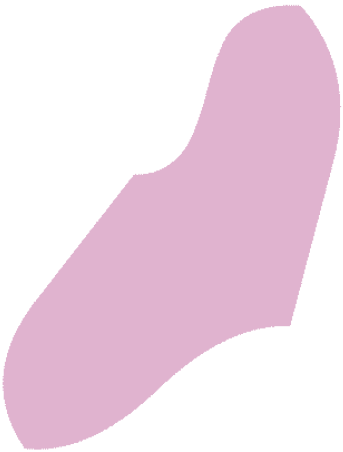
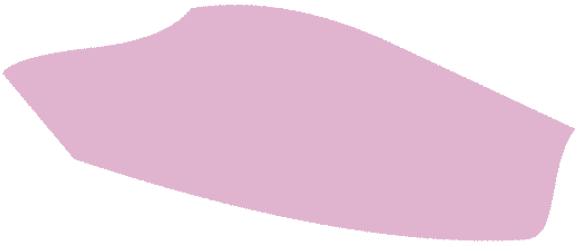
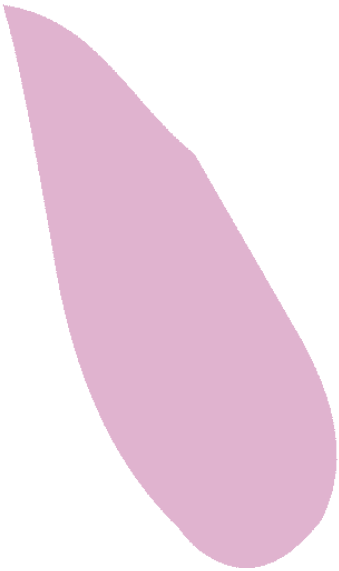

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