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POST-COMPULSORY EDUCATION

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EDITORIAL

The Entitlement to Post-compulsory Education

JOHN GRAHAM

THIS EDITION OF *Professional Voice* is the first of three which will consider and analyse issues across the learning life cycle. We have divided up learning and development into three broad stages — 0-8 or early childhood, 8-16 (the middle years), and 16-plus or youth transition — in keeping with the new framework of the Victorian Department of Education and Early Childhood Development.[1] Our approach is non-linear, starting at the end — post-compulsory education — and then, in subsequent editions, working our way from the beginning to the middle.

Post-compulsory education begins, by definition, where compulsory education ends. In Victoria, "compulsory" education (schooling) is defined in the 2006 Education and Training Reform Act as "not less than six nor more than 16 years of age". From a curriculum point of view however, the border between compulsory and post-compulsory is a lot more fluid. Courses which are typical of the post-compulsory years, such as the VCE and VCAL, are also taken by students under 16 years of age.

A further distinction can be made within post-compulsory education between additional education undertaken between the age at which the requirement for compulsory schooling ends and the attainment of a "threshold qualification", and courses which begin beyond this point. The former is usually associated with Years 11 and 12 or their equivalent. The latter covers the "tertiary" sector including university and various

vocational education and training (VET) courses. Once again the borders are porous, with VET integrated into VCAL and the VCE and adults taking the VCE with various TAFE and ACE providers.

Central to this distinction is the notion of "an entitlement" to post-compulsory education.[2] An entitlement refers both to access to a place in a course and to the funding of that course. In the first stage of post-compulsory education, young people in Victoria have guaranteed access to their nominated post-compulsory course of study in a government school. They cannot be required to pay fees for that access. Access to post-compulsory courses in non-government schools, on the other hand, is dependent upon the capacity of families to pay the compulsory fees which are levied and the school administration's willingness to provide the student with a place.

While the universal entitlement to post-compulsory schooling is carried by the government school system only, federal government funding policies over the past 12 years have favoured non-government schools (and the accompanying "dog whistle" politics of public sector denigration) and in doing so have acted to transform the positive notion of a government school entitlement into one of a "safety-net". The following table outlines the student population characteristics of each sector, reflecting the differences between the universalist government school system and the selective non-government sector.

SCHOOL SECTOR STUDENT POPULATION CHARACTERISTICS

School Sector	% students from low income households	% students from high income households	% students from one parent households	% students with household member with a bachelor degree or higher	% of people who attended sector school who completed Year 12 (2005)
Government	26	8	23	20	69
Catholic	17	16	16	39	83
Independent	16	26	11	51	91

(Source: Australian Social Trends 2006, ABS, 2003-04 national figures)

The student population differences between the sectors are reflected in differential rates of both retention to Years 11 and 12 and participation in the next stage of post-compulsory education. In 2007, 40.74 per cent of students in Years 7-10 in Victorian secondary colleges were in non-government schools. In Years 11 and 12 this percentage was 41.97 per cent. When Year 12 alone is analysed the figure rises to 43.42 per cent. The Year 7 to 12 retention rate for all Victorian schools (government and non-government) in 2007 was 80.1 per cent; when government schools are looked at separately it was 73.9 per cent.

Year 12 completion has become a minimum threshold qualification for an economy which is knowledge-based and globalised. People who complete Year 12 or its equivalent have higher rates of employment and earn higher incomes than those

who don't. The young people who are missing out on this qualification at present are concentrated in lower socio-economic groups, rural and remote communities and Indigenous Australians. These groups in turn are far more likely to attend government schools. Improving retention rates is a matter of building up resources for these young people in the public school system. Equity groups cost more to educate than those from more privileged backgrounds. They require additional support in the classroom through smaller class sizes, and greater support outside of the classroom to meet the challenges they face because of their social circumstances. The wide gap between the funding available to wealthy non-government schools with few if any equity groups and non-selective "universal" government schools needs to be closed.

The differential in retention rates between the sectors flows into the next stage of post-compulsory education. The first year intakes into Melbourne and Monash Universities in 2006 (see table below) illustrate the outcomes for the different student populations in each sector in gaining access to high prestige academic study.

SCHOOL SECTOR AND UNIVERSITY ACCESS 2006

School Sector	% of first year students at Melbourne University	% of first year students at Monash University	% of Year 12 students
Government	35	43	58
Catholic	17	24	22
Independent	48	33	20

(Source: The Age, 17/02/2007)

The 2006 Universities Australia final report on student finances compared upfront payment of HECS fees according to school sector. It found that 42.2 per cent of full-time undergraduate students who had attended an independent school paid all or part of their HECS fees upfront, compared to 29.8 per cent from government schools.

The alternative to school as a first stage post-compulsory pathway lies in the VET sector. The State Government has enshrined an in principle entitlement to this pathway in the Education Training and Reform Act. The Act states that "a student has a guaranteed place at a TAFE institute or other public training provider to the completion of Year 12 of schooling or its equivalent if the student is under 20 years of age". This "guarantee" however, is a lot less than it seems. There is no entitlement to a place in a specific course, so the access is only to a place in a TAFE course, not the course the student may want. Secondly, there is no guarantee of a fully funded place and most students taking up their guaranteed place under this principle would be required to pay fees.

This situation is further complicated by the proposed changes to TAFE and the VET system as a whole. The Victorian Government, with what appears to be support from the Federal Government, is proposing changes which will lead to the doubling of fee levels for TAFE courses and a squeeze on the viability of many of the programs young people under 20 would want to participate in.

When the second stage of post-compulsory education is looked at, the notion of an entitlement becomes greatly attenuated both in terms of access to a place and cost. Access to a place at a university is dependent upon meeting competitive academic requirements. Competition for a limited number of university places means that there is significant unmet demand. In 2008 4,500 eligible applicants missed out on a place at a Victorian university.[3] Over the period from 2001 to 2008 the numbers missing out on a place ranged from 12,400 eligible applicants in 2003 to 4,300 in 2006.

Questions of access are not only about the numbers who miss out on a university place but the differences between those who gain places compared to the population as a whole. Young people from rural and low socio-economic status (SES) backgrounds are significantly under-represented in higher education. University participation is skewed towards high SES groups living in urban locations. In 2006 while 12.83 per cent of the population is identified as coming from low SES backgrounds in urban localities, the access rate of these groups to higher education was 9.02 per cent. Rural and remote localities have 12.41 per cent of their population from low SES groups with 6.54 per cent of those groups gaining access to higher education. At the other end of the SES scale, high SES groups comprise 22.64 per cent of the population in urban areas and have an access rate of 36.82 per cent. High SES groups in rural and remote localities make up 0.78 per cent of the population with an access rate of 0.64 per cent.[4]

Participation of low SES groups in Victorian universities is lower than the national average and seems to be going down rather than up. In 2005 14.5 per cent of university students nationally came from the 25 per cent of the population with the lowest SES background. The corresponding Victorian figure was 13.5 per cent. Participation rates of people from low SES groups differ significantly across Victorian universities. In 2005 the proportion of low SES students ranged from 7.9 per cent at the University of Melbourne to 23.7 per cent at Victoria University. Between 2001 and 2005 there was a decline in the proportion of low SES students in six out of Victoria's eight main universities and also a decline in the proportion of rural students in seven out of eight.[5] Low SES groups are particularly under-represented in medicine, law and architecture and less under-represented in teacher education and agriculture.[6]

Indigenous Australians represent another group which is significantly under-represented in university education. While making up 2.4 per cent of the population, in 2006 they comprised only 1.25 per cent of commencing domestic students.[7] The Good Universities Guide for 2009 found that nationally of the 10 universities with the lowest Indigenous participation rates, six were Victorian.

Obtaining a place at a university is only half the access story. The other half is being able to afford to attend. The cost of participation grew significantly over the life of the Howard Government as individual private funding increasingly replaced public funding of higher education. In their survey of 19,000 students in 2006, Universities Australia found that the average private debt at graduation was $25,000 on top of the HECS debt. HECS charges range from $4,077 to $8,499 per year and many students graduate with a HECS debt of more than $25,000. The Universities Australia survey found that 24.4 per cent of undergraduates took out a repayable loan for their studies

— up from 10.7 per cent in 2000. Some 41.8 per cent of full-time undergraduates had a total annual income of less than $10,000.[8]

The major official funding support for students from low income households is the Commonwealth Youth Allowance. This is hard to get and inadequate in an environment of rising costs and a squeeze on rental accommodation. The present full Youth Allowance rate for 18 years and over living away from home is $355.40 per fortnight. The Melbourne Institute of Applied Economics and Social Research calculated that the poverty line for the December 2007 quarter for a single person was $748.22 per fortnight.

The major alternative pathway into the second stage of post-compulsory education is VET and, more specifically in terms of access, TAFE. Participation in TAFE for low SES and rural young people is of great importance both as an alternative to university and as a pathway to higher education. The On Track data for 2006 found that while participation in university increased with each rise in socio-economic status, participation in VET was at its highest at the lowest SES levels (see below).

DESTINATION OF VICTORIAN YEAR 12 OR EQUIVALENT COMPLETERS 2006

	Lowest SES %	Lower mid SES %	Upper mid SES %	Highest SES %	Total %
University	37.6	39.7	46.5	60.2	46.2
VET	34.7	33.2	29.4	21.5	29.7

(Source: James 2008, p29 from Teese et al 2007)

Research from the National Centre for Vocational Education Research found that participation in VET nationally was highest in low SES areas (12.7 students per 100 population) and lowest in high SES areas (8.7 per cent) with the national average at 10.8 per cent.[9] The report indicated that this difference was partly due to high participation levels from students from regions outside capital cities, which tend to be low SES areas. Students from remote (16.4 per cent) and rural (13.8 per cent) regions have significantly greater VET participation than students from non-capital metropolitan areas (10.6 per cent) and capital cities (9.5 per cent). A DEST survey in 2005 found that VET was more positively viewed as an equivalent to university by young people in rural and remote areas than those in the major cities.[10]

Data from the 2006 Census illustrates the differences in type of qualification in contrasting SES suburbs in Melbourne. In the high SES suburb of Hawthorn 60.8 per cent of the population (aged 15 and over) had a higher education qualification and 22.1 per cent had a VET qualification. In Canterbury there is a similar pattern — 59.2 per cent had a higher education qualification and 24.4 per cent had a VET qualification. In contrast, in Broadmeadows, 12.3 per cent had a higher education qualification and 38.3 per cent had a VET qualification. In Frankston North the corresponding figures were 8.0 per cent (HE) and 50.5 per cent (VET).

There is every indication that further changes will shortly roll through the halls of academe and the workshops of TAFE. There is little optimism however, that these

changes will improve access for those groups with the lowest rates of participation in the second stage of post-compulsory education. Productivity improvements through market-based mechanisms are the overlay for the changes, rather than a more socially just education system. As for the first stage of post-compulsory education, existing federal government funding mechanisms which serve to residualise public schools, will stay in place until at least 2012. In these circumstances, the notion of an entitlement to post-compulsory education appears to be a second order concern for state and federal governments.

For more about the issues in the first stage of post-compulsory education see the articles in this edition of *Professional Voice* by John Firth, Neil Hooley and Jeff Garsed. Simon Marginson (universities) and Pat Forward (VET) principally address the second stage. Alan Reid proposes a new framework for post-compulsory education as a whole and John Spierings looks at the role of post-compulsory education through the prism of climate change.

ENDNOTES

1 Department of Education and Early Childhood Development, *Blueprint Discussion Papers,* 2008

2 For a discussion of this issue see Curtain, R, *An Entitlement to Post-Compulsory Education,* NCVER, 2001.

3 Universities Australia, Report on Offers and Acceptances of Undergraduate University Places, 2008, p9.

4 James, R, *Participation and Equity; a review of participation in higher education of people from low socio-economic backgrounds and indigenous people,* Universities Australia, 2008, p24

5 DEST(now DEEWR), *Full Year Higher Education Student Data,* 2007.

6 James, 2008, p25

7 James, 2008, p43

8 Universities Australia, *Australian University Student Finances:2006 Final Report,* 2007

9 Foley P, *The Socio-Economic Status of Vocational Education and Training Students in Australia,* NCVER, 2007

10 James, 2008, p38

A Question of Priorities:

tertiary spending in a post-Howard world

SIMON MARGINSON

THE HOWARD GOVERNMENT left a mountain of unfinished and mismanaged policy business in education, training and innovation at every level from kindergarten to research. The problem for its successor is where to begin and which pecking order to follow in its education reform program.

To make matters more difficult, if this program is to move beyond spin to achieve lasting results (by no means guaranteed as the Victorian experience shows) it will be costly at a time when the economy is turning down and there are major infrastructure needs unaddressed in transport, water, energy reform and climate management.

We see now with greater clarity how John Howard's mismanagement of the boom years — in which for 12 years the nation allowed its elected masters to put wedge-style electoral politics ahead of good government with an almost uncanny consistency, and every substantial public investment decision was postponed except those relating to defence — was a total disaster. But there's no use crying over spilt milk, and education has to find a successful way through what will continue to be difficult years ahead.

The only sector to be properly looked after by the coalition parties was (you guessed it) the non-government schools sector. The rest of the knowledge economy was left on the backburner for half a generation. A week is a long time in politics but

it's not long enough to waste a world-class education system. Half a generation is another matter.

Australia once invested in education at well above average OECD levels and fostered higher participation rates in post-compulsory education than all but a small handful of countries. In 2004, Australia spent 5.9 per cent of its gross domestic product (GDP) on education. Australia's advantage over the average OECD position (5.7 per cent) has now largely eroded. The USA, the world's leading knowledge economy, invested 7.4 per cent of GDP in 2004.

The international data also suggest that Australia is overly dependent on private investment in education, where the benefits are captured by a small part of the population. Australia was the third largest private spender on education in 2005. It was also a relatively low public spender on education at 4.3 per cent of GDP, compared to the OECD average of 5.0 per cent, the level that applies also in the USA and UK. Australia's public spending on education as a proportion of GDP is at 22nd place of the 29 OECD countries that provide data. It is public investment, rather than private investment, that underpins common school and tertiary education systems of good quality, and supports basic research which is the foundation of national innovative capacity.

In early childhood education, Australia is at the bottom of the OECD table. The families with the best access to early learning are those that can afford to pay for it privately. The legacy of this fragmented educational preparation of preschoolers, compounded by a divided school system of uneven quality, is the long tail of underachievers that are carried all the way through the educational system. This translates into poor basic literacy in the bottom group, a high rate of drop-out in the upper secondary years compared to most OECD countries, stagnant rates of secondary retention and tertiary participation, and lower productivity at work.

Under Howard, Australia moved from a high education participation country to a medium participation country. In 2005, 82.5 per cent of Australian 15-19 year olds were enrolled in education compared to an OECD average of 81.5 per cent. Australian enrolment was above the UK but well below Korea and most countries in Western Europe. What is most interesting is the 10-year trend in Australia compared to the rest of the OECD. Australia saw little change between 1995 (81 per cent) and 2005 (83 per cent) while the OECD average rose from 74 to 82 per cent. There were substantial rises in 15-19 years enrolment levels in most other OECD countries.

Aside from early childhood, no area has been more neglected by Canberra than tertiary education. In 2004 Australia was a relatively low public investor in tertiary education, at 0.8 per cent of GDP compared to the OECD average of 1.0 per cent. Australia was 25th of the 29 OECD countries for which data are available on this measure. Between 1995 and 2004 in the average OECD country, public funding of tertiary education rose by 49 per cent. In the USA it rose by 54 per cent, and in the UK by 6 per cent. In Australia it fell by 4 per cent, though student numbers rose by one third. This is an extraordinary outcome, a crucial problem for the nation, and has created a host of policy challenges.

Higher education is now just 41 per cent government funded, and fee-based

courses have been pumped up to fill the gap. The number of international students has risen to three times the level of the mid-1990s, and is now at the extraordinary level of 26 per cent of all university enrolments. About four in ten of those students eventually become skilled migrants, but it is a strange policy that drives growth in the international market while neglecting the domestic population, and one that has fostered long term social inequities through high dropout from post-compulsory education.

Universities are now seriously under-funded. The student cost through HECS is one of the highest in the world, but the government subsidy rate has deteriorated so badly that the government subsidy and student contribution together add up to funding per student below the average cost of domestic student places.

In other words, universities lose money on every local student they enrol, which is one reason why international enrolments have climbed so rapidly. Meanwhile the average student-staff ratio in Australian universities has risen from 14:1 in the early 1990s to 20:1 today.

Student allowances are at their lowest ebb since the 1960s, and three quarters of full time undergraduates now work during a semester — a large minority work more than 20 hours a week which is clearly harmful for their studies.

The low level of public funding of universities is also of concern in relation to basic research, which depends heavily on this source. Research cannot be funded from foreign student fees, which are ploughed back into the business and into competitive services and facilities. Australia has three research universities in the world's top 100, the Australian National University, Melbourne and Sydney, but Canada and Sweden each have four and Canada's are more highly placed than Australia's

The situation in vocational education and training (VET) is worse. Since the collapse of the federal-state funding agreement TAFE has been poorly supported by the Federal Government, while the states lack the fiscal capacity to support a modernised training system. Business is putting pressure on the Federal Government to upgrade VET but that depends on a new federal-state compact in the sector. The Government also needs to sort out VET/university boundary issues given that both public and private colleges have started to offer degree programs.

Australian tertiary education has been trending down while the rest of the world is trending up. The knowledge economy is seen as the cutting edge of national and global development. Analysts are talking about an "arms race" in investment in innovation, especially in Scandinavia, the Germanic world, Canada, and the rising Asian knowledge economies of China, Singapore and Korea. The USA is expected to follow.

Above all, China has upped the ante. Between 1998 and 2005 the number of students enrolled in tertiary education in China rose by an extraordinary 4.4 times to 15.6 million, not far short of the total tertiary enrolment in each of the USA and the European Union. The rate of school leaver participation in China has risen from 3 to 20 per cent since 1990. China will soon have the largest annual output of tertiary graduates in the world and the majority of the PhDs in science and technology. At the same time China has lifted the quality of institutions and created a layer of top

research universities. The annual number of research papers published in international journals rose by 4.5 times between 1995 and 2005 and the level of investment in basic research in universities is already third largest in the world after the USA and Japan and rising.

The federal government has established a national review of higher education which is due to report by the end of the year. A major item under the microscope of the review is the design of a new tertiary sector embracing both training and universities — possibly in two separate sectors alongside each other. Arguably, the reform of tertiary education can only really work if the Federal Government takes over full responsibility for TAFE and VET policy. It is unclear whether the states will support this. Victoria is likely to co-operate but NSW has been a bastion of states' rights in training.

The Federal Government is currently attempting to place its stamp on training by a strategy one step short of a full federal takeover — the provision of extra funding to the state systems if they adopt a voucher model of funding of the kind emerging in Victoria. There is a danger here that the objective becomes competition for competition's sake, rather than higher quality training and better opportunities.

Just because competition is ratcheted up, this by no means guarantees better outcomes when funding is falling (as the experience of the past two decades of university policy makes clear), or when the market is closed to new entrants, or when the quality threshold for market entry is low (as in private training), or when existing capacity is destabilised or broken up (which could happen if funding of TAFE is inadequate).

Above all training reform needs real taxpayers' dollars if it is to succeed in achieving the objective of improved productivity.

The national review of higher education also has the job of sorting a revised level of government funding for HECS-based places, new student HECS rates, new systems for funding university outreach social missions, measures to open up socio-economic access to universities (where progress has stalled since the growth in enrolments in the early 1990s), unpicking the over-dependence of the universities on international students and whether to restore full indexation of government funding, a new system for negotiating university missions and their funding according to public objectives, whether to set up a new federal commission to take tertiary policy out of the over-politicised hands of the federal department, and many more issues.

But the most fundamental question to be resolved is whether the Rudd Government will go with the international trend and kick-start a substantial reinvestment in education.

Towards a post-compulsory "Learning Space"

ALAN REID

THE TRADITIONAL VIEW: SCHOOL AS PREPARATION FOR A LIFE-BEYOND SCHOOL

Traditionally, schooling to the end of Year 12 has been understood as preparation for a post-school world of work, VET, tertiary study or involvement in community agencies. Some young people stay until the end of Year 12 to complete their state's certificate of education in the hope that they can use it as their passport into tertiary study or as evidence of achievement to support their applications for other post-school options such as work or apprenticeships. In South Australia, currently about 55 per cent of a typical Year 8 cohort fall into this category. The remaining 45 per cent take a different route. Some move directly into work after they reach the compulsory leaving age of 16, some drop out of school and are unemployed for long periods of time, some move into combinations of work, education and/or training, and so-on.

The post-school world has had and continues to have a significant impact on the senior school curriculum. For example, in all states of Australia the university pathway still largely determines the language of the certificates and their assessment approaches, while work-oriented vocational programs are organised for students who do not want to follow an "academic" path. However, until the last decade, the influence of these post-school arenas was primarily achieved at a distance: the post-school world was relatively sealed off from schools. Tertiary institutions and

workplaces developed structures and practices that were self-contained, independent of schools and each other. Once a student left, the job of the school had finished. It was time for another institution to take over as the school turned its focus to its next cohort of young people.

During the past decade, this relative isolation of schools from workplaces, tertiary institutions and community agencies has been challenged. As the student population has become more diverse, school-based educators have sought to make the curriculum more flexible and responsive to student needs. Work experience programs, school-based apprenticeships, VET programs, university subjects studied at school and online learning are all examples. Common to most of these are attempts to blur the traditional boundaries between schools and post-school options.

Notwithstanding these changes, invariably such efforts have been thwarted or made more difficult by the weight of the historical baggage that surrounds the post-school arenas. The structures and practices of the various sectors, developed for other purposes and times, are often at odds. For example, separate funding mechanisms, differences in assessment and curriculum approaches, the differing skills of educators in different arenas and a lack of clear curriculum articulation all serve to reinforce rather than weaken established boundaries.

If the aspiration to make the divisions between the sectors more permeable is hamstrung by traditional notions of the roles of the various education sectors, then it follows that an alternative conceptualisation is needed. Recent studies highlight the importance of this task. For example, data from the Australian Bureau of Statistics for the period 1999–2004 show that the proportion of 15–19-year-olds who left secondary school without having completed Year 12 and who are unemployed and not engaged in study, ranged between 15 and 20 per cent in the various states (ABS, 2004). And these figures mask the fact that those who do not complete Year 12 come largely from certain groups, particularly young people from Indigenous and lower socio-economic backgrounds. Ironically it is these students who leave, despite the fact that they often have nowhere to go.

Given that many research studies demonstrate the close link between the acquisition of a post-compulsory qualification and participation in later education and/or success in the labour market (eg Fullarton et al, 2003), these figures are of great concern. The waste of community resources, as well as the cost of social isolation, disaffection and alienation produced by this state of affairs, is as much a social as it is a personal tragedy.

I don't want to suggest that such educational outcomes can be improved simply by redesigning the boundaries between education sectors. Clearly there are larger economic, cultural and social issues at play. But to the extent that the organisation of education and curriculum contribute to educational outcomes, it is important to identify those structures and processes that impede progress being made. In my view, constructing a post-compulsory education system that creates greater flexibility by crossing traditional school and post-school boundaries is one important step in this direction.

AN ALTERNATIVE VIEW: THINKING OF POST-COMPULSORY EDUCATION AS A "LEARNING SPACE"

It is proposed that one way to think about the post-compulsory years is in terms of a spatial metaphor — a learning space or field[1]. Such a metaphor suggests a space which is defined by a set of concepts and characteristics, but which allows considerable room for movement. Inside the space there would be a range of sites where learning occurs, including schools (and adult re-entry colleges), TAFE institutes, registered training organisations, workplaces, community agencies, adult learning organisations, universities and so on. The idea is that people are supported in moving around this space, engaging in work, training, education and community and civic life in various combinations and ways, learning as they go.

The organising concept that defines this space is *learning*: the logic of the space shapes its structures and practices in ways that reflect a commitment to learning. But it is not only learning in the conventional sense of formal learning; it also encompasses informal and non-formal learning, pursued and recognised in many different ways. Another of the defining concepts of this space is that of *entitlement* to access the range of educational opportunities available in the space at no cost until at least the attainment of a first educational qualification, such as a senior secondary certificate or equivalent vocational qualification.

Finally, another concept informing the space is that of *agency*. It is a space where there would be considerable flexibility and where support is provided to facilitate genuine choice — that is, choice based on the interests of young people, not their background or socio-economic status. But there is no compulsion; young people would be encouraged and supported to make these choices and to take risks, without being forced or controlled. They could leave the space for an indefinite period of time before returning to complete their study.

THE LEARNING SPACE IN PRACTICE

How might the learning space operate? The following are ideas only and would need considerable discussion and trialling on the ground before they are converted into policy. However, some of them have been tried individually in various states and countries (without necessarily being conceptualised in the same way, and without being connected in the ways suggested here), so it would be important to draw upon these experiences.

As young people enter the learning space at the start of their post-compulsory years, they could apply for an identifier and receive a "learner account" on an electronic portal to which only they have access. This portal would be a place where they can keep a portfolio that records their achievements and their experiences (job interviews, personal reflections, references etc) within the learning space.

Once inside the space, young people would develop learning plans. These could be part of the requirements of a senior secondary certificate (as is proposed for the future South Australian Certificate of Education), although these plans would be periodically reviewed and revised on the basis of experience, new interests and fresh insights gained within and beyond school. In this sense, young people would be

offered the chance to construct a sort of youth contract that is always open to change and renegotiation. Their side of the contract would be a commitment to participation in work, study, training or a combination of these. For its part, the state would agree to fund the space and provide tangible support in order to engage within it.

In addition to the support provided by learning sites in their usual way, there would also be ongoing support available at a district or regional level. That is, within each geographic region there might be an aggregation of support services comprising such people as career counsellors, youth advocates, youth workers, mentors, and health and social workers. Another way of thinking about this support is as a kind of one-stop-shop for youth services. Within the space and with these supports, young people would be engaged in some form of learning, whether in full-time school, part-time work and study, full-time or part-time work, some community involvement and so on.

The curriculum — defined here as the full range of learning experiences that can be credited towards a qualification — would be at the centre of the space. As students are involved in successful learning, they bank credits. A credit framework/matrix would articulate learning — formal, informal and non-formal — building upon the Australian Qualifications Framework (AQF). Of course there would need to be a detailed exploration of the relationship between qualifications in order for this framework to operate successfully. Young people who leave the space would retain their credits and could continue to build on these after they return, until they gained their first qualification. The credit framework would facilitate many different entry and exit points, providing young people with the chance to change course without being locked into a rigid pathway.

Finally, groups within the space who are not normally education or training providers, such as employers and community agencies, would need to identify the kind of learning they would provide or support in the normal course of their activities. This would require employers to rethink their dominant understandings of the role of education and places of learning. For this learning, students would be able to gain and bank learning credits.

WHAT ARE THE ADVANTAGES OF THE CONCEPT OF A "LEARNING SPACE"?

The concept of a "learning space" is an aid to thinking: a device to conceptualise new ways of dealing with intransigent issues and problems. If the concept is accepted, there are many details that would need to be resolved. Not the least of these is the matter of funding, including not just the quantum but the difficulties of starting with different funding sources, with their kaleidoscope of histories and practices. Another issue relates to the question of governance of the space, and suggests the need for there to be one overarching authority to take the place of the plethora of agencies, statutory bodies and councils that currently exist.

But the concept offers ways to think more systematically about the relationships between the various sectors, and how to fashion organisational arrangements that facilitate easy movement between the learning sites in the space, rather than inhibit it.

In particular, the concept of a learning space lends itself to thinking about the whole, rather than the parts. Thus the educational arenas inside the space are connected. The space should be constructed so that young people can move easily between the various sites as they pursue their chosen learning pathways, making and remaking choices on the basis of motivation, experience, and changing interests.

The idea is consistent with, and therefore serves to reinforce, many current trends, such as efforts by schools to blur the boundaries between themselves and institutions like TAFE and Universities; and the fact that many young people at school are also engaged in part-time work. It also makes practical some ways to achieve aspirations such as life-long learning and a knowledge society; and to ground the understanding that the health of a society and its economy rests largely on the skills and engagement of its population. Finally, it offers a more powerful way to conceive of retention, as active engagement in the learning space rather than as simply time spent in school on a full-time basis.

If Australia's "education revolution" is to address the entrenched and long-term inequalities that have marred Australian education for so long, it demands ways of thinking that break away from the traditions and patterns that have helped to shape and reinforce these inequalities. The theory and practice of a post-compulsory learning space suggests one possibility.

ENDNOTES

1. In 2004, I was a member of a three-person panel appointed by the (then) Minister of Education in South Australia to review the South Australian Certificate of Education (SACE). During the course of the review we used the term "learning space" (Crafter, Crook and Reid, 2006) and I acknowledge the contribution of my fellow reviewers to some of the ideas, while taking full responsibility for the ways in which these ideas have been interpreted in this paper.

REFERENCES

Australian Bureau of Statistics (2004). *ABS Schools Australia,* Cat. No. 4221.

Crafter, G, Crook, P & Reid, A (2006) *Success for All: Ministerial review of senior secondary education in South Australia.* Adelaide: Government of South Australia.

Fullarton, S, Walker, M, Ainley, J, & Hillman, K (2003). *Patterns of Participation in Year 12,* LSAY Research Report, No. 33. Melbourne: Australian Council of Educational Research.

Broken promises:

Victoria and the vanguard of TAFE privatisation

PAT FORWARD

IN APRIL 2008, the Victorian Government released *Securing our Future Economic Prosperity,* its blueprint for reform of the Victorian TAFE system. If implemented, it has the potential to result in the dismantling of the public TAFE system through the creation of a fully contestable VET market.

It has left the Victorian TAFE system in turmoil, raising more questions than answers. But its significance goes further than the state borders. The proposed reforms are entirely consistent with recommendations from the *Skilling Australia's Workforce 2005-08 Mid-Term Review — Boston Consulting Group, 22 October 2007* (the BCG Report).

That report recommended, among other things, the creation of a fully competitive training market, competitive tendering for all government funding (among TAFEs and between TAFEs and private providers) and the application of competitive neutrality principles to public TAFE providers. The report also canvassed an income contingent loan scheme for TAFE and vocational education and training.

The Victorian reforms involve a staged implementation of full contestability for all government VET funding over the next three years; the introduction of an income contingent loan scheme for students to "offset" the effects of significant increases in costs to individual students; and the application of a competitive neutrality "levy" to

TAFE institutes. It seems that TAFEs will have to pay for resources they already own, such as libraries and buildings, something universities never had to do when they took ownership of the resources bequeathed to them by government.

TAFE directors in Victoria submitted a list of more than 100 questions to the Government, arguing that the reform paper was "appallingly short on detail". These questions remain in large part unanswered.

The proposals have to be understood in the context of national VET reform. Victorian Premier John Brumby has argued that his state's reforms will provide a template for the introduction of much greater levels of contestability in TAFE across the country.

During the federal election campaign, the ALP campaigned around a proposal for an "Education Revolution", proclaiming its support for the TAFE system on a number of occasions, and referring to the need to increase funding for TAFE. In November 2007, Kevin Rudd announced the delivery of 820,000 additional VET places over six years under the *Skilling Australia for the Future* policy. Describing these places as "additional", "new" and "massively expanding" the VET system, he said the policy also explicitly stated that current TAFE funding arrangements would not be disturbed.

However, the policy also described the Rudd vision for a reformed VET sector. It listed competition as a key element of an industry-led approach:

> *A Rudd Labor government will act to promote effective competition between public and private, profit and not for profit training providers.*[1]

The Federal Government's approach to the funding and organisation of the VET sector has been further clarified since the election.

With the ascendancy of the Council of Australian Governments (CoAG) as the primary decision-making body for national policy, wide-ranging reforms have been lifted from public scrutiny and placed in the hands of federal and state bureaucrats. This is the case with negotiations around the next VET funding agreement after the current agreement expires at the end of 2008.

The current agreement was notorious because it required states to implement aspects of the Howard Government's IR agenda (including individual contracts) in TAFE as a condition of Commonwealth funding. Its successor will form part of a larger inter-governmental agreement (IGA) currently being negotiated under CoAG, specifically by the Productivity Agenda Working Group, chaired by Julia Gillard.

To date, no details have been released. Notwithstanding its refusal to articulate a position in relation to the Boston report, it is clear that the Federal Government intends to drive so-called reforms of the VET system, including much greater levels of competition for both state and federal funds in the next VET funding agreement.

PRODUCTIVITY PLACES AND THE NATIONAL PARTNERSHIP AGREEMENT

On 12 June, Minister Gillard said that the Federal Government intended to use the new national partnership agreement (NPA) to drive market reform in VET.[2] The Productivity Places Program (PPP), Rudd's election commitment under *Skilling Australia* to provide 820,000 additional VET places over six years, will be used as part of the NPA

to drive further contestability.

The VET places will be allocated to strengthened and better-resourced industry skills councils (ISCs).[3] Some 238,000 will be allocated to new entrants to the workforce over the next five years, and 392,000 to re-entrants over the next six. All of these latter are geared to higher-level qualifications — CIV and above.

In the 2008-9 budget, the Federal Government allocated $1.9 billion for the program over the next five years, with new entrant places funded 100 per cent. However, for those currently in the workplace (the re-entrants) the states are to provide 40 per cent of the funding, the Federal Government 50 per cent and industry 10 per cent. The AEU is unaware of any discussion with states and territories before this was announced.

In April 2008, the Rudd Government changed its approach and shifted allocation of PPP places away from ISCs and began negotiations directly with individual state and territory governments.

All funding for the PPP must to be competitively tendered.

The first round of 20,000 places released in April were all new entrant places, and therefore fully funded by Canberra. However, this funding is at least 50 per cent lower than the lowest price per student contact hour in TAFE institutes around the country. This makes a mockery of the Federal Government's claim that TAFEs could position themselves to "win" most of the productivity places. The only way TAFEs could win the tenders would be to cut delivery costs significantly.

One TAFE director said the funding was so low that his institute had decided not to bother bidding, other than a couple of tenders "just to get on the register".

The funding formula should be sensitive to actual delivery costs for different qualifications in different areas. Otherwise we'll end up with what already seems to be happening: providers will cherry-pick the cheaper and lower skill qualifications, and the real needs will be ignored.[4]

There is currently no publicly available breakdown of figures for providers of the first round of productivity places. However, it appears there were only two TAFE providers in this round. The PPP website shows only 27 TAFEs among the 527 providers that have so far registered for the program. They include several large institutes, two dual-sector universities and the umbrella TAFEs in South Australia and Tasmania.

In electronics and engineering, the funds on offer are only around a third of actual TAFE delivery costs for the high-end VET areas. The funding is entirely inadequate for rural and regional delivery and would be completely inadequate in key skill shortages areas such as mining and resources.

Funding for the "existing worker" component of the PPP is now being discussed between the states and territories and the Commonwealth, and at least one state intends to use recurrent state funding to provide its 40 per cent share of funding for the PPP. This is exactly what the Federal Government means when it says that it will use the New Partnership Agreement to drive reform of the VET sector. By half-funding places, it is effectively driving further marketisation of the sector. The only other option for states and territories is to find "new" money, but few show an appetite for this. The Federal Government has also reneged on its election undertaking to require 10 per

cent from industry. This contribution can now be met by individuals, not industry, and some states are negotiating to increase this proportion to enable them to shift greater costs onto individuals.

If state governments shift their PPP contribution out of their recurrent budgets, the places are no longer "additional" or "new". Existing TAFE courses will need to be closed, or re-badged with reduced funding in order to deliver the "new" places. This clearly abandons the election commitment not to disturb existing funding arrangements. In the same way, the creation of the New Partnership Agreement explicitly to drive reform and competition in VET openly contradicts Rudd's commitment not to disturb current VET funding arrangements.

The Priority Places Program is manifestly under-funded, with TAFEs sidelined as private providers snap up the new funding to provide cheap, low-level training in non-skill shortage areas.

IMPACT ON STUDENTS

The full impact of these reforms will be felt by the very people that training providers need to reach to address the developing skills shortages.

Language, literacy and numeracy (LLN) and further education (FE) programs are particularly vulnerable to the impact of competition on funding. Co-located with VET programs in TAFE institutes across the country, they offer the most educationally and socially disadvantaged citizens in Australia access to a range of courses in settings which provide comprehensive support.

LLN and FE programs are different to other vocational education and training areas because they do not target an outside industry but rather work with vocational departments in institutes. They are the basis upon which a range of other programs is built. They:

- Provide and encourage access to those members of the community who would traditionally not engage in education
- Support delivery to those who would otherwise experience significant barriers in the uptake of education
- Encourage success in education through targeted intervention and collaboration with mainstream delivery.

These programs work across the broad canvas of educational provision in TAFE and are most effective when located alongside a range of education offerings and are accessible to those learning in the workplace. TAFE institutes are the ideal location. They provide a far greater choice of VET units, with the potential to mix courses, offer alternative pathways and respond to literacy and language needs, while developing employment skills which are often a significant barrier to gaining higher level qualifications. By offering graduated pathways, trainees can be given individualised support, particularly in literacy, language and academic skills. TAFEs also have far greater capacity to provide alternative settings and delivery.

During times of skills shortages and almost full employment, the group which is the target of much of current government policy in terms of economic and social participation requires customised and targeted delivery in order to build the necessary

foundation skills for entry into training and the workforce.

Competition fragments the provision of LLN and FE programs in the vocational and further education sector. It produces downward pressure on funding, especially in situations where programs require payment on outcomes and attendance. It works against the potential of post-compulsory education to make a real and lasting difference to the uptake of education and training and in encouraging and supporting lifelong learning.

Contestability decreases the opportunity for the diverse professional alignments and collaboration necessary for customised, responsive and creative solutions to overcoming the barriers of inadequate language, literacy and learning readiness.

LLN and FE programs are integral to the whole of TAFE provision. Strong pathways exist between LLN and FE programs and vocational and higher education courses within institutes and with other educational providers, including university. Policies which encourage the separation of LLN and FE programs from TAFE do immeasurable damage to the policy of supporting adults to undertake higher-level qualifications.

Downward pressure on recurrent funding through contestability also inhibits the ability of TAFE institutes to support students enrolled on trades courses — many of these in skills shortage areas.

One institute in metropolitan Melbourne developed a tool to assess the literacy and numeracy skills of a targeted group of students embarking on trades courses. Of 819 students who attempted the assessment, 59 per cent required some kind of assistance to successfully complete their studies. Of these, 90 per cent required help with numeracy, 41 per cent with writing and 21 per cent with reading. This compared with students across the rest of the institute, where 16 per cent required support.

The TAFE worked to improve liaison and collaboration across departments and faculties and developed vocationally specific assessment and teaching strategies. The results were positive. Trade teachers felt more supported and more aware of literacy and numeracy issues and strategies. Student support was improved.

The study indicated that students responded well to numeracy support and were happy to ask specific questions, which in a classroom can slow down the lesson and make students feel uncomfortable. A plumbing teacher's response was that students indicated a much greater willingness to re-sit their assessments once they had been tutored on the mathematical concepts experienced in their last assessment task.

This work is now under threat as a result of impending changes to the funding mechanism.

CONCLUSION

Effectively, competition is presented as a way of making the system "demand-driven" rather than provider focused. However, providers will be forced into aberrant behaviours in the delivery of VET in order to manage competition for scarce government funds. This hardly results in a focus on students or industry, but rather on economic survival in a market because TAFEs will have to deliver where it is most profitable and where costs are lowest.

These changes are being proposed despite the fact that there is no research that

provides evidence that training markets based on full contestability actually deliver better outcomes.

Policy is being driven by an ideological belief in markets as the principle mechanism for achieving social objectives. This is not good policy development. It does not allow for public debate and scrutiny of these social objectives. State and Commonwealth governments are making policy on the run, behind closed doors, and away from the public scrutiny. The federal and state government have no mandate for this move to full competition in VET.

ENDNOTES

1 Skilling Australia for the future, ALP policy document, election 2007, p 17

2 The CoAG Open Day chaired by Julia Gillard

3 Skilling Australia for the future, ALP policy document, election 2007, p 17

4 TAFE Director quoted in Campus Review July, 2008

Creative thinking – applied learning and a national curriculum

JOHN FIRTH

WHAT DO WE want for the post-compulsory years from a national curriculum? I would like to reflect on one key aspect of this work from the Victorian perspective over the past decade or so.

I see the national curriculum as presenting a rare moment when we can create a renewed sense of energy and commitment to the task of articulating what we most value in learning for all young Australians. Beyond the rather obvious opportunity this also creates for tendentious sloganeering, the challenge is to work on the substance of a national curriculum that can promote real improvement; so it's well worth reflecting on what we have learnt from recent developments across the country as we begin the national work.

What we don't want is to base the whole process on special pleading about the uniquely wonderful characteristics of our own state/territory/system/sector/school. Of course, there are many such characteristics that we need to identify and incorporate, but building a national curriculum has to involve something other than an old industrial model of ambit claims, non-negotiable baselines and tactically based negotiations in between to reach a "settlement" that we can all live with, with varying degrees of reluctance or enthusiasm.

In the spirit of positive engagement, I would like to venture a few thoughts on

where we are in Victoria in the post-compulsory years and what might be some of the things we can most usefully bring to the national table. It's very easy, of course, to identify many of the structural differences among the states and territories. It's a fair bit harder to work out which of these really matters.

I have little doubt that we have reached various local settlements, using particular terms, that reflect substantial underlying debate and discussion. We will need to be ready to discard those that really don't carry too much significance — where there is a chance in Australia for two or more states to call the same thing something different, nine times out of ten they have done so. But not all structural or terminological difference is of this nature. Some of it signals real and important conceptual difference.

To be more precise, I don't see that Victoria would ultimately attach that much significance to the term VCE "study" when most others would call the same construct a "subject". There is a particular history to the term study design, with which I am intimately familiar as an original study writer for the VCE, and it had its significance at a specific time in that development.

Twenty years on, it hardly retains that significance. On the other hand, it would be profitable and necessary to unpack the underlying meanings and significance of our biggest structural difference with other states and territories — the two certificates, the Victorian Certificate of Education (VCE) and the Victorian Certificate of Applied Learning (VCAL). There may well be elements of our approach that are consistent with practices in other jurisdictions but which are concealed by the structural differences.

The original model of the VCE, as the single certificate to replace the previous five levels of certificates available in Victoria, was meant to embody in 44 study designs the range of academic and vocational, theoretical and applied, abstract and practical — all the dichotomies you can think of — ways of learning, in a single, inclusive pathway. Given the starting point of incomprehensible diversity, more or less arbitrary stratification, and pathways with no external recognition, this was both a radical and reasonable response.

As participation soared in the early 1990s, helped in no small fashion by the collapse of the youth labour market in the accompanying recession, the limitations of this approach become quickly obvious. The first and enduringly powerful response was to accept the limitations of the offerings provided by the 44 studies. They provided no externally recognised vocationally oriented study.

The addition of vocational education and training (VET) to the VCE, first by what was called dual recognition and then full VCE VET, was a belated acknowledgement of two key elements. It recognised the intrinsic value of this form of study for senior secondary students and, perhaps even more importantly, that the industry-led curriculum of VET certificates and what later became training packages was the most useful and valued form of vocational education for the post-compulsory years, at least for that part of vocational education that focused on specific industry areas.

This development was being adopted in various ways throughout the country in the mid-1990s. It marked the end of the time when school system based curriculum and accreditation agencies could claim complete sovereignty in the development and approval of industry-focused, vocationally oriented study for students in the senior

years of secondary schooling.

In Victoria, we moved quickly to full recognition of this curriculum, which had been developed elsewhere, according to industry standards, as being integral to the VCE and of equal status to the curriculum developed by the Board of Studies. This stage was essential in bringing the notion of differentiated but equally valued pathways to fruition. This in time provided the preamble to the development of a fully vocationally focused second senior secondary certificate, the VCAL.

I won't concentrate on the various success measures of the VCAL (you can refer to the VCAA for as much detail as you need) but some key design features of both the VCE and VCAL and their symbiotic relationship are worth considering as the national curriculum addresses that part of its remit that refers to the need for multiple pathways for senior secondary students.

As opposed to previous eras of dual (or more) certificates, the VCAL was not designed to occupy an entirely different space to that of the VCE. I wrote at some length above about the place of VET in the VCE because its conception and its continuing central place in the VCE is key to understanding how the two certificates work together to provide a much more coherent set of pathways than previous incarnations of alternative certificates.

In a nutshell, many VCE and VET units can be taken as part of either the VCE or VCAL. There is the opportunity for substantial cross-credit. The VCAL is essentially a framework qualification — the four strands of literacy and numeracy skills, work-related skills, personal development skills and industry-specific skills define its structure. They reflect directly its purpose to provide specifically vocationally awarded pathways. The "applied learning" reiterates this purpose. There are only a few specifically written "VCAL" units — the large majority of the substance of the courses derives from VET units or VCE units. It's the packaging, the sense of direction and recognition of achievement towards a successful post-school transition that are the real defining characteristics of the VCAL.

Maybe it is ironic that in recognising these purposes and ensuring that, where they fit, VCE units can be included in VCAL programs, the VCAL has helped to fully realise the "applied learning" potential inherent in many VCE units. Many of the VCE studies in the technology, business and arts areas in particular lend themselves admirably to a vocationally, industry-oriented program. This in turn reinforces part of the original vision of VCE studies, that they be designed to provide just this sort of experience for students. So while the VCAL does what it says on the tin, the idea of "applied learning" is not restricted to units especially written for that certificate.

So what of this is potentially useful for a national curriculum? We will be developing and recognising differential pathways for the multiple aspirations of an increasing proportion of the cohort. In doing so we should take care not to differentiate too sharply and distinguish these pathways. Most especially, we should ensure that there are easily negotiated passages across the pathways, which bring some credit both ways for those who wish to change en route, a characteristic of Gen Y and no doubt Z as the pop sociologists of the media never tire of reminding us.

There is real benefit from a curriculum design perspective in trying to bridge

some of those dichotomies referred to earlier. There is no need for a uniform formula across the curriculum. But thinking explicitly about theoretical and applied learning for example and how they might best be balanced can lead to some flexible and creative approaches. This way of conceptualising the content and achievement students can enhance the standards of knowledge and skills that need to apply at senior secondary level.

There is much more to say about all aspects of what a national curriculum may mean for post-compulsory education. But to make this particular foray into the lists of national curriculum succeed, in a landscape littered with the remains of past failures, will require a commitment to thinking deeply and creatively. The national curriculum will challenge us to exhibit some of the thinking we are demanding of our students.

Skills for Sustainability

JOHN SPIERINGS

ACHIEVING ENVIRONMENTAL SUSTAINABILITY — halting dangerous climate change, using our natural resources efficiently, managing our water supplies, keeping our rivers and landscapes healthy and protecting our biodiversity — will require substantial economic change.

Expert economists such as Sir Nicholas Stern and Professor Ross Garnaut have warned us that while the cost of this change will be significant, it will be a lot cheaper than doing nothing.

Much is heard of emission reduction targets, trading schemes, carbon footprints and renewable energy; comparatively little attention, though, has been paid to the people, skills and knowledge needed to actually drive environmental sustainability.

The Dusseldorp Skills Forum recently commissioned the CSIRO to outline the dimensions of this "green skills" and people challenge. Firstly though we asked the CSIRO researchers to test the extent of the impact which introducing a carbon shock to the economy would have on employment levels — whether taking action on climate change would be likely to imperil jobs growth.

The CSIRO estimates that by 2015, the total number of jobs in the industries that account for around 70 per cent to 80 per cent of overall carbon emissions and environmental impact will increase by 335,700 — from 2.9 million to over 3.25m. And

by 2025 they will increase by 558,000 to a total of 3.45m. Table 1 details the broad sectors in which these jobs are likely to be.

Table 1: Employment growth in high material flow industries 2005-2015 and 2005-2025 (using CGE deep cuts scenario — reducing Greenhouse Gas Emissions by 60% by 2050)

Sector	Employment increase 2005-2015	Employment increase 2005-2025
Agriculture, fishing & forestry	43,000	70,600
Food & drink	14,100	27,600
Mining & energy commodities	9,500	22,800
Manufacturing, heavy industry & power	33,400	36,100
Transport	79,300	149,700
Construction	145,500	235,000
TOTAL	**335,700**	**558,200**

Source: CSIRO, *Growing the Green Collar Economy,* DSF & ACF, 2008

Beyond these areas though, jobs will continue to grow in low greenhouse intensive sectors across the economy. More than one million new jobs are likely to be created in business services, communications and finance, trade and hospitality, and the public services (including education and training) by 2015, and more than two million jobs in these sectors by 2025.

The CSIRO modelling thus provides some comfort that we can take bold environmental steps and still expect to see strong employment growth over coming years.

The transition to a low carbon economy will particularly demand "deep green" skills in:

- Renewable energy sources and the adaptation of existing ones (eg to develop clean coal)
- Urban planning, transport, infrastructure and architecture
- New techniques in building and construction (eg to maximise the efficiency of materials and energy used in building design, heating, cooling and lighting)
- Dry land farming, water management and environmental restoration
- The "soft skills" crucial to measuring carbon impacts, and to establishing and maintaining markets for carbon pollution trading.

Skills in particular demand are likely to include technical and trade skills, design and engineering, accounting, assessment and accreditation, reliable product and market knowledge, and supply and post-sale support. In the key greenhouse intensive sectors, workers will be required to combine technical expertise with deeper knowledge

of water, power, energy sources and consumption patterns, and affect a managerial know-how of how to limit the carbon impact. There is likely to be increasing pressure on our university and TAFE sectors to graduate workers in these sectors with these attributes.

Beyond that, many of the jobs in "low environmental impact" industries will involve varying shades of green — offices, workshops, farms and factories will need to change work practices to improve energy efficiency, reduce water consumption and alter travel patterns and transport costs. This makes environmental re-skilling a challenge for the entire economy.

The schools, TAFE and university sectors are central to Australia's climate change response. We will rely on our educators to develop the research leaders, train the new graduates, and equip the existing workforce with the professional and technical skills needed to ensure that a low carbon future is achieved.

How well prepared is the broad education and training sector to meet these demands? The truth is that like many Australian communities and businesses, the sector is locked in the learning process of what urgent responses to climate change will really mean.

There are a growing number of individual centres of excellence researching the climate change phenomenon, working on new products and technologies, tracking the social implications, and developing the vocational curricula and pedagogy needed to upgrade the skills of many of the trades and professions, especially in the building and construction sectors. However while the sector is characterised by some outstanding leadership, many institutions and personnel are still coming to grips with the educational challenge.

Many will be tempted to bolt on environmental sustainability as a new "competency" to existing training programs, rather than use sustainability to stimulate interdisciplinary collaborations and as an underlying intellectual reference point.

Our experience indicates that there are great project based learning and pedagogical innovations connected with a sustainability focus. For example, recent interviews we conducted with middle and senior years NSW secondary students about the environment and their future indicated they want practical, hands-on experience, "getting out" into the environment.

"Getting outside" was a powerful theme — engagement beyond the classroom in the "environment" itself. Students fondly recalled their experiences at primary school. They enjoy peer discussion, and want lessons to be engaging, fun. Big community-wide events (Earth Hour, Clean Up Australia) are valuable and memorable.

Students need to see, touch, feel, to build awareness, motivation and skills. They also need to see how their own local, personal actions will contribute to the larger picture.

They told us they wanted to do "real" and "relevant" activities, and that the opportunities for this were often too limited.

Abstract knowledge of climate change needs to be matched with and embedded in hands-on projects that develop a thirst for discovery and learning in life after school.

The transition to a low carbon economy involves a profound economic change, perhaps one rivalling the Industrial Revolution of the 18th and 19th centuries in terms of scientific and engineering demands and work patterns. Indeed, while the Industrial Revolution took place over 150 years in the West, a carbon revolution will need to occur across the world over the next 20 to 30 years.

Human capital is one of the most valuable components of the economic wealth of nations, accounting for more than 75 per cent of the total asset base of high-income nations such as Australia. It is human capital in the form of labour, skills and knowledge that is driving the extraction and transformation of resources, the production of goods and services and the generation of waste and emissions which are transforming ecosystems, leading to global warming.

These same human resources hold the answer to solving the problem. By employing new knowledge, skills and technology, we can reduce Australia's impact on the environment in a way that increases living standards and employment growth. In effect, unless we modernise our human capital base and training systems we have little chance of meeting the Australian Government's target of a 60 per cent reduction in emissions by 2050.

Reconstructing Technical Education, Again

NEIL HOOLEY

Much of the reform effort in Australian secondary education in the last 20 years has been directed either to improved management of schools — including the promotion of more effective pedagogical cultures — or to incremental changes to the curriculum to make programs more relevant and accessible to new populations.

(Teese and Polesel, 2003, p217)

FROM TIME TO time we hear nostalgic calls to re-establish technical schools across the nation. These usually arise from an economic point of view when unemployment is high or when there are shortages of skilled labour. In a wealthy country like Australia, where a high proportion of students are expected to complete secondary schooling, there is also a deficit view that some young people are not capable or interested in a more scholarly education and should be provided instead with a curriculum that is more practical and active.

Victoria had a strong system of secondary technical schools right up until the mid-1980s. Immediately following World War II, there were 32 technical schools with 34,000 senior enrolments and 28 junior schools with 10,000 students. Indicative of the expansion of secondary schooling generally after the war, by 1965 there were 87

technical schools with 88,000 senior enrolments and 78 junior schools catering for 47,000 boys and girls (Victoria, 1973). By the early 1980s, there were 110 secondary technical schools with about 72,000 students and 7500 staff.

The growth of technical education in Victoria reflected the strong manufacturing base of the state, but the curriculum broadened considerably over the decades. For example, the first stated aim of secondary technical education in 1982 was listed as being: "To assist every student to develop to the fullest, both as a person and as a learner and, in so doing, to promote his or her development as an enlightened, productive and responsible citizen." This was to be achieved through the provision of "a broad spectrum of educational experiences particularly in the social sciences, the natural sciences, the arts, practical and technical activities and physical education" (Victoria, 1982).

There were vocational outcomes as well, but these were not emphasised over and above a more inclusive program. These aims were intended to assist students "to make informed and realistic choices of future educational and occupational specialisation" and to ensure that students were qualified "for entry to a very wide range of professional, commercial, agricultural, or highly skilled technician or trade courses" (Victoria, 1982). It seems clear that, at least from a policy perspective, technical education was not about a narrowing down of educational opportunity, but constituted a particular approach to education that was comprehensive and balanced.

Advocates of secondary technical education would claim that the curriculum was applied in character rather than in abstract. This encouraged a greater integration of practical and theoretical approaches to learning, where the impact of ideas could be experienced in practice. An integration of English and social studies for instance evolved as a broad humanities subject supported by the notions of whole language and the bringing together of language, learning and communication. Technical schools also investigated differentiated learning across the curriculum as a means of involving students from diverse and often disadvantaged backgrounds.

By 1984, the new Cain Labor government in Victoria had established a major review of post-compulsory schooling, chaired by the distinguished educator and writer Jean Blackburn. In 1985, the Blackburn Report not only laid the groundwork for the introduction of a new Year 12 certificate, but also for the phasing out of technical schools. This was to be achieved through the development of comprehensive post-primary education and the amalgamation of all high and technical schools by January 1988. This recommendation was not intended so much to eliminate technical education for some, but to encourage a comprehensive secondary curriculum for all. Such a curriculum should provide a higher theoretical base for practical subjects and enable more students to experience the relationship between practical and theoretical ideas.

Blackburn was not attempting to excise technical education from the curriculum, but to make the main features of technical understanding accessible for everyone as part of comprehensive learning. Unfortunately, for the past 20 years education systems and the profession around Australia have struggled with this concept to the extent that the senior curriculum has turned full circle. In Victoria, vocational subjects have now been included as part of the common certificate at Years 11 and 12, and a separate

certificate has been introduced with the usual inadequate descriptor of "hands on". What this demonstrates is not only educational confusion, but a philosophical belief that only a proportion of students are "academic", while others are "practical".

But do not despair. During the lead up to the federal election campaign of 2007, the then Leader of the Opposition, Kevin Rudd, announced a $2.5 billion policy to equip every secondary school in Australia with a technical wing. This was a key aspect of the campaign, as coping with skills shortages had emerged as a significant point of difference between the two major parties. As a chief policy strategy in the previous election, Prime Minister John Howard had allocated $284 million for the building of 25 new technical colleges around Australia, a program that was to be extended if he was returned to office in 2007. Australian technical colleges (Australia, 2008) are highly controversial in that they compete with secondary schools, remove possible funding from TAFE colleges, and involve working conditions for staff that were established under the WorkChoices program of the Howard Government.

In the Victorian budget of 2007–08, $50m had also been allocated for the provision of technical facilities for "state-of-the-art" technical and vocational education and training at the secondary level. It was stated that secondary schools would be able to focus on trades such as metalwork, automotive studies, electronics, carpentry and manufacturing, according to the interests of their students and skill requirements in their local areas. While the election rhetoric and media releases included a number of possibilities, it seemed that the concept of technical education being deployed was concentrating very much on vocational and economic concerns, as distinct from the intellectual and cognitive experience of the student.

If we take secondary education as being essentially the provision of a broad and challenging range of knowledge encounters and reflections across social, cultural and educational practices for all students, then technical elements of the curriculum should also support this direction. From the policy comments above, technical education since World War II was seldom seen as only the "art of doing", but located practical work within a more extensive frame of comprehensive learning. In particular, the advent of school computing and new technologies has opened up the possibility of "thinking about learning" (*techne* as art and *logos* as thought) even more dramatically in cycles of reflective practice. This means that technical and technological activities in schools should now enable all students to pursue new experiences across all studies in quite distinct, non-vocational ways.

Imagine a suite of multi-purpose workshops or laboratories available in all secondary schools. There will be quiet areas for small group discussion of projects, design studios for drafting, refining and consolidating ideas, and a range of workshop spaces with equipment and machinery. The emphasis throughout is on invention and innovation, with project teams or learning circles negotiating work programs and offering advice amongst themselves and with teacher facilitators. Equipment will include robotics and electronics, digital lathes, design and drafting software, engine design and repair, model making and tools for working with wood, metals and plastics. Offset printing will combine with computer layout programs to enable investigation of printing and publishing. All aspects of radio, television and music production

could be included here or elsewhere in the school.

The learning environment so described is one of integrated knowledge and inquiry learning across all areas of the curriculum. This is not an approach tied directly to vocational training, apprenticeship or skill shortage. It should definitely not be characterised as "hands-on" in the narrow sense. Rather, technical and technological mechanisms are being integrated into a sophisticated cognitive process that brings practice and theory together in cycles of action and reflection to pursue difficult ideas and challenges. It also makes possible an investigation of the scientific meaning of "information and communication" in relation to technology through reference to Claude Shannon's work on information theory (Avery, 2003), Norbert Wiener's research on cybernetics and feedback (Wiener, 1961) and Stewart Kauffman's notions of complexity and self-replicating structures (Kauffman, 1995). Seymour Papert's intention of introducing computing to children was also to provide experience of computer science and artificial intelligence and raise philosophical ideas regarding computing and mathematics for experimentation (Papert, 1993).

Under these imperatives, technical and technological projects can include broad studies of language, society, information and philosophy. A major problem therefore in relation to the development of an integrated and inquiry approach to multi-purpose workshops is the provision of teachers and a flexible curriculum. No doubt those teachers already employed will be expected to move smoothly into a new role, but there will be a pressing need to recruit new staff who are experienced at integrating technical and technological projects. Staff will be required to work with student teams in the design process on ideas that have been initiated by students themselves and involve much unfamiliar territory. Computer-based equipment will be utilised more than in the past and there will be a need to consult with other staff and indeed students for expertise as new issues are met.

Not only must new applicants to the profession be willing to work in an experiential manner, but initial teacher education programs are four years in the making. Recognition of prior experience can reduce this period, but to supply the total number of teachers required will take a number of years. The building and refurbishment of classrooms will need to occur in relation to the number of staff that are available. It will also be necessary to design and implement professional learning programs for current staff depending on the new equipment that is provided and the experience of working with students on innovation and invention. With the amount of funding that is now allocated in state and federal budgets, it appears that cost is not a problem.

Technical education as a part of secondary schooling therefore has strong political and professional supporters and will continue to evolve. What seems certain is that a return to an industrial past is not an option; the image of a skilled worker bent over a lathe in a hot and oily workshop is not a romantic or cultural and economic aspiration for many young people. Jean Blackburn had already heralded this situation in 1985 when she said that the workforce structure to which technical schools related no longer existed. This is not to say that technical schools in Victoria did not provide an appropriate, balanced and challenging curriculum for many families, but rather the economy and society was changing and education needed to change as well.

With community expectations that most young people will complete Year 12 and that the central role of secondary schooling is to provide a high quality comprehensive curriculum for all, then technical education and technical wings must ensure that they contribute to this model. Clearly, the major purpose of technical and technological approaches in the secondary school is not job training, or to cater for so-called "non-academic" candidates. Given it is not appropriate to divide secondary classes into academic and vocational streams, then technical wings need to be characterised by integrated knowledge, inquiry learning, innovation and invention that supports a different type of intellectual work, and creative exploration of the physical and social environment for all students.

REFERENCES

Australia, 2008: Australian Technical Colleges, Department of Education, Employment and Workplace Relations, Canberra, accessed at **http://www.australiantechnicalcolleges.gov.au/** , June.

Avery, J, 2003: *Information Theory and Evolution,* World Scientific Publishers, New Jersey.

Kauffman, S, 1995: *At Home in the Universe: the search for laws of self-regulation and complexity,* Oxford University Press, New York.

Papert, S, 1993: *Mindstorms: Children, computers and powerful ideas, 2nd Edition,* Basic Books, New York.

Teese, R & Polesel, J, 2003: *Undemocratic Schooling: Equity and quality in mass secondary education in Australia,* Melbourne University Press, Melbourne.

Victoria, 1973: *Vision and Realisation: a centenary history of state education in Victoria, volume 1,* Education Department of Victoria, Melbourne.

Victoria, 1982: *Technical Education Victoria 1982,* Technical Schools Publication Unit, Education Department of Victoria, Melbourne.

Victoria, 1985: *Ministerial Review of Postcompulsory Schooling, Report Volume 1,* Ministerial Review of Postcompulsory Schooling, Melbourne.

Wiener, N, 1961: *Cybernetics: or control and communication in the animal and machine,* MIT Press, Massachusetts.

The Brave New World of *Tasmania Tomorrow*

JEFF GARSED

IN THE 2007–08 Tasmanian State Budget, the Education Minister (now also Premier), David Bartlett, announced a major restructure of post-Year 10 education entitled *Tasmania Tomorrow*. Lacking in detail, yet involving a complete disbanding of the existing technical and further education (TAFE) system and Year 11–12 secondary colleges, the new model is being hailed by the State Government as a panacea for the dual problems of poor school retention and low skill levels in the Tasmanian community. These problems were identified and targeted by the earlier *Tasmania Together*, a government community consultation for social, economic and environmental improvement (Government of Tasmania, 2001).

A year on from that announcement, and due for partial implementation in the 2009 school year, the *Tasmania Tomorrow* model is shaping up to be a unique approach to education in the sector. A wide range of commentators in the post-compulsory education sector have given their support for the ideas behind the report. Eric Sidoti, director of the Whitlam Institute, speaking at the Polytechnic Conference held in Hobart in May this year, described the initiative as "daring but low risk" and one that will be watched with interest by the other states (Government of Tasmania, 2008a). The thinking is that, with such low retention and skills levels, Tasmania must try something radically new to turn this around.

TASMANIAN POST-YEAR 10 EDUCATION AS IT HAS BEEN

TAFE Tasmania has been a responsive and successful training provider. Established by an Act of Parliament in 1997 as a statutory authority, TAFE has undergone a number of changes since the late 1990s both structurally and, like TAFEs across Australia, in course delivery. In 10 years, TAFE Tasmania enrolments have more than doubled. TAFE Tasmania is the only training provider in Australia to win the Australian National Training Authority (ANTA) award for Vocational Training Provider of the Year twice, in 2000 and 2002.

Only the Australian Capital Territory and Tasmania have had secondary colleges as the sole institution providing public education to Year 11–12 students for a number of decades now. Tasmanian secondary colleges, which are administered by the Department of Education (DoE), were established in the late 1960s to cater mainly for post-Year 10 school students who were university-bound. The college model has been viewed with interest by other states looking to improve the Year 11–12 learning environment, which differs from the junior high school and treats students more as independent young adults. There are eight Tasmanian secondary colleges, four in Hobart and the others in three urban centres across the state. Secondary colleges have undergone no major structural change since their inception. Rather, the colleges have evolved to cater for their changing and expanding student base. Until the early 1990s, it was possible to complete pre-tertiary studies at a secondary college in one year. Now students must attend Year 12 and some opt to return for Year 13 to complete their studies.

Over recent decades, the college cohort has come to include many students who are not university-bound and thus quite a number with lower academic skills who favour the Vocational Education and Training (VET) courses colleges have increasingly provided to cater for their needs. Due to the lack of technical equipment and specialised learning environments, few of these VET courses extend beyond Certificate II. Despite this, many students enter the workforce after completing them.

The ACT commissioned a review of its secondary colleges (Atelier, 2005) which found problems with the college structure around use of resources and responsiveness to student needs. There has never been a similar review of secondary colleges in Tasmania.

Recently raised to 17 years, the Tasmanian school leaving age dictates that many Year 11 students are still in compulsory education. Even before this change, getting students to start college was not the problem, as the greatest loss of retention occurred from Years 11 to 12 rather than from Years 10 to 11 (ABS, 2006). Despite having made the greatest improvement of all states in the mid 2000s, Tasmania's retention to Year 12 still trails all other states and territories bar the Northern Territory.

Differing by socio-economic status and locality to some extent, retention across all groups in Tasmania is relatively low — even for non-government schools. Barriers to ongoing participation in education and skills acquisition are complex, as a major study of Tasmanian youth participation in education concluded (Kilpatrick, Abbot-Chapman and Baynes, 2002). This study noted as contributing factors, socio-eco-

nomic conditions; community/family valuing of education; curriculum factors; youth employment and welfare policy settings; financial incentives and barriers; the structure and condition of the economy; as well as Tasmania's largely rural population.

JUSTIFYING A NEW STRUCTURE

Prior to the announcement of the restructure, there was no preliminary discussion paper, nor was time allocated for broad public debate. The initiative was supported by a 28-page brochure entitled *Qualifications and Skills for Tasmania Tomorrow* (Government of Tasmania, 2007), which cited the Government's reasoning behind the change, supported by some research evidence and examples of successful post-compulsory educational structures around the world from countries as diverse as Finland, USA, Switzerland, New Zealand and Singapore. Tasmania's small size, particular population demographics, resource industry-based economy, as well as socio-economic circumstances and culture, make it difficult to compare meaningfully with these countries. Yet many of the arguments for changing the approach to post-Year 10 education in Tasmania are the same as those put forward across Australia as governments attempt to grapple with the problem of disengaged youth and the consequent loss of fulfilment of human potential and economic productivity.

Qualifications and Skills for Tasmania Tomorrow acknowledges that the problem of student engagement is a reflection of secondary, primary and early childhood school experiences and beyond that to their homes and community lives, yet the change initiative is focused on post-Year 10, so there is nothing in the document about how to address the retention problem from a broader educational and cultural perspective.

WHAT THE NEW STRUCTURE WILL LOOK LIKE

For *Tasmania Tomorrow,* three autonomous statutory authorities will be established by an Act of Parliament. Following this, schooling under the DoE will finish at Year 10. To complete Years 11 and 12, students will have to enrol in the **Tasmanian Academy**, the **Tasmanian Polytechnic**, or the workplace training enterprise provisionally entitled **Training Tasmania**.

The primary purpose of the academy will be to prepare students for entry to university, offering Year 11 and 12 students courses based on the new post-Year 10 curriculum framework. Government literature claims the academy will offer an educational program which better prepares students for university studies by focusing on the "critical skills and attributes required to be successful in this pathway" (Government of Tasmania, 2008b). There is to be no entry standard for the Academy. However, students will be strongly advised about the background that courses require, and that the focus of study will be on preparation for university.

The polytechnic is touted as providing to both adults and 16- and 17-year-olds "an integrated social and economic learning investment, building their capacity to acquire new skills 'to do', to develop new understandings 'to know', and to expand their experiences 'to be' their own person" (Government of Tasmania, 2008b). It is expected that the Polytechnic will attract many "second chance" students up to 25 years of age, who left education without significant qualifications. It is this integrated

approach which makes the polytechnic the greatest departure from existing structures. It is here that the new structure is hoped to achieve the major improvements in retention and upgrading the skills of Tasmanians.

Training Tasmania (an interim title) will provide apprentice and workplace training and accreditation. Initially mooted as a government–business enterprise, this statutory authority looks now like it will be a wholly government endeavour. Premier Bartlett, in his contemporaneous role as Minister for Education, has argued that Training Tasmania needs to be a structure separate from the Polytechnic, capable of a more flexible approach to delivery and responsive to the needs of industry.

Each of the three *Tasmania Tomorrow* statutory authorities will be responsible for state-wide (not merely single campus-based) delivery of educational programs and each will be controlled by a CEO and seven-member board of directors.

ISSUES AND DEVELOPMENTS

Detail of how the academy, polytechnic and Training Tasmania are to be co-ordinated will not be fully known until they are operating. The idea of having a "shared services unit" — a single organisation to co-ordinate services for both students and staff of the three organisations that will share multiple, state-wide campuses — is a recent practical outcome of discussions between key stakeholders. However, "shared services" will only co-ordinate where there are shared functions or interests between the authorities. All other administrative functions must be organised by the individual statutory authorities themselves. How much unnecessary duplication of function and/or bureaucratic conflict is evident between independent statutory authorities sharing the same physical locations and resources will become apparent when they are in operation. The degree to which the three entities can work harmoniously will, to a great extent, be dependent on the will of their recently appointed CEOs.

It is hard to see how responsive the new entities will be to local community input and needs, as these are not structured like local schools or secondary colleges, which currently have school associations and direct parent/community involvement in their governance. They will instead be run by state-wide boards that will be responsible for setting up their own mechanisms for gauging local input and needs.

The effect of uncertainty on the part of parents, and the current student cohort feeling like "guinea pigs", are factors that may well be gauged by the extent of enrolment drift to the private schools for Years 11 and 12 from 2009. It is noteworthy that the cohort of students who enter Year 11 in 2009 is the same year group that began Year 7 at the height of debate over Essential Learnings (ELs), a partially failed integrated disciplinary approach to K-10 curriculum delivery, similar to some aspects of the Victorian Essential Learning Standards (VELS).

It is unclear whether teacher registration, currently required of K-12 Tasmanian teachers, will be a requirement to teach in any of the new post-Year 10 structures. Under the Tasmanian Teachers Registration Act (2000), a school requiring teachers registered for instruction includes an institution "that provides instruction up to and including the final year of secondary education".

While discussions with the Teachers Registration Board continue, in preference to

registration, *Tasmania Tomorrow* proponents prefer quality assurance similar to the current TAFE processes; this involves auditing who is running courses and their qualifications. The return to study of a greater number of "second chance" young adult students up to their mid-20s may give the academy and polytechnic campuses a richer, more varied culture than the current secondary colleges; yet in such an environment, issues such as duty of care and the safety of minors will need to be addressed.

Judging by Program for International Student Assessment (PISA) results, more comprehensive education systems provide the best educational outcomes for the majority of students (OECD, 2006). Despite the clear benefits of such an egalitarian structure, comprehensive education is currently under threat from aspects of educational privatisation and overtly selective high schools in a number of Australian states. The academy is purportedly non-selective, yet enrolment will require prerequisite studies and it is envisaged that at least one Hobart campus will house only students of the academy, separating them from those undertaking the more practically focused learning of the polytechnic.

The significant *Tasmania Tomorrow* innovation is the advent of the polytechnic, which will run across a number of existing TAFE and secondary college campuses. It is intended that the polytechnic will have all the extra-curricula offerings and student support structures of current secondary colleges. Initially it was thought that polytechnics would provide the full range of pre-tertiary courses offered by the academy, but it was soon realised that scarce resources would not allow this. Extending the full range of student support, often barely existent on current TAFE campuses, to all P-10 campuses is also likely to stretch resources.

Agreement between unions and the three statutory authorities on industrial arrangements for employees has also still to be achieved.

Teacher optimism about *Tasmania Tomorrow* varies widely. Ultimately, as John Smyth, secretary of the Tasmanian Department of Education, former CEO of TAFE Tasmania and the person reputed to have masterminded *Tasmania Tomorrow*, has remarked, it will be teacher commitment that makes it flourish or fail.

REFERENCES

Australian Bureau of Statistics (2006): Item no. 221.0 2006 Schools, Australia ABS. **http://www.abs.gov.au/AUSSTATS/abs@.nsf/productsbyCatalogue/1E44BCDEF87BCA2FCA2568A9001393E7?OpenDocument** (or go to: **tinyurl.com/6omgld**)

Atelier Learning Solutions Pty Ltd (2005): *Government Secondary Colleges in the Australian Capital Territory: Challenge, Opportunity and Renewal*. ACT Department of Education and Training: Canberra.

Kilpatrick, S, Abbott-Chapman, J, and Barnes, H (2002): *Youth Participation in Education: A review of trends targets and influencing factors*. Tasmanian Office of Post Compulsory Education: Hobart.

Government of Tasmania (2001): *Tasmania Together* homepage. **http://www.tasmaniatogether.tas.gov.au/about_tasmania_together** (or go to: **tinyurl.com/6d2hs4**)

Government of Tasmania (2008a): The Polytechnic Education Conference: Conference Synopsis and Report. **http://tomorrow.education.tas.gov.au/events/Synopsis.pdf** (or go to: **tinyurl.com/5w4wgd**)

Government of Tasmania (2008b): Discussion Papers on Educational Programs formed by the *Tasmania Tomorrow* initiative for: The Tasmanian Academy; The Tasmanian Polytechnic; and Training Tasmania. **http://tomorrow.education.tas.gov.au/publications/Tasmania-Tomorrow-Educational-Programs-Discussion-Paper-FINAL.pdf** (or go to: **tinyurl.com/5bdlvl**)

Government of Tasmania (2007): Qualifications and Skills for *Tasmania Tomorrow* **http://tomorrow.education.tas.gov.au/home/EDU0028_booklet.pdf** (or go to: **tinyurl.com/5tah9x**)

OECD (2006): PISA 2006 results. **http://www.oecd.org/document/2/0,3343,en_32252351_32236191_39718850_1_1_1_1,00.html** (or go to: **tinyurl.com/yvhqdl**)

Tasmanian Teachers Registration Act (2000): **http://www.thelaw.tas.gov.au/tocview/index.w3p;cond=;doc_id=98%2B%2B2000%2BAT%40EN%2B20080715120000;histon=;prompt=;rec=;term** (or go to: **tinyurl.com/6zw725**)

KEN LEITHWOOD

The qualities of effective leadership, testing the basics and public schools

INTERVIEW BY JOHN GRAHAM

THIS IS THE third part of an interview with Kenneth Leithwood, Professor Educational Leadership and Policy at the Ontario Institute of Educational Studies at University of Toronto. It was conducted during his visit to Australia as a guest of the Victorian Educational Leadership Consortium (VELC) in conjunction with the Department of Education and Deakin University. He ran a number of workshops for VELC on distributed leadership, teacher emotional intelligence and parent engagement.

JG: What are the characteristics of good leadership in schools?

KL: Well, I am promoting a particular view of successful leadership practices that I think we have good evidence to say are at least part of the repertoire of almost all successful leaders. Before I comment on those, what I do need to say in conjunction with that is that there are different ways of enacting these successful practices. Much of the leadership literature would have you believe that context is everything. You can't lead a small school the same way you lead a big school or you can't lead an elite school the same way

you lead a challenged school. My argument here is that you enact a common set of practices differently in each situation, but in fact they are the same set of practices.

JG: Can you identify some of those common practices?

KL: A scheme that I have been working on with my colleagues divides these practices into four big categories and within these categories we have found three, four or five more precise practices per category. They are directions in which you are heading. Every model of leadership has something about vision or directions and that is almost a definition of leadership. There is capacity development — I call it developing people. If you have a direction, your next job is to help ensure that people have the capacity to move in that direction.

The third and fourth are really about the setting in which people work. Third is redesigning the organisation. As the challenges change, you want to make sure the standard of operating procedures, budget alignment activities, engagement and the like are there to support what you expect people do. In interviews we recently did with teachers, we hear them saying, "If only we could teach instead of all the other rubbish we have to do".

So the point in managing the structural program is to be focused much more directly on the quality of instruction in the school, including things like staffing programs with people who have the right capacities to do them. In the corporate sector you would call managing the structural program simply "managing the technical core". Every organisation has a technical core and leaders always have to manage the technical core in some fashion.

JG: So the leadership practices you are talking about are not specific to schools?

KL: We have got 13 or 14 specific practices and we see evidence of these being identified as successful categories and practices in private corporations and in the military as well as in schools. We see them being used by successful leaders in all kinds of areas, in the Netherlands, England, Canada, USA and Australia, so they cross national boundaries and they cross organisational sectors. So often I read in the educational literature that we just don't know enough about leadership to take a firm stance on what people should be prepared for. I think that is nonsense. I think we know what works now. We just haven't emphasised this very well.

JG: Can you say something about what is called distributed leadership?

KL: This is kind of a growing edge of the conversation in the leadership literature now. Studies in the States and in the UK have been posing issues and questions about how leadership is distributed in schools for the past five or six years. Their mission has been primarily an effort

to describe how leadership is distributed in schools, not how much it can be used to improve schools; that is my mission. People think, for a variety of reasons, that if more people are engaged in those leadership functions, schools will work better for kids.

We have recently collected evidence about particular patterns of leadership distribution making a contribution to student learning. It is only certain patterns; so shared leadership as such may not have much merit. There are ways of doing it that seemed to work well and other ways of doing it which are just a waste of time. To make a long story short, unless the patterns involve some kind of co-ordination of leadership functions across the people involved, they don't seem to make very much difference. People just bump up against one another, waste energy by duplicating activities and dissipate a sense of direction in leadership. It is more a nuanced kind of claim that I would make, that under the right conditions, given the right pattern, the chances of more distributed formal leadership working well is probably right. But, it is still early days.

JG: I suppose when you are talking about distributed leadership there is a spectrum from one person, say the principal, having a very significant level of leadership to the process of leadership in some way involving the whole staff.

KL: Well, you know we have looked fairly broadly at this issue and you have raised an issue that is worth mentioning. Under no circumstances do the principals not have the most influence in the school according to our data. Even in schools where the leadership is distributed really quite widely and other people seem to have a lot of influence, the principal never loses influence. Influence is kind of an infinite and the more you give away the more you get; it kind of sounds like a slogan.

Only at the high-performance schools that we have looked at do parents and kids exercise much leadership. Actually, teams of teachers also seem to exercise more leadership in high-performing schools than in other schools. In the lowest performing schools nobody has nearly as much influence as almost everybody does in the high-performance school. It is like a lack of leadership at large, and certainly students and parents have no influence. So I think we are onto something, but it is going to be a more contextualised and contingent kind of message.

JG: What would be an example of parents having influence in a school?

KL: One of the ways we have measured that is simply their influence on decisions in those schools. They have a voice that is listened to and valued and respected.

JG: And that would also be the same for students?

KL: Yes. The student voice is actually quite absent from this discussion most of the time. We started focus groups of students for almost all of the leadership research we did. They are very knowledgeable about what is going on in schools and who gets things done.

JG: People are increasingly making links between quality teaching and international testing regimes, so that the quality of teaching becomes how well the students in your education jurisdiction are doing compared to students in the rest of the OECD.

KL: Judgements are being made about teaching that are based on comparative evidence of learning. If we think testing is primarily concerned with the skills that might be accomplished through a more behaviouristic orientation, then teachers will certainly be inclined to maintain that orientation, or let it dominate their instruction. This is something that I have been working on with my colleagues in a fairly disciplined way. One of the things that I have learned is that a deep understanding approach to instruction leaves kids not only with deep understanding but they do just as well along the way in the basics. They acquire those kind of basic things because they need to foster understanding.

The evidence we have is that kids who are taught with a deep understanding curriculum do very favourably on international and state tests compared to kids who are not taught that way. This is a very hard case to make in terms of convincing people that they could actually put aside drill and practice because it seems so directly linked to the testing and actually focus on the things that they like to do.

JG The media concentration is always on the basics, particularly in relation to public schools.

KL The problem is that there is so much focus on the issue of whether or not the basics are being taught. I think public schools struggle to get past that. I think it is quite proper to say, as a minimum, (that) the least you could do would be a good job with my kids on the basics of literacy and numeracy. I mean, if you can't do that, you can't move on. But in fact we can move on. The best evidence I know of suggests that for kids in challenging circumstances, the best curriculum you can give them is the same rich curriculum we think is perfectly suitable for kids who typically do very well at school. But that is a very hard argument to make, and it's made much harder in a conservative political environment that has this kind of no-nonsense and relatively behaviouristic view about how learning takes place.

JG: The other indicator which is used here, apart from literacy and numeracy tests, is the number of students you get onto university courses. The media compares the percentage of private school kids and the percentage of kids from government schools that get into Melbourne

University. What they don't point out is the difference in the funding base of each type of school. An elite private school in Melbourne gets about $23,000 per student from a combination of student fees and government subsidies. Government schools, on the other hand, get a maximum of $10,000 per student. So somewhere like Scotch College has got an extra $13,000 (per student) to get their students into university.

KL: In most of the places I work, folks could not get away with the case that these private schools were doing a good job. In the present conservative political environment, it is a value for money argument. How much achievement are you getting per dollar out of these two different kinds of schools? Well, it looks to me like government schools will win hands down.

NOTES on contributors

JOHN FIRTH WAS appointed CEO of the Victorian Curriculum and Assessment Authority in August 2005 after 12 years managing the curriculum branch at the VCAA and its predecessor the Board of Studies. He was responsible for the development of the first P-10 curriculum framework for Victorian schools — the Curriculum and Standards Framework (CSF) — and its replacement, the Victorian Essential Learning Standards (VELS), in 2004. He has played a leading role in the full recognition of vocational education and training in the VCE and in the development of the Victorian Certificate of Applied Learning (VCAL) as an additional pathway. In 2008 he was appointed a member of Interim National Curriculum Board.

PAT FORWARD WAS elected to the position of federal TAFE secretary of the Australian Education Union in January 2004. She previously held the position of federal TAFE president for six years, and was at the same time vice president TAFE in the Victorian Branch of the AEU. She has taught in Victorian TAFE colleges, at university and in schools.

JEFF GARSED IS research officer for the AEU Tasmanian branch. He researched and drafted the AEU's response to the Tasmania Tomorrow changes in post-Year 10 education. He is currently completing a PhD in education focusing on the implications of educational change processes on teachers' work.

JOHN GRAHAM IS a research officer at the AEU Victorian branch, with responsibility for researching curriculum and professional developments in education and training. He has written extensively about curriculum change, teachers and teaching as a profession, developments in education at an institutional, state and federal level, and on a range of other matters from funding to organisational review. John has been a teacher in Victorian government secondary schools, a researcher and writer for a national equity program, and a project manager and policy developer for the Department of Education.

NEIL HOOLEY IS a lecturer in the School of Education, Victoria University. He has interests in critical theory, practitioner research and inquiry learning, particularly as they apply to the mathematics and science areas of the school curriculum. He is committed to reconciliation between the Indigenous and non-Indigenous peoples of Australia and over recent years has been working on the implementation of a narrative curriculum for Indigenous children. Neil strongly supports education as a means of improving social life and sees the development of educational communities of practice as challenging rigid organisational structures and personal understandings.

CALL FOR PAPERS

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KEN LEITHWOOD IS Professor of Educational Leadership and Policy at the Ontario Institute for Studies in Education at the University of Toronto. His research and writing concern school leadership, educational policy and organisational change. Professor Leithwood has authored or edited more than 30 books, most recently Leadership With Teachers' Emotions In Mind (in press), Making Schools Smarter (3rd edition, 2006) and Teaching for Deep Understanding (2006). His work has had a significant impact on public policy on education across Canada and internationally.

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