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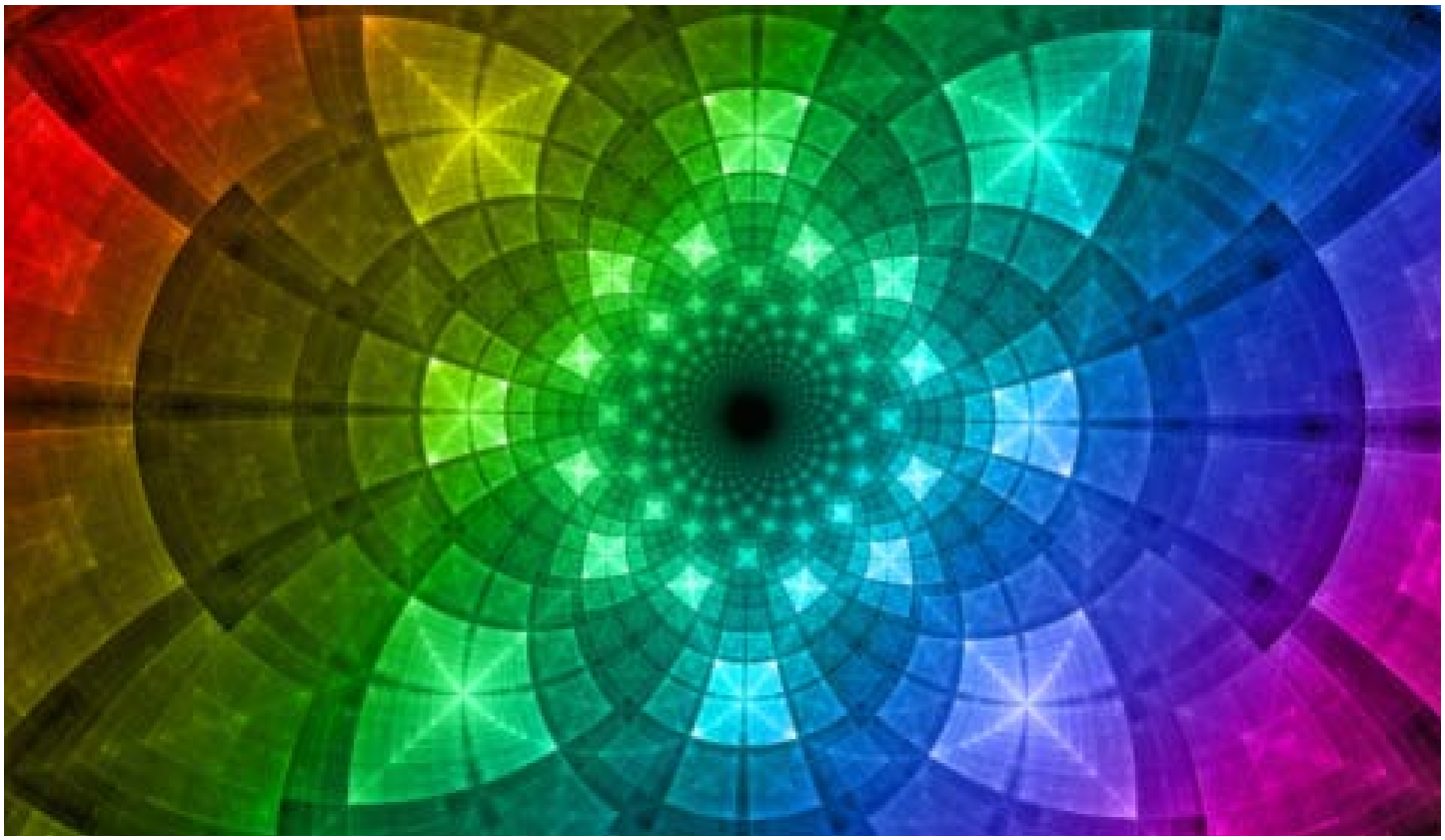
Structures in tertiary education and training: a kaleidoscope or merely fragments?

Research readings



NATIONAL CENTRE FOR VOCATIONAL EDUCATION RESEARCH

Edited by

Francesca Beddie
Laura O'Connor
Penelope Curtin

Australian Government

Department of Industry, Innovation, Climate Change, Science, Research and Tertiary Education

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NATIONAL VOCATIONAL EDUCATION
AND TRAINING RESEARCH PROGRAM

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About the research

Structures in tertiary education and training: a kaleidoscope or merely fragments? Research readings

Editors: Francesca Beddie, Laura O'Connor and Penelope Curtin

In June 2010 the Standing Council on Tertiary Education, Skills and Employment (SCOTESE) adopted a new set of national research priorities in tertiary education and training for the period 2011 to 2013. One of these pointed to the need to better understand structures in the system by examining the impact of policy, funding and market frameworks on the provision of education and training. Since very few researchers have investigated these issues, the National Centre for Vocational Education research (NCVER) decided to commission essays on various aspects of the topic. We hoped to throw light on the structures in the evolving tertiary education system and to take forward debate about the current wave of reform.

The authors and four discussants came together with other leaders in the system in November 2012 to talk about the essays. Given the complexity of these issues, it is quite difficult to distil the discussions into a few simple messages. Nevertheless, some of the key points were:

- A common understanding of the dynamics of the system is not easy to reach. We are still not all talking about the same thing when we refer to tertiary education.
- There is little support for a single integrated tertiary education sector. If there is a consensus it is that variety within the sector is a good thing.
- While the language of markets has been adopted in the reform effort, we need to be clear we are talking about a very unusual market, both in terms of its 'product' and its 'customers'. In fact, there is a dispute over who is the customer of the vocational education and training (VET) system — the individual student or the employers who ultimately employ those that the system educates and trains.
- Even within the sectors, there is not always consensus on definitions. This is notably the case when discussing the meaning of 'vocation' and the shape of competency-based training.
- To establish the underpinnings and value of each part of the system, we need greater clarity about the purpose of public funding, as well as a clear alignment between funding regimes and policy objectives. The issue is who should pay for what.
- Many pillars of the system can be strengthened. How institutions are governed, and how the workforce is organised and the system regulated require further thought. The extent of institutional autonomy is a key element.

While this exercise could never determine the ideal structures for tertiary education and training, it has been invaluable in teasing out the complexity of tertiary education. It also makes clear there is no simple 'market design' that would meet all the objectives of the various elements of Australia's tertiary education system.

Tom Karmel
Managing Director, NCVER

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Contributors

Editors

Ms Francesca Beddie is a consultant and former General Manager, Research, at the National Centre for Vocational Education Research (NCVER), with a strong interest in the intersection of research and public policy. She has previously been employed as a diplomat, with postings in Indonesia, Russia and Germany. From 1995 to 1998 she was a senior officer in the Australian Agency for International Development (AusAID), where she headed the agency's policy development and public affairs areas. Francesca has also worked as a policy and media consultant and trainer, historian and editor. From 2002 to 2004, Francesca was the executive director of Adult Learning Australia. She has served on the ABC Advisory Council and on the Australian Press Council and is a graduate of the Australian Institute of Company Directors.

Ms Penelope Curtin is a freelance editor and writer who has worked on NCVER publications for the past 25 years. She has previously been an arts administrator and a bookshop proprietor.

Ms Laura O'Connor manages and coordinates research projects at NCVER, where she has worked for over five years. Of the many different projects in which she has been involved, Laura is particularly interested in the impact of structural reforms on the student experience and understanding the various pathways which exist within the education system.

Other contributors

Professor Sharon Bell is Deputy Vice-Chancellor at Charles Darwin University, a Professorial Fellow at the LH Martin Institute and Emeritus Professor at the University of Wollongong. She was Co-convenor of Universities Australia Executive Women (previously Australian Vice-Chancellors Committee Senior Women's Colloquium), 2005—08. Sharon holds a PhD from the University of Sydney in the discipline of anthropology. She has worked with international agencies such as the World Bank, the Sri Lankan University Grants Commission and AusAID on institutional capacity-building projects. She is currently a recipient of an Australian Research Council Grant on Women in the Scientific Research Workforce.

Professor Jeff Borland teaches in the Department of Economics at the University of Melbourne and was head of the department from 2003 to 2006. He has previously held positions at the Centre for Economic Policy Research at the Australian National University, the University of Iowa and the University of Wisconsin-Madison. In 1997 he was awarded the Australian Academy of Social Sciences Medal for Excellence in Scholarship in the Social Sciences, and in 2002 was made a Fellow of the Academy of Social Sciences. Jeff's main research interests are the operation of labour markets in Australia, program and policy evaluation and design, Australian economic history, and the economics of sport.

Professor Valerie Braithwaite works in the Regulatory Institutions Network at the Australian National University. A psychologist by training, her work advances the importance of understanding the ways by which individuals interpret regulatory interventions and how they come to exercise defiance, at times undermining the best of regulatory intentions. Some of Valerie's recent regulatory work includes the books *Defiance in taxation and governance* and *Regulating aged care* (with John Braithwaite and Toni Makkai).

Professor Kerry Brown is Director of the Research Centre for Tourism, Leisure and Work at Southern Cross University and holds the Mulpha Chair in Tourism Asset Management. She holds a PhD in industrial relations from Griffith University and was awarded an Australia and New Zealand Academy of Management Research Fellowship (for the period 2009—14). Kerry is interested in the relationships, policies and practices which exist between the public, private and non-profit sectors, particularly in the area of education and development.

Dr Yijuan Chen is a lecturer in the Research School of Economics at the Australian National University. Yijuan received his PhD degree in economics from the University of Pennsylvania in 2009. His research is focused on evaluating public disclosure policies in the health care and education sectors and in applied work in labour economics and health economics.

Dr Michael Coelli is a Senior Lecturer in the Department of Economics at the University of Melbourne. Michael has conducted research in the economics of education and labour economics area for the past ten years. His research focuses on the determinants of education attainment (tuition fees, family background, labour market experiences etc.) and on the outcomes of education (higher wages, employment opportunities, job satisfaction etc.) for both mature-age students and traditional students.

Mr Ian Curry is the National Coordinator of the Australian Manufacturing Workers Union (AMWU) skills, training and apprenticeship policies. He represents the AMWU or the Australian Council of Trade Unions on a range of state and national vocational education and training (VET) advisory and regulatory bodies and is the Deputy Chair of Manufacturing Skills Australia and Chair of the National Apprenticeship Program Steering Committee. Ian's involvement in skills and workforce development reform stems back to the structural efficiency and award restructuring processes of the late 1980s and early 1990s and he maintains his keen interest in the role of VET as it relates to the world of work.

Dr Robert Dalitz is a data analyst at Universities Australia. Before this he was an Adjunct Fellow at the University of Western Sydney. Robert has experience examining the structure and dynamics of the education and training system and its relationship to innovation and economic development. His research interests include the relationship between skills and innovation, sectoral dynamics and technological innovation. His background is in analysing systems of innovation and competence building, using case studies and statistical data.

Ms Di Dibley is a consultant for AgriFood Skills Australia who has expertise in policy and program development. Di is an environmental lawyer with a long history of work in environmental policy and advocacy. This includes work on sustainable agriculture and natural resource management. She has previously been employed as National Policy Director, Environment and Energy, for the Australian Industry Group, and National Policy Director for Greening Australia. In addition, she has been a member of the NSW Ministerial Advisory Council on Environmental Education and on the Australian Centre for Environmental Law Advisory Board of the Australian National University.

Ms Sue Fergusson joined NCVER as General Manager, Research in July 2012. Sue has led major policy development, data quality and reporting activities across the Queensland VET system. She has both managed and conducted data analysis and applied research into aspects of the labour market, to support policy and planning within the sector. Sue has a wealth of experience in public finance and strategic planning, having held senior roles within Queensland Treasury, including four years as Director of the Education and Innovation Branch.

Dr Steven Hodge has worked in the area of vocational education and training for 20 years, starting with a role in a group training organisation and working in diverse roles as a program designer, trainer and manager of a registered training organisation. He is currently a senior lecturer and course coordinator in the School of Education and Arts at the University of Ballarat. Steven is a member of the Australian Vocational Education and Training Research Association executive and the Australian Association for Research in Education executive, as well as the Australian Council of Deans of Education Vocational Education Group. His research interests include competency-based training, occupational knowledge and the philosophy of vocational education.

Mr Richard Jenkins has been a consultant for 13 years, specialising in the development and review of training packages. Before this, Richard was the National Manager of Training Policy for the Australian Industry Group, previously known as the Metal Trades Industry Association (MTIA). In this role he had both training and industrial relations responsibilities, especially for the Metal Industry Award classification structure. From 1988 to 1991 Richard was the National Executive Officer for the National Metal and Engineering Training and Career Development Project, which is a predecessor organisation of Manufacturing Skills Australia.

Professor Kwong Lee Dow, AO, has worked at the University of Melbourne since 1973. During this time he has had a variety of roles, including Dean of Education, Deputy Vice-Chancellor and Vice-Chancellor. He has held appointments as Chair of the Victorian Curriculum and Assessment Authority, member of the national Higher Education Council, Chair of a national Review of Teaching and Teacher Education and Deputy Chair of Teaching Australia. Kwong was appointed an Officer in the Order of Australia in 2012. His recent work has focused on the connections between universities and TAFE (technical and further education) institutes, particularly in regional communities.

Mr Adrian Marron is the Chief Executive Officer of the Canberra Institute of Technology, the public provider in the Australian Capital Territory. Adrian has wide-ranging work experience, which includes director/CEO positions in TAFE institutes in three jurisdictions, as well as drilling for oil in the North Sea in the 1970s and working in a brewery in Papua New Guinea. He is a Fellow of the Australian College of Educators, a board member of TAFE Directors Australia, a member of the TAFESA Board, a member of the Defence Industry Skills Taskforce and a Fellow of the Australian Institute of Management.

Dr Juergen Meinecke is a lecturer in the Research School of Economics at the Australian National University. Juergen received his PhD degree in economics from the University of California, Los Angeles in 2008. His research is focused on structural estimation, dynamic programming, non-parametric estimation and partial identification. Juergen has also done applied work in labour economics and health economics.

Dr Damian Oliver is a Leading Research Analyst at the Workplace Research Centre in the University of Sydney. He was awarded a PhD in industrial relations from Griffith University in 2007. Following postdoctoral research at the University of Duisburg-Essen in Germany, Damian spent three years at NCVER in Adelaide. Damian is interested in examining the links between education, training and work; in particular, the apprenticeship and traineeship models of skills development, the intersection of workforce development strategies and industrial relations issues, and the transition from education to employment.

Professor Jonathan Pincus is Visiting Professor of Economics and member of the Institute for Mineral and Energy Resources at Adelaide University, and an independent economic researcher. He is president of the SA Branch of the Economic Society and a Fellow of the Academy of Social Sciences. He has been listed in Who's Who in Economics since 1986 and holds a PhD from Stanford University in Economics. In addition, from 2002 through 2007, he was Principal Adviser Research at the Productivity Commission. Jonathan's research interests include the economic history of Australian infrastructure and public economics.

Professor John Quiggin is a Federation Fellow in Economics and Political Science at the University of Queensland. He is prominent both as a research economist and as a commentator on Australian economic policy and is a Fellow of the Econometric Society and the Academy of the Social Sciences in Australia. John has produced over 1000 publications in fields including environmental economics, risk analysis, production economics and the theory of economic growth. He has also written on policy topics, including microeconomic reform, privatisation and education policy.

Mr John Ross is a higher education journalist with *The Australian*. He reports across the range of tertiary education issues, specialising in VET policy and international education. He has won journalism awards from the National Press Club, Universities Australia, the International Education Association, the Migration Institute and the Council of Deans of Education. John joined *The Australian* in mid-2010 after working for several years with *Campus Review*. Prior to that he had spent many years as a media officer with New South Wales government agencies, including the Department of Education and Training, and freelancing for publications including *The Sydney Morning Herald* and *The Good Weekend*.

Mr Robin Shreeve began his role of Chief Executive Officer with the Australian Workforce and Productivity Agency (formerly Skills Australia) in October 2009 and is based in Sydney. Robin was previously the Chief Executive Officer of the City of Westminster College, London. This college provides vocationally orientated education and training to over 7000 students across 300 courses. He has a distinguished history within the tertiary sector including Deputy Director-General, Technical and Further Education and Community Education, NSW Department of Education and Training.

Associate Professor Michele Simons is President of the Australian Vocational Education and Training Research Association. She is also the Program Director for the Bachelor of Education (Adult, Vocational and Workplace Learning) at the University of South Australia. Michele completed her PhD in 2002 and holds qualifications in adult education and human services from the University of South Australia. She has had extensive experience in designing and conducting research studies which focus on learning in the workplace; apprenticeships and traineeships; workforce and career training and development, particularly for VET teachers and trainers; and building the capability of staff in the sector.

Overview

Francesca Beddie

The National Centre for Vocational Education Research (NCVER) advises ministers represented on the Standing Council on Tertiary Education, Skills and Employment (SCOTESE) on the research priorities that guide NCVER's research program and frame research activities across the broader tertiary education and training community. One of the priorities identified in 2010 was the need to understand structures in the tertiary education and training system, by examining the impact of policy, funding and market frameworks. This book of readings addresses this topic.

While policy development in education has tended to evolve slowly, Robin Ryan has shown how this evolution can be 'punctuated by episodes of significant and sometimes contentious change' (2011). We are in such a period of change, which makes understanding the structures that underpin the system, and the environment it operates within, difficult but important. NCVER commissioned the following essays to elucidate various aspects of the architecture of post-compulsory education in Australia and thereby enhance debate about the reform of the system.

What follows is an eclectic set of papers. They are presented in clusters, with each section discussed in a synthesis produced by a leading thinker in the area of education, policy or economics. Inevitably, there is overlap. The book is organised into four parts:

- how educational matters influence the system's structures, which includes essays prepared by Sharon Bell, Steven Hodge and Michele Simons, which are then discussed by Kwong Lee Dow
- who controls the system, with essays prepared by John Quiggin, Richard Jenkins and Ian Curry, and Rob Dalitz and Di Dibley, followed by Robin Shreeve's discussion piece
- how the system is governed in a competitive environment, with essays by Kerry Brown, John Ross, Adrian Marron and Damian Oliver, followed by a discussion prepared by Jonathon Pincus
- how individuals interact with the system and how to ensure they get quality offerings, with essays by Yijuan Chen and Juergen Meinecke, Michael Coelli, and Valerie Braithwaite and Sue Fergusson, which are then discussed by Jeff Borland.

Lee Dow reminds us that this must be a subtle discussion. We need to delve further than the headlines tertiary education reform has been generating and take time to properly interpret key words, starting from the very idea of a tertiary sector. He argues for the retention of two sectors — higher education and vocational. What is not desirable — and never was — is the goal of uniformity. Indeed what emerges from the essays and responses to them is that a proper understanding of different types of education and teaching demands drilling deeper than to the arbitrary levels of higher education and vocational education and training (VET). Further, even in the digital age, we must, as Bell's essay acknowledges, take account of geography: the nature of tertiary education provision will differ depending on whether its students and premises are located in regional Australia, or in outer-metropolitan areas, or at campuses in the inner city.

In commissioning these essays, we sought to include new perspectives that may assist in unravelling the complexity of the topic. For that reason, some authors are less steeped in contemporary discussion of tertiary education than others. They bring their experience of other realms — federalism, health economics, for example — and points of view that are not unanimously accepted

nor are fully fleshed out by the discussants. This should encourage the reader to delve into the detail of each essayist's argument.

None would disagree with the idea of education as a worthwhile endeavour; they do debate how it should be delivered and who should pay for it. Their perspectives reveal the cultural fragmentation stymying the aspiration for greater integration of tertiary education. A university person describes vocational education as 'thin'; a journalist thinks quite differently about competition from an economist; an educator and a unionist have conflicting interpretations of what is a 'training package'.

Quiggin was asked to consider the relatively new phenomenon of referring to education as an industry. He acknowledges that elements of market economics and certainly industrial relations have changed the nature of education delivery but leans towards the view of education as an investment, not a commodity or service. He argues that it is reputation, built on sustained institutional standards and individual professional ethics, rather than market prices or even direct observation of quality, that drives educational choices.

Lee Dow reminds us that people — students, teachers, employers — are integral to consideration of education, which is much more than a physical structure or a process of knowledge generation. Chen and Meinecke have a clear focus on the student in their essay that considers how people decide upon a post-compulsory education pathway. Their analysis mentions the influence of structures beyond the education system, such as parental background and socioeconomic status, on educational outcomes, although they conclude that academic ability is the primary determinant of choice between university and VET.

Other players emerge in the essays discussed by Shreeve: public servants and industry bureaucrats; employers and institutional managers. All have their own vantage point. In vocational education and training, there is a persistent clash between the educationalist's view of the student as the 'customer' and that of industry (another of those key words that remains ill-defined), which argues it is itself the end-user of the customers' skills.

So we come to power structures. Who decides what training an individual or enterprise needs? Shreeve does not mince his words — the funders and owners of the system have ultimate control, even if they are receptive to industry advice. For the time being, governments are determining the funding models, which may explain the chagrin of those in industry at the dilution of their supposed leadership of the system. Yet the expectation that government pays a large proportion of the cost is a deeply embedded trait in the system. What is becoming tricky is the introduction of demand-led systems — Ross discusses this reform — into an area of activity that is not a straightforward industry and which has a hybrid customer base.

The structures of post-compulsory education are complicated by the outcomes we expect. Unlike schools, which have a much clearer purpose — to equip young people with an education — the tertiary system strives to achieve both broad economic and societal gains and individual benefits. Several essays consider these issues. They come up with different solutions. Brown, who brings insights from beyond Australia to her argument, suggests that government should pay for the acquisition of general or generic skills and employers for specific vocational skills. Others, like Coelli, show the returns to individuals from an education, reiterating the concept of education as an investment. Pincus and, most explicitly, Quiggin ask us to reflect on the role of government as funder. Quiggin offers a thought experiment of a universal capital grant paid to all Australians on reaching adulthood, which might be used either to finance post-school education or to support some other investment, such as the establishment of a small business or the purchase of a home. Here is an idea to be ruminated upon.

Another complication is the plethora of providers, particularly in VET, and the variety of rules by which they play. Many essays consider their differences: Simons and Oliver look at the professional standing and working conditions of teachers; Bell, Hodge and Marron illuminate different angles of the higher education—VET divide. In sum, they show how much more innovation is needed to fulfil the Bradley vision of a learner-centred system rather than one shackled by different historical traditions and competition for influence. Pincus in his overview emphasises the competitive environment in which structural reform is taking place. His focus is primarily on economic competition, although there is discussion, especially in Ross's piece, about the political and policy tensions that colour vocational education delivered in a federal system. And commenting on Marron's account of an attempted merger of institutions, Pincus reminds us of the pitfalls of applying private sector arrangements in the public arena. This point emerges also in Oliver's essay, which outlines the various industrial awards that apply in the training market and how these sully the notion of an even playing field for public and private providers.

At the heart of this contest is a non-structural issue, namely, status. Rankings (of both institutions and occupations), brands and aspirations are all part of the system. While governments are seeking to regulate for quality as well as probity, and to equip students to make good choices, structural reforms will not be enough to establish parity of esteem between higher education and vocational training. Borland points to the self-sustaining culture of top universities, which is able to attract and retain the best staff. Several essayists contend that it is an institution's long-standing reputation that also attracts students, whatever the price of its offering. Marron describes the confidence an autonomous university body can bring to the negotiation table. Moreover, it has always been the universities that have offered training in the most prestigious vocational occupations: medicine and law, for example.

Some essays underline the distinctive elements VET can boast: foremost, its links to industry but also its ability to support disadvantaged students. Others point to its weaknesses, in particular the reputational cloud that the low minimum qualification for its workforce casts; its lack of longevity as a coherent sector; and its internal battles over competency-based approaches. Hodge argues that VET is constrained by the format and funding of competency standards and training packages. In practice, he says, the acquisition of underpinning knowledge is taken as a secondary goal after demonstration of the performance criteria specified in the training package. Jenkins and Curry, on the other hand, see the evolution of a modularised approach to skills specification and assessment — culminating in training packages — as ensuring that training matches industry needs. In weighing up the arguments in this debate, Shreeve concludes that training packages are versatile enough to survive. Nevertheless, such disputes are destined to continue unless we can come to agreement about the need to develop both conceptual ability and competency in applied learning.

In the knowledge economy there must be room for both. How these are prioritised is likely best done through joint work from both the educational and occupational vantage points. This suggests a more sophisticated approach is needed from industry skills councils in determining not just current competence but also future knowledge requirements. Dalitz and Dibley see a further role for these councils — as instruments in the implementation of public policies requiring the development of new skills and diffusion of innovation.

Such enhancements will only gain traction if the system can guarantee quality. VET has yet to embrace consistent and verified approaches to assessment that leave all parties confident about the qualification awarded. This is one element of quality control. Another, more formal regulation of VET delivery, is discussed by Braithwaite and Fergusson, who offer an optimistic approach. They argue for recognition of both teaching professionalism as well as clear articulation of VET's

responsibility to be responsive to labour market needs. They would like to see a regulator that is tough on providers abusing the system, while supportive of those committed to the provision of quality education and training.

Another important issue canvassed is whether we should be aiming for an integrated tertiary education sector, encompassing both VET and higher education. What emerges is that this idea of one integrated sector is a misreading of the primary impetus from the Bradley Review for the current structural reform in tertiary education. This collection of essays coalesces in an argument for diversity not uniformity: a reclassification of the elements that make up both higher education and vocational education, according to the logic of provision, desired outcomes and their student bodies. This would require us to think more about fields of education and their match with occupations and career paths: as Borland notes, there is heterogeneity in the level of returns even from within the array of bachelor degrees, let alone from different levels of qualifications. Blanket statements about benefits of one type of education or of a specific institution are bound to be misleading. And when the concern is for equity we cannot forget the connections with schools. For many students from low socioeconomic status backgrounds it is Year 12 completion that most affects their participation.

Were we to depart further from institutional legacies as well as existing funding models and power arrangements, we might be able to picture tertiary education as something not centred around institutions but as a process of knowledge and skills acquisition — as well as professional development. This might lead to consideration of the merits of further segmentation of the educational workforce rather than of ways to achieve parity. Simons and Hodge make it clear that some teachers need to be able to straddle the VET—higher education divide, as many learners want to do. Others need to retain their valuable industry experience; and yet others to teach those seeking a second chance at basic education. Simons uses the metaphor of a kaleidoscope, a cylinder of shards unified by light, to describe her vision of a coherent workforce development plan for many types of educators. It is perhaps also a better way of visualising the Bradley idea of integrated tertiary education structures.

The essays that follow move well beyond arguments about what tertiary education is: they seek, in a variety of voices, to help us to think more clearly about the obstacles and opportunities that the current reform period offers to align tertiary education to the demands of the economy, to the diversity of today's adult learners, and to the contest of the institutions involved in its delivery.

How educational matters influence structures in the system

The public good

Sharon Bell, Charles Darwin University

The role of tertiary education in society has long been coupled with notions of higher purpose. Universities in Western democracies have traditionally been recognised as having an obligation to produce graduates who have not just acquired technical knowledge and skills but who also have the capacity to contribute positively to the social fabric. It may be argued that in the public mind universities remain essentially public and philanthropic, even though their reliance on public funding has been significantly eroded (Arthur 2005, p.20). Central to the role of universities is a contribution to society and citizenship much broader than the production of graduate citizens. Universities contribute to the preservation and development of critical traditions of thought that enable us to effectively conceptualise and implement the very notion of citizenship.

Moodie (2005) contends that this 'higher purpose' has not been the exclusive preserve of universities: 'Vocational education was established for social and moral improvement rather than to contribute to industrial efficiency, it provided education for life as much as developing technical skills, and it taught the principles underlying crafts rather than the crafts themselves' (p.131). The 'elevation of the working classes' has been a persistent theme, particularly on the part of the industrialists/ philanthropists who were often the founders of the early vocational institutes.

Kezar (2004) argues that the charter between higher education and society is generally defined as a reciprocal relationship. This relationship is seen as normative, in that it is invested with certain fiduciary responsibilities and rights. Society provides resources, political support, raw materials and a guiding influence. In return, colleges and universities educate students, serve as developers and repositories of knowledge, provide social critique, and contribute to the community (p.436).

The last two decades have witnessed a significant shift from this traditional 'social' charter. The emergence of this shift was clearly identified by Ernest Boyer (1987, p.283) in his study of 29 American colleges and universities:

> Throughout our study we were impressed that what today's college is teaching most successfully is competence — competence in meeting schedules, in gathering information, in responding well on tests, in mastering the details of a special field … But technical skill, of whatever kind, leaves open essential questions: Education for what purpose? Competence to what end? At a time in life when values should be shaped and personal priorities sharply probed, what a tragedy it would be if the most deeply felt issues, the most haunting questions, the most creative moments were pushed to the fringes of our institutional life.

Many contemporary commentators reiterate the sentiment that higher education is forgoing its role as a social institution and is functioning increasingly as an industry with fluctuating, predominantly economic, goals and market-oriented values characterised by privatisation, commercialisation and corporatisation (Kezar 2004, pp.430—5). Arthur (2005) notes that, given the level of public investment in higher education in both Britain and the United States, one would expect to see a clear commitment to a culture of citizenship, but there are significant pressures on higher education institutions that inhibit this commitment, in particular, an emphasis on technical expertise and narrow academic specialisation. This in turn connects higher education more strongly to the needs of the economy and the increasing desire for students to be 'educated' for employability (p.4).

Sir David Watson (2007, pp.5—6) has drawn our attention to both the political and economic drive for utility and a continuing recognition of higher purpose. He notes that, in 1997, the UK Dearing Committee quoted Robert Reich's *The work of nations* on this point:

> The skills of a nation's workforce and the quality of its infrastructure are what makes it unique and uniquely attractive in the world economy … so important are these public amenities, in particular the university and the airport, that their presence would stimulate some collective analytical effort, even on a parched desert or frozen tundra. A world-class university and an international airport combine the basic ingredients of global symbolic analysis: brains and quick access to the rest of the world.
>
> (National Committee of Enquiry into Higher Education 1997, p.190)

In responding to Dearing in their green paper, *The learning age*, the Secretary of State for Education and Employment, David Blunkett, expressed a second, wider, emancipatory hope for lifelong learning, including the role of the universities:

> As well as securing our economic future, learning has a wider contribution. It helps make ours a civilized society, develops the spiritual side of our lives and promotes active citizenship. Learning enables people to play a full part in their community. It strengthens the family, the neighbourhood and consequently the nation. It helps us fulfil our potential and opens doors to a love of music, art and literature. That is why we value learning for its own sake, as well as for the equality of opportunity it brings. (Department for Education and Employment 1998, foreword)

For the past decade this tension between the competing imperatives of utility and the higher purpose of tertiary education has been a recurring theme. Plantan (2002, p.2) argues that:

> The challenge of advancing universities as sites of citizenship comes from the tension between the fundamental mission of developing expertise and human capital while attempting to devote the time and resources to the development of attitudes, dispositions, and functionality of democratic citizenship. These educational aims are often treated as something mutually exclusive or conceived in zero-sum terms in decisions pertaining to the allocation of resources and in the reward structures of universities.

Benson and Harkavy (2001) sketch two competing futuristic scenarios for the knowledge society. In their optimistic scenario 'the 21st century becomes the global Democratic Century — the century in which the irrepressible information and communication revolution powerfully contributes to the worldwide democratisation, civic engagement, and action oriented social responsibility of universities' (p.2).

In their pessimistic scenario, a radically different outcome materialises. 'The 21st century becomes the global Commodification-of-Everything Century in which the irrepressible ICT revolution powerfully broadens, deepens, and accelerates the commodification of universities … In that commodified world, universities, like all other institutions, function as amoral, "nakedly" for-profit corporations which produce and sell commodities' (Benson & Harkavy 2001, p.3).

As Watson reminds us (2007, p.9), modern societies have often contradictory expectations of their universities, and institutions evidence a remarkable ability to accommodate these competing expectations (pp.9—10), simultaneously evidencing both ends of the Benson and Harkavy spectrum.

The concept of engagement

At the Inside-Out Conference in Ipswich (2003) Sir David Watson argued that universities at the beginning of the twenty-first century are perhaps more in the public gaze than at any stage in their history. His suggestion for how we might respond encompasses both our core research and education agendas and our broader citizenship role, in keeping with the Association of Commonwealth Universities, which identifies engagement as:

> strenuous, thoughtful, argumentative interaction with the non-university world in at least four spheres: setting universities' aims, purposes and priorities; relating teaching and learning to the wider world; the back-and-forth dialogue between researchers and practitioners; and taking on wider responsibilities as neighbours and citizens. (Bjarnason & Coldstream 2001, p.i)

In the knowledge economy, intelligence and intellectual labour replace physical labour as the fundamental source of value and profit. In this new economic environment regions build economic advantage through their ability to mobilise and to harness knowledge and ideas. Despite the predictions of the 'end of geography', in the globalised knowledge economy it is widely acknowledged that regions are becoming more important centres of economic and technological organisation.

Tertiary education systems focused upon the knowledge economy require radical changes with respect to goals, resources and institutional settings, particularly in relation to: the concept of service; the management of change; networks and organisational functioning; and knowledge management. It may be argued that universities in particular have always made a significant contribution to the economy and society of their regions — through continuing education, research, public intellectual engagement and as centres of cultural activity (Goddard & Chatterton 1999, p.686). Acknowledgment of the role of the university as a contributor to regional economic development is not new and has been used as a 'tool for expenditure injection in peripheral regions' in Australia for some time (Garlick 2000, p.3).

The obligation for community engagement is one that rests with all higher education institutions, but regional institutions and campuses have a special responsibility to their communities. Universities in particular are a mechanism for ensuring that Australia's regional communities are an integral part of the knowledge economy by offering technology and expertise to both community members and businesses to increase competitiveness and expertise. They also serve to raise the expectations and aspirations of the community.

According to Goddard and Chatterton (1999, p.686), there are a number of drivers in tertiary education policy that are influencing engagement. These include: the move from a system of elite to mass higher education; meeting the needs of a larger and more diverse client population; lifelong learning needs created by changing patterns of skills in the labour market; increased competition from providers of education on a global scale; and new modes of delivery based on information and communication technologies.

Structural change in the sector is arguably being driven by policy settings, but also by the increasing range of student needs and expectations. In his 2010 Boyer lectures Professor Glyn Davis foreshadowed a sector that already exists:

> In a more democratic republic of learning, there will be greater diversity of students. Some want to broaden their intellectual horizons; others will seek to quickly build qualifications. People will start university at different stages of life, and expect institutions to accommodate their varied circumstances.

> It is not clear the single model of an Australian public university is equipped to deal with this expanded spectrum of students. A wider range of institutions, each meeting the needs of different students, may be an important part of meeting our equity challenge (p.85).

Policies that drive a potential 'second wave' bifurcation of the sector (interestingly close to 25 years since we abolished the same) shape the student experience in ways that call into question how we sustain the higher purpose of tertiary education and our students' role in the engagement agenda.

Engagement and the student experience

Until the 1960s higher education in Australia was largely the preserve of the elite: those who had access to high-quality secondary schooling and who were motivated/encouraged to gain matriculation qualifications; and the intellectual elite who gained scholarships to participate in higher education and research. The majority of students began their tertiary education with significant social and cultural capital.

As demand for tertiary education increased, the Martin Report (1964) identified one mechanism for addressing this demand — the creation of colleges of advanced education — lower-cost, teaching-only institutions, extended in 1968 by the inclusion of teacher training colleges. With the abolition of university fees in 1974 by the Whitlam Government tertiary education became more accessible to working and middle class students, although entry requirements and the availability of the 'second tier' colleges of advanced education, teachers colleges and training hospitals meant that the change in participation profile was not as significant as might have been expected.

This two-tier system operated for close to 25 years until the Dawkins reforms of the late 1980s and 1990s, which created the Unified National System, replacing the binary division between universities and colleges of advanced education. Since the early 1990s the Australian higher education system has operated, and thrived, as a single system under an equity policy framework informed by the principle that access to, and success in, higher education should not be determined by class, ethnicity, geographical location or other personal characteristics (James et al. 2007, p.2)

We also know, and Professor Bradley reminded us, that despite this policy framework, the participation of people from equity groups has continued to lag or show clear patterns of differential participation:

> Australia has not provided equal access to all groups from society. People from lower socio-economic backgrounds, those from regional and remote Australia as well as Indigenous Australians are under-represented in higher education compared to their incidence in the general population … Barriers to access for such students include their previous educational attainment, no awareness of the long-term benefits of higher education and, thus, no aspiration to participate. Once enrolled, they require higher levels of support to succeed, including financial assistance and greater academic support, mentoring and counselling services. (Bradley et al. 2008, p.27)

Social and concomitant educational privilege continues to advantage sectors of our community. As we take the first steps in the post-Bradley policy environment and we begin to see patterns emerging from uncapped undergraduate student load, we need to be confident that equity and access for all remains an established part of the fabric of our sector and that structural changes do not result in access and participation disguising critical differences in the quality of the educational experience.

Unfortunately for most students, their experience of university education is divorced from the ideals presented earlier. Our 'time poor' students are a long way from experiencing the resource that Oakeshott (1950) identified as synonymous with a university education — 'the gift of an interval':

> Here is an opportunity to put aside the hot allegiances of youth without the necessity of at once acquiring new loyalties to take their place. Here is a break in the tyrannical course of irreparable events; a period in which to look round upon the world and upon oneself without an enemy at one's back or the insistent pressure to make up one's mind; a moment in which to taste the mystery without the necessity of seeking a solution. (p.28)

In Australia we know a significant amount about our student profile and the dramatic change this has undergone in the past two decades, even if we still seem incapable of assimilating the implications of this systematically and comprehensively into our educational practices. Surveys undertaken by Pascarella and Terenzini (1998) Long and Hayden (2001), McInnis and Hartley (2002), Applegate and Daly (2006) and James et al. (2007) indicate that the majority of full-time students have so significantly reduced the amount of time they spend on campus and their participation in 'university life' that our whole framework for conceptualising 'the university experience' requires revision.

As in the vocational education sector, the pattern of mixing education and work is endemic and for many students begins in secondary school. At university the average number of work hours tends to increase with duration of studies and it is those students from lower socioeconomic backgrounds who tend to have longer hours of paid employment and who experience the more adverse effects of paid employment on their study. Importantly, and unlike students undertaking training in the vocational sector, university students primarily work in jobs that neither directly nor indirectly relate to their course of study, and students frequently miss classes because of paid employment. Over half of all part-time students (generally from low socioeconomic backgrounds) would prefer to be studying full-time. Students recognise that the quality of their educational experience is being undermined by adverse financial circumstances, especially those whose working week includes a significant commitment to employment. Despite the demanding circumstances the majority of students retain a strong desire to do well in their course and the majority also see university at the top of their priorities.

Changes in patterns of engagement are not simply student-driven. As McInnis observes, the choices available to students in the form of the range of courses and institutions, flexible modes of delivery and electronically mediated communities of learners enable them to negotiate their level of engagement with the university (2001, p.3). The advent of Massive Open Online Courses represents the next stage of an educational revolution — a long-anticipated but potentially disruptive technology that enables global provision of high-quality free content (*Higher Education Supplement*, 4 July 2012).

As William Clark (2006, p.82) observed in his memorable *Academic charisma and the origins of the research university*:

> Anyone who has ever taught at a college or university must have had this experience. You're in the middle of something that you do every day: standing at a lectern in a dusty room, for example, lecturing to a roomful of teenagers above whom hang almost visible clouds of hormones; or running a seminar, hoping to find the question that will make people talk even though it's spring and no-one has done the reading; or sitting in a department meeting as your colleagues act out their various professional identities … Suddenly, you find yourself wondering, like Kingsley Amis's Lucky Jim, how you can possibly be doing this. Why, in the age of the World Wide Web, do professors still stand at podiums and blather for fifty minutes at unruly mobs of students, their lowered baseball caps imperfectly concealing the sleep buds that rim their eyes? Why do

> professors and students put on polyester gowns and funny hats and march, once a year … These activities seem both bizarre and disconnected, from one another and from modern life, and it's no wonder they often provoke irritation, not only in professional pundits but also in parents, potential donors, and academic administrators.

McInnis identified three main concerns regarding changing patterns of student engagement for universities, which, arguably, persist today: that our poor understanding leads to ad hoc solutions; that our poorly defined role tends to make us more responsive to what students want in the short-term rather than what society needs in the longer-term; and that the undergraduate curriculum is changing by default, when universities should be showing leadership in curriculum design and the management of learning institutions. Although McInnis focuses on the academic implications of these changes, he also notes the unintended consequence of a loss of critical mass in the learning community of the campus-based universities (2001, pp.4—5). The launch of Massive Open Online Courses again ignites doubts over the sustainability and value of on-campus learning.

It should be emphasised that there is an international body of evidence that confirms that the changes in the learning environment are having a differential impact on students from different socioeconomic backgrounds. This is reinforced by the survey data quoted above and by a number of international studies. Egerton (2002) concludes that in the United Kingdom social association is closely connected with social class (the children of professionals are most likely to be involved in civic activities) but importantly records the significant impact of tertiary education on mature graduates, who are less likely to come from professional families (2002, p.617). Goldrick-Rab (2006) argues that in the United States, where there is a significant amount of movement of students between institutions, how students attend college (movement, interruptions to study) is an additional layer of stratification in higher education that is having a disproportionately negative impact on students from disadvantaged backgrounds.

As James Arthur (2005) observes, almost as a footnote to a lengthy institutional and mission-focused discussion, the 'loss of time and space for many students in higher education limits their capacity and opportunity to become the human beings they ought to become' (p.31).

As our university students become and are encouraged to be more instrumentalist and pragmatic, universities are losing their role as sites of socialisation and politicisation. As many of us become 'thinner' institutions and our engagement with our students also becomes 'thin', we begin to look more like vocational training institutes or colleges of advanced education and the generally very thin private providers. If we are offering little more to our students but content and technical skills and not doing very well at negotiating the 'delivery' of these to meet their needs, then there are other many and increasing options available to our students in the educational marketplace, especially through private providers. In Australia private provision of tertiary education is, with just a small number of exceptions, largely based on 'thin' institutions — sites of skill and technical/shallow knowledge accumulation.

It is in this context that the recent analysis and recommendations proposed by the Grattan Institute's Andrew Norton in his report *Graduate winners* are significant. Norton (2012), looking squarely through the lens of human capital theory, argues that most students should pay more for higher education 'given how much they benefit from a degree … They have attractive jobs, above-average pay and status. They take interesting courses and enjoy student life' (p.2).

While acknowledging that there are public benefits to higher education, Norton reduces these to financial public benefits: revenue increases, such as tax revenue; or expenditure decreases, such as a reduction in unemployment or health outcomes.

Non-financial public benefits are calculated on the basis of how graduates behave compared with non-graduates. These include their willingness to volunteer or their tolerance of different groups in society. Non-financial benefits may also include reduced activities that harm others, such as crime (Norton 2012, p.7).

Norton's focus on the individual as the locus of analysis ignores, and arguably distorts, the contribution of a student body as a collective influence on, and resource for, the community. In rural and remote areas, and even in many of our outer-metropolitan regions, this contribution can be vital for sustaining communities, for building technical and intellectual capital in the form of graduates and staff, for providing both a casual and ongoing workforce with a diversity of skills and knowledge, and for providing infrastructure that is utilised by the community. At its best this constitutes 'a model of continuity and aspiration for a better and more fulfilled life' (Watson 2007, p.133).

Conclusion

Dramatic changes in the nature of tertiary education are taking place, but the civil imperative, although taking different forms in different contexts, remains a significant part of universities' articulated or implied missions. In the nineteenth century the emphasis, at least in the United Kingdom, was on producing graduates/future leaders of good 'character' — British universities have traditionally claimed to help shape the character of its students. As Oxford and Cambridge shed their clerical image in the late nineteenth century, each student was provided with a 'moral tutor'. In recent times the Crick Report (1998 and the resulting National Curriculum in 2002) laid the foundations for the introduction of a broader concept of 'citizenship education' into primary and secondary schools in the United Kingdom and even the Dearing Report (National Committee of Inquiry into Higher Education 1977) explicitly recognised the ethical dimension of higher education to equip students for work in ways that would help shape a democratic, civilised and inclusive society. The report also championed the pedagogy of work-related or community-based experiential learning. Dearing saw higher education as part of the 'conscience of a democratic society, founded on respect for the rights of the individual and the responsibilities of the individual to society as a whole'. In Europe university education remains at the centre of strategies for fostering active European citizenship, in addition to being the key to modernising Europe's economies and developing a more inclusive society (Fernandez 2005, pp.59—60).

The civic imperative is deeply embedded in the United States, where there is an established tradition of civic engagement in higher education, attributed to Jefferson (University of Virginia) and Dewey, and dating from the Land Grant universities in the nineteenth century. Renewed concern around this civic mission is fuelled by the impact of globalisation and the widespread lack of interest or involvement in public affairs, especially noticeable amongst the young, together with 'a general lack of trust and respect for American democratic processes' (Ehrlich 2000, p.xxii).

Despite these differing contexts, there is a high degree of uniformity in what might be understood by education for citizenship. Thornton and Jaegar (2006, p.53) identify five dimensions of civic responsibility that repeatedly surface in the literature: knowledge and support of democratic values, systems and processes; the desire to act in the interests of the community; use of knowledge and

skills for societal benefit; appreciation for and interest in those unlike self; and personal accountability.

Burton Clark proposes that there are three imperatives for dividing tertiary education into sectors. First, it greatly facilitates student access, at least to the lower tier. Secondly, Clark argues that a lack of sectors leads to an overload of activities and conflicting priorities. This in turn leads to the burdens of mass teaching and counselling crowding out research and advanced training. According to Clark, 'adding new types of institutions to handle new functions makes the system as a whole more adaptive than trying to get the old sectors to discharge new functions in addition to their current functions' (1983, pp.51—67).

In the 2010 Boyer lectures Professor Glyn Davis lamented the lack of diversity within the Australian sector, especially when compared with that evidenced in the United States, where a large private higher education sector, combined with high degrees of student mobility, is seen to add significantly to the choices available to students, which 'American students embrace' (p.115). Professor Davis does note however that:

> This choice does come at a price — sometimes hundreds of thousands of dollars in fees, to be paid up front or through a loan. Australians put a great premium on egalitarian outcomes, and many feel the American system is purchased at too high a level of social inequality. (Davis 2010, p.115)

In contrast Bradley et al. (2008, p.xvi) not only sidestepped the controversial debate around diversification but foresaw the need for greater integration between our higher education and vocational education sectors:

> The move to a mass higher education system together with the growth of a credentials-driven employment environment has seen a blurring of the boundaries between the two sectors. However, each still has a critical role to play in meeting Australia's future skills needs. While it is important to maintain the integrity of the VET system and its provision of distinct qualifications in which the content is strongly driven by the advice of industry, the time has come for a more coherent approach to tertiary educational provision. If we are to meet the ambitious tertiary participation targets necessary for Australia to remain internationally competitive, a more holistic approach to planning and provision is vital. What is needed is a continuum of tertiary skills provision primarily funded by a single level of government and nationally regulated rather than two sectors configured as at present. Such a model would deliver skills development in ways that are efficient and fit for purpose to meet the needs of both individuals and the economy.

In this context it is critical to have the resources to support the wide range of students who are participating in a deregulated undergraduate higher education sector, recognising that these students are: disproportionately clustered in largely outer-metropolitan and rural/remote institutions; are concentrated in particular disciplines and under-represented in highly competitive professional fields of study (medicine, law and architecture); and significantly, also under-represented in postgraduate programs. We need to engage in close analysis and monitoring by equity group, institutional type, discipline and course level to understand whether our sector is delivering 'socially just' educational opportunities or just (inferring limited) educational opportunities. The risk, clearly identified by Burton Clark, is that a differentiated, essentially tiered sector will deliver equity and access only to 'the lower tier', a tier that has a limited capacity to deliver the crucial social and cultural capital that underpins career mobility and drives social change.

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What makes education 'vocational' in an integrated tertiary sector

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An integrated tertiary education and training sector is a significant policy goal in Australia. In a key document that elaborates this goal, the rationale for pursuing integration is that it will make 'a continuum of tertiary skills provision' (Bradley et al. 2008, p.183) available to students and workers. The review identifies some mechanisms for effecting the change, focusing on governance and funding arrangements, but the educational meaning and implications of an integrated tertiary sector were not pursued in the document and there has been little attention to these questions since. In this essay I take the opportunity to outline some educational issues of a tertiary education sector, concentrating on what I believe is the fundamental purpose of tertiary-level education: to develop the 'vocational'.

To build my case I will examine some different conceptualisations of the vocational. The influential analysis of Hansen (1994) emphasises both personal and social dimensions of the vocational and their complex interaction in the realisation of a vocation. I argue to extend Hansen's scheme to admit the possibility of multiple 'vocations' over working life and to regard the vocational as synonymous with *the* project of adulthood. In that project, people continuously develop abilities, learn more about themselves and about the multiple contexts of work. Through different kinds of work and education they also acquire understanding of the tasks and roles of particular occupational practices and knowledge structures that relate, but are not confined to, those practices. The vocational thus encompasses phases of satisfying and productive balance or 'equipoise' between the personal and the occupational, and phases of imbalance and dissatisfaction, each phase producing the conditions of the other. This 'dynamic' conception contrasts with the idea promoted in education policy, and labour economic theory more broadly, that the 'vocational' is simply about work and any relationship between the personal and the occupational as something that can be comprehended and analysed in terms of 'match' or 'mismatch' between acquired and deployed skills.

I will argue that the dynamic, working life project concept of the vocational can be fruitfully applied to the challenge of making a continuum of tertiary-level learning opportunities available to Australians. I draw on Dewey's educational theory and highlight limitations in existing vocational education and training and higher education, and suggest changes that would make tertiary-level provision vocational in the dynamic sense. The essay does not cover the important questions of the place of adult and community education in a tertiary sector and the relationship between tertiary-level education and schooling.[1]

Conceptualising the vocational

Any venture into the semantics of the vocational is fraught, yet still worthwhile if it prompts stakeholders to reflect on the question of what makes education vocational in an integrated tertiary sector. In this section I will dwell briefly on meanings of the vocational, touching on history and

[1] Actually, according to the dynamic concept of the vocational advanced in this essay, adult and community education stands out as a particularly effective form of vocational education.

surveying key literature. My goal here is to develop an analysis of the vocational that will be helpful in a debate about the purposes of tertiary-level education.

A history of the concept of vocation reveals that it originally had Christian religious significance as the 'calling' (*vocatio*) from God to take up the work of the church. A person might feel such a calling, and, if church authorities deemed the intuition to be authentic, the called would be obliged to turn away from whatever earthly occupation they were in or destined for (Billett 2011). The Reformation brought with it a transformation of the vocation concept (demonstrating that it has long been a volatile one), so that a calling could be to any sort of useful work, not only ecclesiastical (Dawson 2005). It has been argued that this notion of work as a means to salvation was appropriated by modern capitalism, where it turns up as a sense of duty to work (Weber 1930). From a historical perspective, then, vocation comes to us as a relational concept, in which people and their work are in some way bound.

A literature has grown up around the task of teasing out a secular concept of the vocational (for example, Frankena 1976; Gustafson 1982; Doyle 1982; Hansen 1994; Dawson 2005). In what follows I will present an influential analysis from this literature. Writing about the 'calling' to become a teacher, Hansen (1994) explains that the term 'vocational' has fallen into disuse, suggesting that influential contemporary ways of thinking about work, introduced by sociologists, political scientists and psychologists, 'have provided language and perspectives for thinking about teaching as a job and as an occupation nested within a broader system of social institutions' (p.260). To make his case for the relevance of the concept of vocation to teachers' work, Hansen draws attention to its constituent meanings. To start with, vocation has a personal dimension. He calls this aspect 'psychological', and suggests that in this aspect vocation denotes 'a hopeful, outward-looking sentiment, a feeling of wanting to engage in the world in some way' (p.264). Drawing on a characterisation of work by Dorothy Emmet, Hansen explains that:

> To 'venture' forth raises the image of an adventure, a plunge into an activity whose outcome will be, at least to some extent, uncertain and unpredictable. To 'devote' oneself in the doing of it recalls one of the original meanings of the term 'vocation' — to commit oneself in an enduring way to a particular practice. (p.264)

But Hansen stresses the point that the concept of vocation refers to more than just a psychological state. Indeed, the focus of his analysis is on the relationship between a subjective sense and objective practices. The 'inner feeling', says Hansen, is 'only part of the story. A social practice is the other part, one in which to enact or bring to life that feeling, in the literal sense of those terms' (p.264). Speaking again about teachers, he explains that:

> Would-be teachers step into a practice with traditions undergirding it, with layers of public significance built up over generations. The sense of teaching as a vocation presumes a willingness to engage the public obligations that go with the task, to recognize that one is part of an evolving tradition. (p.272)

Hansen's (1994) differentiation of personal and social dimensions in the concept of the vocational finds parallels in Billett's (2011) analysis of vocational education. Billett draws a fundamental distinction between 'vocations' and 'occupations' that map to Hansen's distinction between the personal and social components of vocation. For Billett, vocations are 'personally directed and assented but often socially derived practices, that reflect an individual's enduring aspirations and interests' (2011, p.66). In contrast, 'Occupations necessarily comprise socially and historically constituted practices that have particular norms and practices, as well as standing in the community' (2011, p.85). Billett's analysis

confirms that the concept of the vocational contains both personal and social meanings, and his elaboration of the concept reveals a complex relationship between the two components.

Hansen (1994) and Billett (2011) both underline the relational nature of the vocational, emphasising personal and social practice dimensions that are mutually enriching. Interest in a form of work and an awareness of personal abilities emerge together. Once in work, processes of mastery of a practice and deeper understanding of self evolve in tandem. In Hansen's view, a person's discovery of their vocation in the context of some form of work is never guaranteed, leading to a distinction between an occupation and mere work.

I will not venture an interpretation of the spiritual connection between self and job that Hansen (1994) and other writers link with the concept of the vocational, but I think it is safe to say that a sort of balance can be struck between a person's mix of abilities and interests and the configuration of the demands and rewards of a work practice, such that the practitioner is fulfillingly engaged and the practice enriched. By the same token, there can be imbalance that goes either way, with a worker under-engaged on the one hand, or unequal to the demands of the work on the other. These scenarios, framed in terms of balance or imbalance, are consistent with Hansen's analysis. However, his analysis leads to a static or terminal concept of the vocational, by which a person either finds their vocation or they do not. Yet many people (and teachers often fall into this category) find that periods of vocational balance have a kind of 'life cycle' that gives way to disenchantment or worse. Perhaps the classical case of finding a vocation, of the person who discovers themselves and keeps growing in a role, is not the norm.

Disequilibrium between person and practice and the dissatisfaction this entails is often not the end of the story. People in this position might find ways to endure, but others will be on the lookout for new opportunities and challenges. The good fortune of a new balance might itself turn out to be temporary, as a new cycle is triggered that leads eventually to imbalance and disaffection. The vocational thus is not only relational, but the relationship is dynamic and can extend across a working life. Younger workers can find themselves in more disorienting extremes of under-engagement or being overwhelmed, while more mature workers can size themselves and opportunities up more cannily and, if they are lucky enough to avoid serious dislocation along the way, can manoeuvre themselves into sustained periods of vocational equipoise. Cycles thus become occasions for learning about as well as fostering abilities, and learning about as well as transforming practices, and this rich learning becomes a condition favouring more and more felicitous choices of work. The understanding of the vocational that emerges from this analysis can perhaps be characterised as 'dialectical' as well as dynamic, since cycles of balance and imbalance lead to cumulative changes in persons and practices, with qualitatively new states of vocational equipoise emerging over time.

The vocational in current tertiary-level education

Different and contending conceptions of the vocational inform current tertiary-level education in Australia, including provision under the national VET system and higher education. A convenient starting point is Karmel, Mlotkowski and Awodeyi's (2008) discussion of the relevance of VET to the occupations of graduates. They explain that, 'Vocational education and training (VET) is, by definition, vocational in intent. Its purpose is unashamedly instrumental; it is about acquiring skills to be used at work' (p.7). What this statement tells us is that the vocational can be unproblematically identified with work, and that work resolves into the deployment of skills. It follows that vocational education seeks nothing more than to facilitate the acquisition of these skills. On the face of it, the concept of the vocational as schematised by Karmel, Mlotkowski and Awodeyi conflicts with the

relational version analysed by Hansen (1994). Their definition appears to overlook the personal dimension of the vocational, preferring instead the ill-defined concept of 'general' as the alternative to the job-specific vocational, thus forgoing analysis of the relational nature of the concept. However, Karmel, Mlotkowski and Awodeyi's concept is rooted in labour market economic theory, and this body of knowledge offers comprehensive perspectives on people and occupational practices that acknowledge, after a fashion, the relationships that exist between them.

In labour economic theory, education's engagement with the vocational is limited to the development of a kind of capital ('human capital') that significantly influences a person's opportunities in the world of work ('labour market'). Private engagement in or public provision of education are viewed as 'investment' decisions made according to calculations of private or social 'returns' (Ross & Whitfield 2009). The actual rate of return is considered a function of the degree of 'match' between 'acquired skills' and 'deployed skills' (Cully 2008, p.9), and this is the way the vocational relationship is conceptualised in labour market theory. According to Karmel, Mlotkowski and Awodeyi:

> If the match is very good, then we would conclude that the VET system is performing its role in providing individuals with vocational skills. If the match is poor, then we need to think about whether the VET system is not as effective as it should be, or whether we should rethink the nature of vocational education. The classic example of a mismatch would be a physicist or electrician driving a taxi. In such cases, from the point of view of training for a skilled workforce, the education is totally wasted. Where the nature of the matching is more problematic is a tradesman, for example, becoming a manager. Here it would not be reasonable to say that the vocational education is a waste, but it may suggest that trades education needs to be considered more broadly, rather than merely being the acquisition of trade skills for a particular occupation (p.7).

This framing and interpretation of 'mismatch' points to some important differences between the labour economics concept of the vocational and the dynamic version outlined earlier. A more subtle difference is indicated by the fact that the illustrations speak of, for example, 'a tradesman … becoming a manager', while the dynamic concept does not envisage a direct correspondence between person and practice, only a state of relative balance or imbalance between them. The person and their evolving configuration of abilities and interests is the key term, rather than an identity between person and role. A more obvious difference is that the dynamic concept does not entertain the idea of 'wastage', when a person moves from one role to another. It is through movement between roles, including between diverse roles, that the worker's abilities are nurtured, awareness of them sharpened, and knowledge of occupational fields and clusters developed. Related to this point is that notions such as 'intended occupation' and methods of comparing these with actual occupations (Karmel, Mlotkowski & Awodeyi 2008, p.8) are far more problematic in the context of the dynamic concept, since occupational intentions, especially for younger people, are likely to be coloured by the sense of adventure identified by Hansen (1994) and the valuation of occupations as promoted by society (Billett 2011).

The attribution of wastage also assumes something like a hierarchy of occupations, structured in terms of returns on time allocated to labour market participation (that is, wage levels), such that (presumably) the education of a physicist could be regarded as 'totally wasted' if the person goes on to work as a taxi driver, yet the metamorphosis of a tradesperson into a manager is felt to be merely problematic. The dynamic concept of the vocational, on the other hand, entertains no such hierarchy, only a gradient of meaningfulness determined by the extent of equipoise between a person's current configuration of abilities and interests and the configuration of demands and rewards encountered in work. By this account of the value of work, it may be that the occupations of taxi driver or manager

are positive, progressive states, and their being so is potentially due in some way to the seemingly misaligned education, as much as a sign of bad use of educational resources.

Karmel, Mlotkowski and Awodeyi's (2008) discussion also serves as a stepping stone to a consideration of the ways in which higher education is vocational. They observe that 'the instrumental nature of university education is not as clear-cut as it is in VET' and go on to explain that:

> The professional fields of medicine, law, accounting, teacher education, nursing, and engineering are largely vocational in nature … Other fields by contrast are far less vocational in nature and provide a much more generic training, the most obvious examples being the humanities and pure sciences. The social sciences and the applied sciences fall somewhere in between. This is not to say that the non-vocational fields are not valuable preparation for work (p.7).

This explanation posits a continuum between the areas of higher education they believe are consistent with their definition of the vocational (that is, 'about work') and areas that are 'non-vocational'. The paradox introduced in this way of non-vocational education that is nevertheless a 'valuable preparation for work' underlines a difficulty faced by a number of writers who have addressed the question of the vocationality of higher education. Barnett (2000), for example, referring to the 'new vocationalism' in higher education writes that this term 'reminds us … that higher education has, since its inception in the middle ages, been vocational, both overtly and more discreetly, through the more personal and intellectual powers it sought to offer' (p.x). Barnett's distinction between the overt and 'discreet' vocationalism of higher education maps to Karmel, Mlotkowski and Awodeyi's distinction, but frames the discreet as the development of 'personal and intellectual powers' on the part of the learner rather than the uninformative 'general' tag that Karmel, Mlotkowski and Awodeyi apply to education that is not vocational in a job-skill sense. Barnett's discreet sense of the vocational, on the other hand, agrees with the dynamic approach, addressing the dimension of personal abilities and interests.

Billett (2011) follows the consensus on the self-evident vocationality of professional preparation, but he draws attention to the practice of making the study of a body of knowledge itself an occupation. In other words, academic work — teaching, scholarship and research about bodies of knowledge — is very much an occupation. Winch (2010) also acknowledges this kind of vocationality in higher education, but his distinction between 'subjects' (bodies of knowledge) and occupations is fundamental, with the notion of the former being positioned in terms of the latter constituting a special case. After all, the majority of graduates from discreetly vocational or non-vocational higher education programs do not make occupations of their subjects.

What Winch (2010) emphasises in his distinction between subjects and occupations is recognised by a number of commentators on tertiary-level education who explore the fact that the overt concern of some areas of higher education is indeed not occupations but the production and systematisation of knowledge (for example, Young 2008). This knowledge, about nature and the human world, is developed by those who have made such subjects their occupation, and is taught by them to others who may be regarded as candidates for entry to these subject occupations. But because this kind of learning is always about something that transcends a practice of the subject occupation — about the multiple contexts of our world — the knowledge gained during discontinued subject apprenticeships, and the process of learning that went with them, has a great deal of potential for teaching people about themselves and the contexts of and knowledge relevant to occupational practices. In other words, Winch's subjects might not be occupations, but that does not stop them being eminently vocational. This kind of potential makes Karmel, Mlotkowski and Awodeyi's (2008) 'non-vocational' or 'general' areas of higher education vocational in the dynamic sense.

What makes education vocational in an integrated tertiary sector: bringing back Dewey (again)

In this section I will focus on educational engagement with the vocational. I will employ the dynamic concept of the vocational because it captures the complex reality of people thinking and feeling their way through working life, creating themselves in a process full of uncertainty, sometimes 'finding themselves' during periods when their abilities and interests are challenged and enlarged in the right way by the demands and rewards of jobs. At these times of equipoise, work practice itself may be transformed through innovations introduced by a worker inclined to place their whole ingenuity, perhaps infused with education and experiences of the most diverse kinds, as well as more direct training in and mastery of the techniques and knowledge specific to the practice, at its service. Also, the dynamic concept does not lead to the paradoxical notion of non-vocational education that nevertheless serves as valuable preparation for work, and it takes us past the static relationality of Hansen's (1994) analysis to encompass multiple cycles of vocational equipoise and dissatisfaction across working life.

How should education engage with the vocational cast this way? About 14 years ago, the late Australian VET researcher John Stevenson tackled many of the concerns that animate this essay. Stevenson (1998) concluded that 'bringing back Dewey' was a way to effect a reconciliation of economic, humanistic and critical perspectives on the goals of vocational education. His analysis was critical of the influence of the economic perspective on VET, arguing that the role of the self in negotiating productive careers and driving innovation was overlooked in such a perspective, and that economic prosperity was itself threatened by the dominance of the economic perspective in the policy and practice of VET. Stevenson advocated a reconciliation of the three perspectives and showed that an appropriate model for VET could be found in the educational philosophy of Dewey. The analysis pursued in this essay leads to a similar point.

John Dewey was an American philosopher who took a keen interest in the relationship between education and social and economic progress. He strenuously argued that vocational education should not be about reproducing the existing industrial order, with its dehumanising and inequitable conditions, but rather should give workers the knowledge to transform work in the future. The economic perspective is accommodated by Dewey's vision because he was an advocate for the value of work and believed that industrial innovation was a good thing. His philosophy is humanistic because he found that the development of people was the key to these other advances, but stressed that learning, work and a productive economy are to be pursued for the sake of individuals.

To achieve these ideals, Dewey believed that the traditional division in educational thought between the 'general' and 'vocational' had to be overcome. Divisions such as this, he believed, entrench conservative regimes that discriminately allocate creativity and drudgery to different social groups, ultimately restricting the potential of society and the economy. 'But an education which acknowledges the full intellectual and social meaning of a vocation', he explains:

> would include instruction in the historic background of present conditions; training in science to give intelligence and initiative in dealing with material and agencies of production; the study of economics, civics, and politics, to bring the future worker into touch with the problems of the day and the various methods proposed for its improvement. Above all, it would train [the] power of readaptation to changing conditions so that future workers would not become blindly subject to a fate imposed on them. (Dewey 1916, p.173)

This vision of vocational education identifies, in a somewhat truncated form, the features of an education with the capacity to engage with the dynamic concept of the vocational. Dewey's prescription highlights the importance of understanding immediate as well as broader contexts of occupations. This kind of knowledge, at least a tacit form, is what is developed through cycles of encounters with different jobs, occupations, occupational clusters and occupational fields. This in turn facilitates apposite job choices and also gives workers a sense of the broader directions, purposes and problems of occupations and industries that can underpin innovation. In the dynamic concept of the vocational, worker development entails the continuous transfer of knowledge between work settings, and it is Dewey's concept of training in science, or exposure to theory, that articulates with this part of the vocational. Dewey's vision also anticipates a working life in which a 'power of readaptation to changing conditions' is a positive acquisition, foregrounding a central feature of the dialectically vocational self.

I will attempt now to unpack some of Dewey's insights, picking out key ways that current vocational education and training and higher education are challenged by them, and how they might respond to them. To start with Australian VET, the most direct challenge posed by Dewey's pronouncements is to the orientation of the system to meeting 'industry needs'. The system is defined by close specification of what must be learned for competent performance in particular jobs and has in place a whole institutional apparatus for keeping abreast of and specifying industry skills needs. It hinges on effectively transmitting these specifications into the learning situation, and trainers are trained with the aim of preserving the educational intentions of the designers. It is a system that in many ways translates labour economic theorems into institutional realities as a mechanism for qualitatively and quantitatively tracking labour demand, collecting and disseminating detailed, relevant market information, and shaping supply to fine-grained specifications.

This system is pre-eminently vocational in the sense of being about jobs, but falls flat in terms of the dynamic conception of the vocational elaborated in this essay. Teaching a person the tasks that comprise a particular job in the absence of education about other aspects serves to institutionalise a set of shortcomings. It misses the opportunity to teach about the broader contexts of the occupation — its history and futures, the industry it is part of, and its challenges, allied roles, clusters and fields and the social and economic significance of the role. Knowledge of these contexts, as has been argued above, facilitates future job choices and informs innovation. Describing tasks has the effect of neglecting the knowledge structures that transcend them, and although 'underpinning knowledge' is inventoried by competency standard designers, resource constraints on the practice of VET ultimately ensure that knowledge is taken as a secondary goal, after demonstration of performance criteria. Making learning conform to the description of performance also has the effect of sidelining the complex problem of discovering what assumptions and values are held and brought into play by those competent in a role. The neglect of the attitudinal and ethical dimensions of work in our specification and teaching about jobs leaves the personal aspect of vocational learning untouched at a fundamental level. Because the meaning derived from engaging in particular job roles must be a function, at least in part, of the relationship between the values typical of an occupation and those of the worker, a whole plane of 'match' and 'mismatch' is missed by analysts and policy-makers. Our VET system, then, due to its focus on equipping for performance of current jobs, fails to be fully vocational.

A second and significant challenge of the system is the overly rigid mechanisms for comprehending and recording skill needs using the format of competency standards. This is a major paradox of Australian VET and means VET practitioners are severely constrained in the exercise of their creativity. While most are nominally free to use their judgment to design and/or conduct the activities that learners engage in, the outcomes of those activities are predetermined, promoting

train-to-the-assessment pedagogies. In turn, those who develop training packages in or for the industry skills councils are constrained by the format of competency standards and training packages. The system is ill-fitted to embrace innovation, largely due to a prior commitment to the assumptions about the demand and supply of skills springing from labour market theory.

What is needed is a curriculum that is cognisant of the tasks that make up an occupation and introduces learners to relevant contexts, knowledge structures and value structures that pertain to particular occupations, occupation clusters and fields. In terms of teaching and training to address such a curriculum, it is clear that work sites and dedicated learning spaces will both be necessary at a minimum. Tasks cannot be effectively taught away from the context of practice (Lave & Wenger 1998), and indeed, when the attempt is made to formalise context-dependent knowledge, an artificial and volatile knowledge is promoted that has quite a different life span and value from formalised context-independent knowledge (Gamble 2006). However, space is needed away from practice settings to learn about contexts, knowledge and values, and educators would need to be able to create curriculum and use pedagogies that engage learners with such complex and demanding material. Vocational curriculum should also incorporate an extensive elective structure to facilitate exploration of occupational fields and knowledge by learners. Current training package design certainly contains scope for electives, but the financial and time constraints endemic to VET dictate that few learners actually get to choose from among the 'electives' permitted in qualifications.

Higher education articulates with the dynamic concept of the vocational in quite different ways. Obviously there is the preparation of professionals that takes place in higher education, which conforms to a more orthodox view of the vocational. The education here is directed to occupations, but in contrast with VET, curriculum is derived from different sources, including analysis of practice and of the knowledge structures relevant to the goals of practice. Curriculum form, too, is differentiated according to practice fields and shaped by structures of knowledge, and then differentiated again according to institutional traditions and policies. Attention to professional identity and its development confronts learners with the value dimensions of work, engendering self-reflection and questioning. Again, the 'massiveness' (Billett 2011) of knowledge in the professions may be a spur to self-reflection and the development of awareness of abilities. In terms of the dynamic vocation concept, this kind of education addresses occupational practice in a rich way and engages the personal dimension too. Awareness of the contexts of practice may be promoted, but this is not clearly an aim of professional curricula. The more discreetly vocational part of higher education in various ways develops awareness of the contexts of occupations, by virtue of both the content of curriculum (for example, history, sociology, economics) and the elective structure of undergraduate degrees. The complexity of bodies of knowledge to which learners are exposed can foster self-reflection and questioning, while some courses explicitly engage learners in value-based reflection. Outside the development of self and the knowledge of contexts, this part of higher education does not typically address occupational practices (except induction into the occupational practices of a subject), although it may develop bodies of knowledge that come into play in some occupations (for example, mathematics).

A major challenge for higher education in the context of the dynamic concept of the vocational is how to make its wealth of knowledge accessible to everyone and on their own terms. As it stands, traditional university curriculum is organised in ways that generally demand the prolonged and continuous commitment considered necessary for the mastery of subjects. While it is clear that such learning takes time and requires sequence, the fact that most learners can derive vocational benefit without completing a subject apprenticeship suggests that a rethink of curriculum structures will be necessary, possibly beginning with degree-level studies. Perhaps the metaphor of pathways should be

supplemented by that of 'doorways', encouraging workers at all stages to dip into higher education and construct their own learning paths, potentially conforming to the traditional ones. Learners could be given the opportunity to study whatever subjects they can or need to engage in. Obviously, higher education institutions would need to be very clear about what is entailed by study at different levels and in different subjects, and be creative as well in accrediting unorthodox combinations of units and subjects. Opening up higher education knowledge development opportunities in this way would be facilitated by the fact that many undergraduate subject programs are constructed from units that have been developed quite independently and introduce a unique set of perspectives, which can often be studied and mastered as a unit. Some aspects of traditional modes of curriculum development in higher education, then, do not militate against a 'many doorways' approach.

A second challenge relates to articulating and acting on the sense of the vocational in non-professional areas of higher education curriculum. I have argued that, while some subjects are not (or not usually) occupations, they can still be vocational. While the vocationality of these higher education options is something that may cohere spontaneously during a person's vocational journey, the scope is there to make this vocational relevance explicit to learners. Since most of these subjects will address one or more of the personal, contextual or knowledge dimensions of the vocational, an effort to articulate vocational relevance does not need to be in terms of specific jobs, but would need to refer to examples of occupations, clusters or fields. Related to this challenge is how to make better use of the educational potential of practice. Dewey pointed to the value of employing practical problems to enhance learning, and his suggestions on this point were meant to serve as a way to break down the dichotomy of general and vocational modes of education. Of course, this model of learning is already a feature of some higher education programs, such as medicine, nursing and management, where problem-based, inquiry-based and case-based approaches are used. Finding ways to bring subject learning and practice contexts, including occupations, together should boost learning and help to establish the broader vocational credentials of subjects. The contiguous learning model advocated by Beckett and Hagar (2002) has even greater relevance in this context than in VET (where combinations of in-practice and out-of-practice learning modes are more common).

Conclusion

What makes education vocational in an interconnected tertiary sector? The answer to this question depends on what we mean by vocational. I have argued that the vocational is a dynamic process of the interaction between a person's configuration of abilities and interests on the one hand, and the demands and rewards of social practices such as occupations on the other. The vocational is a long-term project because an enormous amount of learning is ultimately required for a person to know about themselves, how they can relate to occupational practices, and what these practices involve. During this process there are phases in which the personal and practical are in equipoise and phases in which equipoise breaks down or builds up. People move between occupations and jobs as they learn more about themselves and occupational practices. Periods of equipoise are sought after and make for meaningful, productive and innovative work. Analyses of the secular concept of the vocational, such as Hansen's (1994), which reify the period of vocational balance, overlook the cyclical nature of modern engagement with work across working life, during which multiple moments of equipoise might be experienced, interspersed with periods of disorientation and/or steep learning. Labour market conceptions of the vocational narrow the focus even further, identifying it with practice, and then reduce practice to skills.

An integrated tertiary sector was envisaged by Bradley et al. (2008) as a means of making available to Australian students and workers a 'continuum of tertiary skill provision'. Implicit in this vision is a narrow conception of the occupational, but potentially a rich conception of the vocational as the object of educational provision, because it calls for a system that 'engages effectively with other education and training sectors to provide a continuum of high-quality learning opportunities *throughout an individual's life* [author's emphasis]' (p.6). The concept of the vocational advanced in this essay demands an educational engagement across the tertiary sector with the capacity to develop proficiency in occupational practices and understanding of the knowledge structures that transcend specific practices. It must offer multiple contexts that encompass practices and foster self-reflection and awareness of abilities, assumptions and values. Across tertiary-level provision the potential is there to address the complex demands of a truly vocational education. But work needs to be done to make these opportunities available. The narrow focus of VET needs to be challenged so that the richness and diversity of occupational practices — the activities as well as the knowledge structures, contexts and values — are reflected in curriculum, a challenge that might be taken up initially by making curriculum innovation a priority. Higher education needs to be challenged to break down curriculum structures so that people can access the rich and diverse educational opportunities they need or see as promising, without having to subordinate themselves to onerous subject apprenticeships.

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The future of the tertiary sector workforce: a kaleidoscope of possibilities?

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The policy goal of developing a more integrated tertiary education sector in Australia has significant implications for the workforces in the myriad of education and training institutions that make up the current higher and vocational education sectors. This essay explores the scope of tertiary education workforces and the outcomes that these workforces need to achieve in the current policy climate. The capacity of the existing higher and vocational education workforces to meet these goals will be examined. It is argued that the workforces emerging from the existing 'kaleidoscope' of institutions will consist of a range of occupational groups that service particular segments of the tertiary market. However, these workforces will only be realised if serious attention is paid to workforce development — underpinned by a clear understanding of the goals that an integrated tertiary education sector needs to achieve — across the vocational and higher education sectors.

Introduction

The development of a more integrated tertiary education sector was hailed in the Bradley Review (Bradley et al. 2008) as the cornerstone for reforms aimed at ensuring that Australia had the workforce that it needs for a rapidly changing economy. The effectiveness of the newly conceptualised sector will hinge on the capability of educators to deliver the high-quality learning experiences needed to realise the return on investment to both the individuals and enterprises who engage with the vocational and higher education sectors. It will also depend upon the capacity of both sectors to be able to attract employees with a diverse mix of skills and capabilities, which can be effectively deployed across the portfolio of services that organisations decide to offer in the education market.

Historically, the workforces in the vocational and higher education sectors have developed along relatively independent trajectories, each with its own particular set of cultures, structures and processes, which have shaped the attraction, retention and development of its educators and the other professionals who support the delivery of education services. In reality we are faced with no neat sectoral divide, where one sector abuts the other, but rather an extended and 'messy overlap', where some higher education providers are also registered training providers, some vocational education and training providers are becoming 'mixed-sector' institutions (Moodie 2010) across some or most of their scope of operations, and other institutions are emerging to fill the need for education services in niche markets within the sector. These circumstances mean that prospective employees for the sector will be confronted with the need to develop a 'protean' approach to their career development in order to carve a 'career river' through the changing and evolving sectors (Crowley-Henry 2012; Volmer & Spurk 2011). Career aspirations will need to be achieved alongside employers' requirements for a flexible and agile workforce which is able to meet the changing market for education services. This essay will argue that the future workforce for the tertiary sector will emerge not as a single coherent entity but rather as a 'kaleidoscope' of occupational groups, each serving the

particular types of organisations that will make up the tertiary education sector. This future workforce will only be realised if serious attention is paid to systemic workforce development across both the vocational and higher education sectors that is directed towards the new conception of the tertiary education sector.

The first section of this essay will appraise the nature of the tertiary sector as it has evolved to this point in time in Australia. It will revisit the vision for the sector as it has been articulated in the Bradley Review (Bradley et al. 2008). This will serve to determine the ends to which the tertiary education workforces need to be directed. Attention will then turn to what we know about the current shape of the vocational and higher education workforces. Particular attention will be paid to workforce trends, apparent in both sectors, and the challenges these may create for realising the types of workforces needed for the tertiary sector. The final section of this essay will explore the ways in which the workforces in both sectors need to be remodelled in order to respond, adapt and be renewed, and the role that systemic workforce development must play in this process.

Understanding of the tertiary sector

Historically, the development of education in Australia has followed a relatively straightforward trajectory with the emergence of institutions with 'discrete entities with clear mandates' (Wheelahan et al. 2009, p.10). Education policy supported sectoral differences while also encouraging the development of pathways and partnerships between the higher education and vocational education and training sectors (Wheelahan et al. 2009, p.10). Vocational education and training has its primary organising principle building employability and with its 'centre of gravity' being the sub–professions (Ryan 2010, p.9). In contrast, the higher education sector concentrated on the development of discipline-based knowledge and capabilities, leading to employment in the professions or further study in the sector (Moodie & Wheelahan 2012, p.323).

However, the higher and vocational education sectors that have evolved over time are not homogenous entities within themselves. The VET sector has overlaps with the secondary schooling sector through the provision of VET in Schools programs. VET providers can be roughly categorised into a number of types, including public (usually referred to as the TAFE [technical and further education] sector), commercial, adult and community, industry and enterprise-based providers, some of whom also offer qualifications traditionally associated with the university sector. Each of these different groups of providers addresses different markets and they hold contrasting world views about the work of people engaged in the education and training services provided. While some of these differences may be more ideological than real (Karmel 2011, p.84; Shreeve 2010, p.30), it is clear from other studies devoted solely to private sector VET organisations that private training providers operate in some different contexts from their public counterparts. This gives rise to different perspectives on a range of functions related to the delivery and support of training and learning (see for example, Harris, Simons & McCarthy 2006; Harris & Simons 2012). These differences also extend to the ways in which the workforces in these contexts are constructed and deployed to fulfil their functions. Likewise, the higher education sector is not uniform, having within its remit a 'miscellany of other colleges', distinguished either by the field of study or the industry they served; they include religious not-for-profit colleges and commercial for-profit entities (Moodie 2010, p.7). The development of dual-sector institutions has also been a feature of the Australian educational landscape (see Moodie 2008; Wheelahan 2000), as has the more recent phenomenon of mixed-sector institutions (Moodie 2010).

This 'within-sector' differentiation adds a layer of complexity when considering the blurring of the higher and vocational education sectors and the implications that this has for the shape of the newly constituted tertiary sector. This blurring between sectors arguably has its roots in the opening-up of the higher education sector as it moved along a pathway from universal to mass provision (Trow, cited in Moodie & Wheelahan 2012, p.319). Government policy has also encouraged this transformation, particularly in the development of a competitive training market for the VET sector, which has resulted in the simultaneous erosion of TAFE markets by universities, schools and private providers, and the expansion of TAFE and private providers into new markets, including the provision of higher education (Wheelahan et al. 2009, p.11). Moodie (2010) has suggested that the tertiary sector in Australia can be conceptualised as consisting of four groups of institutions:

- single-sector institutions: those with more than 97% of their student load enrolled in one sector
- mixed-sector institutions: those with at least 3% but no more than 20% of their load enrolled in the minority sector
- dual-sector institutions: those with at least 20% but less than 80% of their student load enrolled in each sector
- cross-sector institutions: those institutions that have some load in both vocational and higher education (Moodie 2010, p.9).

Within this current policy context new institutions are emerging, including omni universities, polytechnics and vocational institutes of technology, while some universities are creating separate entities to deliver a range of post-school options, including vocational education (Karmel 2011, p.85; Simmons 2010, p.36). The upshot of this is a 'variegated tertiary sector' (Skills Australia 2010, p.9).

We are now at a point in education policy development where the blurring between vocational education and training and the higher education sectors — both public and private — has become an important lever for governments to use, in order to create a more competitive and highly skilled workforce (Bandias, Fuller & Pfitzner 2011, p.584). Research suggests that this policy requires the simultaneous expansion of both the higher and vocational education sectors (Birrell & Edwards 2009) and greater participation in higher education for people from low socioeconomic backgrounds (Bradley et al. 2008, p.45). These goals will require a system that will be able to deliver a 'more coherent approach to tertiary education provision', where this coherency is encapsulated by three characteristics: student-centred; demand-driven; and clear pathways between sectors (Bradley et al. 2008). Further, this coherence needs to be attained in a way which ensures that the integrity of each of the sectors is maintained (Bradley et al. 2008, p.xvi).

The Bradley Review argued in considerable detail that the distinctive feature of universities 'is that teaching within them is informed by research to develop or apply new knowledge' (Bradley et al. 2008, p.123). Bradley et al. argue that this dual role of research-informed teaching and the contribution of research to innovation, and the degree to which universities are successful in combining these two functions, should direct the extent to which the higher education sector might become more diverse, as clear distinctions are made between those institutions that achieve this goal and those that do not (Bradley et al. 2008, p.125). This could potentially give rise to different types of institutions, including comprehensive universities (that conduct research in all broad fields in which they offer course work), specialist universities (that conduct research in primarily one or two broad fields of study), and other higher education institutions, which would be 'teaching only' entities (Bradley et al. 2008, p.126).

With respect to vocational education and training, this sector is distinguished by the close connections between learning, employment, the labour market and the economy (Skills Australia 2010, p.7). Its core functions revolve around qualifications which are largely connected to trade, administration, clerical, para-professional and supervisory management occupations. It also has a key role to play in the development of foundation and basic skills in language, literacy and numeracy (Skills Australia 2010, p.9). Its curriculum is competency-based, organised around competencies specified by industry, and delivered in the workplace as well as in institutional settings. Skills Australia (2010, pp.19—22) also argues that the VET sector, by encouraging innovation and promoting environmental sustainability, has a role to play in supporting workforce development for enterprises.

The current policy settings then, place the higher and vocational education sectors at somewhat of a crossroad, where both are now implicated in a project to develop a more highly qualified and skilled workforce for Australia and to enable access and participation in post-school education to a far wider range of people than ever before. This project needs to be fulfilled within the context of a tertiary education sector that aspires to carry the hallmarks of coherency — to be clear, consistent and sound, both in its appearance and outputs, while also ensuring that the two sectors continue to carry their distinctive characteristics (for universities their links with high-status professions; for VET, its industry-led characters, expressed through the use of training packages). What would be worth challenging is the sentiment that vocational education and training is of a 'lower status' and perhaps it is this more than anything that underpins the calls by Bradley for a more coherent system of tertiary education (Shreeve 2010, p. 30). What is clear is that both sectors will need to be able to respond to greater diversity in the student populations they will serve, which in turn will focus attention on the provision of 'highly personalised, innovative approaches to personal and skill development' and 'working more closely with industries to achieve greater skills utilisation of these skills in workplaces' (Shreeve 2010, p.27). For both entry and continuing education purposes, both sectors will also need to respond to trends in the spread of information and communication technologies in education and greater use of peer and collaborative and networked learning across a range of sites, including workplaces (Billett et al. 2012; Tessaring & Wannan 2004). As is the case with any reform in education, it will be the efforts of the workforces in each sector that drive the potential outcomes that might be achieved as a result of these policy directions. However, the respective workforces, like the institutional arrangements, have grown up within various silos, with little if any overlap in terms of the manner in which they have been developed.

The higher and vocational education workforces

Higher education workforce

The key features and issues facing the development of the higher and vocational education workforces will now be considered in turn.

The Bradley Review acted as a clarion call to direct attention to the urgent and pressing issue of the state of the academic workforce in Australian universities and the need to build both capacity and capability in that sector (Bradley et al. 2008, p.22). Growth in student numbers in the higher education sector had not been matched by growth in the numbers of academics in the system. In 1989 there were 26 104 full-time equivalent academic staff (teaching/research and teaching-only staff). In 2007 there were 36 496 such staff. This represents an increase of 27%. During this equivalent period, student numbers increased by over 107% (Coates et al. 2009, p.5). This increase has significantly impacted on the student—staff ratios, with resultant flow-on effects for the work of academics and arguably the experience of students in the sector. Two other features of the academic workforce are

also having a significant effect on the capacity of the workforce — its age profile and the high levels of casualisation.

As Hugo (2008) has noted, the age profile of the workforce is weighted towards people who are now nearing retirement. This is exacerbated by the fact that estimates suggest that the current number of younger academics will not be sufficient to replace their older colleagues, who will leave the workforce over the next ten years (Coates et al. 2009, p.5). In a context where the market for academic staff is increasingly global and competition is high (particularly for English-speaking academics), replacement of staff with the levels of experience needed to respond to the changing demands of academic work will become pressing. Coates et al. (2009, p.6) estimate that approximately 5000 professors and associate professors will leave the higher education sector over the next ten years. This exodus has the potential to create a capacity constraint for the sector, as it will need to find ways to develop staff who have the capacity to lead and manage growing cohorts of younger staff in the early stages of their career. When combined with evidence showing that demand for jobs requiring doctoral-level qualifications is set to grow at a faster rate than for any other qualification level, the job of recruitment for the sector is thrown into stark relief, particularly for some disciplines (education, the humanities, nursing, mathematical sciences) where the age profile is more pressing (Edwards, Radloff & Coates 2009; Hugo 2008). One answer may be to resort to the strategies of the 1960s and 1970s, where migration was used to boost the capacity of the then expanding higher education sector (Hugo 2004). Temporary and permanent migration visas are widely used by universities, but they have the effect of creating considerable 'churn' as academics leave at the end of their contracts. There is also a growing academic diaspora of Australian academics who, for a range of reasons, do not wish to return home, including perceptions of lower pay (compared particularly with other professionals), long work hours, access to inferior resources, a lack of opportunities to pursue research interests, difficulties with career progression and the attractiveness of overseas postings (Coates et al. 2009, pp.10—27).

The other significant feature of the higher education workforce is its level of casualisation. It is estimated that between 40 and 50% of all teaching is being undertaken by casual staff (Australian Learning and Teaching Council 2008), although this estimate needs to be treated with some caution. As Coates and his colleagues (2009, p.9) point out, casual staff are 'the hidden part of the massification that has taken place in higher education'. Using data from the Department of Education, Employment and Workplace Relations, Coates et al. (2009, p.7) estimate that the percentage of casual staff in the sector has increased by 127% over the period 1989—2007. While it is not possible to disaggregate these data and understand the effects of this increase by discipline, a number of impacts have been noted, most particularly regarding the perceptions associated with the quality of working life in the sector and the attractiveness of pursuing a career in academic work (Kubler & De Luca 2006, p.67). There is also international evidence of the declining attractiveness of becoming an academic (Organisation for Economic Co-operation and Development, cited in Bradley et al. 2008, p.23). These trends have been attributed in part to salary differentials and the level of income that people may earn through employment outside a university. The disciplines of business studies, engineering, health sciences and education have been particularly singled out in this regard (Bradley et al. 2008, p.23; Cumming 2010). Other factors affecting the attraction and retention of academic staff include 'research teaching and administrative resources and pressures, and the external reputation of the institution' (Bradley et al. 2008, p.23).

Potentially one of the greatest sources of the future academic workforce are the numbers of students who are or who can be attracted to complete master's by research and doctoral studies. Bradley calls for a significant expansion of the numbers of master's and doctoral students, drawing on both

domestic and national markets to do this. However, research by Edwards, Bexley and Richardson (2011) suggests that, while research students believe Australian universities might be attractive places to work and they are interested in pursuing academic careers, they also hold significant reservations about this type of career pathway (p.viii). Based on a survey of 11 710 higher degree research students undertaken across 38 Australian universities in 2010, Edwards and his colleagues found that one-third of research students who aspire to an academic career believe that their aspiration might be unrealistic because of a perception of a lack of positions and uncompetitive salaries, compared with other employment options (p.23). Further, a significant number intend (up to 40%) to seek employment overseas. This outflow of highly qualified graduates sits in the context of Australia currently being 'a net importer of academic skills' (p.23) and adds to the globalising that is underway in the higher education workforce and which is essential for knowledge-diffusion and building links between Australian institutions and their international counterparts (p.23).

One of the challenges that the academic workforce will need to face is its capacity to provide increasing numbers of students from diverse backgrounds with a high-quality education experience. Examining data from a number of sources led Bradley et al. (2008) to conclude that there are issues with increasing staff—student ratios and that 'greater productivity and outputs from the sector … are being achieved at the expense of time spent with individual students, good feedback on assessment and social interactions' (Bradley et al. 2008, p.74). The review further concluded that improving the engagement of students with their learning environments and continual monitoring of the quality of teaching and learning are essential if the higher education sector is to meet the expectations of students and maintain its reputation in the global higher education market.

Non-academic staff make a significant contribution to the productivity of higher education institutions. In the period 2001—10 non-academic staff numbers (as a percentage of the total number of staff employed in the sector) have risen marginally (Larkins 2012). This increase has largely been in areas such as information technology, marketing, support services for research, compliance services, and work associated with external relations and fund raising (Larkins 2012). Further, Larkins notes that 'while important, these roles are largely ancillary to the core teaching responsibilities of academic staff and … academic staff do express concerns about the lack of administrative support services in their departments, especially support for coursework activities including laboratories and technical services' (Larkins 2012). Additionally, Larkins also speculates about the outsourcing of some functions that has increased in universities over the past decade, suggesting that if numbers of outsourced staff were included, numbers of non-academic staff as a proportion of university staff would be larger than the staffing statistics would report.

VET workforce

The VET workforce is made up of a range of practitioners, including teachers, trainers, assessors and other professional staff working in a wide range of different types of organisations. Workers in the sector can be employed on a full-time, contract or hourly paid basis; they can be self-employed consultants or they can be employed in other occupations and engage in education and training as part of their work role (Simons et al. 2009; Harris, Simons & Bone 2000). Estimates of the total number of employees in the sector are not robust, particularly for the non-TAFE sector, but are estimated to be around 223 000 (Productivity Commission 2011, pp.37—8).

The VET workforce is an ageing one, particularly in the public sector. The average age of trainers and assessors in the TAFE sector in 2010 was estimated to be 49 years; this compares with an average of 44 years in the non-TAFE sector (Productivity Commission 2011, p.44). This high average is not

surprising, given that a career in vocational education for most teachers and assessors is a second career, usually taking place after some years spent in industry, where they developed their vocational knowledge and skills (Simons et al. 2009). In contrast, the age profile of the non-teaching staff in the vocational sector is younger and more closely mirrors the average age of the wider Australian workforce (Productivity Commission 2011, p.44).

The vocational education workforce is a casualised workforce. Estimates suggest that approximately three in every five TAFE teachers were employed on a casual basis and that this varied considerably across states/territories (NCVER 2004). This trend for employing non-permanent staff is also apparent in private training organisations (Auscorp Marketing & Strahan Research 2000). In contrast, nearly 80% of all professional and other staff in the vocational sector are employed on a permanent basis (Productivity Commission 2011, p.41).

The working life for many teachers and trainers in vocational education commences with a period of time employed on a casual basis, followed by employment on a contract basis and then potentially permanent employment (Simons et al. 2009). However, not all take this pathway to a permanent position, with some remaining on casual and contract employment by choice, either because of a phased move into retirement or because employment in the sector supplements other work (Productivity Commission 2011, p.46; Simons et al. 2009). This level of casualisation is a point of contention in the sector. On one hand, some argue that a high level of casualisation is needed to allow institutions to cope with the variable demands of the training market. On the other hand, casualisation of the VET workforce has been noted as having a significant impact on career pathways in the sector, as well as intensifying the work of contract and permanent staff, who are required to manage and support (often) continual streams of sessional staff and integrate them into the activities of the workplace (Simons et al. 2009).

The vocational education workforce is also a mobile workforce. A study on careers in the sector (Simons et al. 2008) found that two-thirds of respondents reported that they had made between one and five moves during their employment in the sector. This is, perhaps, not remarkable for teachers and trainers, given that many make a significant career move to enter the sector; for the non-teaching staff this mobility appears to be due to a mixture of factors, including career aspirations which might lie outside the sector. This adoption of self-directed career behaviour and intra-sector mobility may, on the one hand, be a marker of a workforce that adopted the flexibility and agility required of the sector to meet the demands of the competitive training market. On the other hand, it could be seen as an erosion of traditional pathways and contributing to significant 'churning' of the workforce, which has ramifications for managing workloads and sourcing staff for roles such as those in management which have been notoriously hard to fill (Black 2005; Mulcahy 2003; Rice 2003).

The Productivity Commission noted the absence of robust national data as a basis for improving workforce planning for the sector (Productivity Commission 2011, p.166). However, using available data the commission predicts that there will not be a shortage of workers for the sector (Productivity Commission 2011, p.167). How this prediction will bear up in the light of current moves to significantly downsize public sector vocational providers (where the workforce is significantly older than their non-TAFE counterparts) while also engineering some significant growth in private education provision is unknown. It is arguable that this significant and relatively quick exit of more experienced teachers and trainers from the sector could have implications for the capacity of the workforce, at least in the short-term.

One of the significant challenges in recruiting staff to the sector (and particularly to public providers) is the salary gap between what people can earn as workers in industry and what they can earn as teachers in the VET sector. Moreover, salary scales are highly contracted (Dickie et al. 2004, p.87), while trainers employed in enterprise-based training organisations can incur decreases in wages when regular shift work is swapped for training roles with regular '9.00—5.00' hours (Harris & Simons 2012). Private training providers face a different challenge when recruiting staff, particularly when applicants are often perceived to be ill-equipped to cope with the demands of training and assessing in the workplace (Harris, Simons & Moore 2005, p.28).

One of the most contentious issues related to the capability of the vocational education workforce is the minimum level of qualifications needed to work effectively as a teacher or assessor in the sector. Current regulatory requirements mandate a Certificate IV in Training and Assessment. The Productivity Commission (2011) supported this minimum requirement, despite their admission that there exists no evidence connecting teacher characteristics, such as level of qualifications, with student achievement. Further, this assertion of adequacy was accompanied by a number of caveats, including that the qualification retain its status as a high-risk qualification for auditing purposes under the Australian Quality Training Framework; that the training package used to develop assessment and delivery strategies for the qualification needs attention; and that the qualification needs to be supported by ongoing professional development and other strategies to support capability development (Clayton et al. 2010; Guthrie 2010; Productivity Commission 2011, p. 247). Arguably, this assessment of the qualification was driven by productivity and economic concerns: mandating higher qualifications could pose a serious risk to the sector and potentially inflate labour costs. What appears to be missing from this analysis is a more nuanced understanding of the 'qualification mix' that exists in the current workforce. Put another way, any assessment of the capability of the vocational education workforce needs to take into account the capacity of the current workforce, which appears to combine a mix of high and minimally qualified educators (with the potential for intra-workforce transfer of knowledge and skills through mentoring, team work and other mechanisms) as opposed to a workforce dominated by trainers and assessors who hold the mandated certificate IV as their only education qualification. This line of argument has been taken up in other studies which have broadened the debate to look more closely at the certificate IV and its outcomes (Clayton et al. 2010), initial teacher education for the sector (Guthrie, McNaughton, & Gamlin 2011), the quality of teaching in VET (Wheelahan & Moodie 2011), and the nature of professional development that should be available in the sector (Guthrie 2010). Other workforce capability gaps noted by the Productivity Commission (2011) include the capacity of the existing workforce to deliver higher-level qualifications, the use of information and communication technologies (p.237), the delivery of education and training in workplaces (p.241), the use of recognition of prior learning (p.240), the maintenance of industry currency (pp.243—6) and gaps in leadership and management capability (p.242).

Workforce development challenges

From this analysis it can be seen that both the higher and vocational education workforces are facing broadly similar challenges and are connected by the urgent need to develop a sustained and systemic approach to workforce development. Both sectors share the challenge of coping with the realities of ageing and casualised workforces. The higher education sector simply needs more staff (Coates et al. 2009, p.29); both sectors have to attend to the issue of succession planning to address the replacement of its workforce as many experienced educators reach retirement. Competition for suitably qualified workers for both sectors will be high but will play out in different ways: the arena

for competition in the higher education sector is an international one; for the VET sector competition will come from the industries that it seeks to serve and its capacity to provide a 'pipeline' of applicants who are suitably skilled in both educational and vocational senses. Vocational and higher education providers may compete with each other for suitably qualified applicants able to support the provision of qualifications that are offered in both sectors in some fields of study (for example, Australian Qualifications Framework [AQF] 5—7 qualifications). Equally, both sectors may also compete for those educators who have the capacity to work across sectors in order to support the development of more integrated pathways for learners.

Both sectors also share the challenge of developing their workforces in an operating context characterised by greater diversity in the types of educational institutions operating in the sector; the changing roles for public providers and an enlarged role for private sector organisations; a complex regulatory environment; and a changing and increasingly diverse student population. Changing funding regimes carry with them the requirement for revised business models, which will have implications for the type of workforce that can be sustained. To this end, some form of a core-peripheral workforce comprising a mix of sessional and contract staff, working alongside a cohort of permanent staff with growing responsibilities for managing the casual workforce, seems to be a potentially enduring feature of both the vocational and higher education landscapes. From the experiences of the vocational workforce, we know this can have positive benefits for workers who wish to develop 'portfolio' careers with the potential to work across various providers; however, an over-reliance on casual staff can result in a diminished student experience, as has been observed in the higher education sector. Getting the balance right, both numerically and in terms of the support (induction, job design, professional development, career development) provided to different segments of the workforce, will be an imperative.

Both sectors will also need to address significant industrial relations issues; this will be particularly pressing for institutions wishing to span the vocational—higher education divide. Changes which allow recognition of 'cross-sectoral workers' with accompanying pay and conditions are a necessary precursor to enhancing coherence across the sectors, but also, more importantly, for the potential this has for giving these workers a 'head set' for the contrasting curriculum, pedagogy and assessment practices that exist across both sectors.

Another shared challenge is the need to make both sectors attractive sites in which to work. Addressing perceptions which suggest that the 'real' work of teaching and research is being eroded by increasing administrative and accountability regimes and unattractive pay and other conditions will require some imagination. Enhancing the attractiveness of education work in both sectors for older workers through the use of transitionary work arrangements for workers prior to their retirement and better job design for roles associated with leadership and management in the sector (particularly those at the 'front line' of educational and business leadership) are just two examples of where further work is needed.

Both sectors also face the challenge of reshaping the skill base of their workforces to enable them to better respond to the diverse student population that will seek to engage in various forms of tertiary education. Increased capacity in the use of information and communication technologies; the provision of a wider range of blended learning experiences, including the use of the work-integrated learning; peer collaboration; and networked forms of learning experiences will become increasingly important. This is particularly the case if providers across the vocational and higher education sectors are to address the needs of students, who will include many existing workers who will need access to ongoing education and training in increasing numbers in order to maintain their employability. The

scholarship of teaching, which already has some traction in the higher education sector, has the potential to be a unifying force across all tertiary education sites and to drive significant change in teaching and learning. Building a tertiary workforce of excellent and expert teachers through a unified attempt to promote a scholarly and evidence-led approach to teaching and learning should be a priority alongside the goal of developing world-class researchers.

The issue of the professional preparation of educators for an expanding tertiary sector is one that will not subside in importance in the near future. While higher education institutions have adopted various approaches to developing their workforces, particularly in relation to teaching qualifications, the vocational education sector continues to wrestle with the issue of an initial-level teaching and training qualification which, on a number of counts, is not held in high regard. The argument for a differentiated continuum of qualifications has been well made (see Wheelahan & Moodie 2011). However, the adequacy of what has been prescribed as a minimum requirement for *all* educators and trainers engaged in the vocational education sector seems to be coming under increasing pressure, particularly with the proliferation of dual-, mixed- and cross-sector institutions, which seek to engage their educators in the delivery of a wider range of qualifications across different settings to an increasingly diverse student population. Workforces with a limited qualifications base focused on narrow sets of skills will not serve the interests of employers, who will be seeking greater flexibility in their workforces in order to be able to deploy them in the best possible way to meet both the business and educational imperatives they will face. The level of qualifications held by a workforce carries with it more than just a measure of capability — it also carries with it a range of norms, values, beliefs and practices that can serve to entrench sectoral divides and prejudices, which must be overcome if the Bradley vision of coherence is to be achieved. It is also a matter of equity for workers who must be equipped to be able to navigate the uncertain waters of institutional change and reform that will characterise the tertiary sector in the foreseeable future.

Conclusion

Just as a kaleidoscope contains loose coloured pieces of glass which can be brought together to form brilliant patterns as the light enters the cylinder, so the tertiary education workforce will be a kaleidoscope, whose elements need to be brought together under the unifying 'light' of coherent approaches to workforce development. In this context workforce development can be taken to mean how the institutions which comprise the tertiary sector are able to put in place a range of activities, policies and programs to 'manage the size and composition of the workforce, retaining and managing the workforce and skilling that workforce' (Carson, Maher & King 2007, p.99). This approach to workforce development is guided by and directed towards the goal of the tertiary sector as a whole being characterised as student-centred, demand-driven and providing clear pathways between the various forms of institutions that comprise the two sectors.

Such a workforce development strategy needs to be grounded in a strong evidence base. One of the consistent refrains that run through the literature on the vocational and higher education workforces is the incomplete data currently available to inform decision-making. While efforts are currently underway to develop a standard for collecting data on the vocational education workforce, the gaps in data available for the higher education workforce (for example, in relation to casual staff) also need to be addressed. Further, this evidence base also needs to be able to support assertions about the nature and quality of the tertiary education workforce and its link to a range of student outcomes. Such data would: help to make connections between, for example, educator characteristics, initial and ongoing professional learning and delivery of education across specific

contexts and industry areas (institutional, workplace, online delivery) to specific student populations; facilitate an understanding of the relationship between various models of initial and ongoing professional development for educators and student outcomes; and assist in achieving an understanding of the impact and outcomes of approaches for building workforces with the capacity to address the needs of diverse student populations in the tertiary sector.

A systemic approach to workforce development for the tertiary education sector will help to identify points of intervention and ways by which all parties — individuals, organisations and governments — might realistically and practically contribute to the project of developing a tertiary education workforce that can deliver on the aspirations for the sector set out in the Bradley Review. Strategic infrastructure to develop a strong evidence base for decision-making will be a necessary first step. A systemic workforce development strategy aimed at improving the effective functioning of the entire workforce (not just those segments that are perceived to be 'failing'), attentive to the structures and systems that shape the workforce as well as the cultures that reside in organisations, offers the most promising pathway to achieving the vision of a tertiary sector which is responsive, effective and equitable for all.

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DISCUSSION

How educational matters influence structures in the system

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I am delighted to present and comment on three papers describing the educational issues which should influence future vocational education and training structures. They address different topics with different emphases but share three common characteristics: thorough and careful preparation; evidence-based conclusions expressed simply, without making over-reaching claims; and each from a person knowledgeable in their field and grounded in lived experience. Such work stands in contrast to the frequent headline grabs and dramatic conclusions which pepper daily media accounts of what's wrong and what needs fixing in Australian tertiary education.

Sharon Bell: The public good

Sharon Bell's paper deals mainly with universities. It highlights the links and partnerships between higher education institutions and wider communities that contribute to particular organisations and groups and to engaging with communities overall. Bell sees this purpose to be 'at the core of the social contract with society from its inception'. She reminds us that the Dearing Committee in the United Kingdom (1997) saw higher education as part of the 'conscience of a democratic society, founded on respect for the rights of the individual and the responsibilities of the individual to society as whole'. From the nineteenth century this imperative similarly has been embedded in the Land Grant universities of the United States. Fostering active European citizenship is today at the centre of European university strategies, no less so than the modernising of Europe's economies and the development of a more inclusive society.

Bell notes a 'significant shift' from this traditional social charter in the last two decades, citing Ernest Boyer (1987) as identifying 'competence' as now the most successful aspect of college teaching, but asking 'competence to what end?'. Boyer comments: 'What a tragedy it would be if the most deeply felt issues, the most haunting questions, the most creative moments were pushed to the fringes of our institutional life'. Bell is worried by the dominance of 'economic goals and market-oriented values characterized by privatization, commercialization and corporatization'.

In a recent Canadian web-discussion forum, *Counterpunch* (rather like *The Conversation* in Australia), Henry Giroux of McMaster University (2013) drew attention to:

> this neoliberal corporatized model of higher education [which] exhibits a deep disdain for critical ideals, public spheres, and practices that are not directly linked to market values, business
>
> cultures, the economy, or the production of short-term financial gains … commitment to democracy is beleaguered, [being viewed as] a distraction that gets in the way of connecting knowledge and pedagogy to the production of material and human capital.

Juxtaposing these two contending positions highlights the depth of the divide in the fundamental underpinning philosophies. A current Australian example from the corporate world is a recent paper from the international consulting company Ernst and Young titled 'University of the future'.[1] In contrast to the work of Sharon Bell it exhibits some breathless naivety, yet it deals with pressing issues for Australian universities, and for our tertiary sector generally. It deserves serious attention, but its language and assumptions won't go down well with many staff in universities.

The second section of Bell's paper focuses on 'engagement', often described as a 'third mission' of universities, additional to teaching and research, a concept stronger today than the simpler notion of 'community service'. Bell adopts the definition of 'engagement' put by the Association of Commonwealth Universities, as:

> strenuous, thoughtful, argumentative interaction with the non-university world in at least four spheres: setting universities' aims, purposes and priorities; relating teaching and learning to the wider world; the back-and-forth dialogue between researchers and practitioners; and taking on wider responsibilities as neighbours and citizens.

From her experiences at Charles Darwin University she sees the obligation for community engagement especially salient for regional universities and campuses. While this point is not further developed in her paper, I see the recognition of location as central to any reshaping of tertiary education structures. The needs and possibilities in regional and remote communities cannot be just extrapolated from what is best in cities, with their very different population profiles. Similarly, the needs in newer outer-urban growth areas are different again.

Bell has a third and final section, 'Engagement and the student experience'. To compare and contrast differing student experiences, she reminds us of the quite different tertiary institutional pattern in the 1960s. Because aspects of this history arise in all three papers, at this point it might be helpful to spell this out more fully.

At the start of the 1960s Australia had a relatively small elite university sector and separate technical institutes and colleges (some offering diplomas and advanced technical training, while others, which grew from secondary technical schools, focused more on apprenticeships and certificates). As well there were state-supported agricultural colleges and teachers colleges and hospital-based nursing

[1] This report, authored by Justin Bokor, is available on the Ernst and Young website. It was released on 24 October 2012. A report in a similar format and style was released by Ernst and Young in 2011, titled *Higher education and the power of choice: reform, competition and the emerging consumer-driven market in Australian higher education.*

courses, commercially managed business colleges and specialist institutions in separate areas of the visual and performing arts. [2] Theological education was supported by the churches.

The Martin Report (1964) led to the establishment of colleges of advanced education, including newly founded institutions in Tasmania and Canberra. But most of these came from existing institutions. Later, following resistance and debate, some colleges of advanced education incorporated nearby teachers colleges. A period of role clarity occurred when Professor Peter Karmel led a Tertiary Education Commission, which supported three separate councils — for universities, for colleges of advanced education and for TAFE colleges (as defined in the Kangan Report of 1974). Separate parallel development and reasonable stability were maintained until the immediate lead-up to the creation of a Unified National System in the late 1980s and early 1990s. At this point amalgamations and renaming on a grand scale led to the disbanding of the colleges of advanced education, creating new universities and bringing additional campuses into some existing universities. Consolidation of the TAFE sector in most states led to a redefining of some institutions and campus arrangements. Later in Victoria four 'dual-sector' universities were formed from existing sites and institutions, and in the Northern Territory a single broad-based university was created from existing tertiary structures.

Varied and sometimes messy interplays between the Australian Government and the state and territory governments have come to characterise the way Australia deals with proposals for structural change. There is little point in advancing grand structural plans even if based on plausible principles, if agreement can't be reached between different levels of government. Much structural change in Australian tertiary education founders here.

Bell's paper acknowledges that 'in Australia we know a significant amount about our student profile and the dramatic changes this has undergone in the past two decades'. She refers to a number of national surveys of what has come to be called 'the student experience'. The early pioneering studies and activities initiated by Don Anderson (at the University of Melbourne and later from the Australian

[2] To take Victoria as an example, the state Education Department was responsible in the 1960s for 10 teachers colleges in Melbourne and its suburbs and in major country centres. Funding and staffing were centralised in the department. By the early 1970s, the argument that the employing authority of teachers should not also be the training authority was winning the day, and in 1972, a state coordinating authority was established under a separate Act of the Victorian Parliament. Further structural changes occurred before the (Dawkins) changes from the late 1980s. Similarly, separate agricultural colleges had existed at Dookie (near Shepparton) from 1886, and at Longerenong (near Horsham) from 1898, and these and other later colleges, including a college of horticulture and a college for forestry were managed from the state Department of Agriculture. These colleges, likewise, came to be coordinated by a state statutory authority. In the mid-1990s, the total entity became a part of the University of Melbourne through amalgamation with its Faculty of Agriculture. (Forestry had transferred to the university some years earlier.) As these colleges had VET courses as well as courses in higher education, the university became a registered training provider. The arrangements for preparing nurses for hospital and related employment were more localised through individual hospitals, with some coordination through statewide professional nursing bodies, themselves linked into the College of Nursing Australia. This college was a major initiator of the shift to education-based nurse training, initially through colleges of advanced education. The first such programs were in advanced nursing specialties; the first course so accredited was at the Western Australian Institute of Technology (now Curtin University).

National University) were continued in significant part from the Centre for the Study of Higher Education in the University of Melbourne, with funding from successive Australian governments. [3]

Today's work in this institution builds on this. It is thoroughly grounded, extensive in scope, involves researchers from a number of universities and from the Australian Council for Educational Research, and continues to be financially supported by the Australian Government. Many studies with longer time horizons have been university-based, but a comprehensive view now is available from NCVER, which built upon and now manages the Longitudinal Surveys of Australian Youth (LSAY) project. Taken together, we know much about students, their families, what concerns them with the effectiveness of learning and teaching, their financial, accommodation and parallel work—life experiences. Our understanding of points of commonality and points of difference between the sectors, of campuses and of different fields of study areas, and of professional training has been enhanced.

Bell mentions as issues: less time on campus, the need to take on paid work to meet living costs, students from lower socioeconomic backgrounds having to study part-time but preferring to be full-time, and seeking to make the most of e-learning opportunities while still keen to spend time on campus.

But one sentence signals trouble ahead. Making the point about students having less time for study and so becoming 'more instrumental and pragmatic', she says:

> As many of us become 'thinner' institutions and our engagement with our students also becomes 'thin' we begin to look more like vocational training institutes, or CAEs, and the generally very thin private providers.

This worrying admission is worth attention. Does the properly different emphasis of public (TAFE) and private registered training organisations mean that the broader goals for student care and wellbeing have to be poorer? Can we have a sector focused on vocational priorities which, though different, is no less rich in the nature of its support for students? Recent experience leads me to want to argue that TAFE institutions generally welcome and provide effectively for their students. It will be sad if this reality and aspiration are lost.

Steven Hodge: What makes education 'vocational' in an integrated tertiary sector?

The paper from Steven Hodge stresses the vocational element in all tertiary learning.

From his first paragraph one might anticipate his position to be diametrically opposed to that taken by Sharon Bell, for he says his essay concentrates 'on what I believe is the fundamental purpose of tertiary-level education: to develop the vocational'. But as subsequent paragraphs unfold it is clear that his position on tertiary learning is far from narrow and it is not a simple end point of occupational preparation to meet workforce needs. Rather, he develops a nuanced sense of what is

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[3] The focus on student support and the student experience grew from earlier recognition of the importance of better learning and teaching, and this soon came to be seen in the wider context of students' broader experiences and context. The Higher Education Council of the National Board for Employment, Education and Training advocated for and then monitored the first Australian Government-sponsored body to focus on improved teaching: the Committee for the Advancement of University Teaching. It was governed by a board chaired initially by Don Anderson. Subsequent governments changed its emphasis slightly through replacement bodies — the Committee for University Teaching and Staff Development, the Australian University Teaching Committee, the Carrick Institute, the Australian Learning and Teaching Council, and now the Office for Learning and Teaching. While funding has been somewhat precarious, it has continued, and the continuity has been a critical factor in what has been achieved and sustained over two decades.

meant by 'vocational', starting from the historic notion of a vocation as a 'calling', originally a 'calling (*vocatio*) by God to take up the work of the church'. From the Reformation the concept broadened to include a calling to any sort of useful work, and later to 'a sense of duty to work' (Weber 1930). I am reminded of the Freudian imperatives 'lieben und arbeiten' — love and work, as the two things that matter in life. 'People and their work are in some way bound', says Hodge.

They are bound through two distinct elements. One is a personal dimension through an 'inner feeling' of wanting to engage in work of a particular kind. The second is a social practice dimension — a willingness to take up the public obligations that go with the job, endorsing accepted roles and practices that have evolved as part of the occupation. Hodge quotes Stephen Billett (2011), who identifies vocations as 'personally directed and assented but often socially derived practices that reflect an individual's enduring aspirations and interests' as distinct from occupations which 'necessarily comprise socially and historically constituted practices that have particular norms as well as standing in the community'.

In two sentences he makes clear a dynamic view of vocational education and training, not one where a person simply selects training for an occupation, or job or industry. They are: 'Interest in a form of work and an awareness of personal abilities emerge together. Once in work, processes of mastery of a practice and deeper understanding of self evolve together'.

The paper next canvasses ideas of match and mismatch between acquired skills (from education and training) and deployed skills (in work). He cites as a classic example of mismatch the physicist or electrician who is driving a taxi, where from the point of view of training for a skilled workforce the education is totally wasted. In a less clear-cut example he quotes the tradesman who becomes a manager. Here, not a total waste, but where a broader education is called for. My comment is that a second differently focused program at a later point in time is the way to go. It is analogous to the engineer who later does an MBA.

There are parallels in higher education where study not directly linked to immediate employment has never been dismissed as waste. The purpose of such study was to train the mind (to use earlier language), leading to cultivated and educated citizens who subsequently gain employment of diverse kinds in many areas of society. Think pure mathematics, foreign languages, literature and philosophy. Alternatively, some high-prestige fields of university study have substantial vocational components. Many if not nearly all students enter them with the intention of using their knowledge and skills directly in employment. Think medicine, dentistry, law, accounting and engineering.[4] Much more could be said about this, as young people change careers and, as is so often pointed out, some jobs of tomorrow are not yet defined.

In a world where disciplines and fields of study rise and fall in significance, where new needs are identified, where graduates are in excess or in shortage and both change over time, where it is harder and harder to get professionals in key fields into regional communities, who should decide the

[4] The underlying culture of university disciplines, the relationships between these disciplines and the professions, and the relations between both the relevant industries and their organisational structures runs deep in the fabric of universities and their associations with many communities. The parallels internationally are also profound, as global linkages and partnerships continue to strengthen. This, more than anything, will make it difficult to change leading institutions and the perspectives of leading discipline scholars and researchers primarily through external intervention. While structural change can always be steered in part from outside, especially through funding priorities and frameworks, real change grows organically and needs the commitment of a range of key players as well as that of institutional leaders.

programs to be offered, to whom, at what academic levels and to what numbers of students? Is there a secure base of information from which to make such decisions with confidence?

Hodge does not ask such practical questions, but makes observations and defines 'challenges' based on the conceptions he has advanced. First, he challenges those who design competency standards, saying that 'making learning conform to the description of performance has the effect of sidelining the discovery of assumptions and values held by those competent in a role, as well as ensuring that in VET, knowledge is taken as secondary to demonstrating performance criteria'. He concludes: 'Our VET system, then, due to its focus on equipping for performance of current jobs, fails to be fully vocational'.

His second challenge is the overly rigid mechanisms for comprehending and recording skill needs using competency standards. Practitioners are severely constrained in exercising creativity where the outcomes of activities are predetermined, so the system is ill-fitted to embrace innovation. Calling for curriculum development he says:

> What is needed is a curriculum that is cognisant of the tasks that make up an occupation and introduces learners to relevant contexts, knowledge structures and value structures that pertain to particular occupations, occupation clusters and fields.

Turning to how higher education deals with the concept of the vocational, Hodge is more positive. Here curriculum is more widely sourced, including analyses of practice and those knowledge structures that relate to the goals of practice. Curriculum is differentiated by field, shaped by the individual structures of knowledge, and differentiated further by institutional policies and traditions. Professional identity is built through the value dimensions of work, thus encouraging self-reflection and questioning. But the challenge for higher education is 'to make this wealth of knowledge accessible to everyone and on their own terms'. Curriculum demands are generally prolonged, with continuous commitment to the mastery of subjects. He seems to be seeking ways to cut through the encyclopaedic stepwise systemic learning requirements, so people can more readily 'dip in' by constructing their own learning paths. Changes in the way anatomy is now taught to medical undergraduates would seem to be a clear example.

Finally Hodge calls for a vocational perspective for some subject fields not usually considered vocational or leading to occupations. He sees them appealing to the personal, contextual or knowledge dimensions of the vocational and so, following the writings of John Dewey, a way exists to break down the dichotomy between the general and vocational modes of education.

These approaches could, as Bradley et al. (2008) advocated, make available to students and to workers a 'continuum of tertiary skill provision'. In this vision, while 'occupation' is a narrow conception, the vocational is rich, as it 'engages effectively with other education and training sectors to provide a continuum of high-quality learning opportunities throughout an individual's life'. His final words are:

> But work needs to be done to make these opportunities available. The narrow focus of VET needs to be challenged so that the richness and diversity of occupational practices — the activities as well as the knowledge structures, contexts and values — are reflected in curriculum, a challenge that might be taken up initially by making curriculum innovation a priority. Higher education needs to be challenged to break down curriculum structures so that people can access the rich and diverse educational opportunities they need or see as promising, without having to subordinate themselves to onerous subject apprenticeships.

My conclusion is that this subtle paper shows the limits to the simplistic notion that higher education is based on curriculum, while VET is driven by training packages. But until the more complex reality is analysed field by field, or subject by subject, or profession by profession, interconnections or integration will remain constrained and the two cultures will stay apart. Even though the reality is more nuanced, the language of training packages will confine VET to a limited, less preferred environment, while higher education practitioners need to be open to fully acknowledging that, in many areas, above all else they rightly insist on testing for and demanding competence.

What Steven Hodge and I refer to here has been adroitly summed up by Leesa Wheelahan (2012) when she describes the 'fractured social settlement of VET in Australia', where low trust has led to competency-based training and a commitment to competitive markets is resulting in cost-cutting and lowering quality, in turn putting more emphasis on compliance and regulation. Wheelahan says 'governments need to articulate the role of TAFE as a public institution that must be supported to ensure we meet the future skill needs of Australia, but also that we build a tolerant and inclusive society with opportunities for all'. The papers from Hodge and from Bell, my comment and Wheelahan's summary show four people in resounding agreement!

Michele Simons: The future of the tertiary sector workforce: a kaleidoscope of possibilities?

This third paper complements and resonates with the two already considered. It moves the debate forward by emphasising how far structural variation has reconfigured the Australian tertiary scene. 'Kaleidoscope' is apt. With a focus on staff, it is the flip side of Sharon Bell's focus on students.

Staff and students are what comprise tertiary education — over three million students (in 2010, 1.8 million in VET and 1.2 million in higher education, or in EFTS (equivalent full-time students) 665 000 in VET and 861 000 in higher education) in courses from certificates to doctorates, and over 300 000 staff (a Productivity Commission estimate is 223 000 total VET staff; the higher education statistics collection shows 119 000 EFT staff — academic and professional combined — in 2012), comprised of academics, teachers and professionals of many kinds with diverse backgrounds and experience, full-time, part-time and casual.[5]

Sometimes politicians, media writers, institutional leaders and various 'experts' speak as if structures could be manipulated almost at will to meet this or that insight or new statistic. But in these institutions people matter, they exert influence and like to have a say. Let's not think that even our leaders or their governing councils alone can redraw the structural map or recombine component parts of institutions without the broad agreement of a fair proportion of these concerned and affected people. In speculating on potential structural alternatives this paper takes forward the insights of Steven Hodge and sees them within living institutions, in all their complexity.

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[5] Care is needed in reading and interpreting student and staff statistics in the higher education and VET sectors in Australia. Separate compilations based on different assumptions make it difficult to compare numbers between the two sectors. The student numbers quoted are from *Tertiary education and training in Australia* (NCVER 2010). Note that, while the number of student participants in VET is larger than the number in higher education, measuring equivalent full-time students shows the load to be greater in higher education. Measuring staff numbers requires separate measures in each sector for teaching staff compared with support staff. In higher education this is further complicated by academic staff being designated in three groups — teaching and research, research only, and teaching only. Further complexity arises from the large numbers of staff described as 'casual' or 'sessional', including the accuracy with which the commitments of such people are recorded and converted to 'full-time equivalents'. It is reported that, especially in the VET sector, the recording of staff load in smaller private sector institutions is problematic.

First, the nature of the tertiary sector is appraised in the context of its evolution. Then the present workforces of each sector are disaggregated, with the trends and challenges identified. The final section explores how these workforces could be reconceptualised to respond, adapt and be renewed, with necessary systemic workforce development.

Simons starts by contrasting VET as having committed to building employability and being centred in the sub-professions, whereas higher education has concentrated on discipline-based knowledge and capabilities leading to both professional employment and to further advanced study. Yet neither sector remains homogeneous. VET overlaps with secondary schooling (VET in Schools), and the types of provision include the large public TAFE sector, commercial, adult and community, industry and enterprise-based providers, each with their own world views and different market segments. Differences extend to the construction and deployment of their workforces. With changing universities and a 'miscellany of other colleges', the higher education sector likewise is not uniform.

Within-sector differentiation adds further complexity, as does a gradual blurring of the boundaries between the sectors, driven by growth and expansion as well as by a more competitive training market and increasing competition between universities. Simons cites Moodie (2010) as defining four groups of institutions: single-sector (over 97% student load in one sector); mixed-sector (at least 3% but less than 20% student load in the minority sector); dual-sector (at least 20% but less than 80% in each sector); and cross-sector (some load in both sectors). With new institutions emerging and new combinations occurring, the upshot is, as described by Skills Australia (2010), a 'variegated tertiary sector'.

I comment on two issues which follow from this analysis of fluidity and grasping for market share. One issue is the erosion of TAFE markets by universities, schools and private providers. This is very serious and, by simply perceiving a competitive market operating, its significance is under-appreciated. Weakening TAFE threatens a really significant part of the whole Australian education edifice. Not only is its sheer scale important, but as well it is the component primarily committed to extending opportunity to those less advantaged. While an issue everywhere, it is less significant in the big capital cities, more noticeable in the outer urban areas, and most in evidence in regional and remote communities. For an example, consider the TAFE institution in the regional city of Bendigo. That institute is squeezed at one level by the recent welcome successes of the Latrobe University campus, and at another level by a strong and effective school, Bendigo Senior Secondary College, with its massive enrolments (from school amalgamations it is the largest government secondary school in the state) and in consequence now boasts a splendidly diverse comprehensive curriculum with many vocational options.

A second matter is a telling sentence in this part of Simons's paper. She says:

> What would be worth relinquishing is the sentiment that vocational education and training is of a 'lower status' and perhaps it is this more than anything that underpins the call by Bradley for a more coherent system of tertiary education.

So I ask: can anyone simply 'relinquish' this sentiment? What is possible here? This is indeed the heart of a dilemma, both educational and structural. In a world where institutional rankings, brand attraction and the aspirations of families and potential students are intensifying, we have to face the reality that by itself any structural change will be of limited effect. To make genuine progress will require tenacious commitment over a long time horizon.

I interpolate the perspective of what ought to be (in my view) a 'roadmap for vocational education and training, *Skills for Prosperity* from Skills Australia (2011). This report 'is not advocating any top-down remodelling of the tertiary sector, but rather supports the moves to equalise, and make more rational, funding arrangements where universities and VET providers are operating in the same

space'. It further declares (in section 8.1) that 'movement towards an integrated tertiary sector should not compromise the distinct attributes of the VET sector, particularly its special connections with industry and the world of work'. I concur!

Simons proceeds with a systematic enumeration of key workforce issues. For the university sector she points to the growth in students outpacing growth of academic staff. Over the period 1989 to 2007, student growth has been 107%, while staff growth has been 27%, so impacting on student—staff ratios. As Graham Hugo has documented, the age profile of the academic workforce is weighted to those nearing retirement. Issues around job recruitment relate to competitive factors globally and alternative professional employment, to migration prospects and visa policies. Simons quotes an Australian Council for Educational Research study from 2009, *The attractiveness of the Australian academic profession: a comparative analysis*, which claims that Australian academics working overseas don't wish to return for reasons that include perceptions of lower pay, long work hours, inferior resources, fewer research opportunities, lower career prospects and attractions of overseas postings.

Another issue also now well documented and studied is the high casualisation of the academic workforce. In what should be a major step forward, Bradley et al. (2008) called for expanding master's by research and PhD enrolments as a potential future workforce source. Certainly a necessary step, although needing care and regard for its complexities; even then, it is not a complete answer to the problems ahead. Simons next considers growth in non-academic staff, noting a marginal rise in their proportion as a percentage of total staff over the last decade.

To highlight the issues raised by this growth, I quote Richard James, whose own research 'reveals a profession under strain. Mid- and late-career academics report high levels of stress, hefty workloads and loss of autonomy. Early-career academics are often frustrated that they cannot secure tenured appointments and are excluded from career-development opportunities'.

James predicts:

> that open online delivery will precipitate an explicit differentiation of academic work roles. The number of traditional research and teaching academics will dwindle and may concentrate in certain universities and in graduate education. Teaching specialist roles will proliferate and these will be highly varied. People in these roles will tutor and support students, online or face-to-face, and will assess student learning. They will have at their disposal premium-quality learning resources sourced from around the world.[6]

To return to Michele's paper.

Broadly, the VET workforce has a different provenance, being drawn from 'a range of practitioners, including teachers, trainers, assessors and other professional staff working in a wide range of different types of organisations'. They can be employed full-time, on contract, or paid by the hour. They can be self-employed consultants or engaged for part of their work role through employment in

[6] Richard James, in an opinion piece in *The Australian* newspaper, 24 October 2012. Richard, for many years Director of the Centre for the Study of Higher Education in the University of Melbourne, has led many substantial studies of university students and their learning, and university academics and their teaching. Here he is commenting on the likely impact of Massive Open Online Courses.

other occupations. The Productivity Commission (2011) estimates the total number of employees in the sector as around 223 000. The age profile of teaching staff is higher in the public sector than in the private sector, and non-teaching staff are younger than teaching staff. Estimates suggest three in five TAFE teachers are employed casually, with considerable variations across the states. By contrast, nearly 80% of non-teaching staff in the VET sector are employed on a permanent basis. Overall, she describes the VET workforce as 'mobile', with areas of 'churn'.

Poor salaries in the public sector VET workforce are reported to hamper recruitment from industry. Private providers face a different challenge, with some applicants seen to be ill-equipped for the demands of training and assessing in the workplace. The teaching qualification required (Certificate IV in Training and Assessment) is contentious.

On the one hand questions have been raised about its adequacy in terms of depth, with suggestions of a need for further ongoing professional development. On the other, 'mandating higher qualifications could pose a serious risk to the sector and potentially inflate labour costs'. There is an implicit suggestion that a workforce with a mix of high and minimally qualified educators has the potential for internal mentoring, team work and other mechanisms for transfer of knowledge and skills.

In conclusion, Simons sees the two workforces 'facing broadly similar challenges' of shortfall, ageing and casualisation. For higher education, 'the sector simply needs more staff', with competitive pressures being international; for the VET institutions competition will come from the industries it seeks to serve and the capacity for a pipeline of applicants suitably skilled in both educational and vocational senses. Both sectors face industrial relations issues, and both sectors need to enhance their attractiveness to potential staff. Staff will need to become adept with new technologies, with online, networked and blended learning modes, especially for existing workers demanding access while maintaining their employment. She sums this up by saying that the tertiary education workforce will be a kaleidoscope, whose elements need to come together under the unified light 'of a coherent tertiary education workforce development strategy'. She sees adopting 'a holistic view' as a necessary first step. While being sensitive to 'the cultures that reside in organisations and which act to sustain some of the silos', these are 'arguably not in harmony with the vision for a tertiary sector which can be described as responsive, effective and equitable for all'.

Her analysis leads me to a somewhat different conclusion. The notion of the different parts of the sector 'coming under a unified light' and so leading to a coherent, single sector, with a single-sector workforce seems to me a long way off. I'd say that global competition among leading universities across the world has pushed the sectors further apart — much further than when Dewey wrote of the commonalities between general and vocational education. The two sectors in Australia are as apart today as they were when John Dawkins 'unified' universities and colleges of advanced education but continued to separate them from VET institutions through the Employment and Skills Formation Council. Despite genuine and (I hope) enduring advances for equity across the entire tertiary sector I

would argue not for an integrated sector, but for two distinct sectors with many interconnections,[7] and within each, partnerships to ensure that for students, staff and the wider community, each institution plays to its strengths to create a whole which exceeds the sum of its parts.

Note

Please note that references are not provided for works which are clearly referenced in the three papers under discussion in this overview and commentary.

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[7] In response to the (independent) Review of Australian Higher Education led by Professor Denise Bradley in 2008, the government made a formal statement in May 2009, titled 'Transforming Australia's higher education system'. Within a section of this response titled 'Improving tertiary pathways', it is said:

> Australia's VET and higher education systems have their own particular purposes. The direct connection between our vocational education system with the requirements of industry is the envy of the western world, while our higher education system prides itself on graduating citizens capable of leading the world in their areas of expertise.
>
> Tertiary education in Australia should be a continuum of delivery, with better connections between sectors in both directions while avoiding one sector subsuming the other.

This emphasis differs from that implied in the use of 'integrated tertiary sector', which readily can be taken to mean 'combining parts into a whole' *(Australian Concise Oxford Dictionary)*. The use of terms including 'cohesive', 'coherent' and 'holistic' in the Bradley Review, combined with their proposal that both sectors be funded from the single source of the national government, inevitably has given rise to multiple proposals as to how close the sectors should come over time. While seeing strong benefit from some dual-sector institutions and from a number of specific mixed-sector arrangements, the large and increasing scale of each sector, as well as their different missions, suggests hastening slowly in a period of coming financial constraint.

Who controls the system?

Education as an industry, and as a product

John Quiggin, University of Queensland

Education is an important economic activity. Public expenditure on education accounts for around 5% of gross domestic product (GDP), with the education sector employing around 7.5% of the paid workforce. Broader measures, taking account of the cost borne and work done by students as part of the education process, yield even larger estimates.

On the other hand, the idea, implicit in the use of standard national accounting categories, that education is an industry that can and should be analysed in the same way as, say, manufacturing industries, is problematic in many ways. It is far from clear what is being produced and who is the consumer. The idea that the relationship between teachers and students can be treated as one between service providers and their customers challenges traditional understandings of education. The role, if any, of markets and competition is the subject of vigorous dispute.

In this essay, I will consider whether and to what extent education can and should be viewed as an industry. The primary focus will be on the implications for education funding and for the relationship between teachers and students.

The idea that education should be viewed as an industry is relatively new. The term 'industry' is most naturally associated with a large factory, where workers are employed to supply labour under the direction of managers to produce a physical product, which is sold, ideally at a profit, to consumers by the firm that owns the factory.

Education differs from this 'ideal' notion of industry in a number of ways. The 'workers' are professionals who are assumed to have a commitment to their profession over and above the need to earn a living. Particularly at university level, they have a high degree of autonomy and substantial control over what they teach and how. The nature of the 'product' is unclear and, indeed, is the subject of vigorous dispute. Rather than producing for an anonymous market, teachers have a direct personal relationship with their students, involving a range of mutual obligations, as well as broader obligations to society at large. Finally, in terms of the nature of the employment relationship, it is not clear whether the employer is the individual institution, the government that provides basic funding, or some combination of the two.

Despite these idiosyncratic features, education has increasingly come to be viewed as an industry. This process reflects a number of developments.

First, industry in the classic sense described above now accounts for only a small proportion of total employment and economic activity. The vast majority of workers are now employed in service activities, which share some characteristics, such as the absence of a tangible product, with education.

Moreover, an increasing proportion of workers (about 35% in 2012) are employed in managerial and professional occupations. On the standard classification, professionals are the largest single group in the workforce, and education professionals (teachers and academics) are the largest sub-group of professionals (Department of Education, Employment and Workplace Relations 2012). Taken as group, teachers (including university academics) are one of the largest occupational groups in the entire

workforce, second only to shop assistants. Teachers are now more similar to the 'typical' worker than are, say, factory workers.

Finally, as market pressures have been brought to bear on the education sector, many of the distinctive features of education have been eroded or stripped away. Academic institutions have adopted the rhetoric and attempted to implement the practices of managerialism, including a focus on tightly specified 'key performance indicators' and 'accountability'. This in turn has placed pressure on teachers to downplay traditional notions of professionalism and academic values in favour of corporate values.

The transformation of education into an industry is most complete in the context of industrial relations. Until the 1970s, teachers and academics, along with many other service professions, were excluded from the Commonwealth arbitration system, which was established under the Constitution to settle industrial disputes. This reflected both the view of 'industry' described above and the assumption that professional workers would not require arbitration to settle disagreements over pay and conditions. This view was rejected by the High Court of Australia in 1984. The court held that, in the ordinary meaning of the term, 'the constitutional concept of "industrial dispute" is sufficiently wide to embrace any dispute between employer and employees as to terms and conditions of employment'.

The High Court treated the meaning of the words 'industrial dispute' in s.51 (xxxv) of the Constitution as largely a question of fact and ordinary meaning. It held that the expression 'industrial disputes' extended to all disputes that the person in the street would regard as industrial disputes and was certainly not limited to disputes in 'industry':

> The words are not a technical or legal expression. They have to be given their popular meaning — what they convey to the man in the street. And that is essentially a question of fact.

The immediate result was that the scope of the arbitration system was expanded to include public employees, including university academics and teachers in the school and TAFE systems. Consequently, the staff associations that had previously represented such workers were converted into unions, most notably, the National Tertiary Education Union, which covers universities, and the Australian Education Union, which covers most workers in the vocational education sector.

On the employer side, teachers and academics were increasingly treated in the same way as other employees. In particular, employment protections that had characterised the public sector in general, and education in particular, were stripped away. Teachers and academics became subject to large-scale redundancies, such as those that have recently affected the TAFE sector in Victoria.

Concepts such as 'academic tenure' also ceased to have any real applicability, except negatively. Academics still undergo a lengthy period of probation before becoming permanent employees, but having completed this period, they have no special protections beyond the general prohibition on unfair dismissal applicable to all employees. The recent dismissal of a large number of academics from the University of Sydney, on the grounds of inadequate research productivity, illustrates this point.

In most respects, then, teachers and academics work under standard industrial conditions. A more difficult question is: what about the work done by students in the course of their education? In the apprenticeship model, students 'learn by doing', and are counted as part of the employed labour force. Much the same model is applicable to students undertaking advanced research degrees at universities, although they are not normally counted as employed, unless their stipends are supplemented by payments for work as tutors or research assistants. Nevertheless, like apprentices,

students undertaking research for a PhD are clearly doing the same kind of work, although normally at a less advanced level, as their academic supervisors.

More generally, being a student is work (although students aren't always as diligent in their work as their teachers would like). Time spent in classes or working on assignments is time that can't be spent earning income. On standard economic estimates, the forgone earnings of students account for the majority of the social costs of university education (Lewis, Daly & Fleming 2004), and it seems likely that the same is true for vocational education.

If education is an industry, what does it produce? Traditionally, education was viewed as a service, providing an immediate consumption benefit, in the same way as, say, a haircut or a musical performance. However, the development of economic analyses of education, beginning with the work of Mincer (1958) and Becker (1964) has yielded a more complex and sophisticated view of the question. In the human capital model advocated by Mincer and Becker, education is an investment in the acquisition of knowledge and skills, which will be useful in the future, either as a way of earning an income or in daily life.

The human capital view is not universally accepted. Among economists, the most popular alternative is the 'screening' hypothesis, in which test results derived from education are used to identify the most able young people, who are then assigned to high-skill jobs. In strong versions of the screening model, the formal content of education is entirely irrelevant. In weaker versions, it is supposed that some combination of screening and human capital is applicable. Quiggin (1999) argues that the evidence for screening is weak, and that mixtures of screening and human capital models are logically incoherent.

The truly crucial questions, however, relate to the relationship between the education 'industry' and its 'consumers'. In the simplest versions of the human capital model, this relationship is straightforward. Students acquire technical knowledge useful in some occupation, in exactly the same way as they might acquire tools, equipment or vehicles for business use. Hence, in principle, they should be able to estimate the return on their investment in advance, and choose accordingly.

The critical problem with this simple model is that students, by definition, cannot know in advance what they are going to learn, or make an informed judgment about what they are learning. They have to rely, to a substantial extent, on their teachers to select the right topics of study and to teach them appropriately.

Moreover, any specific course of education is a once-only experience in most cases. Students may judge, in retrospect, that particular teachers, courses or institutions were good or bad, but in either case they are unlikely to return, so that there is no direct market return from high-quality performance.

The result is that education does not rely on market competition to any significant extent to sort good teachers and institutions from bad ones. Rather, education depends on a combination of sustained institutional standards and individual professional ethics to maintain their performance. This in turn means that reputation, rather than market prices or direct observation of quality, drives educational choices.

Institutional reputations in education are exceptionally durable. The leading universities in Australia, and in most developed countries, are those that were already well established at the turn of the nineteenth century. The same is true of private schools and even, to a large extent, of elite state schools.

Reputations do not always match reality. People and institutions can rely, for a time, on past achievements to cover present underperformance. But such a divergence can only be sustained for a limited time. The durability of educational reputations reflects their success in maintaining standards of achievement over very long periods.

The durability of educational institutions, and of their relative standing, stands in stark contrast to other sectors of the economy. Only a few of the leading companies of 1900 survive today, even in industries where brands and reputations are important. In the Australian retail sector, for example, David Jones and (on a much smaller scale) Harris Scarfe are the only major firms that have survived since 1900. Nearly all of their competitors at that time (Anthony Horderns, Foy & Gibson, Grace Brothers, John Martin's, Marcus Clark) have disappeared, while new entrants such as KMart and Bunnings have taken a substantial market share.

The striking contrast between educational institutions and for-profit corporations indicates that an analysis based on market incentives is unlikely to explain observed outcomes in education. Nor can the durability of standards and reputations for educational institutions be explained by leadership. The typical term of tenure of a school principal or vice-chancellor is only five to ten years, whereas the lifetime of educational institutions is measured in decades or even centuries. More importantly, individual leaders vary widely in their management styles, vision and general competence. If leadership played an important part in institutional reputation, we would observe much more variation than actually takes place.

The maintenance of educational standards over many decades can only be explained by a combination of institutional culture and professional ethics. Academics and teachers derive satisfaction and the respect of their peers from adhering to professional standards. These standards are embodied in the culture of educational institutions and have proved highly resistant to change, whether driven from within (for example, by students in the 1960s and 1970s) or without, for example, by government directives and market forces.

The view that education depended on the professionalism of teachers and academics was taken for granted until relatively recently. From the 1990s onwards, however, this view was challenged by advocates of market-based education, who argued that schools and universities should respond directly to consumer demand: in their operation they should use the generic management techniques applicable to corporations of all kind and compete on the basis of price (fees), as well as quality, and tailor their offerings to market (student) demand. The laws of economics would then ensure an efficient outcome. The most notable Australian advocates of this view were 'enterprising' vice-chancellors such as Gilbert (2000) and Schwartz (2000).

This theory seemed beautiful to the ideologists of market reform, but it failed to account for an ugly fact. For-profit education has been a consistent failure in all times and places. The limited exceptions relate to areas of vocational training with little or no general educational components.

The market euphoria of the 1990s produced a large number of for-profit educational ventures, most of which quickly failed. Among the most notable failures have been Edison Schools and U21Global.

Edison Schools was founded in 1992 and was widely viewed as representing the future of school education. Its plans were drawn up by a committee headed by John Chubb, the co-author of the most influential single critique of public sector education in the United States (Chubb & Moe 1990).

The period since then has been one of decline. Edison has lost numerous contracts, along with its stockmarket listing and has largely abandoned new bids to operate schools, focusing instead on a

variety of peripheral educational services, such as testing and the provision of course materials. Even operating in a highly favourable political and financial climate, Edison was unable to deliver on its promise of transforming the school sector and seems unlikely to survive as a school operator in the long run.

U21Global started out with even more ambitious goals. U21Global was designed to be a joint venture between Universitas21, a consortium of universities of which the University of Melbourne was the driving force, and News Corporation. Other members of the project included the University of Queensland, the University of New South Wales, Nottingham University and the University of British Columbia. News Corporation pulled out of the project before it got off the ground, to be replaced by Thomson Reuters, and then by a Mauritius-based firm, Manipal Universal Learning International.

Initial ambitions to establish a world-leading university were quickly replaced by a more prosaic online MBA degree. By 2012, even that program had been abandoned, and the focus of the enterprise was on short corporate courses. Virtually all of the $100 million invested in U21Global by the university sector and its corporate partners has been written off.

A similar venture undertaken under the auspices of the United Kingdom Government was the e-University. Established in 2000 just before the collapse of the dotcom boom, UKeU was closed down in 2004, after only two years of operation.

Not all for-profit educational enterprises have been commercial failures. But in many ways, the successes have been even more alarming. Arguably, the most notable has been the University of Phoenix, founded in 1976, and widely represented in Australia as a successful challenger to traditional universities. In reality, the University of Phoenix, like other for-profit universities, depends almost entirely on exploitation of the Pell system of government grants to low-income students. Students at for-profit institutions represent only 9% of all college students, but receive roughly 25% of all Federal Pell Grants and loans, and are responsible for 44% of all student loan defaults (Pew Charitable Trusts 2009). An investigation of 15 for-profit higher education institutions found that all were engaged in deceptive and misleading practices, and that at least four were engaged in outright fraud (US Government Accountability Office 2010).

In Australia, for-profit education has been concentrated in the vocational education sector. Over the last two decades public policy has promoted the expansion of for-profit vocational education at the expense of the publicly funded TAFE sector. As in the United States, a large component of the business has been driven by regulatory arbitrage rather than by education goals.

Over the decade to 2010, the primary concern has been the use of vocational education as a backdoor route to permanent residency for overseas students. This eventually led to the revision of immigration laws, with the objective of dissociating student visas from permanent residency. In the process, a substantial number of private education providers closed, in some cases leaving students stranded.

More recently, concerns have emerged over vocational training provided primarily to domestic students. In particular, reforms introduced by the Brumby and Baillieu governments in Victoria have encouraged rapid expansion of for-profit provision, resulting in problems of regulatory arbitrage (Wheelahan 2012).

An Australian Broadcasting Corporation investigation has alleged that some of the most prominent providers in Victoria have provided low-quality training and engaged in outright fraud, such as the provision of staged photos purporting to show on-the-job training that did not in fact take place (Australian Broadcasting Corporation 2012). This follows the deregistration of Vocational Training

Group earlier in the year, following allegations of illegal kickbacks, and the refusal of applications by at least 100 of the 600 providers operating in 2011 for access to government-funded training places (Ross 2012).

In summary, attempts to restructure education as a competitive industry, in which market signals play a central role, have proved almost entirely unsuccessful or counterproductive. Many of these initiatives have been abandoned and others have been characterised by chronic problems of fraud and exploitation of regulatory loopholes.

The second main challenge to traditional views of the university has come from attempts to restructure educational institutions along managerialist lines, combining centralised strategic planning with a push to increase accountability through more extensive systems of oversight.

The push for strategic planning is commonly associated with a desire to make educational institutions operate in a manner more like that of similarly sized private corporations. However, it also draws on ideas from the 'new public sector management' literature which emerged in the 1990s (Osborne & Gaebler 1992).

To sum up the discussion so far, although education may usefully be considered as an industry in some respects, there are critical differences between the process of education and the production of market goods and services. These differences make the application of ideas about market competition and standard theories of management highly problematic in the education context.

It remains to consider the crucial question of funding. Education is costly, and these costs must be met either by governments, by students or through contributions from third parties.

In most cases, only the first two are serious possibilities. Some universities receive substantial support from corporations and wealthy individuals, but this support is mostly tied to specific goals (research centres, buildings and, in the case of the United States, sporting teams) which are only tangentially related to education.

At the school level in Australia, education is primarily funded by governments. By contrast, and with the exception of a brief period in the 1970s and 1980s, post-school education has always been funded, to a substantial extent, by student payments of various kinds. The extent and form of this payment varies greatly across courses.

The crucial public policy issue here is whether student payments should be regarded as a contribution towards the cost of a publicly funded education system or as the market price of a service, ultimately determined by competition between providers. This issue is directly related to the question of whether, and to what extent, education should be viewed as an industry.

The analysis presented above suggests that, in general, the idea that the provision of education is appropriately viewed as a market transaction, mediated mainly by prices and subject to the discipline of market competition, is seriously mistaken.

The most successful model for post-school education funding has been that of undergraduate university funding, with a regulated fee set well below the average cost of provision, repayable by an income-contingent loan. Experiments with varying this system, motivated by the desire to make it more like a market price, have generally yielded poor outcomes.

Of particular note is the decision by the Howard Government to allow 'flexibility' in charges, with universities being allowed, but not required, to increase charges by up to 25%. It was expected that

this flexibility would produce a differentiated outcome, with some universities charging the higher price and competing on quality, while others sought to compete on price.

In reality, nearly all universities implemented the maximum price increase immediately and the handful of temporary exceptions (including the Australian National University) were motivated by opposition to the policy of shifting more costs to students, rather than by a desire to compete on price. The same outcome was observed in the United Kingdom, where universities were permitted to triple their charges.

None of this is surprising on the basis of the discussion presented here. The institutional culture of universities is such that an explicit commitment to reducing quality in order to lower costs is entirely unacceptable. On the other hand, at the time flexibility was introduced, steady reductions in government funding per student, combined with regulated fees, had forced universities to increase class sizes, reduce contact hours and take other measures that implied a reduction in quality. Not surprisingly, offered the option to partially reverse this imposed reduction in quality, universities accepted it without hesitation.

The combination of regulated charges and income-contingent loans has worked well and could usefully be extended. However, the primary rationale for requiring student contributions, namely, that the entire community is being taxed to provide benefits to a minority undertaking further education, will cease to be applicable if, as is implied by current policy, high school completion followed by post-secondary education becomes the norm. There would then be a strong case for universal funding along the lines of the model for school education. This would be consistent with a view of education as the fulfilment of a social obligation, rather than as the product of a market-driven industry.

An alternative possibility would be a universal capital grant paid to all Australians on reaching adulthood, which could be used either to finance post-school education or to support some other investment, such as the establishment of a small business or the purchase of a home.

While a full assessment of the feasibility of such a proposal is beyond the scope of this essay, it may be helpful to consider some estimates of the possible cost and the associated financing requirement. Around 300 000 people reach adulthood in Australia every year, so a grant of $50 000, comparable with current average levels of public contributions per student for university education, would require annual expenditure of $15 billion per year, or 1% of national income (usually measured by GDP). However, this amount would subsume a large proportion of existing expenditure on post-school education, along with a variety of existing expenditure items such as grants and tax concessions for first-home buyers. A plausible estimate of the net cost might be $10 billion a year, equivalent to 20% of the revenue currently raised by the Goods and Services Tax.

Rather than funding such a payment out of general revenue, it might be treated as an income-contingent loan, in an extension of the existing HECS-HELP system. Again, it may be useful to make some preliminary estimates of the feasibility of such a payment mechanism and its impact on government and household budgets.

Under the existing thresholds, repayments would only be made by people earning more than $49 000 per year, approximately equal to median annual earnings for all workers, part-time and full-time. Since incomes vary over time and typically rise over a worker's lifetime, and since most people spend at least some time in the workforce, more than half of the population would eventually make some repayment.

At existing rates, the annual payment would range from $2000, for someone with an income of $50 000, to 8% of income for those with an income of $100 000 or more. Thus, workers earning close to the median income could take up to 25 years to repay their entire loan, while those who reached high incomes early in their careers would take only five to ten years.

Under existing rules, loans are interest-free, implying that the real value of repayments over 25 years will be substantially less than the nominal value at the time of the initial grant or loan. It is also important to note that such a long period of repayment would undermine one attractive feature of the existing HECS-HELP scheme: since most students can expect to repay their obligation fairly rapidly, the higher effective marginal tax rate applicable until repayment is completed does not act as a disincentive to earning additional income.

It follows that the HECS-HELP model is unlikely to yield sufficient revenue to fully fund a grant scheme on the scale suggested above, unless thresholds were lowered or contributions increased substantially. It seems likely that a substantial contribution from general revenue, or from some hypothecated source such as the Education Investment Fund (a component of the Future Fund) would be needed.

To sum up, education is a major industry, but it does not fit the standard model derived from an industrial economy that is rapidly disappearing. In particular, the application of models of market competition has rarely produced satisfactory results. A sophisticated understanding of the relationship between educational institutions, education professionals and students is needed if Australia is to meet the demand for steadily improving levels of education, particularly at the post-secondary level.

The dangers of treating education as an industry supplying services in a potentially competitive market are particularly serious in relation to financing. Students are not, and cannot be, well-informed consumers choosing between alternative market offerings. Attempts by for-profit firms to enter (what they perceive as) education markets have almost invariably ended either in failure or in fraudulent exploitation of public subsidies.

Rather than attempting to make education conform to the market models of an industry, the most promising course is to take the financing models that have proved successful for schools and universities and to extend them to vocational education and lifelong learning.

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The drivers of industry involvement in VET reform

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National vocational education and training policy has been gradually shifting away from the 1990s objective of a demand-driven model, with demand defined by industry needs, to an entitlement model focused on the individual learner and their needs. However, the recent experience of Victoria has shown the risks associated with models that ignore industry drivers, and there is an ongoing need to understand what industry requires from VET. This essay reviews the drivers that motivated industry in the 1980s to pursue major reform in the VET sector and argues that these drivers are still substantially present but not as visible as in previous periods. These drivers are:

- industry's desire to use vocational skills in order to increase flexibility, mobility, productivity and hence competitiveness in the economy
- a need for VET to focus on generic as well as technical skills
- national recognition arrangements for vocational qualifications and skills
- skills development and recognition that crosses occupational boundaries
- recognition of the importance of reforms to management education and training to the success of VET reform
- skills defined through industry ownership of the process and the direct involvement of the workplace
- the need to ensure VET reform includes 'semi-skilled' and 'unskilled' employees
- openness of the training system to public scrutiny in terms of content, quality and delivery methodology.

Industry's interest in the strategic use of VET substantially broadened and strengthened during the 1980s, with substantial changes eventually consolidated around a series of actions and proposals that became known as the National Training Reform Agenda. These training reforms were motivated by joint employer and union interest in the link between skills and productivity, especially in manufacturing. This interest extended to pursuing new methods for the identification and use of skills by employees and was part of the broader industrial agenda known as award restructuring.

We examine key documentation of the major industry organisations most involved in the early period of award restructuring and the National Training Reform Agenda and argue that the industry drivers listed above are still as relevant and important today. However, these drivers are not currently as visible in VET discussion and debate, because funding, control and efficiency issues have gained prominence, including the pursuit of student entitlement-based funding. These issues, while important, are largely removed from the workplace and tend to overshadow discussion on how VET serves the needs of industry, especially at the workplace level.

The development of a holistic focus on skills

A recent opinion piece by Innes Willox (2012), Chief Executive Officer of the Australian Industry Group, observed in relation to the Bailleau Government's cuts to VET in Victoria that:

> Despite years of attention from policy makers, persistent and often crippling skill shortages are still frequently cited as the number one constraint facing business.

While we acknowledge that there have been years of attention, the focus has not always been on skills. For many years after the Second World War the issue for government and commentators was the supply of labour, but with little direct focus on skills. The Willox statement illustrates the recent, more common, practice of expressing the supply problem as a shortage of skills rather than a shortage of labour.

The change from a focus on labour supply to skills supply in policy discussion was one manifestation of the broader emphasis in the mid-1980s on the importance of skills, especially those skills which facilitate improved industry competitiveness, their portability and improved career paths for individuals.

Skill issues had been acknowledged as important at different times prior to the mid-1980s. However, in the National Training Reform Agenda period skills across industries and at all levels of the workforce became a central focus of both industrial relations and public policy. The extent to which skills became central to workplace reform was made clear by the Australian Industrial Relations Commission in its 1989 National Wage Case decision, which established the Structural Efficiency Principle. That principle required the industry parties to satisfy the commission that they had:

> co-operated positively in a fundamental review of that award and are implementing measures to improve the efficiency of industry and provide workers with access to more varied, fulfilling and better paid jobs.

Two of the measures that the commission required be considered by the parties were:

> establishing skill-related career paths which provide an incentive for workers to continue to participate in skill formation … eliminating impediments to multi-skilling and broadening the range of tasks which a worker may be required to perform.

We assert that this heightened focus on all aspects of skills, including but not limited to skills supply, established as a consequence of the award restructuring and the reform agenda of the 1980s, has been consistently maintained by industry up to the present, and that differences between the 1980s and the current period are mainly related to control and funding issues rather than any change in the fundamentals of what industry wants from the training system with regard to skills. This is not to say that control and funding issues are not important. Indeed one of the early consensus decisions by industry in the late 1980s was that, unless industry leadership of VET was increased, there was a risk that industry needs would not be properly understood and the desires and needs of governments and providers would predominate. This same tension between the needs of industry and the needs of other players in the training system is still seen today.

Award restructuring and national training reform — using skills for change

References to the importance of skilled labour were not uncommon before the award restructuring and National Training Reform Agenda period. One example was a reference in Part Two of *Australia*

reconstructed (Department of Trade, Australian Council of Trade Unions & Trade Development Council 1987, p.118) to the 1965 Report of the Committee of Economic Enquiry (the Vernon Report), in which it was noted that skilled labour was Australia's scarcest resource. Immediately following, *Australia reconstructed* notes:

> More than twenty years after Vernon's Report, there is precious little evidence that the urgency of Australia's skills crisis is fully appreciated in all sections of the community.

Importantly, *Australia reconstructed* did not just comment on the skilled labour supply issue mentioned in the Vernon Report. It injected into public discussion a wider focus by explicitly stating that Australia had a deficient skills base. By focusing on the skills base as the key issue, the report (p.118) gave an urgency and prominence to skills formation policy:

> The need for skill upgrading and adaptability during a working life applies to all levels of the workforce, including management … Australia is not producing the right skills as well as not producing enough skilled people.

The strength of these claims, including the novelty of a report compiled by the Australian Council of Trade Unions and which was suggesting a need for an upgrading of management skills, gave a prominence to skills formation policy over skills supply.

Skill needs in *Australia reconstructed* (p.124) were defined as more than technical skills and this has become one of the lasting calls from both sides of industry: a need for a focus in VET on defining skill needs in a way that includes generic skills as well as occupationally specific technical skills:

> Action is needed to improve skills in communications and numeracy; to ensure Australia's young workers have a higher technological awareness and are adept in current technology … to promote more education and training in business and management skills; and to promote more cross-disciplinary study and training.

At the time generic skills training was not formally identified in many technical qualifications, especially apprenticeships, and was often seen narrowly as literacy and numeracy and the province of specialised and often remedial lecturers. One of the most important parts of the above quote is the linking of business and management skills into cross-disciplinary study; that is, access to these skills had to be made wider than was then current if industry was to build an innovative and productive culture.

Australia reconstructed also introduced a radical idea for the time: 'Employers, unions and employees at the enterprise level are best able to identify and anticipate the future skill needs of industry' (p.127). This was as much a radical proposition coming from unions used to collective bargaining and representative structures as the introduction of multiskilling, the valuing of generic skills equally with technical skills, or the importance of management education and training.

While *Australia reconstructed* represented a focus across the union movement on skills, employers were also examining skills and training issues, albeit not in as coordinated a manner. The most prominent organisation at the time advocating action on skills was the Metal Trades Industry Association (MTIA), which was to break from the Confederation of Australian Industry in 1987. In December 1986 the organisation presented the 'MTIA proposals for a compact with the metal unions'. This document contained a proposal on skills at both the individual and industry levels as one of five key proposals for a proposed joint statement of intent with the unions (p.3):

> Based on a shared concern for the industry's viability and the quality of employment it can offer, it is the intention and firm resolve of the parties, in making this agreement, to promote the

> interests of industry by: … Developing the skills and capacities of individual employees as well as increasing overall skill levels and capacities in the industry as a whole.

Like *Australia reconstructed*, the Metal Trades Industry Association's proposals went beyond the skills supply issue and raised the imperative for skills base and related training issues to be considered. The chapter on training and careers development in the compact proposed (p.8):

> The parties recognise the need to effect major change in the current approach to training and career development in the metal and engineering industry. This involves developing the skills and capacities of individual employees and the overall skill levels and capacities in the industry as a whole. More emphasis needs to be placed on increasing the diversity and the industry's workforce, with the long term aim of making on-going education and trade training an integral aspect of working in the industry.
>
> This is essential not only to strengthen future competitiveness but also for developing and introducing modern techniques and work practices.
>
> For individual self-development, proper training of unskilled and semi-skilled employees is necessary in order to improve their knowledge and broaden skills, to enable them to participate and contribute more effectively and productively. Particular attention needs to be made to those entering industry for the first time.

Apart from the general commitment to education and training in the first paragraph, a number of other aspects of the above quote are noteworthy. Firstly, it explicitly recognises that productive techniques and work practices are dependent on a broad definition of skills, which is in direct contrast to narrow task-based job design often associated with the 'Taylorist' approach to manufacturing.

Secondly, the Metal Trades Industry Association recognises the importance of the training of 'semi-skilled' and 'unskilled employees', as it is a de facto acknowledgment (through the reference to productively in the last paragraph) that skills gained by the semi-skilled and unskilled employees were equally as important for productivity as were other occupational levels. The association also acknowledged the benefit to the individual of education and training for semi-skilled and unskilled employees, which contributed at this early stage to the recognition by both unions and employers that there was an opportunity in VET reform for mutual benefit. This was further expanded in appendix 3 of the 'MTIA Compact', which included a detailed proposal for a joint MTIA—metal unions project team to undertake a range of actions to address identified skill issues and needs.

By 1987, the Australian Council of Trade Unions, the metal unions and the Metal Trades Industry Association, as parties to the key benchmark award, the Metal Industry Award, had made it clear that:

- Skills were central to future competitiveness.
- The skills issue was more than a focus on skills shortages and skills supply issues.
- Skills issues for all levels of the workforce including management were of concern.
- Skills were best defined by industry ownership of the process and direct involvement of the workplace.
- Reforms to VET were required if change was to be achieved in industrial relations, especially at the award level.
- There was substantial scope for cooperative action.

The motivation for this convergence of interests around skills and associated training reform as part of a drive towards increased productivity, efficiency and the international competitiveness of manufacturing is worthy of a separate essay in its own right.

Suffice to say that the economic conditions confronting the industry in the mid-to-late 1980s were a strong motivator for all concerned, as noted by Nixon Apple, then National Research Officer of the Amalgamated Metal Workers Union, in his address to the union's 1988 National Conference (p.98):

> It is worth reflecting again on the magnitude of the crisis that developed during the 2 years between the 1984 AMWU National Conference and our July 1986 National Conference. During that 2 year period:
>
> - The prices we paid for imports increased by nearly 20% more than the price we received for our exports.
> - Commodity prices fell 28.6%.
> - Against other currencies (trade weighted index) the value of the Australian dollar fell 36%.
> - Our Current Account Deficit went from $7.2 billion (1983—84) to $14.7 billion (1985—86).
> - Australia's Foreign Debt (net) went from $30.5 billion to $73.9 billion (June 84 to June 86).
> - Our inflation rate measured by the consumer price index went from 4% (1984 calendar year) to 9% (1986 calendar year).
>
> In simple terms our terms of trade, commodity prices and the value of the Australian dollar had fallen dramatically, and our foreign debt, balance of payment deficit, and inflation were rising rapidly. All of these indicators expose the dimensions of the crisis that confronted us.

1988–91: the early phase of training reform

During 1987, the Metal Trades Industry Association and the Metal Trades Federation of Unions engaged in detailed negotiations over the proposals in *Australia reconstructed* and the MTIA Compact. One of the key outcomes of the joint negotiations was agreement that award classifications should change from approximately 360 classifications, most of which were based on a classification entitlement determined directly by the tasks the employee performed, to a 14-level skills-based classification structure. The proposal that employees should be classified and paid on the basis of the skills they possessed and used rather than the tasks they performed was one of the most radical and yet simple propositions to come out of award restructuring and is also one of the most enduring effects of award restructuring, in that, notwithstanding the myriad changes to industrial relations since 1988, employers and unions in the main have continued to seek to have employees at the award level classified and paid according to skills rather than tasks. In manufacturing, the recent award-modernisation process maintained the Metal Industry Award 'C' level skill-based classification system. In other industries, skill-based classification systems have largely been maintained.

By 1988, the Metal Trades Federation of Unions had agreed with the Metal Trades Industry Association proposal for a joint project team, and the Commonwealth Government provided funding assistance for a National Metal and Engineering Training and Career Development Project, which pursued 29 priority issues across five headings:

- career development
- declining skills base
- training and retraining — new technology

- coordination and funding of federal and state support systems
- award matters (that is, how the project could support new skill-based classifications through skills development, training and educational activities).

By late 1988, the Commonwealth Government had recognised the importance of accelerating and facilitating many of the principles and initiatives flowing from award restructuring, the *Australia reconstructed* report, and the metal industry negotiations. The Commonwealth Government funded a series of missions to Europe for peak body representatives in key industries to enable them to identify for themselves the developments in Europe, especially in Scandinavia and Germany, that had motivated the *Australia reconstructed* mission. The metal mission took place in September 1988 and the report *Towards a new metal and engineering industry award* (Department of Industry Restructuring 1988) became one of the key statements of the period, in terms of industry desires for education, training and skill formation. Thirty-one recommendations were made, many of which repeated the directions and reforms already identified and sought in *Australia reconstructed*, the MTIA Compact and the National Metal and Engineering Training and Career Development Project priorities. However, greater specificity was given in terms of the VET system changes desired by industry.

A summary of what the metal industry parties wanted from the training system was given in Recommendation 3.23 (Commonwealth of Australia 1988, pp.38—9):

> 3.23
> All off-the-job training provided under the national industry training and recognition system should be:
> - Modular
> - Related to the career paths laid down in the new Metal and Engineering Industry Award
> - Competency-based
> - The subject of agreed and nationally accepted cross-credit arrangements
> - Integrated with on-the-the job training to ensure both forms of learning are mutually reinforcing
> - Broad based
> - Available to all employees
> - Responsive to new production techniques and changes in technology and made less intimidating to those who have been absent from the training system for some time.

The response by the VET system to the above recommendations and activities of the National Metal and Engineering Training and Career Development Project and the industrial parties was substantial and has had long-lasting effects on subsequent VET developments across all industries.

The prime vehicle in 1988 for coordinated action across states and territories for VET curriculum was the Australian Committee of TAFE Curriculum. Over a period of three years this committee established three major national curriculum projects. These were:

- the National Metal and Engineering Curriculum project to develop new modules for trade and post-trade training
- the Engineering Production Certificate project to develop new national modular curriculum for production worker training. This project laid the groundwork for the later massive expansion of formal curriculum and qualifications for semi-skilled workers across all industries, a trend which was further promoted with the advent of training packages. It provided an opportunity for many workers, the majority of whom had no post-school qualifications, to gain national recognition of their skills for the first time. It was also the first project to draw into sharp focus the capacity of

governments to fund the expansion of formal training for existing workers, which was being advocated as part of training reform and can be seen as the precursor to the now-complex web of entitlement and funding rules for existing worker public training

- a project to develop new modular curriculum for technician qualifications at advanced certificate and associate diploma levels. This project became colloquially known by the code prefixes of the modules as the 'EA and EB' module project.

The National Metal and Engineering Training and Career Development Project was the main vehicle for industry input into the above projects. In 1991 the National Metal and Engineering Training Board was established as the successor to the career development project. In *A journey through innovation* (National Metal and Engineering Training Board 1998) there is a reference to the breakthrough nature of the curriculum projects described above (pp.6—7):

> The Metal and Engineering Curriculum Project was conducted in three stages from mid 1988 until late 1990 and represents one of the major achievements in progressing training reform in Australian industry. Historically, reaching consensus between the states and territories on a national position in any forum has never been a straightforward exercise and this project was no exception.
>
> …
>
> The adoption of a nationally recognised curriculum introduced a level of mutual recognition and transfer of skills and qualifications across Australia which was not previously available.

The metal industry was at the forefront of training reform in the period from 1988 to 1992. One of the main reasons for this was the extent of change it was encouraging in the TAFE system, which reflected the predominance of TAFE delivery for the industry. However, similar training and curriculum reform projects and processes were established in other industries, including some industries that were not as dependent on TAFE as a provider.

As the National Metal and Engineering Training Board history stated, one of the main industry aims for vocational training (that is, national consistency based on industry-defined standards and national recognition of skills) was being established through the three major national curriculum projects. However, their greatest achievement lies buried away in the detail of each module. The development of each module required a consensus by each state and territory on the definition of the skills covered by the module, including title, content of the module and, most importantly, on the learning outcome statements accompanying each learning outcome, including a list of assessment criteria. This level of nationally agreed and publicly available detail had rarely been achieved previously in VET. We assert that these projects established a new principle, which survives to this day in VET (that is, open, detailed provision by training providers about the content, standards, and assessment methods for publicly recognised vocational training). This has become the norm in Australia through the various Commonwealth, state and territory government reforms since the early 1990s.

The TAFE National Metal and Engineering Curriculum, the Engineering Production Certificate and the 'EA/EB' modules, especially the learning outcomes and assessment criteria, served another important purpose: they heralded the beginning of a culture change towards competency-based assessment for formal VET. Even though each module only described the training that was to be delivered by a provider on campus and not by the employer, the extent of skills specification and skill assessment introduced by the modules was to establish the groundwork for later competency-based training initiatives, especially training packages.

Another important but overlooked benefit of the TAFE module curriculum development projects was that they encouraged industry, especially peak bodies and larger companies, to analyse and provide detailed advice on industry needs. Both sides of industry soon came to realise that their hard-fought role in providing leadership and industry direction to VET could be lost and VET would return to a provider-led system if they did not engage at the detail level: this was where the battles on multiskilling, alignment to classification levels (including recognition based on prior learning) and the still-vexed question of occupational versus industry basis for skill development were fought out. Both the Metal Trades Industry Association and the metal unions maintained (and to this day maintain) specialist personnel throughout the 1990s to engage with VET at this detailed level.

The engagement with the TAFE national curriculum projects ran in parallel with the desire by the industry parties to focus on the workplace performance of skills, consistent with their belief that skills recognition and improved work organisation and job design were critical to the achievement of their goals. It was agreed that competency standards were the best vehicle to define the expectations in relation to on-the-job skill performance. This was foreshadowed in the recommendation 3.29 of the *Towards a new metal and engineering award* report quoted earlier and described in *A journey through innovation* (National Metal and Engineering Training Board 1998, p.11):

> During 1989, parallel to the activities of the NMETCDP [National Metal and Engineering Training and Career Development Project], the industry parties were seeking to formulate a process of skill recognition for subsequent inclusion in the Federal Metal Industry Award.
>
> To this end, the MTIA [Metal Trades Industry Association] and MTFU [Metal Trades Federation of Unions] requested that the NMETCDP undertake the development of standards of competency for each of the classification levels contained in the Award.

The development of competency standards highlighted differences in the motivation and interests of employers and unions over training reform, with Metal Trades Industry Association employers seeking to ensure that the competency standards did not cause the large-scale reclassification of existing workers and unions seeking to ensure an accessible career path and a correction of what they saw as past classification grievances. Many trials with enterprises and supervision by the Industrial Relations Commission were required before the metal and engineering competency standards were implemented in 1996.

In the history of award restructuring and training reform, the experience of the metal industry with the implementation of competency standards is often quoted as evidence for keeping training and industrial relations separate. However we, as people who were intimately involved in the development of and negotiations around the metal and engineering competency standards, believe that many gains for both unions and employers, and the industry itself, could not have been achieved without competency standards. These include:

- the introduction of multiskilling as a legitimate career pathway and form of work. Without a nationally recognised tool (that is, the competency standards) to objectively define the skills (and their value) held by employees and required by employers, achievement of multiskilling would have become a much more fraught and subjective process
- the reduction of some 360 mostly task-based classifications, which included near-automatic entitlement to the classification, irrespective of competency, to 14 skill-based classification levels. This change required some agreed mechanism for determining the alignment of current employees and old classifications to the new classification structure. While initially this was determined according to broad schedules produced by the parties, it was the competency

standards that provided the ongoing means for dealing with the anomalies and changes brought about by new technologies, job redesign, work organisation change and new manufacturing processes. For this reason it can be argued that the competency standards supported, and continue to support, ongoing productivity improvement rather than hindering it.

Beginnings of a government-directed competency agenda

Industry interest in skills policy in Australia in the 1980s was primarily driven by industrial imperatives, which at their root cause were related to concerns over the competitiveness of Australian industry and a desire for greater security and opportunities for workers.

> For both parties a strong motivating force has been mutual agreement concerning the need for a more viable, internationally competitive industry; one which can offer secure employment and where the career aspirations of the individual are given adequate scope for development.
>
> (Metal Trades Industry Association and Engineering Employers Association 1988)

However, interest in changes to VET policy and mechanisms was also occurring in government, especially the Commonwealth Government. One of the first major documents setting out the Commonwealth Government's interest in a new skills and VET agenda was *Skills for Australia* in 1987, a paper released by the then responsible ministers, JS Dawkins and AC Holding. The paper was quickly followed by two other Commonwealth Government papers proposing changes to vocational training in Australia. These were *Industry training: the need for change* (1988), and Improving *Australia's training system* (1989). The latter formally proposed competency-based training as the preferred approach to vocational training. This proposal was adopted by states and territories and led to an agreement to establish a National Training Board to oversee and register national industry competency standards.

Industry, including the metal industry parties, supported the proposals in the Commonwealth papers. Andrew Gonczi (1996, p.7) in his essay, 'Reconceptualising competency-based education and training', sums up the reasons why industry supported the government push for competency-based training and other reforms, which later became known as the National Training Reform Agenda.

> The sudden adoption of a competency-based approach to vocational education and training can be explained by its appeal to the key groups interested in reform of vocational education and training and in wider micro economic reform. Industry, as represented by the peak bodies, perceived that such an approach would make public education more responsive to industry's needs, a feeling shared by government and the unions. Government saw the potential of competency-based education to raise the quality of training and to underpin the creation of a national and consistent qualifications framework as part of its micro economic reform strategy. For the unions the reform of the award structure was paramount. They saw the potential of a competency-based structure to assist in that task by facilitating the upgrading of workers with competencies learnt on the job and unrecognised by the qualification system. There was little or no debate with educators and clearly, in retrospect, little understanding either of the conceptual issues or the practical problems involved in the implementation of a competency-based approach.

The Commonwealth Government discussion papers and the establishment of the National Training Board represented a two-edged sword for industry. They initiated the system change in VET that had been advocated by industry. However, they can also be seen as the beginning of a preoccupation with managing, funding and controlling the new direction in training, primarily at the expense of industry input and leadership of VET. Inevitably, because of the need to achieve agreement across the eight

states and territories, the policy guidelines for government initiatives in training became more complex and more concerned with the priorities of government, such as funding, delineating Commonwealth and state/territory responsibilities, relationships between sectors and so on.

During the early 1990s the focus in many industries was on developing competency standards and working out implementation arrangements for each industry. However, government was much more system-focused, and a series of high-level reports was prepared, such as the Deveson Report, *Training costs of award restructuring* (1990), the Finn Report, Young *people's participation in post-compulsory education and training'* (1991) and the Mayer Report, *The key competencies in post-compulsory education and training —putting general education to work* (1993).

The outcome of these and other reports was a much more active role by governments in determining arrangements for the development and recognition of the skills required by employers and employees. Industry was actively engaged in generating and responding to the reports, but the initiative had swung to government in terms of setting the VET agenda.

We could continue to review the many policy, funding, recognition and organisational policy debates and changes in the period between 1996 and the present, such as:

- the push from the Business Council of Australia (BCA) and the Australian Chamber of Commerce and Industry (ACCI) for a more demand-driven VET system
- the creation and eventual abolition of the Australian National Training Authority (ANTA)
- the introduction of training packages
- the introduction of New Apprenticeships
- the establishment of the Australian Qualifications Framework
- the introduction of standards and regulation for registered training organisations, including the Australian Quality Training Framework (AQTF)
- the introduction of key competencies and later employability skills
- the various reviews of industry training advisory bodies (ITABs) and now industry skill councils (ISCs).

This list is by no means exhaustive and many more issues, reviews, changes (and acronyms!) could be included. However, the question for us is: did these and other initiatives change industry support for the proposals that came out of the 1980s award restructuring and training reform period? These proposals can be summarised as:

- a desire by industry to use vocational skills to build flexibility, mobility, productivity and hence competitiveness into the economy
- a need for VET to focus on generic as well as technical skills
- national recognition arrangements for vocational qualifications and skills
- skills development and recognition across occupational boundaries
- recognition of the importance of management education and training as critical to the success of VET reform
- skills defined by industry ownership of the process and the direct involvement of the workplace
- the need to ensure that VET reform included 'semi-skilled' and 'unskilled' employees
- the openness of the training system to public scrutiny in terms of content, quality and delivery methodology.

In our view the answer is that the issues listed above continue to reflect what industry wants as fundamental tenets for VET in Australia. However, this support has become somewhat subterranean, as more public prominence has been given to debate and reports on funding and representation and control issues. Inevitably, different industry groups, unions and governments take a position on these reports and debates. However, support for the points above has remained over a long period and from diverse sources. An example of the consistency in basic principles, while also expressing differences, is the Allen Consulting report for the Business Council of Australia, *The vocational education and training system — key issues for large enterprises*, in which it is stated (2004, p.9):

> Enterprises value training in soft skills/employability skills and consider that these areas are not given sufficient emphasis on Training Packages … Enterprises want training closely tailored to their workplace needs … Inconsistencies in state based standards and regulations create inconsistencies.

The report goes on to argue that substantial changes are needed to the VET policy framework in terms of regulatory and administrative arrangements. However, the report is consistent with the broad themes of the National Training Reform Agenda and award restructuring period, while offering its own emphasis, particularly relating to greater enterprise alignment and control over training. Areas consistent with the principles we stated earlier are:

- an increasing requirement for generic skills and ongoing training
- more flexibility and timeliness in training frameworks and policies
- greater national coordination
- increasing flexibility in content delivery.

In 1999, the Australian Industry Group published a report prepared by the Allen Consulting Group titled *Training to compete: the training needs of industry*. While expressing support for the basic direction of training reform, this report (p.xiv) also stated that support for the basic concepts of training reform was being frustrated by complex implementation.

> The support for a competency based approach identified in the survey is an example of where attention needs to be given to the issue of complexity. Focus groups mirrored the strong support for the competency based approach, but some participants perceived certain endorsed standards as complex and difficult to use and that implementation will require substantial support in the translation to a new system of training. The newly established Training Packages were seen in the focus groups and interviews as potentially combining industry specificity and flexibility in learning approaches in more balanced ways than in the past. However, given the relatively recent nature of this reform it will be in implementation that the success of this reform will be measured.

In 2006, the Australian Industry Group again commissioned the Allen Consulting Group to prepare a further report, *World class skills for world class industries*. This report had a greater focus on skill shortages than the previous report but also expressed continuing support for the training reform principles identified earlier with regard to the training system, which had found four key areas for improvement:

- the breadth and balance of skills offered
- responsiveness to industry needs
- flexibility at a system level
- flexibility and proactivity of training providers in responding to specific firms' needs and the quality of training.

More support for the proposals emerges from the non-government members of the Prime Minister's Taskforce on Manufacturing, who observe in their recent report, *Smarter manufacturing for a smarter Australia* (2012):

> To sustain productivity growth into the future with continuous innovation in managerial and workforce skills and practices, a new national conversation between industry, unions and government around Smarter Workplaces is proposed. To recognise that productivity gains are ultimately realised in workplaces and firms, a new national partnership for Smarter Workplaces is proposed. This involves a sustained commitment from industry, unions and government to build the managerial and workforce skills and practices — and the innovation culture — that high performance workplaces demand.

The above sounds suspiciously like the bi- and tripartite calls for reform that were common during the training reform and award restructuring period already discussed, while confirming the 1980s consensus that the key voice in determining the role of skills in productivity at the workplace level is that of industry. The difference is that this latter-day call for a 'national conversation' is destined to happen in an environment where the decisions of the individual learner have primacy through an entitlement model of funding. How the voice of industry is to be maintained in this model and whether industry will have a determining or only an advisory role is still not apparent, but it will be a concern to key industry leaders.

Conclusion

There was a commonality of interest in the 1980s over the industry imperatives relating to VET, driven by the joint concern of the Australian Council of Trade Unions, individual unions and employer organisations, for changes to improve competitiveness. In today's language, the term 'productivity' would most likely be used. The role of VET in enhancing productivity is still recognised as important. However, industry as well as governments, training providers and other organisations seem now to follow an agenda that reacts to what we would call the 'administrative' issues: funding, representation on authorities and advisory bodies, the responsibilities of sectors and levels of government, and so on. As we argued earlier, these are vitally important. However, they are not the fundamental drivers. The fundamental drivers must come from the workplace and be related to developments at that level: technology, work organisation and employee recognition and reward structures. These will vary significantly across industries, sectors and enterprises. We believe that all of the fundamental drivers identified in the 1980s by industry still apply. However, not all drivers have led to equally lasting impacts. We see the lasting impacts of the National Training Reform Agenda as:

- the use by industry of vocational skills in order to build flexibility, mobility, productivity and hence competitiveness in the economy
- a focus in VET on defining vocational competency in a way that includes generic as well as technical skills
- the recognition that employers, unions and employees at the enterprise level are best able to identify and anticipate the future skill needs of industry
- a general acceptance that employees should be recognised in the workforce for the skills they possess and use rather than the tasks they perform
- a general acceptance of the idea that the outcomes of training should be recognised through 'small bits', that is, either modules and subsequently as units of competency.

This last point may at first seem trivial. However, prior to the National Metal and Engineering Curriculum project, TAFE curriculum was organised into large semester-long subjects that often provided very little detail about what a student was actually studying and, more importantly, what was required for the student to pass. One example was the then NSW TAFE Fitting and Machining Curriculum, which for each of the three years contained a subject, 'Workshop Practices', which was allocated nearly half of all delivery hours.

The breaking of delivery into small, recognised chunks was as important as the evolution from curriculum modules to competency standards, but receives less attention. It was this division that significantly improved the ability of the VET system to assist industry through recognition of prior learning, improved national skills recognition, training for multiskilling and articulation. Also, most importantly, it increased VET transparency, as it allowed a similar reporting regime to be developed as applied in higher education, with academic transcripts being issued for VET qualifications.

In conclusion we would like to finish with another quote from the Australian Industry Group response to the Skills Australia's 2010 discussion paper, *Creating a future direction for Australian vocational education and training*:

> A major concern in need of reform is the position of industry within the national training system. A key feature of the Australian VET system was industry leadership — a feature internationally recognised. This has been eroded in recent years and needs to be addressed. There is a need for industry to have determinative powers in relation to key governance arrangements within the sector and not just an advisory role.

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Innovation and industry best practice: why industry skills councils are critical

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Typically, policy implementation relies on suitable skills being available in the right place and on the appropriate scale. Whether understood or not, economic development and successful government policy implementation rely on the skills development system, especially vocational education and training. In VET, industry skills councils are the central players, specifying skills needs and coordinating the VET system with industry, government and other stakeholders. Thus, they fulfil a vital role in the successful implementation of policy and innovation.

The primary role of industry skills councils is to develop and promulgate industry training packages. Training packages identify the competences individuals are required to have for a range of VET qualifications. In other words, training packages define the skill sets required for the VET system and determine what is taught. Changes in the skills required to support innovation in industry change the competences required in training packages. This places industry skills councils as central coordinators in the practical translation of innovation into practice. Prior research shows that there is poor integration of VET into industry and innovation policy, despite industry skills councils having a fundamental role in policy implementation through their central coordinating role in VET. This role is illustrated by our case study on the active part that AgriFood Skills Australia (AgriFood) is playing in the implementation of the Carbon Farming Initiative.

Industry skills councils and the coordination of the National Innovation System

The Australian Government — through its industry and innovation policies — along with most Organisation for Economic Co-operation and Development (OECD) governments, uses the National Innovation System framework (Lundvall 1992; Nelson 1993; OECD 1999) to guide its approach to economic development. Although it is understood by innovation researchers and policy-makers that skills and innovation drive one another, skills development involving the VET system has not been fully incorporated into the National Innovation System approach (Edquist 2005). A lack of connection between skills and innovation policy is shown by a recent review of Australian Government innovation policy initiatives (Toner & Dalitz 2012). While the importance of skills in the implementation of innovation has been widely acknowledged, the teaching of skills for innovation in VET is minimal, although they are partially addressed in some university-level science and technology courses. A range of industry and innovation policy statements, reviews and reports consistently claim that skills lie at the heart of innovation and economic development. Notwithstanding this, there is little analysis or discussion of the role of VET in innovation and thus insignificant inclusion of VET in innovation policy

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discussion and guidance. This same study looked at the board membership of the various organisations created to coordinate Australia's innovation policy at national and state levels. The analysis indicated that only four of 265 board members have a VET link, with two of these being the minister and an individual from the Department of Education, Employment and Workplace Relations, representing the entire education and training system, and not VET specifically (Toner & Dalitz 2012).

As central players in the Australian VET system, industry skills councils drive the skills development on which innovation and economic development rely and, although this role of industry skills councils has been recognised, it is under-researched and arguably underutilised.

Skills and innovation are so inextricably related that it could be argued that these bodies are integral to the success of the National Innovation System. Innovation is defined by the OECD as 'the implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organisational method in business practices, workplace organisation or external relations' (OECD & EUROSTAT 2005). Innovation thus impacts on how people do work, as it changes the technology they use, how they use technology, how organisations are structured and the skill sets required. The VET system is a system of skilling for work. Without innovation changing the skills needed to do any particular work, the competences required to do a particular job would be stable. Accordingly, once training packages and courses were established, they would remain static, with only minor changes determined by trainers. Because of innovation the required competences of workers change: in content; in the array of competences that are required for certain jobs; and in the number of people required by industry with specific skill sets in particular contexts. Alongside this, workers need certain skills to proficiently perform the work involved in innovation.

Thus the VET system drives the successful adoption of innovation while being driven by innovation. Industry skills councils are compelled to understand the changes needed to enable industry to benefit from innovation in technology, working methods, work organisation and industry structure. Prior research shows how this is done (Dalitz, Toner & Turpin 2011). To keep training packages up to date and useful, industry skills councils need to have an understanding of likely future changes in work practices and organisation. They thus link with firms, industry bodies, unions, researchers, suppliers and specialists in the various areas that impact on how work is done. The industry skills councils then judge how important these changes are and whether the training package needs to be changed. Changes to the training package are made, or even a new training package developed. For example, Innovation and Business Skills Australia (IBSA) introduced a separate computer games qualification into its more generic Information and Communications Technology Training Package. The distinctive technology and pace of innovation in computer games meant it required individual attention.

Industry skills councils establish the content of the training package because Australia has a competency-based training system, which requires a central agency to set the competences required to attain various qualifications. The role of industry skills councils is thus coordination across the many areas that are concerned with the development of training packages and the VET system. In the context of innovation, therefore, they largely act to connect the VET system with the National Innovation System. Various incarnations of organisations analogous to the current industry skills councils have historically existed to fulfil this purpose.

Given the centrality of VET to innovation, it is pertinent to ask how VET is coordinated with other systems. And what is the role of VET in the successful adoption of innovation to keep Australia competitive? In relation to the first question, in the development of training packages to provide nationally agreed competences for the various qualifications that constitute the Australian

Qualifications Framework, industry skills councils must engage with players across all areas of Australian society and the economy and integrate the information they receive into effective training packages. Details of this were discussed above, but the key point is that, in working to fulfil their mandate to develop up-to-date training packages useful to industry, industry skills councils act to coordinate the VET system in the context of ongoing innovation. Prior research by the authors (Dalitz, Toner & Turpin 2011) and the case study used in this chapter show that industry skills councils do this at the practical and pragmatic level of how work is performed in various vocations, not at the level of policy-making in various federal and state government departments.

In answer to our second question about the role of VET in innovation policy implementation, it is remarkable that, while VET is stated to be vitally important to Australia's economy, it has almost no role in the official structures that coordinate Australia's National Innovation System (Toner & Dalitz 2012). Alongside this, VET policy-makers and researchers appear to display little interest in understanding the National Innovation System. On the other hand, industry skills councils are closely involved in the day-to-day coordination of VET with industry, research, government policy, standards and regulation (Dalitz, Toner & Turpin 2011), activities not part of official VET activities. Thus, our second question is answered, in that industry skills councils typically act to deal with the flow-on effects of policy implementation as part of their ongoing operations. In the absence of research, we can only speculate on whether industry skills councils' non-inclusion in policy development is positive, negative or neutral to policy achieving its goal.

Each industry skills council faces a very different environment in the sector it services (Dalitz, Toner & Turpin 2011). A number of factors drive this diversity: the number of distinct industries with which each industry skills council deals; the coherence of the knowledge base underlying training packages; total VET employment in the sector; number of firms; the employment size distribution of firms; occupational structure; number and scope of employer and employee associations; VET training capacity; technological sophistication; and speed of technical and industrial change. These factors result in considerable diversity across industry skills councils in how they do their work. Nonetheless, in their work coordinating the linkages between VET and other systems, industry skills councils inform education departments, industry bodies and other players of the issues they face and provide relevant statistical and other data as part of their government-funded role. That is, the industry skills councils go beyond the role of developing training packages to perform a coordination role at the practical level of the issues that impact on the skills required for work. What is common across industry skills councils and what is specific to each industry skills council are not yet understood, as research into this has barely begun.

There is a considerable body of knowledge — especially through NCVER research — about the role of VET in innovation and innovation's effect on the VET system (Curtin, Stanwick & Beddie 2011; Dawe 2004). However, there is little research on the dynamics of the VET system within the broader Australian context, especially VET's relationship to the National Innovation System. The focus of the research and policy community in education and training is on the 'how to' of effective education and the many factors that influence learning. But an equally important and underlying question is what drives change in the skills needed and in the content of education and training. Without understanding the relationship between VET and skills development by firms and workers, education and training policy may inadvertently drive it away from a good alignment with the needs of graduates and employers, therefore serving the national interest less effectively.

AgriFood Skills Australia and the Carbon Farming Initiative

The role that industry skills councils can play in innovation policy is well illustrated by AgriFood Skills Australia's role in the federal government's Carbon Farming Initiative. AgriFood is the industry skills council for the agricultural, food and natural resource management sectors. The Carbon Farming Initiative is a carbon offsets scheme which will enable farmers and other land managers to access carbon markets. Farmers and land managers will be able to generate carbon credits for taking action to reduce emissions and store carbon. These credits can be sold to other businesses and individuals wanting to offset their carbon liabilities. This policy thus aims to create innovation in farming practice and in institutions supporting the mitigation of climate change. The initiative will support the introduction of new technologies and changed farming practices by creating incentives for farmers and natural resource management practitioners to become innovative in the management of carbon on farms. As well as emissions reductions, the effective management of carbon on farms gives rise to multiple benefits, which ultimately results in productivity gains. The Carbon Farming Initiative is one component of the Australian Government's Land Sector Package, a package intended to assist the further development of Australia's agricultural and agriculture-related industries.

The Carbon Farming Initiative was launched in 2011 by the Department of Climate Change and Energy Efficiency and did not include VET in its proposed implementation plan. AgriFood requested a meeting with the department to discuss the Carbon Farming Initiative and the role AgriFood could play. AgriFood did this because, although not officially part of its remit, by becoming involved early in a major policy initiative affecting agrifood industries, it recognised the potential for influencing policy implementation relating to the role of VET. This would enable a head start in the development of the training materials required as a result of the policy initiative. AgriFood has an obligation to ensure that the sector can access and benefit from the carbon initiative.

When asked whether the department had considered the role of the VET system in the implementation of the Carbon Farming Initiative component of the land sector package, the answer was that it had not. This is despite the obvious need for changes in the knowledge and skills regarding carbon farming and the associated need for training and education. This sort of skills development is logically part of the VET system, as the skills required are vocational and the people involved are mainly practitioners. Industry skills councils, as the coordinators of training packages, with linkages throughout their industry sectors and a mandate that includes providing analysis and advice to state, territory and federal governments, have a clear role in identifying and developing the skills required to successfully implement such policy initiatives. However, industry skills councils are rarely involved in such policy-making and implementation.

AgriFood, as is typical of an industry skills council, has contacts with industry, education and training, research and other relevant players. AgriFood undertakes regular future studies to enable it to better develop training packages to meet changes in industry requirements. AgriFood is also involved in standards setting. These activities provide AgriFood with a deep understanding of its component industries, likely future changes and how these changes will impact on the skills required. AgriFood recognised carbon reduction initiatives as a likely important future development and so had already done work on the impact of carbon farming before the policy was released. This knowledge of the potential impact of the carbon initiative was the driver behind AgriFood being proactive in approaching the Department of Climate Change and Energy Efficiency. This sort of proactive activity by an industry skills council is not part of its funded role of developing training packages, although it is fundamental in enabling industry skills councils to more effectively support the provision of the required skills to industry and support policy initiatives. It also ensures that the relevant industry

sector will be in a position to fully benefit from the innovation associated with new policy and regulations or scientific developments.

Once aware of the way in which the VET system informs, educates, skills and trains farmers and natural resource managers, the Department of Climate Change and Energy Efficiency displayed a great deal of enthusiasm for AgriFood's involvement in the carbon initiative. When the implementation package was released, a 'carbon skills' component was included. In subsequent meetings, the scope of the involvement was determined — to include setting standards for carbon offset providers through the development of a qualification, as well as ensuring that conservation and land management training covered carbon farming. There has been discussion about the development of a general carbon farming qualification as well.

AgriFood's broad involvement in the carbon initiative is indicative of the benefits accruing from the wide range of linkages an industry skills council has with its industries and other supporting organisations and systems. These connections mean that an industry skills council can offer access to the full array of players involved in initiatives such as this, particularly to the players who are changing the work requirements in that industry. In the context of the Carbon Farming Initiative, AgriFood is able to offer an integrated package of specifically developed standards and training materials, delivered through the formal VET system, with its associated quality assurance and certification systems. This means that the policy initiative could be implemented using the knowledge and connections of the practitioners whose involvement and expertise underpin its success or otherwise; it also removes the need for the Department of Climate Change and Energy Efficiency having to create some parallel system for standards and skills development. The obvious benefits to the department from AgriFood's involvement in this policy development have prompted further discussions about the potential for AgriFood to be involved in other components of the Land Sector Package: the Biodiversity Fund; Regional Planning for Climate Change; and the Indigenous Carbon Farming Fund.

The crucial importance of the standards and skills work AgriFood is undertaking in relation to this initiative means that this work is being treated as *core work,* outside the realm of a competitive tender process, which applies to parties seeking funds to undertake project work associated with policy implementation. This recognises that industry skills councils have the expertise and contacts required to support policy initiatives, making industry skills councils an excellent vehicle for the adoption of innovation driven by public policy and regulatory reform.

VET is not the only route to skills development flowing from policy implementation, but it is the area of education and training that directly provides skills development to practitioners. This is particularly relevant to policy aimed at changing work practices. In the implementation of the Carbon Farming Initiative, the University of Melbourne was designated to develop a short course covering base-level knowledge for Landcare Facilitators to deliver to Landcare Groups. The course covered such topics as the scheme, methodologies to measure offsets and information to help farmers and landholders to benefit from carbon markets. The VET system for its part was identified as the vehicle for training landholders and natural resource management providers to deliver the carbon initiative directly on the ground.

Discussion and conclusion

The remit for industry skills councils specifies that they interact with a wide range of stakeholders, thus enabling them to develop the products that ensure students have useful competences for a wide

range of vocations. Industry skills councils also have an important role to play in coordinating skills development relating to public policy and industry innovation. Both of these roles require industry skills councils to understand how work is done and the various factors influencing work and workplaces. This understanding provides industry skills councils with great insight into the actual, rather than the theoretical or assumed, workings of industry. Policy agencies, such as government departments, do not have these close linkages with the actual performance of work; they therefore have to extrapolate from theory, inquiry, available research or their own research efforts. AgriFood's involvement in the Carbon Farming Initiative clearly shows the central role industry skills councils can play in advancing policy initiatives.

This chapter raises concerns about the best use of public investments in VET and industry skills councils in the implementation of government policy. Any government policy that aims to influence how work is done through the introduction of new technology, changing work practices or changes in the scale of operations affects the skills needed by industry and therefore the workforce. Typically, such policy development does not involve industry skills councils, and so experts in vocational workforce skills and training are normally not engaged in policy development or implementation planning. Given that the typical delay in moving from identifying a need for new skills, to achieving large numbers of people trained in these new skills, is measured in years, policy initiatives that don't include industry skills councils may be slower and more cumbersome in their implementation and less effective than is necessary. Furthermore, government policy that impacts on industry often wastes considerable resources by replicating work already undertaken by industry skills councils. From a simple efficiency perspective, skills councils' input into policy development and implementation planning has the potential to save taxpayers' money and improve policy uptake.

The inclusion of industry skills councils in policy development processes may have the potential to prevent adverse policy outcomes. With their close links to industry and a focus on achieving practical outcomes, industry skills councils provide a reality check in the planning required to convert policy to practice.

While industry skills councils are not set up to develop policy or carry out non-VET policy initiatives, they are well placed to provide advice and undertake research. At a practical level skills councils do interact with industry and other stakeholders, conduct futures studies and plan for change. According to representatives from these bodies, much of this work lies outside the formal definition of the role industry skills councils are funded to undertake.

Our work raises many questions: how do industry skills councils act as coordinators for VET and the industries they serve? How can education and training policy be integrated into the broader non-skills policy agenda? How can industry skills councils be incorporated into policy development processes? How would incorporating policy responsibilities into industry skills councils' role affect their operation? Why are VET and industry skills councils' existing resources and linkages generally ignored in the policy development arena?

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DISCUSSION

Who controls the system?

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A theme linking these three very interesting essays is the contest for influence, recognition and, ultimately, control of education and training systems. This should not be surprising for anyone who has worked in VET for any length of time. They would know that VET is contested territory — and the contests can be intense. There are contests over funding and influence between the Commonwealth and the states. There are contests for system supremacy between industry bodies, primarily industry skills councils, and providers, such as the TAFE institutes. There are contests for political influence and recognition between private registered training organisations and public providers. There are conflicts between those who argue that a competency-based approach to training should be the fundamental ideology of the system, as it guarantees that industry's needs are met, and those who hold that such approaches can exclude learners from acquiring the underpinning knowledge that allows them to progress at work or to further study. In contrast to VET, that other part of the tertiary sector — universities and higher education — has a more settled view of its place and overall importance. That is not to say that universities and their academics are not often fractious. As Professor Quiggin in his essay points out, the expansion in student numbers and a more managerialist approach to university governance have also brought about huge changes — not least, the end of tenured employment for most academics. But conflict in higher education is more often within the academy. Universities can present a more united front to outsiders. Politicians and society at large do not so often threaten their position and, when they do, universities can call upon a body of informed and powerful supporters to counter it.

Why should universities enjoy this advantage? Quiggin believes it has something to do with reputation, in many cases built up over decades, if not centuries. VET is far less stable. It may also have something to do with the fact the average return on investment from a university course over a working lifetime currently remains higher than that from a VET program (Watson 2011). There are a number of exceptions to this, especially for traditionally male trade occupations (NCVER 2010). University study does not suit everyone. This is just as well, otherwise some critical occupations trained in the VET sector would go unfilled.

In their essay, Jenkins and Curry argue that industry leadership of the VET system, established as part of the joint union and enterprise workplace productivity reforms of the 1980s and 1990s, has been gradually eroded. While Quiggin thinks it is unclear who the consumer of education is, Jenkins and Curry see no such uncertainty over who the prime client of their part of the education and training system should be — it is clearly industry. The drivers that motivated the VET reforms, such as increased productivity and greater flexibility as well as better career paths are, Jenkins and Curry argue, still relevant today. A subsequent emphasis on the administrative and governance aspects of the reforms has contributed to a dilution of what might have been achieved. The most significant negative change, however, has been the implementation of student 'entitlement' funding models by the states. These entitlements, or 'student voucher systems', establish individual learners as the main

clients of VET, not industry. Individuals might therefore 'waste' their entitlement on programs that do not meet a current industry need.

Dalitz and Dibley in their essay argue that our national innovation systems ignore and undervalue VET in general, and industry skills councils in particular. Innovation is critical to improving both productivity and our national economic performance. Innovation is as much about incremental process improvement at the workplace as about large-scale research and development in the laboratory. VET could be a driver of this continuous improvement, but has been sidelined. Quiggin, although equally critical, takes a different tack. Unlike the other two essays he does not even mention industry skills councils, even in passing. This is probably because the writer's background is more higher education than VET. Rather Quiggin argues that attempts to view tertiary education as an industry or a product misconceive the fundamental nature of the system. Worse, attempts to set up 'for-profit' institutions have largely failed and even those that have appeared to have succeeded, like the University of Phoenix, are dependent on the availability of government loans to potential students. He concedes that VET has been more commercialised than universities or schools but argues this has also been problematic because of weak regulation and control, which has allowed poor-quality providers to enter the market.

Especially as I now work for the industry-led board that runs the Australian Workforce and Productivity Agency, I take no issue with the claim that skills development and innovation are critical to a growing economy and are vital components of improving productivity within the workplace. The rate of increase in productivity in Australia has been in decline since the time of the reforms outlined by Jenkins and Curry. Productivity means, in essence, producing more, and this can be achieved by enhancing skills and improving processes (D'Arcy & Gustafsson 2012). This also means that I am comfortable that Quiggin argues for the human capital approach to explaining the function of tertiary education and training rather than a theory of 'sorting or screening', where past educational performance and qualifications are principally used by employers as an indicator of latent ability. In the human capital model employers hire people for the utility of what they have learnt and the skills they have acquired. In the screening approach, what has been achieved academically is considered of value primarily as a means of sorting people in the queue for jobs — in other words signalling to employers those who have the best potential.

Jenkins and Curry interpret the history of these reforms as a parallel process. They see the reforms as being initiated by the industrial partners in the union movement and the employer associations, principally the Metal Trades Industry Association. These partners were motivated in the 1980s by concerns about Australia's national competitiveness and consequently job security for workers. But the government soon also took an interest. This was driven by the Commonwealth ministers, John Dawkins and Clive Holding, who wanted to reform post-compulsory education and training.

Jenkins and Curry see this as a mixed blessing, although these reforms 'started the system change in VET that had been advocated by industry … they can also be seen as the beginning of a preoccupation with managing, funding and controlling the new direction in training, primarily at the expense of industry input and leadership of VET'.

In reality, part of the agenda was about wresting control of what was taught in vocational programs from state-based TAFE systems. Until then TAFE had had a monopoly over publicly funded provision. It specified the 'curriculum', including what qualifications should be taught and where they might be offered. Industry only had a formal role through 'advisory councils'. Leadership by industry would eventually involve switching to a system of competency-based training packages. Training packages

listed the industry-defined competencies that a learner needed to demonstrate to be awarded a vocational qualification. Jenkins and Curry detail some of the transition phases of this process, such as the modularisation of the curriculum led by the development of the Engineering Production Certificate. Modularisation to Jenkins and Curry was an important reform, since in the previous system the curriculum had been dominated by semester-long subjects with very little detail and very little industry input into what was being taught.

As Jenkins and Curry point out, one of the prime achievements of this era was the establishment of a national system, with the content of modules being jointly agreed by the industry partners.

This is a very different world from that inhabited by Quiggin, who argues that at university level, teachers 'have a high degree of autonomy, and substantial control over what they teach and how'. This is certainly not true in VET and not something you would think Jenkins and Curry might approve of.

As part of these reforms, the TAFE monopoly was to be broken and public funds tendered out to public, private, community and enterprise providers, thus creating a training market that would drive efficiency though greater competition. TAFE would no longer be 'the sector', but simply one provider in an increasingly diverse VET system.

TAFE institutions have thus been subject to considerable change. One of the most significant yet least heralded of the changes of this era was the formation of 40 or so large TAFE institutes from many hundreds of smaller departmentally controlled TAFE colleges. This partly reflected the contemporary wisdom of moving to more devolved governance structures, but was also intended to give TAFE institutions the critical mass to compete in the new national market. Most TAFE institutions thus went from being the size of large high schools to the size of small universities. Jenkins and Curry do not refer to this change, possibly because to them the nature of the institutions delivering the training is less important than who controls what is to be taught.

The majority of our TAFE institutions, in their current institutional guises, are thus fewer than 20 years old, although some, like TAFE NSW Sydney Institute, claim direct lineal descent from the Sydney Technical College, founded in the late nineteenth century. Quiggin argues against education being a market, partly on the basis that in the university sector student choice is driven by institutional reputation rather than by price. He argues that in many cases this reputation has been developed over many decades; I am not sure if reputation is more important than price in the VET sector. In one sense all VET institutions teach the same programs, because their learners have to achieve standardised competences, delineated in national training packages. It is thus more difficult for VET institutions to differentiate themselves in terms of course offerings, although obviously one differentiator in the sector is ownership — public TAFE or private registered training organisation. VET students have lower socioeconomic status backgrounds and are thus generally poorer than university students and many obtain fee exemptions, so one suspects that price is important. Enterprises fund a substantial number of VET programs and most of them are concerned about costs.

Although Jenkins and Curry argue that industry leadership has declined over the years, industry-led bodies, the industry skills councils, still develop training packages. These specify, on a national basis, what has to be achieved by learners. Although academics like John Buchanan et al. (2009, p.15) would like to get rid of training packages because they see their competency-based approach as Taylorist and thus controlling rather than empowering workers, the likely reality is that they are not seriously under threat. Few want the massive destabilisation of the system that such a change would bring. Packages have been developed to accommodate underpinning knowledge more easily. Although some fundamentalists see this as dilution, I believe it will ensure that packages adapt and survive.

Dalitz and Dibley provide an argument that, as training packages adapt to reflect changes in jobs, they are both driven by and can drive innovation. Packages need to reflect contemporary needs, so can only be developed effectively in association with industry. Once developed they can spread those innovations beyond the 'early adopters'. Dalitz and Dibley complain that industry skills councils are not sufficiently involved in the innovation or skills policy process — although they acknowledge most of their work is at the practical and pragmatic level. Certainly the Australian Workplace and Productivity Agency Board, which is a peak industry-led group directly advising the minister, values the input of the skills council into its policy recommendations and canvasses their opinion at every possible opportunity. The fact that this organisation, formerly known as Skills Australia, now has the term 'productivity' in its title means that there will be a renewed emphasis on the role that skills play in workplace innovation as a driver of productivity.

If industry leadership is critical, can one totally lead the system without owning it or funding it? Jenkins and Curry complain about the states. Yet the states own the public providers, the TAFE institutes, which still represent the largest part of the VET sector. TAFE institutes have a large asset base and employ many thousands of staff. The states are not going to wash their hands of VET, as is graphically evidenced by the refusal of Western Australia and Victoria to refer even their regulatory powers over VET to the Commonwealth and the national VET regulator, the Australian Skills Quality Authority. Decisions taken about TAFE and VET can have wide implications for tightening state budgets. Maybe an opportunity was missed to adjust the power of the states in the era that Jenkins and Curry are writing about, when there was a real possibility that the Commonwealth might have 'taken over' funding responsibility for TAFE from the states, in the same way the Commonwealth has funding 'responsibility' for the more autonomous university sector. The opportunity passed and the solution was the tripartite Australian National Training Authority. Some view this as a compromise but many saw it as progress in terms of industry leadership, given its industry-dominated board. Although ANTA had a seat at the Ministerial Council — it was still the state and Commonwealth as owners and funders of the majority of the system who took the key decisions. Eventually one of their decisions was to abolish ANTA. Jenkins and Curry might say this proves their point. My point is that the owners of the system will always want a large say in how their assets are used.

Ownership is also related to funding. I was surprised that Jenkins and Curry only make passing mention to the major funding report of the era, the Deveson Report, *Training costs of award restructuring* (Deveson 1990). Funding is almost viewed by Jenkins and Curry as a necessary and unavoidable evil, debates about which detract from industry leadership. Reading Deveson strongly reinforces the view that we are talking about a different era (not least because the Deveson Report is not available on the web — you now have to borrow it from a library and read it in hard copy). Deveson describes a system where accredited training was then confined to the publicly funded TAFE system and industry training was the in-house, unaccredited training funded by industry itself. The only publicly funded resources that went directly to industry were the Commonwealth Rebate for Apprentices in Full-time Training (CRAFT) apprentice subsidies. It was thus an era of a hard distinction between the off-the-job credentialled training delivered by TAFE and the on-the-job training delivered by the enterprise.

Deveson wanted to change this. His committee recommended that more credentialled training should be available to industry and delivered in-house. Some of this would be conducted on a 'fee for service' basis by TAFE. Public funds should be more widely available on a competitive basis. These measures would make providers like TAFE more responsive to industry needs. In terms of funding, Deveson recommended increases in public funding, an expansion of fee-for-service activity in TAFE colleges, and more clarity about student fees and charges. He did not recommend large increases in

student fees, basically on the grounds of equity and access. His target of 20% of TAFE college revenues coming from customised 'fee for service' work with industry now seems modest. Even in that era it was well short of the 50% 'self funding' target set by WD Scott in his report a year earlier on the NSW TAFE system (Scott 1990).

As an active player in the policy debates of the era, I pointed out at the time that it was not so much a training market as a funding market that was being created (Shreeve 1994). Different types of providers, not enterprises or individuals, submitted tenders to either state training authorities or ANTA for the majority of funds (at least 80%) to deliver training. Although what was taught was specified by industry, which industries got the training dollars was far less certain. Thus even at this stage industry leadership was not universal. In this 'purchaser-provider' model the bureaucrats were still in charge of where the money went — except the bureaucrats were not in TAFE. Enterprises only got greater direct control of the funds through the later and limited 'user choice' arrangements for apprenticeships and traineeships. More recently the Critical Skills Investment Fund and the National Workforce Development Fund, overseen by the Australian Workforce and Productivity Agency, are examples of funding going to employers rather than to registered training organisations. These funds were conceived of as an 'enterprise responsive stream' to complement the 'individual responsive stream' of the student entitlement, although the proportion of funds going to each stream is severely imbalanced.

Deveson did not canvass in detail an 'industry co-contribution rate', as applies to the current industry targeted National Workforce Development Fund. It seems that his committee considered that paying for expenses such as the wages of employees undergoing training as well as the costs of on-the-job unaccredited training were deemed a sufficient contribution by industry to the benefits they received from the public expenditure on training. Deveson clearly believed that training should have a high degree of public subsidy. One could argue that high degrees of public subsidy with little co-contribution reduce the notion of industry leadership. It could even be said to reinforce an industry view that training is a government responsibility.

Though Deveson argued for very high levels of public funding for individual VET students, he did not envisage a student entitlement model.

Funding individual students or individual enterprises is a reaction to both control by bureaucrats and 'capture' by providers. Who is better placed to work out what training the enterprise or individual needs — the end-user or a central planner? My board in its policy documents supports 'demand led systems' (Skills Australia 2011). But they only support their implementation, subject to certain prior conditions. These include effective regulation and quality control systems already being in place. They argue for greater transparency about course and job outcomes as essential prior conditions — to enable students to make informed decisions. Funding should extend to more than one course at a certain level to facilitate lifelong learning and reskilling. My board considers it is important for funding bodies to be able to 'cap' or 'collar' enrolment in certain programs to avoid massive oversupply. Unfortunately not all these conditions have been put in place in instances where entitlements have been implemented.

Some industry commentators such as John Hart of the Restaurant and Catering Association would go further than these conditions (Hart 2010). They argue that, in an industry-led system, public funding for VET should principally go to enterprises, existing workers or job seekers, who are practically guaranteed a job in the relevant industry. This may be neat conceptually but ignores the fact that people change jobs regularly and qualifications and skills are often both transferable and substitutable. Individuals use qualifications generically. This is not to support 'screening theory' but rather to

highlight that the customer service skills acquired in the hospitality industry are transferable and applicable to roles in many other industries, such as retailing and finance. Restricting entry to people already working or about to work in the industry would, in our labour market, cause skills shortages.

The other argument for a demand-based funding regime is to avoid 'provider capture' or, crudely put, providers offering what they can do rather than what the customer needs. This is in some ways conceptually related to 'public choice theory', as outlined although criticised by Quiggin in an earlier article (Quiggin 1999). That is, those running the system engineer it so it benefits themselves as much as the intended beneficiaries or clients. Realistically there will be elements of this, but overall my observation is that providers are much more motivated by clients' needs.

The implications of public choice theory should not be ignored. Nor should it be just a concern for registered training organisations and other providers. Since the reforms of the 1990s VET has spawned an industry in its own right, beyond merely providers. My organisation, the Australian Workforce and Productivity Agency, is part of that industry. There is always a danger that intermediary bodies, including industry skills councils and industry associations, come to represent the views and aspirations of the new VET industry more than their home industry. Is the VET Industry 'crowding out' enterprises and encouraging employers to believe that training is primarily a government responsibility? This might be good for the VET industry but it is not good for enterprises and the economy. Although I do not observe this as the current reality, it is nevertheless a danger.

These three essays remind us about the critical role VET plays in improving innovation, productivity and participation for the economic and social benefit of Australia. Quiggin represents a school of thought — that if education does this it also has a broader purpose. Students in VET are concerned about getting a job, keeping a job and getting the next, better job. VET must therefore respond to those who generate jobs. Industry leadership is critical — although I think in our liberal democracy some degree of choice for individuals is impossible to exclude. With appropriate information and guidance, individuals will often respond to where the best job opportunities are, or use their vocational skills generically. They can therefore help to supply industry with the skills it needs to be more productive, innovative and competitive. Professionals are important, but they need to run the system, largely on the basis of what industry wants. But it is not that simple. Industry might want to lead but it does not totally own or fund many parts of the system. Other stakeholders will want a voice, but they will also want to look after their interests, assets and liabilities. This will lead to contests. One can only trust that the contests are not so distracting for the players that they fail to deliver effectively on their prime clients needs.

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Governance of the system in a competitive environment

How do providers respond to changes in structures in a period of reform?

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In this essay, I outline the ways in which contestable funding for VET has affected the behaviour of providers and examine the levers that might be employed by government to monitor outcomes arising from these changed funding models. The differences in the responses between public and private providers are investigated and the resultant changes to the system of public provision analysed.

The drivers of change in funding models in the education sector will be outlined. One of the drivers for change is the high cost of providing vocational education under a traditional government-funded model. The increasing cost burden to governments of providing education is a global issue. It strikes at the core of the underlying questions of: what are appropriate models for delivering education in an environment of rising costs/inability of government to be solely responsible for the costs of education provision; and who should share in the payment of these increasing costs.

International education models and programs are outlined and analysed for their relevance to Australia, especially with regard to the latest operating frameworks and modes that seek to create new contexts for education services.

The essay outlines policy differences in funding models and examines the impact these models have on the structure and function of education and consequent education model outcomes. Further, the levers that governments may use to monitor the implementation and change management initiatives are identified and analysed. The essay also explores the different management and institutional approaches from both a public and private sector perspective in response to user choice arrangements. The effect of changes in funding models on service delivery, public policy-making and the future of education in this sector is considered. In following sections, the concept of contestability, as it is a major reform direction in the VET sector, is defined and the implications for vocational education models and structures are examined.

Contestability

The Hilmer Report (1993) set the agenda for contestability in Australia on the basis of a wide-scale investigation into competition policy, consequently restructuring the existing model of government monopoly in which government was the sole supplier of goods and services delivery. Hilmer (1993, p.215) referred to the strategy of the inclusion of private providers into previous government monopolies as part of 'pro-competitive' reforms. This approach was considered distinct from privatisation, whereby the prior system of government-owned entities changed ownership from the public sector to the private sector, and is aligned with what Le Grande (1991) referred to as 'quasi-markets', where government shifts from being both a funder and provider of services to a model which separates the funding of services from the provision of services. Hilmer (1993, p.1) argued that competition policy was based on the strategy to introduce innovation, value for money and productivity into industry, leading to a more adaptive, flexible and enterprising business sector.

Pro-competitive reform, which included introducing private providers into the areas of government activity, was the approach favoured by the proposed new models for education provision (Hilmer 1993). Struyven and Steurs (2004) contended that the introduction of market forces stems from the pressure to improve efficiency and responsiveness in the public sector, with the move to introduce greater competition into public provision of services a feature of change efforts. The two allied concepts of contestability and consumer choice are the cornerstones of the conventional theory of markets. The terms appear to have been used formally in the context of market theory by Baumol and colleagues from the early 1980s (Baumol 1982; Baumol, Panzar & Willig 1982, cited in Davidson 2011). A contestable market is defined as 'one into which entry is absolutely free and exit is absolutely costless' (Baumol 1982, p.3). The consequent entry of many different organisations into the market then creates many choice options for consumers.

In reality, a perfectly contestable market in which there is unfettered ease of entry and exit is not likely to exist, as there will always be costs associated with setting up and withdrawing from business. In practice, the common use of 'contestable' is less restrictive than the concept of perfect contestability. A market can be considered 'contestable' if at least one new supplier may compete for business with another, even if there are some barriers and costs to entering or exiting the market. This less restrictive meaning establishes the principle of private provider access under conditions of contestability. These twin notions of contestable markets as a vehicle for new and innovative service providers and the generation of greater consumer choice are also used extensively in the vocational education reforms.

However, ease of market entry is also characterised by volatility, as firms withdraw and new service organisations emerge. In a study of social services delivery under conditions of a 'quasi-market', Davidson (2011) concluded that a 'managed' model would create optimal conditions for a program of marketisation. A restricted cohort of providers, rather than open entry for any provider, may offer a better and more stable model for service delivery. The managed model is a hybrid solution that introduces commercial market principles into education provision so that greater efficiencies can be achieved from competition, but limits wide-scale entry by private providers to avoid business risk and failure. Public policy may also seek to ensure that those who require vocational education have equity of access, which also implies some gatekeeping or direction of investment.

It was found in a study by NCVER that most states and territories encountered challenges in determining proper funding regimes for the delivery of training in an open market and meeting ongoing commitments to fund public providers, as these organisations struggled to become more corporate in their approach (NCVER 2005). Previous research found that public providers had difficulty in competing with private providers due to additional cost burdens, including meeting required industrial award conditions for employees and larger capital infrastructure and capital maintenance costs, which are not borne to the same extent by private providers. It was concluded that these additional cost structures militate against the ability of public providers to offer competitive program offerings, by comparison with private providers, and public providers are then required to deliver a disproportionate number of programs with a higher cost, while they also have a community service obligation to provide free or low-cost courses for disadvantaged students (NCVER 2005).

From the foregoing discussion, the use of a hybrid or managed market can be positioned between the full government provision of education services (non-market) and the full market (Baumol's 1982 unfettered and cost-free entry and exit model). This development allows a more nuanced consideration of the way in which a contestable market can be introduced with a more flexible

framework for delivery of education than that of the non-market provision of education, but one that avoids the risks and uncertainty associated with the full market model.

The use of market mechanisms in the delivery of services is expected to lower costs and improve innovation capacity. It is argued that:

> Competitive pressure exercises constraints on activities and drives producers to keep prices down, to organise according to the best known techniques of production and to innovate in order to avoid economic annihilation. (Webster & Harding 2000, pp.6—7)

These expectations, as set out by Webster and Harding (2000) and Struyven and Steurs (2004), are reflected in the expectations for the introduction of competitive mechanisms in the VET sector. The Australian situation is explored to elicit a deeper understanding of the different models either implemented already or under consideration. Different government approaches to VET provision and the implications for the quality of service delivery are discussed in the following section.

Education and contestability

The Australian VET sector entered a new era in 2010 when it introduced the National Entitlement to a Quality Training Place, which gave young people guaranteed access to education, including upgrading their qualifications. This approach is argued to be an 'entitlement-based, demand-driven structure' and is organised according to two 'push-pull' elements, one from the supply side: 'who should deliver training and how' and the other from the demand: 'who should buy training, and why'. Ross (2011) in an article in *The Australian* newspaper reports that the policy was given renewed impetus when the Council of Australian Governments (COAG) agreed to adopt 'a new national framework of objectives and principles for a reformed national VET system'. It was noted that some states were adopting 'a more flexible and demand-driven training system, seeking greater contestability of funding for public training and greater competition between providers'. This policy solution adopts market relations on the assumption that all players may have a choice about how to invest their resources within appropriate buyer—seller relationships.

The move to a more demand-driven model was brought about by the increasing cost of providing education, the 'lack of fit' of skills education to industry requirements and the inflexibility of the current system, especially given the programmatic aspiration of having school leavers in education rather than unemployed. The Victorian Department of Education and Early Childhood Development (2012) undertook a meta-analysis of reviews of the VET funding arrangements undertaken by the Victorian Government since 2009 and found that current funding arrangements were unsustainable and too costly to be provided by taxpayer support. A report commissioned by the Australian Education Union found that, while there was an overall decline in funding levels for public VET, government targets for increased levels of educational attainment in the population and the workforce were putting pressure on the system (Centre for the Economics of Education and Training 2010). Further exacerbating this problem of the need for greater access to VET places was increased demand for the different types of educational qualifications within the VET system. The demand for a wider variety of courses created higher costs for providing education. These challenges created difficulties for the future funding of VET (Centre for the Economics of Education and Training 2010).

Victoria in 2009 was the first state to introduce VET reforms, prior to the skills reform initiatives introduced by the federal government through the Council of Australian Governments in 2010. The Department of Education and Early Childhood Development (2012) reported that from 1 January 2013, all providers in Victoria, whether public (TAFE institutes) or private providers, would receive the same

training subsidy rates, as a way to create a 'more level playing field' in the VET sector. As part of its drive to improve the operation of the sector the Victorian Government sought to change TAFE institutes through structural reform, involving a new governance framework. The implementation of this system was argued to support the TAFE sector to be more efficient and to enable more competitive behaviours in a 'demand-driven, contestable training system' (Department of Education and Early Childhood Development 2012). South Australia, through the Skills for All, TAFE SA Bill of 2012 introduced contestability into the VET system. The TAFE institutes, along with private providers, were brought into the new system; however, unlike the current Victorian system, government providers were paid at a higher rate per student to account for the higher costs expended in delivering courses to regions, to disadvantaged students and for maintaining large-scale infrastructure (Department of Further Education, Employment, Science and Technology 2012, p.6). The quality requirements for private providers were argued to be high, and in this way, had safeguards against business risk.

The recently released interim report by the Queensland Skills and Training Taskforce in August 2012 foreshadowed a planned approach to contestability (2012, p.23). The report suggests that the first step towards contestability is to ensure a more commercial and competitive approach for TAFE Queensland. The need to be more cost-effective and flexible has resulted in a reduction in the number of TAFE campuses from 82 to 44, including, as a part of the proposed change, the closure of 32 regional TAFE facilities. With its geographically dispersed settlement pattern of coastal regional centres, this reduction appears to restrict community access to local providers.

The main changes have focused on encouraging private education providers to offer a competitive model for VET. However, the call for greater efficiencies includes changes to employment arrangements. Greater flexibility in types of employment, including greater casualisation and flexibility in the workforce, together with more flexibility in employment arrangements (including a longer span of hours and more adaptable working conditions), feature in the requirements for the new VET system (Department of Further Education, Employment, Science and Technology 2012; Queensland Skills and Training Taskforce 2012; Department of Education and Early Childhood Development 2012).

The provision of educational services to regions and to individuals in marginalised or disadvantaged groups is of high concern in the contestable models. A report by Mission Australia (Cull 2009) concluded that the Victorian VET reforms were showing an early negative impact on lower socioeconomic groups' access to vocational education. Commercial decisions relating to the expense of providing education in the regions may reduce opportunities for those living in regions or those who may not have access or opportunity for private education, to have access to VET. The overall viability of the TAFE sector is at issue as more flexible private providers move into the arena of vocational education.

International training models and approaches

Funding models in Europe have maintained a government-provided system of vocational education but more of the costs have been shifted to those who undertake education programs. In the United States, there is a reliance on private providers, but the costs are mainly borne by employers rather than the students.

The OECD (2012, p.3) adopted the definition of the VET sector as 'a one to four year program (full-time equivalent), preparing students for direct entry into the labour market in a specific profession'. The focus is on bringing industry stakeholders into the policy and practice arena and developing closer relations with employers to ensure that skills match industry requirements. For employers, education

is important as it has a direct bearing on worker productivity. It was found that stronger interconnections and reliance between countries under a unified Europe affects VET systems. Student mobility and recognition of qualifications was an issue for this sector but more indirect issues were also issues of concern, such as foreign direct investment and international trade.

As is currently occurring in Australia, funding for education across Europe is diminishing and the shape of policy from a European perspective is also changing as the Global Financial Crisis affects more countries. Schwarzenburger (2008) suggested that the models for dealing with rapidly rising costs were also under severe strain:

> Much of the ideological and political contestation is the consequence of the very high and rising costs of higher education and of issues *surrounding the sharing of these increasing cost burdens* (p.3, author's emphasis).

The cost-sharing mix relates to the relative financial contributions to vocational education made by private households and the government, with now an increasing proportion of private funding being invested in education. This model differs from the Australian situation as the decreasing funds available for education have meant that, while individuals are increasingly paying a greater share of the education costs, government provision rather than private provision of vocational education remains the main vehicle for this type of education.

The European Union is a large institutional player and has taken responsibility for funding programs when countries have been unable to fully fund their vocational education costs. Countries are not always mature enough to develop independent sectors, as demonstrated in the following case study. Corradeni et al. (2012) in their study of Bosnia-Herzegovina found that a program of VET reform had been implemented since 1998, predominantly through programs funded by the European Union, which had acted as a major donor and driver of innovation and modernisation in the sector. However, due to the complexity of the administrative structure, the implementation and management of reform encountered obstacles and delays, and the outcomes achieved failed to meet initial expectations.

A study by Tessaring and Wannan (2004) found that major challenges to the VET sector in Europe included the need to improve the image and attractiveness of VET, the inability to adapt to labour market needs, the impact of demographic change and difficulties in responding to the needs of low-skilled and disadvantaged groups. The struggle to change this sector has not included wide-scale intervention to shift to private provision, but private providers are included in the mix in different European countries.

In the United States there is a mix of private and public provision, but private provision is more prevalent. VET-equivalent options can be attained through schools and post-secondary institutions in the public and private sectors. The majority of post-secondary technical and vocational training is provided by proprietary (privately owned) career schools and a large proportion is employer-funded. Approximately 30% of all credentials in career training are provided by two-year community colleges, and these also offer courses that are transferable to four-year universities. Other programs are offered through military technical training and government-operated adult education centres (Levesque et al., 2008).

The VET sector is mainly managed through state-based education services, but there is federal oversight through the federal government under the Office of Vocational and Adult Education within the US Department of Education. Accreditation for education providers is through both federal and state departments but this administrative complexity creates difficulties for qualification recognition and transfer. Funding is also more likely to be applied in terms of grants and loans to students. In

their analysis of education providers in the VET sector, Levesque et al. (2008, p.205) found that almost 45% of VET education was provided by employers; business or industry provided 25%; and government provided 8%. The remainder was divided up among professional associations, post-secondary institutions and other providers.

A finding of a comparative study of education in Europe is the principle of 'high private returns and public benefit for human capital investment' as the basis for the mix of public and private investment in education (Schwarzenburger 2008 p.3). 'Social balance' is the term used in an international context to account for a mix of contestability options in education and relates to preserving social equity (Schwarzenburger 2008, p.1). The implications for social balance under conditions of contestability for the Australian situation are debated in the shift to allow private entrants into the VET sector. The social agenda of *access* to vocational education could be recognised as a part of the federal government's National Entitlement to a Quality Training Place. The articulation of training to employment also ensures a better-skilled community and links to the promotion of wellbeing and community cohesion. The basis of government provision of services in education has been to ensure that the universal right to education is extended to all types of education experiences including, as is foreshadowed in the United Nations Declaration, vocational education.

Who pays? Finding a new model for education provision

The policy and practice for funding public and private education providers is an important consideration in a reform period (Wise 2002). While offering a safety net for education, the reform agendas of state governments for the VET sector highlight a concern with finding ways to promote a viable vocational education sector but with a major focus on greater flexibility of operation and on labour markets in the TAFE system. Public services, while capable of delivering innovative programs, may however be resistant to change (Brown & Keast 2005). Difficulties in implementing programs may drive state governments to resolve these challenges by shifting service delivery to the private sector. Various government reports into VET (Department of Education and Early Childhood Development 2012; Department of Further Education, Employment, Science and Technology 2012; Queensland Skills and Training Taskforce 2012) have highlighted public sector failure to deliver flexible and cost-effective streamlined education services and the need for more innovative arrangements with private sector providers to deliver education services. However, private sector failure may have consequences in this context.

Understanding and developing an adequate risk management strategy or framework for new initiatives or reform programs is an important element of effecting changes in the education sector. The closure of eight English language colleges due to business failure in 2010 shows that there needs to be a strong system of support for wide-scale private sector provision of vocational education (*The Economic Times* 2010). In his study of contestability in the human services sector, Davidson (2011) concludes that market efficiency may come at the cost of consumer and service choice; for example, when deregulation lowers legal barriers to entry and creates greater concentration of ownership. Large firms use their market power to reduce the ability of smaller firms to remain competitive, preventing new entrants in the market.

Other examples of this activity in which the introduction of market mechanisms and contestability in previously government-provided goods and services has resulted in a concentration of large firms rather than a broad array of competition can be found in various sectors, including the retail industry (Jacenko & Gunasekera 2005), construction industry (Furneaux, Brown & Allen 2008; Ryan et al., 2005) and the social services sector (Brown, Ryan & Parker 2000; Ryan & Brown 1998). These studies

also found that, while initial competitive pressures resulted in new entrants to the market and lower costs of services, contracting costs and market uncertainty eventually resulted in the consolidation and reduction of service providers.

In these examples, the shift to contestability has therefore created a situation in which government lost the internal expertise required to monitor service provision and became captive to a few large specialised or niche service providers. Government, rather than benefiting from increased competition and lower costs then became a 'price taker' for delivery of external specialist expertise and services that could not again be easily in-sourced because the institutional structures had been dismantled. In view of the case examples from other sectors, it can be shown that dismantling government service provision is not without problems or unforseen effects. The use of a managed market, with restricted entry in order to meet particular sets of standards and requirements, may reduce some risk and retain quality education standards.

A market-driven VET sector is one possible response to the challenges confronting the sector, but opening up to a private system brings new issues. Carne (2007) contends that, with the payment of education through the private system, the determinants of demand include the expected return on the investment (wages paid to skilled labour; awareness of employment opportunities; and whether gaining skilled employment is likely); whether a student is focused on gaining skills for their present job or undertaking training for a future career; awareness of the availability of training opportunities; and the student's income or capacity to borrow. Accordingly, Carne (2007) argues that employers needing specific skills should pay the cost of vocational education, as employers will directly receive the benefits of the skills acquired. Generic skills taught by the VET sector is a public good, which aims to better educate members of society, and without intervention or a public model, the market will under-provide. This situation requires funding by government to promote generic skills.

Carne (2007) suggests that there is a need to differentiate between the two types of skills: general skills such as reading, maths, communication and problem-solving and specific workplace skills, as these will require different funding arrangements. It is argued that specific skills should be funded by the employer requiring the skills, while generic skills should be government-funded, as these skills provide the building blocks to broader competences but will not be offered if reliant on a market-based model. The provider model for delivering a fully integrated course is problematic using Carne's (2007) model, however.

In a study of market mechanisms to deliver public services, Blöchliger (2008, pp.19—20) suggests that governments can implement a range of policy measures to ameliorate problems of access and equity and unintended consequences. Policies include the requirement for service providers to meet prescribed standards for service delivery, non-discrimination of users for the services, the implementation of differential pricing mechanisms on the basis of need, payment of direct income support to users to enable access to services and introduction of voucher systems to promote choice and access.

A fully market-driven model for the VET sector has many challenges and risks, including problems of business failure, the inability to provide a full range of education services due to the high costs of speciality programs, and the exclusion of marginalised groups because of lack of access to education through distance, cost or opportunity. These are manifested in policy trade-offs between efficiency and equity of access to education and the challenge of providing choice. At the same time the regulatory burden is expanded to deliver that wider choice (Blöchliger 2008). The unrestrained entry of new players into the education sector may fragment a system already under pressure and challenge

the delivery of a set of almost universal rights (the right to education). However, a more limited version that introduces new private sector education providers into the sector may provide a way to achieve greater efficiencies. Restricting those new entrants to a highly regulated and supported set of well-managed operators can reduce risk and may complement the existing system in novel ways.

Conclusion

I have outlined the drivers for change in the education sector as shrinking budgets and the greater importance of vocational education as a national strategy for delivering skills development. The chapter then proceeded to define and discuss contestability in the VET sector with particular reference to the changes in the VET sector in Victoria and South Australia and the proposed changes in Queensland. Change initiatives within these structures were analysed to determine how the government may seek to implement a program of education reform under a contestability regime. An examination of the possible consequent education structures and the management frameworks required to deliver the new agenda indicated that private education providers need to meet high-quality requirements so that the system is protected against the costs of business failure.

The Victorian approach opens the VET sector to the most competition, as it has allowed fees to be uncapped, removed the higher government funding differential between private providers and TAFE and phased out funding for meeting community service obligations (Department of Education and Early Childhood Development 2012). Both the South Australian and proposed Queensland models retain public education providers with higher subsidies and community service obligations. Employment relations are more flexible, with the Victorian model moving to individual contracts for employees. All three states highlight the need for greater flexibility in employment types and employment conditions, including span of hours and changes to overtime arrangements.

A fully contestable market-driven model may deliver greater cost savings but not necessarily deliver a more effective education system if private providers do not adhere to good business and education practices or if the business fails. Education is of itself a social good and a right for citizens under the United Nations Charter for Human rights (Article 26). In the charter, technical education is expected to be made generally available by governments. Consequently, education is not simply a good or service that can be traded in the marketplace in the same way as other types of products.

The Australian reviews of VET suggested that the mix of firm or specific technical skills may be delivered better under a market model, as it responds to those who are requiring skills or wish to be skilled. However, international studies found that it is not necessarily imperative to introduce a contestable model in order to meet employers' needs and requirements. A stakeholder engagement model can also meet employers' needs and requirements in skills and training. This approach is demonstrated in the European example and in the United States, where the employer provides a large proportion of the vocational training, offering a direct link to industry-required training.

Other countries have experimented with greater private provision of funding by requiring those who undertake VET to pay a greater portion of the costs, with state-based institutional approaches retained. The United States has adopted a model that brings the employers into the education provider arena along with other businesses, with government only a relatively small provider. Regulatory oversight through accreditation is a major role, and social benefit appears to be achieved through access to student grants and loans.

Innovation, adaptation and greater efficiencies are required in order to deliver VET in a climate of decreasing funding and greater demand, and so new ways of offering vocational education are

required. The 'managed contestability' model was put forward as one option to ensure that market principles delivered efficient services while social balance and equity are preserved.

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Mismatched gears — how federal arrangements hinder the integration of the tertiary education sector

John Ross, *The Australian*

In a perfect world, the federal system could work very well for vocational training, with national and state or territory levels of government pulling together and harnessing their combined enthusiasm and resources for the benefit of the sector. Unfortunately we don't live in a perfect world, and governments' rhetorical support of vocational education and training is often hard to detect in their actions.

In this imperfect world, federalism exacerbates the considerable opaqueness and complexity associated with VET funding and policy development. It makes it easier for governments to claim they're doing their bit to support training, but the other level of government isn't. It makes it easier for the tail to wag the dog: the national government, with a relatively minor proportion of investment, is able to exert disproportionate influence.

It also makes the decision-making process even less transparent. Committees of bureaucrats from the various governments make decisions privately, assisted by consultants' reports that also remain under wraps, with governments able to claim they've 'consulted' because they've talked privately to other governments. Arguably it also exacerbates the tendency for decision-making to be focused in treasuries and premiers' and prime ministers' offices, rather than in education and training portfolios, even though the policy expertise is in the latter.

The tensions play out in VET funding, in policy development, in transparency, in regulation, in institutional structure, in cross-sectoral activities, and in the goals that politicians and educational bureaucrats set for themselves.

Commonwealth funding and administration of VET, an idea supported for years at senior levels, could help to alleviate many of these problems and create a less murky and complex sector. However, the recent High Court ruling on the school chaplains program illustrates how difficult such a goal could be constitutionally, even if the considerable political obstacles could be overcome.

Introduction

In April 2009, when the Council of Australian Governments (COAG) got behind the idea of a national regulator for vocational education, the Australian training community gasped in delighted disbelief.

A single regulator? Everyone had hoped for it, but nobody had really believed it would happen — not even when then education minister Julia Gillard had announced the government's 'aspiration' to move to a national system.

Australia's bewildering VET sector had no fewer than nine regulators: one for each state and territory, plus the National Audit and Registration Agency for some of the multi-state providers. Nine separate authorities, nine interpretations of the standards and nine understaffed compliance divisions struggling to keep watch over burgeoning numbers of colleges. Barely two months after Ms Gillard's announcement, the states and territories had agreed in principle to convert all this into a single national body. It didn't quite match the Bradley Review (2008) recommendation for a single tertiary education regulator, but it was a hell of a start. It seemed too good to be true.

Unfortunately, it was. The inevitable cracks appeared. Not just from Western Australia playing its familiar Canberra-is-a-foreign-country game, but also from Victoria, which, until then, had been in lock-step with the federal government on VET reform. By November it was clear that Australia would have not one VET regulator, but at least three. For two states at least, no amount of duplicated effort was worse than ceding control.

While comprehensive national regulation remains elusive, so far at any rate, many people in the VET community would like to go much further. They'd happily hand over the whole VET box and dice — resourcing, administration and policy as well as policing — to the federal government.

It's an idea that dates back at least a quarter of a century. It was floated in former education minister John Dawkins's green paper on higher education in 1987 and supported by former Prime Minister Paul Keating in the early 1990s. The Howard Government's National Commission of Audit proposed a national VET takeover in 1996 (see James 1996).

More recent advocates include former Queensland Premier Anna Bligh. In 2008 she wrote that giving the Commonwealth sole responsibility for VET and universities would be 'a major step in delivering the skilled workforce we need as a nation. It would significantly improve the efficiency of our university and VET providers and reduce red tape and major duplication in financial and performance accountability requirements of the state and federal governments'. More recently Holmesglen Institute CEO Bruce Mackenzie suggested a Commonwealth takeover of Victoria's four biggest standalone TAFE institutes. They could become the core of a new national skills system, he said, leaving the state government to devote its funds to smaller metropolitan and regional institutes.

In a perfect world, such slicing and dicing wouldn't be necessary. The federal system could work very well for VET, with national and state or territory levels of government pulling together and harnessing their combined enthusiasm to produce a well-run, well-resourced and coherent VET sector.

Unfortunately we don't live in a perfect world, and governments' rhetorical support of VET is often hard to detect in their actions. In this imperfect world, federalism becomes a drawback rather than a blessing.

Like mismatched gears, the two different levels of government grind away at each other, creating plenty of noise and sparks but little forward thrust. In the process, they exacerbate the complexity and dysfunction of an already opaque and congested sector.

Federalism provides a smokescreen, enabling governments to say one thing about VET while they do another. It makes it easier for governments to claim they're doing their bit but the other level of government isn't. It makes the decision-making process even less transparent.

These tensions play out in funding, in policy development, in transparency, in regulation, in structural arrangements, in relations with the higher education sector, and even in the goals and objectives which are supposed to give educational sectors their raison d'être: namely, good training.

I explore some of these tensions below.

Funding

It's difficult enough to unpick VET funding arrangements in a single jurisdiction. Programs are wound up prematurely with the money diverted into new initiatives, making it hard to distinguish 'new' funding from the 'old'. Moreover, a huge proportion of VET funding is spent on complementary arrangements such as tax exemptions and employer incentives.

Add another jurisdiction to the vortex, and the picture becomes even more chaotic. Canberra sometimes claims credit for entire programs that in reality are co-funded by states and territories. The states claim kudos for projects when all they're doing is allocating Commonwealth money.

Press releases churned out by long-suffering government media officers create an impression of regular funding injections. In reality, the same grant can be given the government publicity treatment two, three, four, even five times: once when the federal government announces the program; again when the state government announces who's getting the money; again when the project starts; again when some magic enrolment figure is reached; and again when it's all completed.

This smoke and mirrors can work well between governments that get on with each other. When they don't, the picture becomes less harmonious — but no clearer.

The current stoush between the federal and Victorian governments is a case in point. When Labor governed both jurisdictions, they endorsed each other's VET policies to the extent that Canberra dubbed Victoria a 'reform state' and granted it untrammelled use of national partnership funds. With the Coalition now in charge in Victoria, that common ground has morphed into conflict. The federal government is loudly critical of the outcomes of Victoria's skills reforms, even though it supported those reforms in their early days. At the time of writing (mid-2012), the two sides are taking pot shots at each other through staged media events and press releases. Each side claims its record VET investment is being undermined by the other.

The dispute has also broadened to include Queensland, where an industry-dominated taskforce's draft report has recommended a dramatic overhaul of TAFE institutes — including closure of almost half of the campuses — and New South Wales, which has slashed its vocational training budget by over $130 million in successive cuts during 2012. Queensland also cut some $79 million from its training budget in its September 2012 Budget.

In one sense, the squabble is doing VET a favour by adding fuel to the intense media coverage of Victoria's 2012 budget cuts. VET normally lives in a media rain shadow, starved of the attention given to schools, for example. While excessive media coverage can lead to knee-jerk policy upheavals — think international education, or asylum seekers for that matter — being in a media blind spot can be just as detrimental. Governments can cut funding as much as they want or need, shielded by media and community indifference.

Jim Davidson, a former deputy secretary of the federal education department, believes exclusive Commonwealth funding could provide the kudos to help reverse this. 'It's only by putting vocational education in its rightful place alongside higher education, with funding through a national system, that you will ever see it get the status and position it needs', Davidson said in an interview with *Campus Review* (Ross 2010).

> The Commonwealth is the only entity that really has the funding power. With the pressures on state governments for funding, [VET] inevitably falls to a second level of priority against schooling.

But in the current multi-jurisdictional funding system, the dispute between Canberra and Melbourne is adding little clarity to the muddy world of VET resourcing. It's hard to confirm either side's claim that it's spending more than ever on VET. The only firm conclusion one can draw is that both sides are consistently reducing funding rates on a per-student or per-contact-hour basis.

This paradox — reduced funding rates within an overall increase in the training funding envelope — is nothing new in tertiary education. 'Whilst nominal funding for higher education and VET continues to increase, evidence shows that base funding for universities [is] well below 1994 levels and VET funding per hour fell by 14 per cent between 2006 and 2010 on 2010 prices', the new Australian Workforce and Productivity Agency reported in July 2012: 'In VET especially, continuing decline in funding per student contact hour is likely to affect quality and support for individuals with major learning needs'.

Real recurrent funding for VET declines from one year to the next in most jurisdictions. VET is the only educational sector in which governments regularly claim credit for driving costs down.

Policy development

Notwithstanding this constant slide to the bottom, the states and territories remain the main funders of VET. The Commonwealth contributes less than a third (Productivity Commission 2012, chapter 5). But it buys plenty of influence with its 32%, frequently imposing substantial policy shifts.

RMIT University policy analyst Gavin Moodie observed in 2009 that the Commonwealth had 'significantly influenced' major VET policy changes. These included competency-based assessment, national training packages, compulsory contracting, the establishment and subsequent closure of the Australian National Training Authority and the introduction of Australian Technical Colleges (Moodie 2009).

Like an absent landlord, the Commonwealth asserts its will by proxy. It attaches conditions to the funding it allocates to the states and territories, effectively overriding their obligation to consult their own citizens about policy changes. As Moodie (2009) noted: 'By the time an issue is included in a funding agreement or agreed at COAG it has been mostly determined: there is little if anything that a state or territory government can consult on'.

These COAG funding negotiations are often preceded by a bit of bluster, particularly from state governments of a different political hue. State and territory ministers, playing to a parochial audience, vow to oppose the federal government's policy direction before inevitably knuckling down when dollars are at stake. In 2012 the bluster also worked the opposite way, with the federal government threatening to bypass the states if they didn't fall into line.

Several weeks before the April COAG meeting, federal Tertiary Education Minister Chris Evans threatened to withhold up to $9 billion in VET funding if the states and territories didn't sign up to the Commonwealth reforms. He suggested the money might flow instead to a program modelled on the National Workforce Development Fund, a Commonwealth program that funds companies and enterprises to train their own staff.

'We will use this industry-led funding model to ensure individuals and business do not miss out on their training entitlement if [state] governments baulk at reform', Senator Evans told the National Press Club (Evans 2012). 'Our clear preference is to work in partnership with the states to deliver these critical reforms but we cannot afford to have our training effort stymied.'

Senator Evans was probably as unlikely to act on this threat as the states and territories were unlikely to 'baulk' at his reforms, which they duly agreed to, of course. But if Senator Evans had made the fundamental change he was proposing, he would have been replacing a comprehensive training system for all Australians — including the unemployed and disenfranchised — with a narrow system catering mostly to employed people and exclusively to their employers' needs.

The Commonwealth inevitably gets its way in these national negotiations. But the Council of Australian Governments isn't the only opportunity for it to throw its weight around. Sometimes it can orchestrate U-turns in states' policies simply by making them offers they can't refuse. For example, in 2008, the federal government offered the states vague promises of funding windfalls under its new Productivity Places Program — but only if they kicked in up to 40% of the costs. A confidential paper circulated within Queensland's then Department of Education, Training and the Arts (Leckenby 2008) illustrates the difficulty this created for states. Queensland stood to gain an extra $294 million in federal funding, but only if it found a previously unbudgeted $235 million. The solution? Take it out of the TAFE budget, of course. Of 11 strategies outlined, the only approach considered likely to release the required $235 million involved 'budget re-directions from current programs'.

Essentially, this would involve diverting dedicated TAFE funds into a competitive program, which private colleges had a history of dominating. 'The financial impact on the operations of TAFE institutes will … need to be considered', the paper cautioned. 'Significant reductions to VET Revenue General over a relatively short period of time could have the result of creating operating deficits within these institutes' (Leckenby 2008).

Four years on, with operating deficits now reasonably commonplace in Queensland and Victorian TAFE institutes, the federal government is more circumspect about its advocacy of competitive VET funding policies.

It insisted that its latest great big funding carrot — $1.75 billion under 2012's National Partnership Agreement — didn't require the states to open their mainstream training funds to private competition. 'We'll leave that decision to the states', said a spokesman for federal Tertiary Education Minister Chris Evans (cited in Ross 2012a). However, a common English reading of the agreement, which established a guaranteed national training 'entitlement' up to certificate III level, suggests otherwise. It dictated that the new entitlement must be 'accessible through any registered training organisation, public or private, which meets state-based criteria for access'.

At the time of writing, most states appear to have interpreted this as a requirement for contestable funding — an approach not without risks, as Victoria's open training market has shown. While enrolments have ballooned in many cheap-to-run courses, the cost has exceeded expectations by a reported $400 million a year and relegated TAFE institutes to minority provider status, pushing some to the brink of financial non-viability.

Victoria has reportedly warned other states off adopting its contestable approach after blowing its training budget to pay for an explosion in training of sometimes dubious quality and even more dubious labour market relevance (Dunckley & Mather 2012).

The Australian Workforce and Productivity Agency, formerly Skills Australia, has also cautioned states against adopting Victoria's approach until they have better regulatory and quality frameworks. 'Skills Australia has supported the introduction of demand-led funding but considers that it should have been delayed until effective quality assurance and external validation of assessment is in place' (Australian Workforce and Productivity Agency 2012).

> It is also recommended that governments will need to guard against an over or under supply, through caps on student enrolments and incentives based on occupations in need. The impact of demand-led funding on the supply of skills needs to be monitored to ensure that individuals are gaining useful education and skills, and that industry is able to recruit the skilled workers it needs.

Nevertheless, unable to resist the magnetic pull of hundreds of millions of dollars in federal funding, most states — Victoria, South Australia, Queensland and Tasmania, at any rate — appear to be charging down the contestable path.

The exception so far is the Northern Territory, which has declared that its entitlement places will only be available at its public VET providers, namely, the dual-sector Charles Darwin University and Batchelor Institute of Indigenous Tertiary Education (Ross 2012b).

While this approach avoids the pitfalls highlighted by the Australian Workforce and Productivity Agency, it raises questions over whether any form of contestable funding at all will now be possible in the Northern Territory; for example, user choice funding for apprenticeships and traineeships, which has been around for a couple of decades. If every territorian is entitled to a 'first' certificate III and the government has ruled out private provision of these entitlement courses, how can apprenticeships (which are mostly certificate III) be delivered by private providers? Are apprenticeships not entitlement places?

Early rorts of the user choice program were cleaned up and for years it has operated without the types of problems that have recently become evident in Victoria. The Australian Council for Private Education and Training said more than 90 private colleges in the Northern Territory received government training funds (Ross 2012b). The territory's Labor Government, which has now been replaced by a Country Liberal Government, never revealed whether user choice training would be swallowed by the new entitlement model.

The federal government's ambiguously expressed approach to contestability may be forcing the states and territories into an all-or-nothing scenario. Either they embrace full contestability, with all its well-publicised dangers or they eschew all forms of contestability, including the more limited forms — user choice and the Enterprise Based Productivity Places Program — that appear to have worked quite well.

Transparency

Notwithstanding this ambiguity and the arm wrestle over funding, the federal government deserves credit for disclosing its intentions in advance of this year's negotiations. Senator Evans acknowledged that this had been far from usual practice, which had involved Commonwealth and state public servants meeting 'in what used to be smoke-filled rooms … to batter out a deal' (Senate Standing Committee on Economics 2012). 'They [would] all come out and claim victory … without much input from others', he said.

No doubt Senator Evans is sincere in his desire to shine light into the darkest corners of national VET policy development, a process typically conducted behind closed doors by a group of high-ranking public servants known as the National Senior Officials Committee, or NSOC. This group issued no pre-meeting agendas or post-meeting communiqués. Stakeholders had little opportunity to influence its decisions, or even to find out what it had decided.

Arguably, things have improved. The National Senior Officials Committee is now the administrative arm of the new Standing Council on Tertiary Education, Skills and Employment. The secretariat assisting these bodies is trying to improve transparency, keeping the media more informed about developments.

But on the minus side, the establishment of the Standing Council is part of a wider process that has distanced ministries and their senior bureaucrats from the decision-making process. Ministerial councils have been converted into standing councils of the Council of Australian Governments. Their major focuses are now COAG's 'strategic themes', not priorities determined by specialists.

The Council of Australian Governments remains as opaque as ever. 'The council's agendas, discussion papers and minutes remain secret', notes Gavin Moodie. 'The only announcement of its decisions is a communiqué of one and sometimes two pages, usually expressed in vague and ambiguous terms' (Moodie 2009).

Headline issues like the National Disability Insurance Scheme might get a working over in the media before a COAG meeting, but VET is rarely a headline issue. 'State governments [can] consult on their skills plans … within the parameters already set in secret with the Australian Government', commented Moodie. 'The consultation is limited and processes are not very open: submissions are not always made public, public hearings are not always held and government responses to submissions aren't always full and frank (Moodie 2009).

Moodie has described the result as a 'democratic deficit'. The Commonwealth doesn't consult on VET policy because it's not its direct responsibility, and the states don't consult on policy principles because they've already been negotiated in secret with the Commonwealth and the other states. Moodie (2009) has also highlighted the dearth of public reviews of VET, which hasn't been the subject of a major examination by the federal government since the Kangan Report of 1974, a period that has seen five influential reviews of higher education.

The Rudd Government consulted to a degree on its 'Skilling Australia for the future' VET discussion paper, which proposed the establishment of Skills Australia and the Productivity Places Program. The government invited submissions, which it subsequently summarised in a 'feedback report'. But there was no final report or white paper; instead the government simply went ahead and implemented its original proposals.

Compare this with the treatment of higher education, an area that the federal government effectively controls exclusively. The last comprehensive review, led by Denise Bradley, was conducted by an expert panel, which published the submissions it received and released its own independent report in December 2008. The government responded formally the following March, and more comprehensively in the May federal Budget. And the Bradley Review included detailed recommendations that have enabled observers to keep a running tally of the proposals the government has adopted and those it has ignored.

Why such a different approach? It would be silly to blame it all on VET's multi-jurisdictional reporting lines. Clearly there are many reasons why vocational education and training isn't taken as seriously as higher education. But exclusive Commonwealth control certainly wouldn't hurt. When the federal government has its hands on all the levers, the consultation appears thorough and genuine. When the levers are shared, consultation becomes sketchy. Governments are able to claim they've 'consulted' because they've talked privately to other governments.

VET policies are set by committees of bureaucrats making decisions privately, assisted by consultants' reports that also often remain under wraps. Those that are revealed can have a made-to-order feel about them. It can be hard to tell whether consultancies have been chosen because of their policy leanings, or whether they've sniffed the air and dished up the report they understand to be required. And the unseen hand of Treasury is also evident, reining in any untoward spending.

Of course, Treasury can be a major restraining factor within single jurisdictions such as Victoria, for instance. The state's bean counters applied the handbrake that compelled the training portfolio to adopt the controversial 'eligibility criterion', which forces retraining students to pay full fees for courses at the same or lower levels as their existing qualifications. More recently, Treasury imposed harsh spending restrictions on the skills ministry in the 2012 Budget, including the removal of 'full service provision funding'. This led to funding cuts that have devastated TAFE institutes and private colleges alike.

In a federal system, with nine treasuries to deal with, policy developments are shackled by funding limits that are miserly at best. This year, for instance, the Council of Australian Governments agreed to guarantee an 'entitlement' to people's first qualifications at certificate III level only. This constitutes little change on previous practice, especially given the federal government's claim that contestable funding isn't necessarily part of the deal. Arguably it offers people less than they had before, because 'firstness' wasn't previously part of the equation.

The puppet master influence of Treasury is exacerbated in a federal system already structured around the Council of Australian Governments. Decision-making is focused in the offices of chief ministers and their chief bean counters, not in education and training portfolios, where the policy expertise resides.

Regulation

We've already looked at the push to establish a single national VET regulator, and how it unravelled to leave three separate regulators. In fact there could have been four, after Queensland's new Liberal National Government refused to rubber-stamp its predecessor's agreement to refer the state's VET regulatory powers. The Newman Government eventually agreed to play ball. But its referring legislation included an escape clause allowing the state to withdraw the referral 'quickly and effectively' if it felt the need to do so (Ross 2012c).

This suggests that national VET regulation could unravel further if Queensland decides to pursue an opportunity to score political points against the Commonwealth, or vice versa. Indeed, it raises questions over the reliability of any state's agreement to join the national regulator. Will the decision be revisited every time there's a change of government?

Institutional structure

Barely a year ago, dual-sector universities were attracting a lot of interest as a desirable institutional model. Now they're in decline, thanks largely to fluctuating federal—state funding flows.

At the time of writing three of the four Victorian dual-sectors had recently restructured, shedding many TAFE courses — which had been starved of funds by the May state budget cuts — with more eggs being allocated to the higher education basket. At least two of them plan to establish separate trades colleges, possibly paving the way for their entire TAFE divisions to be reduced to old-style

'techs'. The remaining Victorian dual-sector, RMIT University, has also flagged course and staff cuts and fee increases.

Meanwhile, proposed university—TAFE mergers that would have seen new dual-sector institutions established in central Queensland and Canberra have been delayed or dumped — even though the two projects had been promised a combined $100 million through the Structural Adjustment Fund. At the time of writing the central Queensland proposal appears likely to proceed, but there will be no dual-sector university in Canberra in the foreseeable future.

Regional and institutional politics have been largely responsible for hampering both projects. But funding settings have also been a significant impediment, particularly with the Canberra proposal. An enormous federal funding carrot, it seems, isn't enough to overcome either institutional jockeying or state qualms over the inherent instability of TAFE funding.

Australia is supposed to be embracing an integrated tertiary sector and seeking new ways to encourage new types of students to obtain degree-level education. Many observers have considered dual-sector institutions a great way of achieving these goals. Now their future is under a cloud, thanks once again to the federal—state arrangements that have always made life particularly difficult for dual-sector universities.

Higher education

The new demand-driven higher education system has also been skewed by federal—state funding flows. Late last year the federal government removed foundation programs, diplomas and associate degrees from the uncapped higher education system, ostensibly to prevent VET institutions from haemorrhaging students to expanding universities.

But many commentators believe the real reason was to protect federal coffers, not VET colleges, by preventing Victorian dual-sector institutions from 'shifting load' from vocational diplomas to their more lucrative higher education equivalents (Ross 2011).

Again, state funding arrangements — particularly in Victoria, where diploma funding has been slashed — were regarded as the real problem. Federal rules dictating universities' choices were being constrained by state policy settings.

Aspirations

We've seen plenty of examples of federal—state tensions hampering progress towards tertiary education goals. But more fundamentally, the two levels of government can't even agree on the goals.

The Bradley attainment target, adopted by the federal government in 2008, is now the overriding aspirational driver for the higher education community. It requires an ambitious jump in the proportion of the population — in this case, 25 to 34-year-olds — with higher education qualifications by the year 2025. Tertiary institutions are responding to the call, citing the Bradley target as the reason for new campuses and courses, partnerships and pathways.

Meanwhile a COAG target, set separately by the heads of the Commonwealth, state and territory governments, goes almost unnoticed. It mandates a doubling of diploma completions between 2009 and 2020.

These two targets don't have to clash. Students can complete diplomas on their way to higher education qualifications. But many will undoubtedly bypass diplomas as uncapped universities welcome them with open arms, particularly given that the federal government has reimposed caps on funding for diplomas. Every step closer to the Bradley target is likely to be a step away from the COAG target.

They're only targets. They're enumerations of policy, not the underlying reasons. But contradictory targets can play out in contradictory policy development, encouraging tertiary institutions to work at cross purposes.

Few expect the Council of Australian Governments' target to be achieved, with the COAG Reform Council reporting snail's pace progress. Some commentators also believe the Bradley target, once considered a shoo-in, may be very difficult to achieve, although recent data from the Longitudinal Surveys of Australian Youth provide grounds for optimism. Nevertheless, a single target might have better prospects. And a tertiary sector controlled by a single level of government would be unlikely to set such conflicting goals.

Conclusion

All in all, the tertiary sector could save itself a lot of heartache if it stopped sitting on the fence and committed itself fully to a single level of government, ideally federal. Everyone I've interviewed on the subject — in over four years reporting on tertiary education — would like a Commonwealth takeover of VET. Most would like to see all occupational licensing handled at the federal level, too.

But how realistic is such a prospect? The clumsy VET regulatory arrangements illustrate the political obstacles. Even if most states and territories desire a Commonwealth takeover there will always be one or two dissenters. They'll claim the Commonwealth is out to rip them off or doesn't understand their particular needs. They'll assert states' rights. No doubt there will also be plenty of vested interests advocating the status quo — the myriad state-based bodies that would lose their raison d'être in a Commonwealth-controlled VET system.

And while it has established substantial Commonwealth VET programs, the current federal government has displayed no appetite for a complete takeover of VET — unlike the Keating Government.

And even if the considerable political obstacles could be overcome, the June ruling on the school chaplaincy program illustrates how difficult such a goal could be constitutionally. In a majority decision, the High Court declared the funding agreement for the program invalid because it overreached the Commonwealth's constitutional powers. The decision cast doubt on the legitimacy of other areas of federal funding, including education.

Parliament has since passed legislation to secure the legal base of hundreds of Commonwealth programs. But the University of Melbourne's Professor of Higher Education, Simon Marginson, said the High Court ruling had reversed a decades-old 'drift to Canberra', which had seen a cashed-up Commonwealth making inroads into a whole range of traditionally state-controlled areas — either through state handovers of control, as with higher education, or by asserting 'direct executive power' in lieu of legal authority (Marginson 2012).

According to Marginson: 'Under a federal constitution, especially when law and practice are out of whack, there is always ambiguity and potential conflict. 'Each successive High Court case can move the role of Canberra forward or back.' Professor Marginson claimed the finding could lead to the unwinding of Commonwealth authority over higher education. At particular risk was the contentious

Tertiary Education Quality and Standards Agency: 'Critics of TEQSA's looming authority may be emboldened to challenge the [Higher Education Support] Act' (Marginson 2012).

Given all this, how confident can we be that a Commonwealth takeover of VET would stick? Governments may not necessarily have the last word on the matter.

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A precipitate proposal – a participant's view of structural discussions in post-secondary education

Adrian Marron, Canberra Institute of Technology

> We know what we are, but know not what we may be. Shakespeare

This piece is a subjective reflection on a period from 2010 to 2012 when consideration was being given to the future forms of public post-school education in the Australian Capital Territory. The views expressed are from the writer's perspective as a main participant.

Background

The University of Canberra is a self-governing higher education entity originally created by Commonwealth legislation and transferred to ACT legislative jurisdiction in 1996. In 2009 it had undergraduate enrolments of approximately 11 100 students and nearly 3000 postgraduate enrolments.

The Canberra Institute of Technology, established under an ACT Act as a statutory authority, is primarily a VET public institution and manages the major component of the ACT's VET commitment. It also delivers higher education qualifications in its own right and in partnership with universities. In 2009 the Canberra Institute of Technology had approximately 27 000 student enrolments.

In early 2011 the notion of Canberra as the Learning Capital was in the forefront of ACT Government post-secondary education policy thinking. A focus of concern was the future structural relationship between the Canberra Institute of Technology and the University of Canberra. There were two stimuli: the ACT Tertiary Task Force report *Learning capital* (2011), which included the recommendation that 'CIT and UC investigate new ways to collaborate, based on robust business planning and supportive evidence', and the report on the reform of the ACT public service, *Governing the one city state* (Hawke 2011), which included a recommendation that, 'the partnership be further enhanced through the formal marriage of the CIT with UC'.

This provoked the next chapter of a public debate in the ACT, which in one form or another had been around for 20 years. Urgency was added by the renewed turbulence in the Australian post-school environment with the impending introduction of a raft of post-Bradley (2008) measures, especially the lifting of caps for undergraduate university students and the Structural Adjustment Fund for at-risk universities. The VET sector was braced for likely changes in Council of Australian Governments policy for VET, including learning entitlements and greater public funding contestability. National regulatory changes in vocational education and training and higher education, as well as changes in the international student markets, all provided further motivation to examine policy and institutional structures.

At the local ACT level there was a view that as each institution responded to the times local competition could increase and thus militate against the conviction of the 'public good' being best served by collaboration.

There was also the view that governments tend to have: that mergers bring economies of scale and better alleviate local skills shortages (Lang 2002). This view was generally supported by the business community. The Canberra Business Council submitted to the Hawke Review that he 'investigate the coming together of parts of the University of Canberra and the Canberra Institute of Technology … There are substantial opportunities in more closely aligning UC and the Canberra Institute of Technology — economic, educational and administrative' (Canberra Business Council 2010).

To help navigate through this, the ACT Government commissioned Emeritus Professor Bradley to provide advice to it. Her task was to present advice to the government on the opportunities for greater collaboration between the two institutions, up to and including amalgamation, and ultimately present a preferred model for the next decade.

In July 2011 she presented a report, *Options for future collaborations of CIT and UC* (Bradley 2011) with the following recommendations:

1 The ACT Government establish a dual-sector university formed from an amalgamation of the Canberra Institute of Technology and the University of Canberra by 1 January 2012. The amalgamation should proceed, underpinned by the following:
   - respect and value accorded to the unique characteristics of each partner
   - respect and value accorded to the values, culture and traditions of each sector
   - understanding of and respect for the strengths each will bring to the new institution.

2 If the ACT Government elects not to amalgamate the institutions it move to establish the Canberra Institute of Technology as a body with levels of independence similar to those of the Victorian TAFE institutes by 1 January 2012.

In response, the Minister of Education and Training in the Australian Capital Territory, Andrew Barr, told the ACT Assembly that 'Professor Bradley is very firm in arguing that the new institution needs to be formed on the basis of three important principles: firstly, respect and value accorded to the unique characteristics of each partner; respect and value according to the values, cultures and traditions of each sector; and, importantly, an understanding and respect for the strengths that each would bring to a new institution. It is clear that any marriage between UC and CIT must be the coming together to two equal parties to form a new institution' (ACT Hansard 2011).

In August 2011 the ACT Government established a period of public consultation and set up a steering group to guide this process and to produce a final report. In late 2011 they recommended a third way, a new third entity to be owned in a partnership between the University of Canberra and the Canberra Institute of Technology for the purpose of delivering AQF levels 5 and 6 programs.

On 16 December 2011 the ACT Government indicated a preference for encouraging greater collaboration between the Canberra Institute of Technology and the University of Canberra through a new entity with the working name, University of Canberra Institute of Technology, rather than a merger.

Almost five months later, on 1 May 2012, it was announced by Education and Training Minister Bourke, that due to the new COAG agreements and the VET National Partnership Agreement, 'further work on collaborative arrangements between Canberra Institute of Technology (CIT) and the University of Canberra (UC) [have] been placed on hold' *(*ACT Hansard 2012).

Imagining structural models — a Canberra Institute of Technology perspective

In response to Hawke the University Council adopted a position which laid out a number of principles that would need to be adopted for the university's participation in the merger. They included:

- The ACT Government must announce before the end of November 2011 that it will introduce legislation to bring the Canberra Institute of Technology into the University of Canberra with effect from no later than 1 July 2012.
- Section 8 of the *University of Canberra Act* should be amended to include the Canberra Institute of Technology as one of the constituent parts of the University of Canberra.
- All functions of the Canberra Institute of Technology should be transferred to the University of Canberra.
- Those assets which are to form part of the enlarged University of Canberra should be transferred to the University of Canberra's balance sheet on 1 July 2012.

The Canberra Institute of Technology was more circumspect, in no small measure because of the different governance arrangements and being wholly owned by the ACT Government. It had a view that the work to be undertaken in responding to the Hawke Report *must* be able to demonstrate that any changes would expand and enhance the missions of both the VET and higher education sectors.

During the second half of 2011 there was an imperative to imagine what a model of a new institution might look like. Taking the cue from Bradley and the experiences of others, the Canberra Institute of Technology imagined a model of a new university institution which was unconstrained and that had the potential to be greater than the sum of its parts. Daniel Lang in a paper on cooperation in higher education (Lang 2002, p.20) identified five paradigms that stretched from 'consolidation to necessity'. Using this idea the Canberra Institute of Technology gave attention to Bradley's first recommendation, which was a consolidation model, whereby 'two institutions come together to form a new third institution' (Lang 2002, p.40).

Consolidation – an 'infusion' model

In this proposal the educational goal of the new institution would be based on three integrated components: research, industry and student expectations and experience. As these components come together to form innovative, industry-responsive, integrated learning environments, the new institution would be infused by them and could begin to create a unique place in the tertiary education landscape.

Each institution would bring different strengths to the consolidation model: the Canberra Institute of Technology offered its industry relations, industry focus and, through its mission, applied learning aimed at preparation for and integration in the workforce. The institute had the infrastructure to support this.

The University of Canberra's strengths were located in practice-led teaching at undergraduate degree level, research and the importance of research as underpinning knowledge for curriculum and innovation. The university was also developing an increasing responsiveness to industry in preparation for a new curriculum and had a growing infrastructure.

This new type of institution would have the opportunity to bring together knowledge, skills development and innovation. Alone, the VET system struggles to do that, even though the ability to transfer and apply skills to new situations and contexts is part of VET qualifications. Similarly, the university research focus and the acquisition of knowledge at university level can often be disconnected with industry. As outlined in the NCVER innovation research readings (Curtin, Stanwick & Beddie [eds] 2011), from the innovation perspective, both knowledge and skills are required to undertake work and to purposefully change how that work is done.

These two aspects could come together in an institution which is integrated from AQF levels 1 to 10. This institution places the student experience at the centre of a model in which new curriculum can emerge to meet industry needs for innovation. One aspect of this model would be products from AQF 6 and 7, with some inclusion of AQF 5, the aim being to develop fundamental knowledge and skills for a workforce able to be innovative in the future. This model could also be attractive to an international student, where the current focus of VET in developing Australian industry-specific skills and the lack of applied focus in university have both been challenges.

The curriculum could respond to a particular industry innovation demand and thus blend the above, meaning that an 'innovation derived perspective on knowledge and skills' is formed. This blend of learning, which is applicable to the workplace learning based on scholarship and reflection, creates an 'infused environment' built on many capabilities.

Thus there would be an opportunity to develop approaches to course design around the ideas of capability, an all-round human quality that represents 'the confident and mindful application of both current and potential ability (competence and capacity), and values within varied and changing situations to formulate problems and actively work towards solutions as a self-managed learning process' (Cairns 1997, cited in Malloch 1999) and the concepts of building learning power (Claxton 2010).

This model would build students with a broad range of critical skills for different workforce environments. Students would have opportunities to develop attributes, knowledge and skills that are industry-responsive and relevant through applied learning contexts, workplace learning, work-integrated experiences and research-infused curriculum.

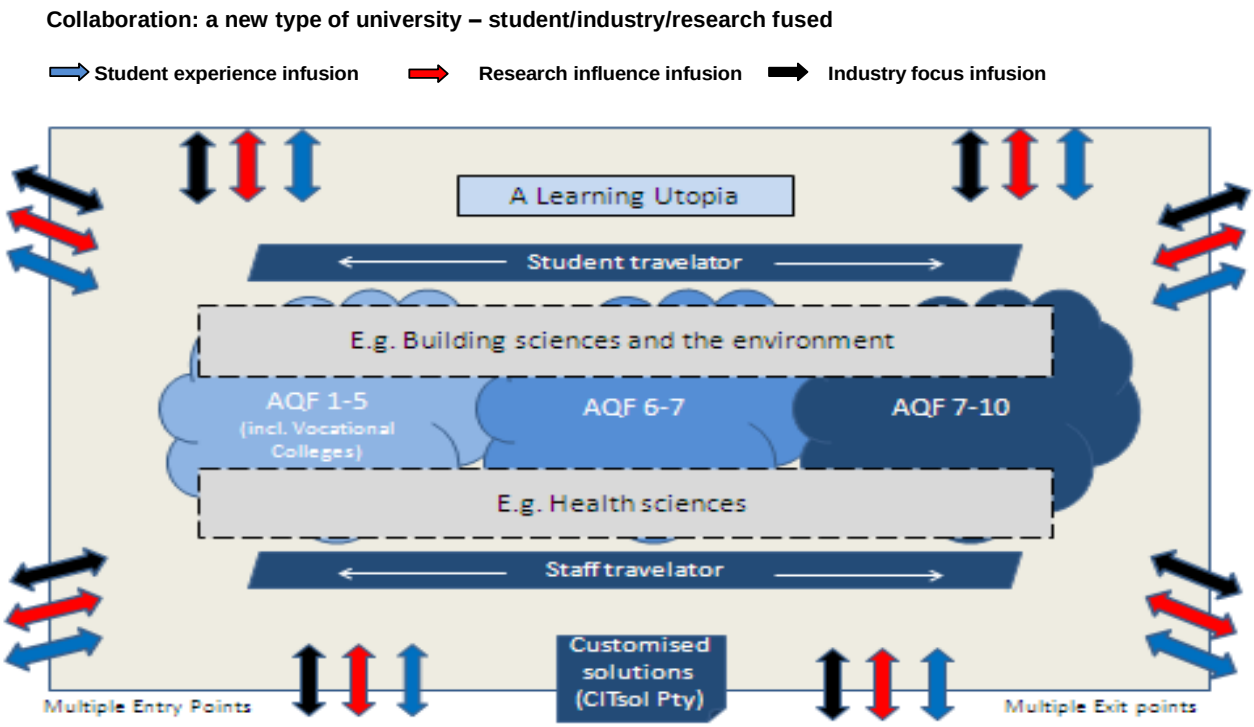
Teaching and learning could be integrated in a more holistic approach to student development and experience. Research in effective teaching of young and more mature adults would be essential in this model as well as discipline-based research. The Canberra Institute of Technology teacher who is industry-responsive, energetic and committed to learning and education will work alongside academics who bring strong curriculum knowledge of teaching disciplines and research-based understanding.

An image that was used to describe this concept was one of a two-way travelator (see figure 1), for students and for staff, which captured the idea of students entering at any part of the Australian Qualifications Framework and having a clear view of the possibilities in the discipline they have entered, for example, health sciences or building and the environment. They would have opportunities to systematically move along the travelator, acquiring skills and earning qualifications as they went. The two-way nature enables students to move both ways; those with higher education

entry move along and pick up VET qualifications and or skills. This approach could play a leading role in the inevitable evolution of qualifications and curricular structure. Customised commercial training and education solutions would be provided by the existing private company.

The second of the travelators was for staff, so that a master's student in engineering, for example, could experience as part of their course a practical class from the VET domain that could support his study. This could also work in reverse: there would be benefit in higher education lecturers presenting to VET AQF 5 and 6 students and to trades areas.

Figure 1 Consolidation: an 'infusion' model



Research with existing dual-sector universities underlines the difficulties of the interface with current curriculum constructs and therefore the importance of getting the plans right before effecting such a transition (Smith 2011; Zoellner 2011; Watson & Webb 2008). The first steps in this construct would thus require that critical consideration be given to:

- new legislation
- new governance
- new identity
- mutual respect
- mutual sectoral knowledge
- proper transition planning
- commitment to innovation
- regard for context
- building a new culture
- trust building.

This was an unconstrained and aspirational model and there would be challenges to be overcome. However, there was a clear opportunity to learn from the experiences of the older dual-sector institutions, avoiding pitfalls and creating a next-generation institution. The relative sizes of the Canberra institutions and their geography offered the potential to do just that. The products could be constructed for the context and audience from the outset.

An alternative – the 'cooperative autonomy' model

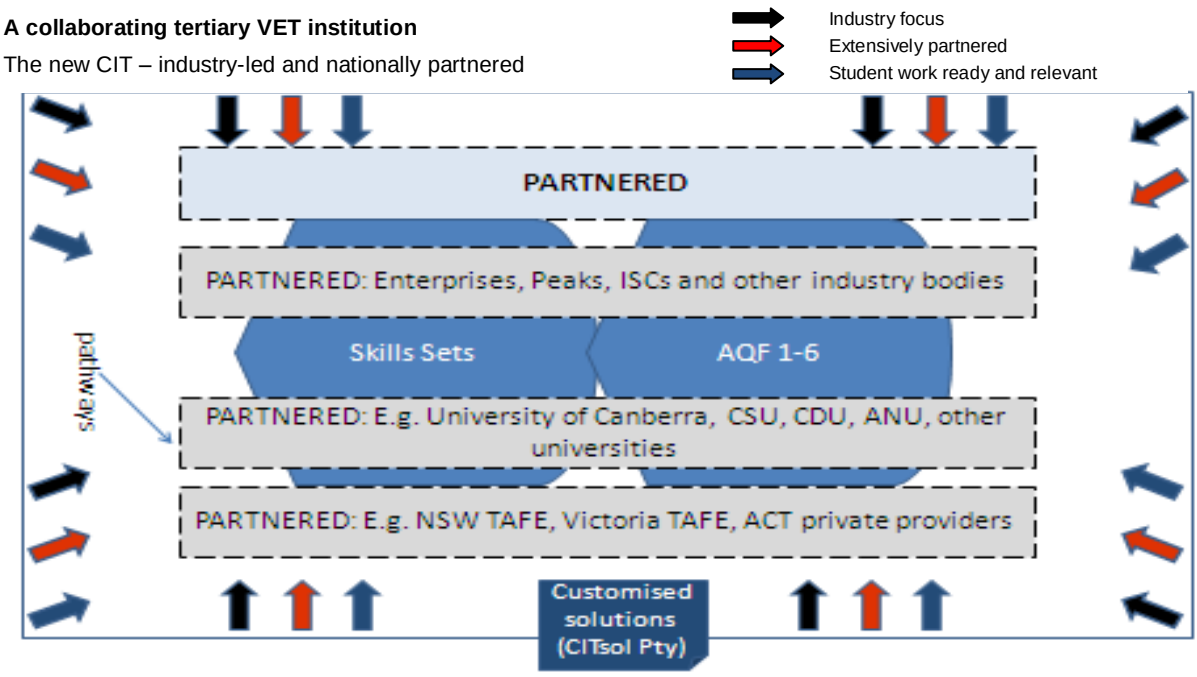
It was important to also sketch an alternative approach for the Australian Capital Territory if the merger was not going to occur, to assure the position of the Canberra Institute of Technology as a stand-alone VET institution preparing people for work or further educational pathways.

In this model the educational vision is a form of 'cooperative autonomy' (Lang 2002): an autonomous public education organisation, servicing both industry and community needs at local levels, forging national industry partnerships, meeting access requirements, whereby individuals can engage in supported learning environments, and collaborating with the University of Canberra and other universities for greater student pathways and innovative programs.

In this educational vision the Canberra Institute of Technology would be clear that its educational purpose is at the sub-degree level.

The educational goals were to ensure that learning is applied and students exit the learning environment workforce-ready and with further learning choices. This would occur by continuing strong links with industry and utilising teachers who are industry-experienced and also qualified adult educators. Mature learners who wish to go onto further study could be equipped through eLearning and workplace approaches for distance learning. This approach could cement an accessible organisation which encourages members of the ACT community to engage with learning, often for the first time, with the provision of appropriate scaffolding to achieve success.

Figure 2 'Cooperative autonomy' model



Younger students would find the supported learning environments of small classes empowering for future study and work preparation. If they were apprentices and trainees, then the workplace learning models supported by the Canberra Institute of Technology's existing practices and focus on eLearning would enable choice over where and when they learn.

In this model the Canberra Institute of Technology would continue its strong relations with schools, recognising the growth of certificate IIs and IIIs in VET in Schools programs and partnering where appropriate.

The Canberra Institute of Technology would work in partnership with the University of Canberra and its other higher education partners in an efficient and effective contemporary collaborative model, so that products were developed in ways that secured appropriate and timely pathways for students wishing to move between institutions. These would include auspiced third-party delivery arrangements with our higher education partners, joint course developments and joint marketing.

The community aspects of this model can be described as a 'funnel and choice' vision. The Canberra Institute of Technology captures all manner of people in a big sweep, from those who are educationally disadvantaged, to the mature learner who believed studying would not be for them. In gathering these people, the Canberra Institute of Technology continues to provide the supported learning environments that 'funnel' people to work or to educational outcomes such as new careers and more and higher levels of study. In this model the Canberra Institute of Technology would take on some characteristics of an American community college.

As with the earlier model there would need to be key underpinning elements and these include appropriate transition planning and funding.

A third model – a 'half consolidation'

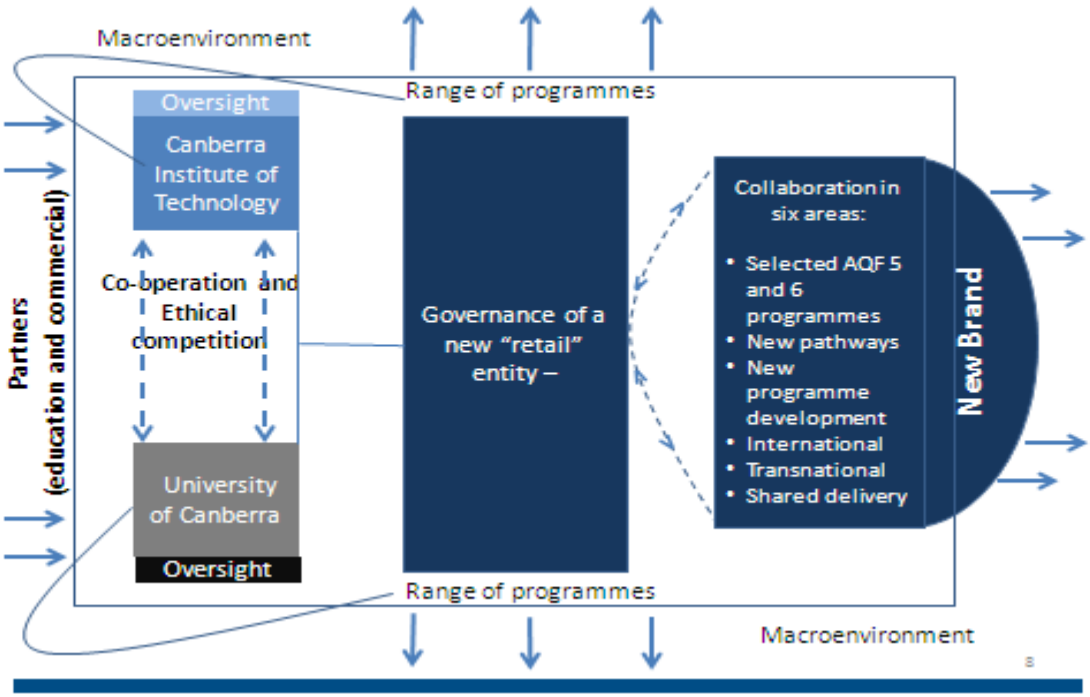
In November 2011 as the idea of a joint venture option emerged, the Canberra Institute of Technology sketched a third model. This model was synchronous with the then recent announcement from the federal government on funding policy directed at vocational education diploma and advanced diploma courses in vocational education and training and the role of the higher education demand-driven funding. The Minister for Tertiary Education, Senator the Hon. Chris Evans, had announced that courses offered by public universities leading to qualifications below bachelor degree level would be subject to annual allocations, agreed between the government and each university. Minister Evans was very clear about the government's desire for 'universities and VET providers to complement each other in the delivery of courses' (TAFE Directors Australia 2011).

Thus the transitions between the educational sectors and the agreed educational goals and business development were to be achieved in this third way through an alliance that would enable research partnerships, as well as jointly planned program development, delivery and pathways between the University of Canberra and the Canberra Institute of Technology. For this approach to be successful it would need to be recognised that both institutions required equal levels of independence.

This environment would establish a set of agreed principles to underpin the educational vision of the collaboration. These principles would centre on the importance of the student experience. Both institutions would need to embed flexible, innovative and responsive programs that enshrine newly structured processes for the marketing and development of programs, pathways and research partnerships.

Research approaches that involve an applied learning approach and a knowledge base are fundamental to developing an ACT environment which can meet the needs of emerging industries and facilitate job opportunities. Similar to the first proposed model — the consolidation model — this collaborative model would have the opportunity to bring together research, knowledge, skills development and innovation.

Figure 3 'Half consolidation' model



Each of the institutions would give the other *first option* for developing pathways for all programs. However, should neither institution not be able to nor wish to take up the options, then each would be able to use their national reputation to establish new tertiary pathways to expand choice for ACT citizens.

An image that seemed to capture this model was the idea of a branded retail entity, established by its owners, with production capacity remaining in the owning institutions but having a shared research and development arrangement. The rationale was that only those products that benefited from the concept would be placed in the retail entity; the University of Canberra and the Canberra Institute of Technology would continue with their own identities and present their own programs.

These models formed part of the Canberra Institute of Technology submission to the ACT Government to stimulate planning for three possible scenarios.

The first model in particular may have had a utopian flavour and it would certainly have needed a very high degree of strategic harmony, patience and the planets aligning to get off the ground. Obstacles encountered included:

- difficulty getting from 'us and them' to just 'us'
- finding a common vision
- regulation — the continuing issue of two regulatory regimes
- funding regimes — the continuing issue of two funding regimes
- student expectations

- educational practice
- industrial practice and industrial agreements
- asset ownership and maintenance
- the confidence of government in regard to risk
- fees
- appreciation of relative histories.

Overcoming these is likely to take considerable time. But developing models is a promising starting point for a common vision to emerge.

The third model was clearly a compromise concept that was always going to be problematic. In the event no new model has been adopted, but the question of collaboration in the Australian Capital Territory is still one being pursued in different ways. Nevertheless, it would be foolish not take the opportunity to identify and learn from the factors that impeded progress on this occasion.

What got in the way?

Distance offers the opportunity for reflection. It is clear now that there are obvious reasons contributing to the inability to achieve an outcome; the problem is that they were less clear then.

The preferred outcome presented by Bradley was interpreted differently by the parties concerned, including the ACT Government. Part of the problem was that a clear articulation of a common purpose was missing. Perhaps all of the players assumed at different times that they shared the same understanding, but the presentation of benefits was seen through the prisms of too many competing primary objectives.

Recent history showed the University of Canberra to be more enthusiastic than the Canberra Institute of Technology about the prospect of merging. But what merging meant to each party was based on quite different mental models: one person's merger can be another person's takeover. From the beginning of this period the media description and the language used by participants often suggested that it was going to be more of an acquisition for the university than a merger.

It was important for the Canberra Institute of Technology, when considering any new scenarios, to ensure the availability and viability of the full range of VET qualifications in any proposal. While pathways are very important, the primary purpose of the institute is to provide learners with skills for employment and life, as well as further education choices. Most of the Canberra Institute of Technology graduates enter employment.

The question of status and what drives the respective sectors was a critical one in relation to stakeholders. In many instances the perception of the Canberra Institute of Technology as simply a trainer of tradespeople prevailed. The importance of having a university to a city is recognised; they can be 'locomotives of knowledge creation' (Gopinathan & Lee 2011, p.290,) and there was often the implicit assumption that being associated with a university would be naturally a better position for the Canberra Institute of Technology. Possibly for some stakeholders the critical mass implied by the merger was the most important driver.

In the experience of both institutions, a lack of understanding of each other's sectors, including their motivations, became central issues for staff and students. People working in the VET sector have different drivers from those in higher education, as does the student cohort — not better, only

different. Despite our protestations to the contrary, we were woefully ignorant of each other's sectors and this made it hard on many occasions to do the wise thing and all too easy to take the wrong path.

This lack of broad understanding of the difference between technical and further education and higher education in terms of curriculum and purpose was exemplified by the assumption relating to diplomas and advanced diplomas: that they are the same, regardless of whether they are VET or higher education qualifications.

The fear of competition between the two entities was also a significant part of the background, expressed by many as a binary — 'collaborate or compete'. In a sense this was odd, since much of public policy seems to place competition as a fundamental component of efficiency and effectiveness. However, because of this fear, it might be argued that decisions were framed in an environment underpinned by shaky assumptions and myths, which had largely been driven by considerable speculation over the duplication of programs at AQF levels 5 and 6 (diploma and advanced diploma) across both institutions. The reality was and is that only about 3% of the Canberra Institute of Technology delivery was in a form that could be described as direct competition.

In short, none of us possessed sufficient understanding of the challenges involved in doing this well. As the 2006 Phillips KPA report on pathways identified: vocational education and training and higher education are governed by different policies and decision-making processes, different curricular structures and imperatives, different drivers, pressures and directions and, significantly, are accountable in different ways. The report recognised these as fundamental differences that provide barriers even to creating pathways (Phillips KPA 2006). What does that mean for something altogether more complex?

Survivability, which was part of Bradley's (2011) reasoning in her report, was also a contested point. Unlike institutions elsewhere in Australia where similar debates were occurring, there was little evidence that either institution was at risk: no one needed rescuing. Both institutions, while not invulnerable, had good recent financial results and were in strong positions. Is fear a strong enough reason to huddle together? We would have argued that the Canberra Institute of Technology is 'a credible and well-resourced institution attracting a healthy share of students seeking relevant post-secondary education' (Gopinathan & Lee 2011, p.289).

In the background there was also a clock running in relation to the university's Structural Adjustment Fund application. Quite understandably they sought to be able to direct their application to the most useful purpose. The question of time led to urgings to make decisions before the essential preliminary work was completed, and attempting to meet unrealistic timelines without the support of proper business and feasibility plans, risk analysis and a common strategic vision proved to be difficult.

Ongoing uncertainty also had other effects: it takes a toll on an organisation and its workers. Cultures are impacted: 'there are limits to the amount and rate of change people are able to assimilate … culture may manage us much more than we can manage it (Buono & Bowditch 1989). This was certainly part of the Canberra Institute of Technology experience.

The whole question was, of course, as much political as it was educational or financial. The longer the debate, the more participants who entered the debate and the more diversity of views expressed. The industrial agreements and future industrial relations were always going to be one of the key challenges, with both the Australian Education Union and the National Tertiary Education Union making submissions on the matter, with the latter saying 'an equal merger relationship is essential to

ensure that a new dual-sector university is more than the sum of its parts' (National Tertiary Education Union 2011).

As for the student bodies, a great deal of blog chatter and a couple of headlines was generated, with the University of Canberra students wondering if their qualification would be less meaningful in a merged institution — but mainly they continued to attend to their studies.

Most of the participants realised that this was, and is, complex stuff. Clearly defining the public good in this space is hard and explaining the worlds we inhabit to those outside is difficult — even more so when there is little time for contemplation and attention spans are constricted by exogenous factors that can alter direction at a moment's notice, for example, a Structural Adjustment Fund bid. What was clear was that all the participants believed they were serving the public good — it was just that there was no comprehensive agreement over what that was.

Gains and lessons

It is of course now obvious that to achieve what was needed was a shared purpose, 'common vision at the top, cultural compatibility, not accepting fudges, speedy implementation' and 'a clear managerial model' (Council for Industry and Higher Education 2001) as a starting base. We needed to do the homework and the hard calculations; we needed a common communication plan and a robust joint negotiating and planning apparatus. Clearly, if the feasibility and business planning are not done, then it is difficult to make a decision that will withstand scrutiny. We also need to ensure that the act of collaborating does not become more important than the outcomes of collaborating.

In this story there are no villains and no one was jilted; there was mainly goodwill as the journey progressed, but in reality when faced with a duty to protect the interests of institutions — even more so when there is some tension between the idea at hand and the legitimate concerns of one's staff, students and institution —goodwill is not enough.

While parity between the institutions in terms of respect sounds appropriate and was very important to the Canberra Institute of Technology, as Lang (2002) notes, there is a tendency to be romantic about 'marriages of equals', which is challenged by institutional realities. This can and did drive tension and in reality was intensified by the different policy and funding regimes. However hard it is change these realities, one might argue that if the country is to truly optimise its post-school education sector, it needs to happen.

What this experience did was to give us an opportunity to imagine futures; they may have been idealistic and even unrealistic, but they gave us the chance to disseminate ideas publicly, identify the obstacles and continue to provide strategic nutrition for the next phase of the Canberra Institute of Technology's journey.

From the perspective of a VET provider, we also learned that consideration of future structural models requires deep attention to some specific critical elements and their future developments. These include the future and structure of government policies in this area and the future of training packages and their number. It also crucially hinges on the basic philosophical approach taken to technical and further education. The reality is that, as Gavin Moodie says, 'Australia is still a long way from an integrated tertiary education policy' (Moodie 2011).

There is no doubt that the Canberra Institute of Technology's future is going to be built on collaboration and we take inspiration from the lessons learned from the work done and from the

models imagined; they are generating the ideas that will take us into the future. A vital part of that future is the relationship with the University of Canberra.

It may be that the difficulties experienced in understanding the VET sector resulted from its now being too complex. Leesa Wheelahan's latest work in this arena suggests that Australia needs a new approach to developing and accrediting qualifications, which includes institutional qualifications (Wheelahan 2012). A simpler approach would be a distinct advantage in building contemporary collaboration arrangements across the sectors. The rigidity of the current system often militates against cooperation.

Perhaps the key lesson learned is, that all things considered and recognising the integrity of the stakeholders involved, negotiations are best left to the organisations themselves. Institution to institution is the only way to determine whether a commonality of vision and value system exist, such that trust relationships are possible and collaboration becomes a realised outcome.

For the Canberra Institute of Technology we will be selectively and carefully promiscuous perhaps, but the result will benefit the community and the clients we serve. At the risk of stretching the metaphor of matrimony we were clearly not enough in love to get married. Next time perhaps it will be romance first and we will not assume that because we have lived next door to our neighbours for some time we know each other intimately!

We also recognise that, as Jane Austen said, 'Happiness in marriage is entirely a matter of chance'!

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The strategic impact of industrial relations among tertiary education providers

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The different industrial relations settings in place in universities, TAFE institutes and private registered training organisations are unlikely to impede increased access to tertiary education. However, as things currently stand, TAFE institutes have fewer avenues to exploit industrial relations flexibility than universities or private training organisations. In terms of industrial relations, the university and TAFE sectors share many similarities. Both are relatively highly unionised and yet highly casualised and both have developed workforce structures embedded over many years in awards and enterprise agreements. By comparison with university and TAFE institutes, industrial relations in private registered training organisations is historically characterised by low unionisation, little regulation and no common workforce development standard.

Two recent developments in industrial relations alter this picture slightly, to the detriment of TAFE. First, universities are increasingly engaging academics on a teaching-only basis, something that will further erode the industrial relations (and staffing cost) differences between the two sectors. In this essay, I argue that this development in particular jeopardises TAFE strategies to move into bachelor-level qualifications and maintain their current position in diploma-level activity. Second, a new modern award is in place, covering private providers in vocational education and training and higher education. This award, while establishing a common classification standard for academics and teachers employed by private providers, does not threaten the cost advantage of private registered training organisations.

In the following section, I briefly survey the main industrial relations settings in universities, TAFE institutes and private providers. Next, I examine the growth of teaching-only appointments in university enterprise agreements and the impact that this is likely to have on the strategy adopted by universities and TAFE institutes. I then discuss the significance of the Education Services (Post Compulsory Education) Award 2010 for industrial relations and workforce development among private providers. I finish by speculating on what these two developments may mean for how tertiary education is delivered in Australia in coming years.

Industrial relations settings

This section sets out the key industrial relations characteristics of three sectors of tertiary education in Australia: universities, TAFE institutes, and private providers of vocational education and training and higher education (excluding private universities).

Industrial relations in (public) higher education

The regulation of industrial relations in higher education has been relatively stable. All universities are covered by the national (now modern) awards, one for academic staff and one dealing with general staff.[1] The National Tertiary Education Union (NTEU) is the largest union in the sector, representing academic and many non-academic staff. Non-academic (general) staff may belong to a number of other unions, including the Community and Public Sector Union and the Australian Services Union. Each university has its own enterprise agreement (or separate agreements for academic and general staff). On some key issues such as disciplinary procedures and redundancy entitlements, the enterprise agreements retain similar elements. However in other areas, such as workload regulation, there is no broad pattern among agreements.

Following the Howard Government's decision in 1997 to reduce the real level of per student funding, universities increased their reliance on casual (sessional) academic employment. The Department of Education, Employment and Workplace Relations (DEEWR) calculates that, on a full-time equivalent (FTE) basis, the number of academic staff in Australian universities increased by 81%, while the number of ongoing and fixed-term staff increased by 32% (Department of Education, Employment and Workplace Relations 2012). Using the department's FTE measure, casual staff comprise approximately 24% of academic staff (excluding research-only academic staff). However, this measure is subject to uncertainty and criticism, and numerous other approaches have estimated that around 40% of academic teaching is delivered by casuals (Buckell 2003; Coates & Goedegebuure 2010, p.16, Junor 2004). The Howard Government also attempted to introduce greater industrial relations flexibility into the sector and reduce union influence through its Higher Education Workplace Reform Requirements (HEWRRs), which required enterprise agreements to meet certain tests, such as no restriction on the use of fixed-term or casual employment, in order for universities to qualify for (additional) public funding.

Industrial relations in TAFE

Compared with universities, the industrial relations coverage of TAFE has been much less settled, in some cases moving between state and federal jurisdiction and back to the state coverage, as the various industrial relations regimes underwent reforms. Since the commencement of Work Choices in 2006, TAFE institutes in the territories have been within the federal jurisdiction. In 2011, the O'Farrell Government in New South Wales amended legislation so that TAFE teachers were employed by the NSW TAFE Commission rather than the Crown. This had the effect of moving NSW TAFE teachers into the federal system. For the time being, TAFE teachers in the remaining states are covered by the remnant state systems. This has militated against any uniform trends. Depending on the particular government views of the day, the organisation of industrial relations arrangements in TAFE institutes ranges from a central agreement covering all institutes, with wages outcomes tied to the core public service (as has often been the case in New South Wales and South Australia), to each institute being empowered to strike their own enterprise agreement with unions and employees (as in Victoria). However, even in Victoria, the Australian Education Union's Victorian Branch has struck a single agreement to cover teaching staff in all Victorian TAFE institutes (including dual-sector institutions). Each Victorian TAFE institute has its own agreement covering non-teaching staff. Casual employment is even more endemic in the TAFE system than it is in universities. Fewer than half of all

[1] A number of enterprise awards continue to operate in the university sector to the exclusion of the two modern awards. Examples include University of Adelaide General Staff (Interim) Award 2000 and the University of New England General Staff Award 2000. Enterprise awards will expire on 31 December 2013.

TAFE practitioners are permanently employed. According to data compiled by Guthrie (2010), 61.8% of TAFE practitioners in 2008 were employed on a non-permanent basis. The states with the highest rates of non-permanent employment were New South Wales (68.7%) and Victoria (64.1%) with the lowest rate in Tasmania (17.6%).

TAFE teachers are covered by the Australian Education Union and its state affiliates, the same union that also covers teachers in public schools. At the state and national levels, TAFE teachers have their own councils within the union and a full-time national secretary. At the national level, the TAFE sector promotes a coordinated response on policy and some industrial matters. However, because the policy arrangements for TAFE continue to be set by state governments and because of the legacy of state coverage in some jurisdictions, bargaining and industrial strategies are largely determined at the state level.

Industrial relations in private post-compulsory education

By comparison with employment arrangements in universities and TAFE, employment in private providers has traditionally been much less regulated. Up until the commencement of the modern award regime in 2010, there was no central award covering the VET sector. Apart from a few state awards covering English colleges and some business colleges, private registered training organisations were largely award-free. Provided employers did not pay below the minimum wage and met the other legislated obligations for annual leave, long service leave and so on, they were free to engage employees on whatever terms they saw fit. Arising out of the *Fair Work Act*, the Australian Industrial Relations Commission made a new modern award, the Educational Services (Post-Secondary Education) Award. The award covers employees in private providers of both vocational education and training and higher education. It specifically does not apply to recognised universities or secondary schools. For reasons discussed below, the award does not apply to TAFE institutes, except in Victoria and New South Wales.

Union membership in the private registered training organisation sector is very low and coverage of most of them is held by a third union, the Independent Education Union. As with the Australian Education Union, it is in effect a federation of state-based unions predominantly representing teachers in private primary and secondary schools. Its main efforts organising in VET have been in ELICOS (English Language Intensive Courses for Overseas Students) colleges.

Shake-out in the ivory tower

The teaching–research nexus

A distinguishing marker between academic work performed in universities and that performed in TAFE institutes and other registered training organisations has been the idea that academic teaching in a university setting must be informed by research (McCollow & Lingard 1996; Ramsden & Moses 1992). This idea, commonly termed the 'teaching—research nexus' has been vigorously defended by the National Tertiary Education Union and has long been enshrined in the awards and enterprise agreements that regulate the employment conditions of university academic staff. The teaching—research nexus has been an article of faith for this body, the union representing academic staff, ever since the advent of the Uniform National System and the transformation of colleges of advanced education into universities. PhDs were not usually a requirement of appointment as an academic in colleges of advanced education and a high proportion of academics in those institutions were not intensive researchers. The teaching—research nexus was defended by the National Tertiary Education Union as a marker that former colleges of advanced education had reached parity with older

universities. The principle was enshrined in the Universities and Post Compulsory Academic Conditions Award 1992 and thereafter in the enterprise bargaining agreements struck at each university. The strict bargaining strategy adopted by the National Tertiary Education Union ensured that these provisions were largely preserved at each institution through successive rounds of bargaining.[2] In any case, universities both old and new were content to preserve the teaching—research nexus, since research activity was seen as the status marker for a real university. Nonetheless, sustaining this nexus represented a financial challenge to universities. In a climate of cuts to operating grants in real terms, most opportunities to make money depended on teaching full-fee students and extremely competitive research grant funding. Data on how academics spend their time show that, as academics move into more senior roles, they increasingly specialise, devoting more of their time to either teaching or research at the expense of the other (Coates & Goedegebuure 2010, pp.11—12). The status quo led to a de facto employment segregation of the academic workforce by type of work. Ongoing (tenured) appointments were reserved for the traditional model combining teaching and research (Bexley, James & Arkoudid 2011, p.52). Teaching-only positions were only available on a casual (sessional) basis and research-only staff were predominantly employed on fixed-term contracts, because universities were unwilling to guarantee ongoing appointments when the funding for research-only positions is so dependent on winning research grants.

Although many factors played a role, the prime catalyst for universities shifting support towards teaching-only appointments was the announcement of the Research Quality Framework by the Howard Government in 2005 and the introduction of the Labor initiative that succeeded it, Excellence in Research for Australia (ERA), in 2010. Both initiatives require universities to rank the research performance of all 'research active' academics according to an index that gave heavy weighting to publication in top-tier journals. Because ERA rankings would go on to play such a large role in research funding applications as well as feeding into marketing campaigns and so on, the structure of the initiative provided universities with a powerful incentive to limit 'research-active' status only to the most productive (by the criteria of the ERA) researchers.

'Teaching-focused'

The impact is clear in an analysis of current enterprise bargaining agreements in Australia's 37 public universities. Through various measures, most universities now have the flexibility to require academics to depart from the standard workload allocation of 40% of time spent on teaching, 40% of time spent on research, and the remainder spent on administration and university and professional service. Although the label 'teaching only' has been avoided, at least 11 universities have successfully achieved explicit 'teaching intensive' or 'teaching focused' roles, where the usual expectation could be that an academic spends between 60% and 80% of their time on teaching and teaching-related duties, with the remainder split between other duties.

A complementary approach, adopted in a further 15 enterprise agreements, has been to redefine research as encompassing 'research and scholarship', allowing teaching-focused academics to spend their research allocation on curriculum development, research into student learning, or other measures to improve the quality of their teaching. Such an approach draws on the thinking of Ernest Boyer, who proposed four overlapping types of scholarship as the basis of academic work: the scholarship of teaching; the scholarship of application; the scholarship of integration; and the

[2] Prior to the Fair Work era, federal award coverage did not extend to Australia's private universities, so Bond University, the University of Notre Dame and the various foreign universities that have since established a presence in Australia have been free to engage academics on a teaching-only basis.

scholarship of discovery (Coaldrake & Stedman 1999, p.23; Coates & Goedegebuure 2010, pp.10—11). The scholarship of discovery reflects the traditional understanding of pure academic research. The scholarship of application and the scholarship of integration are respectively about building links between universities and the real world and between different disciplines. Advocates of the scholarship approach argued that because of the cost pressures facing all universities, academics could not be expected to meet all types of scholarship equally: there would need to be specialisation (Coaldrake & Stedman p. 24). Ironically, the structure for many of these formulations comes from the academic workloads clauses for which the National Tertiary Education Union campaigned vigorously in earlier rounds of bargaining. Close to half of all Australian academics believe that their workload is not manageable (Bexley et al. 2011, p.32).

Other universities are experimenting with teaching-only and teaching-focused roles in more limited circumstances. In some instances (four agreements), the *quid pro quo* for the university agreeing to convert long-term casual academics to fixed-term employment was an insistence that those appointments be teaching-only. In addition, seven agreements allow a university to offer a teaching-only appointment to a student of the university (subject to certain limitations).

Strikingly, these developments have not simply re-created the old divide that existed prior to the Unified National System. Both old sandstone and new universities have been among the fiercest advancers of the teaching-focused model. The introduction of new categories is just the beginning of change and it will take time for the workforce profile to adjust. Practically speaking, limits remain on universities advertising teaching-only appointments and even more on forcibly converting an existing staff member to teaching-only where they have a reasonable research record. However, the levers are in place and universities have the option of stepping up their use of teaching-only and teaching-focused roles where that aligns with their strategy.

Implications for TAFE

Greater flexibility for universities to engage teaching-only and teaching-focused academic staff on a sustainable basis undermines the ability of TAFE institutes to attract bachelor-level students on a cost basis and may even encourage universities to compete with TAFE institutes and private providers for students who are looking to undertake a diploma-level qualification as a pathway to university. Many have assumed that the only way for the government to achieve its targets for higher qualification levels, and its specific target for increasing participation of students from lower socioeconomic backgrounds, is through VET qualifications as a pathway. However, universities are equally able to offer diploma or associate degrees as pathways, and the ability to engage teaching-only academic staff to deliver the programs goes some way to reducing the cost differential. This approach is indicative of the strategy recently announced by Victoria University. Significantly, Victoria University is one of Australia's dual-sector institutions. It has sought to integrate its higher education and diploma-level VET options into eight subject-themed colleges (Victoria University 2012). A separate Victoria University Trades Academy will focus on apprenticeships, pre-apprenticeships and the Victorian Certificate of Applied Learning. There is no impediment to non-dual sector universities implementing similar changes without a TAFE partner. After merger discussions with the Canberra Institute of Technology reached a stalemate, the University of Canberra now intends to proceed with developing its own polytechnic, which would offer diploma courses that articulate into University of Canberra degrees (Hare 2011).

And, unlike TAFE institutes, which remain tethered to state governments, universities have the institutional autonomy and resources to effectively collaborate as well as compete with private

providers. When real funding cuts to universities were first initiated, many universities established feeder colleges to provide pathways for international students (and, to a lesser extent, domestic students) directly into degrees (often into the second year). Over time, universities sought to reduce their exposure and reduce the cost of such ventures by licensing private providers such as Navitas to run them (Victoria University 2012, p.13). The prospect of being able to achieve indirect public funding for these diploma-level courses (through Fee-HELP) may reignite interest in this area. A case study of advanced diplomas and associate degrees in engineering, prepared by Karmel and Lu (2012), demonstrates that variations in the funding formulas result in higher public subsidies being directed to the higher education version. Regulation has been forced to play catch-up: the Minister for Tertiary Education has already felt compelled to cap the number of sub-degree places that universities can offer, despite the uncapping of undergraduate places. However, opportunities remain for enterprising universities.

In a setting where both institutions rely on casualisation to control costs, universities can use teaching-only appointments to reduce their cost disadvantage while exploiting their other advantages. Universities retain a status edge, they have the institutional resources to support new ventures and they can draw on their own pre-existing degree programs to easily develop articulated programs. The concern expressed by some in universities that TAFE institutes were poised to capture a significant portion of the bachelor degree market because of their teaching-only cost advantage (Parker 2010) seems misplaced (Coates & Goedegebuure 2010, p.9). As their growing enrolments in both sectors testify (Ross 2012), private providers, who have the cost advantage over both TAFE institutes and universities and the flexibility to operate easily across higher education and vocational education and training, are in a position to challenge both. I examine the relative advantage of private providers in the next section.

Regulating the jungle: the impact of the new Post-Secondary Education Award

A significant moment for tertiary education occurred when the Educational Services (Post-Secondary Education) Award 2010 came into effect. The award created a common workforce standard for the 'post secondary education services industry', a definition that encompasses:

- VET teaching leading to qualifications recognised within the Australian Qualifications Framework
- English language teaching, including to international students and migrants
- language, literacy and numeracy teaching
- community and adult education teaching not leading to AQF qualifications
- undergraduate and postgraduate teaching leading to higher education degrees, except teaching in a university approved to operate in Australia.

In the VET space, the award forms the minimum standard for all private registered training organisations as well as TAFE institutes in Victoria and, since late 2011, New South Wales. TAFE staff in the two territories are covered by their own separate awards in the national system. TAFE staff in other states remain within the state industrial relations systems.

The award features a classification scale for academic teachers, teachers, and tutor/instructors. This represents a big change. For the first time, there is a national classifications standard that requires registered training organisations to take into account the qualifications of teaching and training staff when determining their minimum pay. The award contains two classification structures for teaching

staff and a separate scale for non-teaching (general) staff. Academic teachers who undertake delivery of higher education courses have their own scale modelled on the Higher Education Industry — Academic Staff Award, but without the higher levels (associate professor and professor). Teachers, tutors and instructors share the same scale, with their salary point determined by the qualifications and experience and whether or not they are delivering a course of study that is recognised within the Australian Qualifications Framework. Teachers are employees:

> engaged to teach students where a teaching qualification is mandatory or required by the employer, and where the work required involves teaching a course … within or pursuant to the AQF or accredited by a relevant state or territory authority (3.1).

And in a case of confusing nomenclature:

> [includes] a VET tutor who has the qualifications required by the accredited curriculum or training package and who delivers and/or assesses nationally recognised competency based training (C3.1.d).

Under the award, a 'tutor/instructor' is someone engaged to provide tutoring or instruction in a course that is not accredited under the Australian Qualifications Framework or by a relevant state or territory authority.

The new award establishes by default a career structure for VET teachers in the growing private sector, something long called for. Within their classification, all teaching staff covered by the award are eligible to move to the next pay point after 12 months service, subject to a satisfactory performance review. Teachers, tutors and instructors moving between registered training organisations will have a common basis upon which to have their experience recognised. In time, the award structure may help to build the occupational identity of the VET workforce and be a prompt for further skills development (Bretherton 2008). Implicitly the award embeds the principle that an hour of classroom delivery requires time outside the classroom to prepare and be available for student consultation (National Tertiary Education Union 2009, p.11). It does this through the formula used to calculate the daily and hourly casual rates of pay for instructors. The casual hourly rate is achieved by dividing the daily rate by five, on the assumption that five hours is the maximum number of direct teaching hours that could be accomplished, with the remainder of a day's work being given over to preparation and administration. A larger multiplier is used for the casual academic rates. Taken together, these developments are a modest first step towards a career structure that covers the entire VET workforce.

However, it would be naive to conclude that the award has had a dramatic impact on VET teachers' salaries and career development. Figure 1 summarises the academic and teacher/tutor/instructor classification. A teacher delivering accredited training and who possesses a three-year degree is entitled to an extra $550 a year. A teacher with a five-year degree or equivalent can expect to receive at least an additional $2220 a year. The differences are not large — certainly not large enough to induce existing VET teachers to gain additional qualifications and expose employers to larger wage bills. Further, the award, by spanning both private vocational education and training and higher education, does nothing to discourage registered training organisations expanding into private higher education provision. And unlike other examples where qualifications are referred to in modern awards (such as the Children's Services Award 2010), the award classifications are not complemented by minimum standards established by regulatory agencies (Oliver 2010, p.112). The minimum qualification required to deliver nationally accredited training is the Certificate IV in Training and

Assessment and there is little regulatory appetite to increase the minimum qualification level, even for VET teachers working in more advanced roles (Productivity Commission 2011, p.248).

Figure 1 Classification scheme for teachers, Educational Services (Post-secondary Education) Award 2010

Academic stream			Teachers and tutors/instructors stream		
Level/ step	**Annual salary**	**Notes**	**Level**	**Annual salary**	**Notes**
Level A			1	$41 417.55	
A.1	$43 526	A Level A academic teacher will work with support and guidance from more senior academic staff … A Level A academic teacher will normally have completed four years of tertiary study or equivalent qualifications and experience and may be required to hold a higher degree …	2	$41 969.81	Minimum for a teacher with a three-year degree Minimum for a tutor with Cert. IV TAA
…			3	$42 799.61	Minimum for a teacher with a four-year degree. Top for a tutor without Cert. IV TAA
		Administration will generally be limited to the administration of the relevant unit or units of teaching they are engaged to teach.	4	$43 637.72	Minimum for a teacher with a five-year degree
A.8	$54 210		5	$45 402.76	
Level B			6	$46 579.42	
B.1	$56 391	A Level B academic teacher will undertake independent teaching and research in their discipline or related area … They may undertake administration relating to their discipline and may be required to perform the full academic responsibilities of and related administration for the coordination of an award program of the institution.	7	$47 650.70	Top step for a tutor with a Cert. IV TAA
…			8	$48 827.42	
			9	$50 009.69	Top step for a teacher without a degree
			10	$51 536.00	
B.6	$64 571		11	$52 956.96	
			12	$54 211.34	Top step for teachers with degrees
Level C					
C.1	$66 207	A Level C academic teacher will play a major role or provide a significant degree of leadership activities relevant to the profession, discipline and/or community … [They] may be required to perform the full academic responsibilities of and related administration for the co-ordination of a large award program or a number of smaller award programs of the institution.			
…					
C.6	$74 386				

Source: Educational Services (Post-secondary Education) Award 2010, Schedule B and cl 14.1; and Schedule C, cl 14.3.

Further, the pay rates contained in the award remain well below the rates found in enterprise agreements covering TAFE institutes and universities. Table 1 details the minimum annual salary typically payable to a qualified VET teacher with at least a four-year degree. Table 2 contains a summary of the cheapest hourly casual teaching rate in the award and in the TAFE agreements for three states (New South Wales, Victoria and South Australia). The current award rate is well below all the TAFE rates shown. The appropriate minimum rate for a four-year trained teacher contained in the

New South Wales TAFE Award is 167% of the modern award rate.[3] In percentage terms, the gap is even larger when looking at the cheapest casual teaching rates (175%). As casual employees are so prolific in both TAFE institutes and private registered training organisations, this is probably the more important ratio. It is likely that this gap may erode over time as TAFE institutes are forced to compete with registered training organisations for public funding. Also, as the market matures, leading registered training organisations may strike enterprise bargains for higher rates or choose to offer higher pay in order to secure and retain qualified teaching staff. For the time being though, registered training organisations easily retain their cost advantage in relation to TAFE institutes.

Table 1 Annual teaching rates, Educational Services (Post-secondary Education) Award 2010 and selected TAFE enterprise agreements/awards

Position	Sector	Classification	Annual salary
Four-year qualified teacher	Private RTOs	Level 3	$42 799.61
	NSW TAFE	Step 10	$71 469
	Vic TAFE	Teacher Level 3.1	$62 698
	TAFE SA	Level 3[1]	$67 365

Note: 1. Level 3 does not require a bachelor qualification but was chosen as the translation point for the bottom of the old Lecturer scale.

Sources: Private RTOs: Educational Services (Post-Secondary Education) Award 2010, cl. 14.3 and Schedule C; NSW: Crown Employees (teachers in TAFE and related employees, Bradfield College and teachers in TAFE Children's Centres) Salaries and Conditions Award 2009, Serial C7296; Victoria: Victorian TAFE teaching staff multi-business agreement 2009; South Australia: TAFE SA Education Staff Arbitrated Enterprise Bargaining Award 2010.

Table 2 Casual teaching rates, Educational Services (Post-secondary Education) Award 2010 and selected TAFE enterprise agreements/awards

Position	Sector	Classification	Hourly rate
Cheapest casual teaching rate	Private RTOs[1]	Level 1	$39.67
	NSW TAFE	Training duties	$69.84
	Vic TAFE	Casual – Certificate IV Qualified – Teaching Duty Hour	$60.37
	TAFE SA	Hourly Paid Instructor Class V	$45.70

Note: 1. The hourly rate is calculated using the formula specified in the award: (Annual rate/261) x 1.25) /5.

Sources: Private RTOs: Educational Services (Post-Secondary Education) Award 2010, cl .14.3 and Schedule C; NSW: Crown Employees (Teachers in TAFE and related employees, Bradfield College and teachers in TAFE Children's Centres) Salaries and Conditions Award 2009, Serial C7296; Victoria: Victorian TAFE teaching staff multi-business agreement 2009; South Australia: TAFE SA Education Staff Arbitrated Enterprise Bargaining Award 2010.

Conclusion

An examination of industrial relations settings in tertiary education reveals that TAFE institutes are caught in the middle of two significant changes in the regulation of teaching work in universities and in registered training organisations. Traditionally, one of the biggest differences between the two sectors has been the expectation that university academics would spend a sizeable proportion of their working time on research. For a variety of reasons, this idea is weakening and while the standard teaching—research academic model will remain the norm, teaching-only and teaching-focused academics in Australian universities are becoming much more common. These options will allow universities to more easily respond to competition in the bachelor degree market from TAFE institutes and private higher education providers by further increasing the teaching load of non-research-active academics. Indeed, some universities (particularly existing dual-sector universities) may seek to move

[3] At the time of writing, the NSW TAFE Commission is in the process of finalising its enterprise agreement, as part of its transfer to the federal system. Therefore, the reference is to the old state award. In any case, the rates have been preserved in the proposed enterprise agreement.

further into sub-degree diploma and associate degree offerings. By minimising, if not eliminating, their cost disadvantage, universities can exploit their ability to offer seamlessly integrated programs as well as their higher status.

On the other side, TAFE institutes confront intensifying competition from private registered training organisations. Prior to the introduction of modern awards in 2010, there was no common industrial relations framework for private registered training organisations. Apart from a few state awards covering English colleges and some business colleges, private registered training organisations were largely award-free. The Educational Services (Post-Secondary Education) Award covers private providers of both vocational education and training and higher education. It features a classification scale for academic teachers, teachers and tutor/instructors and represents a substantial change. The award includes multipliers, building in an assumption that delivery time in the classroom also requires preparation time. This means that a career structure for VET teachers in the growing private sector is now in place, something long called for. Further, the award, by spanning both private vocational education and training and higher education, does nothing to hamper registered training organisations expanding into private higher education provision. Although private registered training organisations are now subject to a classification system for their teaching staff, the pay rates contained in the award remain well below the rates found in enterprise agreements covering TAFE institutes and universities. Thus, while private registered training organisations have had a workforce development structure imposed upon them, they easily retain their cost advantage against TAFE institutes. TAFE institutes' industrial relations strategy offers no easy options. TAFE institutes look set to remain caught between the ivory towers of universities and the jungle of the private registered training organisation market.

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DISCUSSION

Governance of the system in a competitive environment

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My comments will focus on competition and, more specifically, on the notion of competitive neutrality.[1] It is not because I believe that cooperation is unimportant, but that the suppression and distortion of competition is a major structural issue for vocational education and training (and for education and training generally). Also, these four essays say more about competition than about cooperation. Towards the end of my contribution, I turn to the vexed question of who should pay for what and draw out some consequences of the answers.

Competition: a socially beneficial mechanism?

Until about 50 years ago, Australian elites tended to regard competition with great suspicion. It was widely seen as leading ineluctably to malign market domination by one or a few sellers, and otherwise, generally undesirable. However, starting in 1965 with the first *Trade Practices Act*, competition came to be embraced by the elites as a socially beneficent activity: not that competition was regarded as a good thing in and for itself, but it was seen as a suitable means to the attainment of social ends — if it were properly regulated. This was the ideological force behind the National Competition Policy of the Hawke and Keating governments, pushed by various state premiers, which involved extending the *Trade Practices Act* to cover government-owned trading entities; testing anti-competitive arrangements and regulations and removing the unjustifiable; adopting the principle of competitive neutrality between public and private trading entities; and creating a new access regime for infrastructure, whether public or private.

Of interest here is an extract from a guide provided by the University of Adelaide to assist employees to comply with their legal obligations:

> Remember, the Competition and Consumer Act works on the basis that competition:
> - is a healthy thing
> - drives efficiency and fairness
> - offers the best results for customer. [2]

Competition and cooperation can be good or bad things, depending on the circumstances. Cooperation amongst potential private competitors is subject to the approval of the competition authority, the Australian Consumer & Competition Commission; however, competition is less likely to be socially beneficial if cooperation has been artificially stymied. Also, competition is of dubious benefit if one

[1] The term 'competitive neutrality' is more useful than the term 'level playing field'.

[2] See <www.adelaide.edu.au/legalandrisk/resources/Competition_and_Consumer_Act_101.pdf> (available only on the intranet).

party has artificial advantages over others. Moreover, competition works best for the community when prices accurately signal the social costs and benefits of the activities of those involved.

Within the education sector, we see at least four arenas of competition; however, more often than in other areas, prices do not signal costs accurately and do not fully compensate public providers for their costs.

Competition for people:

- students, their effort and time, and for the monies they bring
- teachers and other staff.

The competition for student-borne funding, especially public funding, is covered in most of the essays. The second point is covered in Damian Oliver's essay.

Competition between and amongst providers:

- private and public
- universities and the rest
- on-the-job and off-the-job educators/trainers.

There is almost nothing on the last point in these essays, but much on the first two, especially in the essays by Adrian Marron and Damian Oliver. Kerry Brown's essay argued for managed competition between public and private providers within the VET sector.

Competition among funders — to escape the costs:

- national government and state governments
- government and non-government (that is, employers, students).

Competition between regulators:

- national government and state governments
- government and non-government.

John Ross's essay covers competition among funders and (to a smaller extent) among regulators.

I will now outline what I read as the main themes in each essay, and make some comments on them.

Kerry Brown: How do providers respond to changes in structures in a period of reform?

Main themes:

- In responding to changes in incentives, public providers are hampered by pre-existing factors.
- For this and other reasons, Professor Brown argues in favour of managed competition, rather than unfettered competition, between public and private providers.
- Government should pay for education and training of a general kind.

Legacies and hindrances

In recent years, the structural and funding arrangements for VET in Australia were judged to be unsustainable, with the main driver being the rising cost of government provision.

Budget and other considerations have led to changes in some state government and federal arrangements:

- contestable funding, open to private as well as public providers
- national entitlement to a quality training place, with access to income-contingent loans for government-subsidised places at the diploma level or above, and requiring the states to guarantee places and to undertake some specific reforms.

This essay did not delve much into the sources of cost rises, but rather gave more attention to the cost disadvantages facing public providers, compared with their private competitors:

- labour costs (awards and the like) and productivity (industrial relations arrangements are a main focus of Damian Oliver's essay)
- physical capital and its maintenance — presumably due to history and being tied to particular locations
- community service obligations.

These legacies meant that public providers were generally less flexible than were their private counterparts, and less capable of responding to the changing environment (or slower to respond).The first two disadvantages are manifested in specific ways (for example, individual TAFE institutes' exclusion from enterprise bargaining) and require sector-specific responses. However, the experience in other fields shows that the burden of community service obligations can be lessened or removed by mandating external funding of these obligations and, where feasible, contestability of that funding.

In the for-profit sector of the economy, a firm stuck with higher labour costs than its competitors, lower productivity and less suitable physical capital would tend to go out of business, or be taken over by another firm. Competition for ownership of private for-profit firms is relatively unrestricted (with the Australian Consumer & Competition Commission and the Foreign Investment Review Board being the main sources of restrictions). In contrast, competition for 'ownership' of public education entities is rare; and, when it occurs, it is usually a matter of one local institution 'merging' with another (as Adrian Marron relates).

Managed competition

Citing these legacy issues and for other reasons, Kerry Brown's essay argued that managed competition was the better model than unrestricted private entry and exit. The main benefit sought was that managed competition would reduce three kinds of undesirable outcomes:

- business failures, which would harm the students of the failed providers (and maybe the reputation of the sector generally)
- consolidation of the industry, with increasingly few and large private suppliers
- government losing its internal expertise to monitor service provision.

None of these featured prominently in Kerry Brown's discussion of the United States situation, with its two-year community colleges and otherwise private providers, with limited government funding of students. Concern about the second outcome — consolidation amongst private suppliers — does not seem to fit comfortably with her exposition of the notion of market contestability; namely, that if

exit and entry were relatively easy (cheap), then potential entry imposes a competitive discipline on all established suppliers.

More generally, all markets in Australia are regulated — 'unmanaged competition' exists nowhere. The ubiquitous question is how to arrive at a regulatory framework that achieves a satisfactory compromise between the benefits of competition and the costs of competition. An important attendant question is how to achieve a satisfactory transition from the existing framework, to the new one.

My comments on 'Who should pay for what' — an issue raised in Kerry Brown's essay — are in my concluding section.

John Ross: Mismatched gears — how federal arrangements hinder the integration of the tertiary education sector

Main themes

- In practice, federalism does not work well for VET.
- Moreover, the Council of Australian Governments has accentuated the loss of power over policy experienced by the education and training portfolios.
- In theory, federalism would work well for VET, especially if it were of a fully centralised or coordinated kind of federalism.
- However, two High Court decisions (Pape; school chaplaincy) may limit the role of the Commonwealth as funder.

Three quotes capture John's thrust:

> The federal system could work very well for VET, with national and state or territory levels of government pulling together and harnessing their combined enthusiasm to produce a well-run, well-resourced and coherent VET sector … In this imperfect world, federalism becomes a drawback rather than a blessing.
>
> Everyone I've interviewed on the subject — in over four years reporting on tertiary education — would like a Commonwealth takeover of VET. Most would like to see all occupational licensing handled at the federal level, too.
>
> The Commonwealth is the only entity that really has the funding power. With the pressures on state governments for funding, [VET] inevitably falls to the second level of priority against schooling [quoting a former deputy secretary of the federal education department].

Federalism in practice and theory

John Ross reports the vagaries of federalism within a democratic system and applies the usual criticisms of federalism in practice to vocational education and training:

- opacity
- complexity
- conflict rather than cooperation
- the federal government, and not the states, has the money, giving it a disproportionate degree of control over the states.

He records a number of proposals for the Commonwealth to take over all of TAFE — John Dawkins, in the Keating Government, 1987; John Howard's National Commission of Audit, 1996; Anna Bligh, as Premier, 2008 — or to take over some core elements, in order to create a new national skills level.

John Ross reports that Victoria's 'bean counters applied the handbrake that compelled the training portfolio to adopt the controversial eligibility criterion which forces retraining students to pay full fees for courses at the same or lower levels as their existing qualifications'; but he also believes that 'exclusive Commonwealth control certainly wouldn't hurt' (in reference to transparency, but presumably more widely). But maybe the federal deputy secretary (quoted above) was too optimistic about the relative ease of securing more generous funding from the Commonwealth Budget: any reasonable projection of the Commonwealth finances through the next decade would suggest that the Commonwealth will either be cutting spending selectively or increasing taxes, in order to fund new or expanded programs (for example, in disability, dental, refugees and asylum seekers, the Gonski proposals), let alone keep pace with the increasing costs of existing programs in health and welfare. Even the uncapping of university places, implemented so recently, has been partially reversed, in order to limit the expansion of universities at the expense of TAFE institutes and other VET providers, but also for budgetary reasons, to the extent that the guarantee of a first training place has already been hedged about.

Localism and history both matter, in this 'imperfect world'. As John Ross concludes, the lack of serious and timely reviews of VET is not due solely to federalism. Maybe a source of difficulties lies in the role that governments play in the Australian VET sector, as major providers.

In 2009, the Council of Australian Governments supported the proposal that there be a single national regulator for vocational education. However, John Ross concludes that at least three regulators will be in place for some years. This was in line with the results of COAG decisions for a national licensing system for specific occupations (jettisoning the system of mutual recognition negotiated under Bob Hawke).[3] It has not yet been fully implemented. A similar story can be told about occupational health and safety. Proposals for a national takeover of funding and regulation of VET need to be tested against experience not only in Australia, but also in other places, including non-federal countries in the OECD; here Kerry Brown's brief recounting of the United States scene is helpful, as would be some comparison with Germany and France.

John Ross provides illuminating detail of how the Commonwealth transmutes relatively small tranches of funding into disproportionately large leverage over the states. Despite contributing about one-third of the funding of VET, the Commonwealth has driven (or encouraged) competency-based assessment, national testing packages, compulsory contracting, the Australian National Training Authority (in and out), and Australian technical colleges; and presumably the Commonwealth was keen on the COAG target of a doubling of diploma completions between 2009 and 2020.[4] This is a federal form of cream skimming: the Commonwealth choosing initiatives that make it look good, even if their state counterpart funding is diverted from more valuable uses. (This is my interpretation of his Queensland story about the Productivity Places Program.) However, the Northern Territory seems to have successfully resisted Commonwealth efforts to force it to make entitlement places available to non-public VET providers.

[3] See Pincus (2009, pp.77—106).

[4] For VET, there is much less evidence of the 'sheepskin' or 'credentialling' effect of completion on earnings and employability than there is for university degrees. The reason may be that a higher proportion in VET has employers paying for the training; and employers are able to judge when enough training is enough. On degrees, see Flores-Lagunes & Light (2007).

So, in essence, John Ross's diagnosis is that, because the Commonwealth has partial control, it does not pursue a consistent and efficacious policy line for VET, of the kind that it would pursue, if only it had full control and was the dominant public funder. Not every university academic would joyfully accept this proposition, as it applies to higher education.

In a world with many governments, we see cooperation among and competition between governments, whether they are in a federation, or not. However, a federal structure makes for easier competition as well as easier cooperation among the governments within the federation. Federalism, as is sometimes forgotten, embodies an interesting variety of competition, not available otherwise. A citizen in a federation is simultaneously a member of a constituent state and of the nation, which are two sovereign polities that cover the same piece of geography. In federal systems, therefore, there is the possibility of vertical competition between the 'senior' and 'junior' levels of government.[5] In particular, the Commonwealth could set up its own TAFE system in competition with those of the states, or pass legislation and regulation necessary for the establishment of private providers under the central government aegis. To date, the Commonwealth has made limited moves to create or encourage competitors within VET. This is in contrast to the situation for primary and secondary education, where the Commonwealth has done much to stimulate the creation of non-government schools.

Adrian Marron: A precipitate proposal (to amalgamate Canberra Institute of Technology and University of Canberra)

This is a participant's view of the discussions — ultimately fruitless — of a merger between the Canberra Institute of Technology (where Adrian Marron is Chief Executive Officer) and the University of Canberra. Competition appears in the story as background: Adrian Marron suggests that a factor in the outcome was that there was a fear of competition, rather than a belief that competition is conducive to efficient and effective outcomes.

The other themes are:

- External events can drive proposals for structural changes, but internal conditions determine whether or not they succeed: initial financial strength; industrial agreements; expectations; self-assessments.
- Familiarity may not breed contempt, but it certainly did not breed an accurate understanding of the other institution.
- People, using different 'mental models', can interpret a proposal very differently, according to their pre-suppositions and experiences.
- The VET sector is very complex, and more so because VET policy is not integrated nationally.

The discussions were initiated by the ACT Government, in response to two reports in 2011 — by the Tertiary Taskforce, recommending more collaboration between the two institutions, and by Allan Hawke of the ACT public service, recommending 'the formal marriage' of the two institutions. On the financial side, there were the usual claims that cost savings would flow from economies of scale and the University of Canberra application to the Structural Adjustment Fund. Also in the mix were the Commonwealth's policy changes: uncapping undergraduate places; national entitlement to training places; and contestability of public funding. These and the severe weakening of the foreign student market raised fears that either or both institutions could respond by jettisoning their commitments to

[5] See 'Productive reform in a federal system', chapter 2 in Productivity Commission (2006, pp. 2—51).

the provision of broader 'public goods' (as against mere private advantages to students and employers). Denise Bradley provided a report on prospects for the next decade, setting out proposals for greater collaboration, possibly leading to amalgamation; and, otherwise, for granting a Victorian level of independence to the Canberra Institute of Technology. After public consultation, the ACT Government's steering group suggested a partnership, to deliver AQF levels 5 and 6 programs.

There are two major differences between private sector mergers and mergers between public educational institutions:

- the role of the competition regulator, the Australian Consumer & Competition Commission
- the motivations for mergers.

Mergers between private sector entities, although common, are not without their difficulties and troubles. Most importantly, private sector mergers need the approval of the competition regulator, the Australian Consumer & Competition Commission, whose guidelines start with competition: Will this merger reduce market competition, or not? If so, is it a significant reduction? If so, are there offsetting public benefits? The writ of the Australian Consumer & Competition Commission, however, does not extend to mergers of the kind contemplated between the Canberra Institute of Technology and the University of Canberra (although some competition issues could arise of interest to regulators, for example, competitive neutrality between public and private providers).

Otherwise, the owners of the entities are decisive in regular private sector mergers. (However, mergers can be forced on private entities by debt holders or by government bailout agencies, as with some financial corporations and banks during the Global Financial Crisis and its aftermath). For private sector mergers between commercial entities, the dominant consideration is the expectation of increased profit, which is the surplus of revenue over cost. On the revenue side, the merged entity may be able to offer a range of goods or services that are more attractive to customers than can the two unmerged entities — and the same could be true for merged public educational institutions. On the cost side, it is often claimed that reductions in overlap and duplication (across the merged entity) will reduce unit cost; or, in the catchphrase, reap economies of scale or scope.

If the motivation for private mergers is profit, then the motivations for mergers between public educational entities are … well, various: a sense of mission in pursuit of the public interest; a desire for greater prestige; a reduction in competition; a reduction in restrictions on innovative activity; advancing regional interests or those of specific categories of students or employers; the desire for different workplace awards or agreements; better career paths; and so on. Of course, their counterparts (and more) are present in private mergers, but they are moderated by the profit motive, which is absent from the public institutions.

Damian Oliver: The strategic impact of industrial relations among tertiary education providers

Themes

- Industrial relations arrangements give private registered training organisations a competitive advantage over TAFE institutes.
- The new post-secondary education award has done little to change this (as it sets minimum rates below those in TAFE enterprise bargains).

- Universities have had a cost disadvantage, compared with TAFE institutes, arising from their insistence on a nexus between teaching and research. However, this nexus is increasingly being broken by teaching-only positions and casualisation.
- Institutional autonomy is an abiding competitive advantage of universities: TAFE institutes are still subject to ministerial fiat.

Running through this essay are discussions of competitive strengths and weaknesses, which are summarised in the themes above. The background is the federal government's commitment to increasing the proportions of the relevant age groups attaining a degree or other post-secondary certification, along with an emphasis on 'equity' in terms of the socioeconomic composition of those completing.

The industrial relations difference that Damian Oliver outlines, which influence the relative competitiveness of TAFE institutes and private registered training organisations, is not the result of violations of competitive neutrality that disadvantage the public institutions. To the contrary: the awards in TAFE guarantee more generous pay and conditions — including job security and greater control over work arrangements — than in private training organisations and could well be the consequence of the explicit or implicit financial guarantees that state governments provide to the TAFE institutes. However, a concomitant of those guarantees is that TAFE institutes have no or little control on the bargaining that leads to an enterprise bargain.

Damian Oliver suggests that, 'as the market matures [and private registered training organisations compete for public funding], leading [private] registered training organisations may strike enterprise bargains for higher rates or choose to offer higher pay in order to secure and retain qualified teaching staff'. That is to say, competition for staff may tend to equalise, upwards, the attractiveness to teachers of employment in the two kinds of VET providers. Until we have a better grasp of why this competition has been weak to date, then it is difficult to be confident of Damian's speculation — that the modern award will gradually bridge the gap between TAFE pay and conditions and those of private training organisations. The fact that the minimal qualification for teaching in VET is very low — certificate IV — suggests to me that the supply of teachers to private registered training organisations is unlikely to be tight; and this will militate against the tendency that Damian Oliver foresees.

When it comes to direct competition between TAFE institutes and universities, the teaching—research nexus, however attenuated, must act to hamper the universities. What advantages universities do have — as the paper by Karmel and Lu (2012) outlines — arise from two main sources: a closer tying of university curriculum for sub-degree courses to those of degree courses; and higher student subsidies.[6]

Who should pay, and why it matters

Public subsidies to education and training have been mostly justified by claims about the nature and extent of the public or 'spillover' benefits from education and training. First, however, I want to list some necessary and often neglected tax and legal backgrounds:

- Australian income tax law does not give relief for the cash costs of self-education or training, unless the course was necessary to retain employment: costs incurred to get a job (or another job) are not deductable.
- Employers have 'instant' tax write-offs of their costs of training employees.

[6] The federal government has turned down the request by some states for the new post-study work visa to be extended to VET (Whitbourn 2012, p.6).

- An individual's 'human capital' is not recognised for tax purposes as a depreciable asset.
- Voluntary bonding (to pay off a debt) is illegal.
- Personal bankruptcy is relatively easy and cheap.

Kerry Brown notes that students can gain additional private incomes and opportunities from the acquisition of a skill, whether that skill is generic or specific. Without a subsidy, some will undertake education and training; with a subsidy, more will. In her essay, Kerry Brown suggests that government should pay for the acquisition of general or generic skills (reading, maths, communications, problem-solving), because they create beneficial spillovers for society as a whole, but that employers who need specific skills should pay the cost of vocational education for those skills. However, I am not persuaded by the argument.

Here, it is useful to distinguish the legal burden of costs from the ultimate burden, for they can be very different, because of competition among potential employers. If the student bears some of the costs of specific training (by way of fees or lost income), then, all going well, he or she will hope to recoup these costs through a wage premium.

- For skills of value to only one firm — an unusual situation — the worker is in a weak bargaining position after training, and so we would expect to find the employer paying for the training costs and promising a pay rise on completion.
- For skills of value to many firms, competition forces employers to pay the wage premium for workers with higher productivity (or the characteristics, qualifications and experience that promise higher productivity). If an individual employer, say, firm A, pays for the acquisition of skills specific to the industry, then firm A may not be able to recoup these costs. Any attempt to pay less than the person is worth may very well induce the employee to find a job with another employer: the law voids most contracts that bind an employee to a particular employer.

This suggests that trainees should pay the costs of training (other than that specific to a single firm), but have access to FEE-HELP and the like, and that the trainee's costs will be passed onto employers (if the training is productivity-enhancing). Alternatively, these considerations provide some economic rationale for group training schemes. However, employers have been successful in arguing the case for public subsidies — partly on the grounds that the benefits of a larger and better-trained workforce are not confined to a specific industry, or even to industry itself. This is to appeal to the best economic case (in theory) for training subsidies — wider 'spillovers' or 'externalities'.

It is widely believed that significant society-wide spillovers justify some subsidy to primary and secondary schools, but the evidence about spillovers is much weaker for post-compulsory education. Moreover, even if society as a whole does benefit from the acquisition of skills, this does not establish a presumption for a government subsidy. Rather, the criterion is that the subsidy should be set so that the *additional* society-wide benefits that it generates are of sufficient size and importance to justify the cost of the subsidy. The overall size of the spillover is not what matters. The optimal subsidy scheme, from this point of view, is when its cost is just balanced by the additional advantages that it secures: marginal cost should equal marginal benefit, for society as a whole.

Here, we come to heavily contested territory: there is some evidence that an increase in the supply of skilled labour can generate an increase in the demand for skilled labour, in some circumstances. However, the economist's usual expectation is that, as more and more people engage in an activity, including education and training, then the size of the additional spillover will eventually get smaller and smaller, while it is likely that the cost of encouraging more and more engagement in education

and training will rise with the numbers so engaged.[7] And there are economic costs to society as a whole from implementing a fee system that bears no or little relationship to the costs of training, or to its social value.

This brings me to the final issue raised in Kerry Brown's paper, namely, public provision of income-contingent loans. The provision of these loans suggests that senior levels of government expect that, in the first instance, a significant cost will fall on the student (either as fees, or as forgone earnings).

'Market failures' are often claimed and rarely proven — but here is a genuine case. The acquisition of skills is risky for the student, and the more so, the more specific the skills, and it is difficult for any individual to insure or hedge against unfavourable outcomes in the employment market. Moreover, 'human capital' cannot be offered as collateral, because voluntary bondage is illegal (and debts can be voided by bankruptcy). Therefore, the commercial market for loans will not provide much of the funds for the individual's immediate cost of education and training, including VET. In the absence of publicly provided or publicly guaranteed income-contingent loans, it falls on the student or trainee or on family and friends to provide funds and support, often through a temporary period of belt-tightening (forced saving). Such informal funding arrangements have deleterious consequences for economic equity, as well as for economic efficiency.[8]

Concluding remarks

It is common to claim that recent federal government changes have unleashed 'competitive market forces' on universities and, to a lesser extent, on TAFE institutes (where state governments hold more sway). It is true that something like an implicit educational voucher system has been edged into place for universities. Nonetheless, the situation in higher education and in vocational education and training is very far from a normal market. In particular, the sectors are replete with numerous and variable subsidies for students and infused with government constraints on and supports for various suppliers. Especially important is that the link has been greatly attenuated — between the costs of the education and training and the 'price' paid by the student. Educational 'prices' do not signal the absolute or even the relative costs of various courses. For example, it may be perfectly rational for an individual to undertake a fitness trainer course with a registered training organisation that provides a pleasant gym, a free iPad and a certificate, even if a TAFE course offering were superior in every way, including employment prospects, except that it is not as interesting and enjoyable. In vocational education and training, the competency-based system values every certificate of a certain type as the same as every other, for purposes of subsidy, and a similar lack of discrimination holds for the various bands of undergraduate degrees — 'top-up' fees are illegal. Under these funding arrangements, competition will do little to counteract the incentive for providers to favour low-cost courses rather than high-value courses. A uniform subsidy level within the sector, however, must act to suppress struggles for pay rates differentiated according to what the market would bear, if the market were to operate — and presumably, therefore, satisfies the majority of TAFE teachers in the system.

[7] Tom Karmel and others have produced evidence that the private rates of return from higher education have not fallen over the past decades, despite a huge increase in the proportion of the working-aged population with degrees. This suggests that the marginal private benefit was about equal to the average; and the same could be true for the external spillovers.

[8] See Miller & Pincus (1998, pp.99–111).

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Interactions with the system

Student choice between VET and university

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This essay addresses the question of how students choose between vocational education and training and higher education. In the first part of the essay, we explain and apply the economic theory of discrete choice and present some stylised empirical evidence to corroborate some of the theoretical results. In the second part we discuss whether a student would benefit from the introduction of a public report card scheme for VET institutions.

Economic theory of education choice and empirical evidence

Theoretical model

The canonical economic model of human capital investment is due to Becker (1967). Card (1999) takes Becker's model and derives a so-called human capital earnings function that lends itself well to empirical application. In essence, these are models of partial equilibrium, in which a rational decision-maker considers choosing the optimal 'amount' of education by picking, from a menu of options, the education—work trajectory that offers the largest net present discounted value of future earnings.

This optimal amount is derived by comparing the net present discounted values of future earnings streams resulting from alternative decision trajectories.

Keane and Wolpin (1997) develop an explicitly dynamic model, whereby people choose, every year, between additional education, blue-collar work, white-collar work and home production. Such dynamic models offer a rich tool set for simulating the effects of alternative policies on labour market outcomes.

Such rational decision models have the advantage of being simple and tractable, while at the same time offering important insights into our understanding of educational choices. In general, individuals, when making education decisions, balance the benefits of a certain type and amount of education against the costs.

Choosing the amount of education

To illustrate this more concretely, consider a person who has just graduated from secondary school after completing 12 years of formal education. This person can make, for simplicity, two principal decisions: obtain more education or start working.

What are the benefits of attaining a higher level of education rather than finishing formal education to start working in a job? The additional benefit of another year of education offers of an increase in lifetime earnings, assuming that this extra year of education increases human capital, which in turn is rewarded in the labour market. The marginal cost of education consists of forgone earnings and work

experience (indirect cost), tuition (direct cost) as well as the personal disutility of school/university versus work (non-pecuniary cost).[1]

Both the marginal benefits and the marginal cost of more education differ across individuals. On the benefit side, individuals have different skills, talents, aptitudes and preferences for schooling relative to work, all of which affect the marginal benefit of education. On the cost side, individuals face different borrowing constraints and interest rates, affecting the marginal cost of education.

There exists a large body of literature in education economics that aims to estimate the benefit of acquiring one additional year of formal education. Much of this research does not distinguish between different types of education. Rather, it classifies education simply by the years of formal education a person has obtained. The main idea of that research is to compare the earnings (for example, annual earnings or hourly wages) of people with different years of education. Differences in earnings are then attributed to differences in education (holding other observable factors constant). Such *returns from education* estimations are plagued by what economists typically refer to as endogeneity or selection bias: people with higher academic aptitude are more likely to select into university. This creates problems for empirical work, as typical survey datasets only collect reliable information on educational attainment but not on skills and aptitudes. When comparing the earnings of university graduates with those of, say, high school graduates, too much of the gap is attributed to educational differences, when some of the gap should be attributed to existing (unobserved) differences in academic skills and aptitude.

During the last 15—20 years, econometricians have developed a rich tool set that helps overcome the problems caused by ability bias. Card (2001) provides an excellent survey of the applied work done on the estimation of the returns from education for the United States. Estimates of returns from education are in the neighbourhood of 7—12% per year for the United States. For Australia, Leigh and Ryan (2008) estimate returns per year of education of about 13% and, more recently, Barrett (2012) finds that returns may not be higher than 6.2% per year.

The study by Barrett (2012) also found relatively low returns from work experience. Each additional year of work experience may add only as much as 1—3% to earnings (with the effect decreasing over time). If we interpret these numbers as causal, we see that a person who chooses between obtaining more education or entering the labour market should choose more education unless the personal disutility (psychological) cost of school/university versus work or borrowing constraints are prohibitive.

Comparing direct and indirect cost of university and VET

Here, we assume that a person has already made the decision to obtain more education after already completing 12 years of formal education. Becker's trade-off between benefits and costs applies here as well. What are the most important cost components to consider?

The (indirect) opportunity cost of a university education in terms of forgone earnings and work experience is higher, since obtaining an academic degree takes longer than finishing a TAFE certificate. The direct cost in terms of tuition fees and incidental cost (such as resources and materials needed for the course itself) are difficult to compare. Long and Shah (2008) argue that it is difficult to summarise tuition fees in the VET sector but conclude that 'it seems unlikely that average maximum tuition fees for most courses are much above $1000 per year nationally'. Watson (2003) points out that the more significant financial burden may result from incidental costs, which may be

[1] For example, the personal effort necessary to attain education or mental stress before and after exams.

as high as $2788 per year (depending on the course and state). On average, however, Watson estimates that the 'total cost borne by VET students is likely to be … two-thirds higher than the tuition fee specified by government policy'. How does this compare with university education?

For Australian undergraduate students with an equivalent full-time student load at any G8 university, annual contributions range between $4520 (maths, science and statistics subjects) and $9425 (including subjects such as law, dentistry, accounting, economics etc.). Citizens and permanent residents can defer their contribution via the government HECS-HELP loan program. In principle, these loans only defer the repayment of the loan. In addition to these contributions, university students face incidental costs in the form of course materials, which vary by study subject.

Empirical investigation

Using data from the Household, Income and Labour Dynamics in Australia (HILDA) Survey, we compare labour market outcomes and demographic characteristics of people who obtained a certificate with those with a bachelor degree. Beginning in the year 2001, HILDA is an annual household survey containing about 20 000 individuals. Its panel structure means that it contains rich information of people's labour market history.

Table 1 presents descriptive statistics (averages and standard deviations) of the labour market outcomes and demographic variables comparing people aged 25—35 who obtained a certificate with those who obtained a bachelor degree. In general, people with a bachelor degree have more favourable labour market outcomes. The hourly wages for holders of bachelor degrees are 25% higher than those for certificate holders and their employment rate is 85% for people with a bachelor degree — four percentage points above that of certificate holders. A larger proportion of certificate holders are unemployed (5% versus 2%) as well as not economically active (14% versus 13%).[2] Certificate holders, due to the generally lower time spent in post-secondary education, acquire more work experience on average (7.0 years compared with 5.9 years for bachelor degree holders). Studying the intensive margin of the labour market,[3] both certificate and bachelor holders work similar hours per week and have the same fraction of people who report working in full-time jobs (84% of workers).

Regarding the demographic characteristics, certificate holders are considerably less likely to be from an urban area (62% versus 86%), while they are markedly more likely to be male (59% versus 42%) and less likely to be married. The average age of certificate holders is the same as that of bachelor degree holders. Comparing the two groups' socioeconomic status, certificate holders fall about one-and-a-half categories below that of bachelor degree holders. SES1 is an index of relative socioeconomic advantage/disadvantage as constructed by the Australian Bureau of Statistics (ABS SEIFA). It 'summarises a wide range of information about the economic and social resources of people and households within an area'. The index comprises 17 different socioeconomic measures, including income, education, unemployment and skill levels of jobs, and groups individuals into deciles. By construction then, SES1 ranges from 1 (lowest status) to 10 (highest status). Similarly, SES2 is an index that approximates the economic resources of households within an area. The ABS uses 15 different variables to construct this index, including measures of income, rent and wealth.[4]

[2] A person who is not economically active is one who does not work and does not seek work or someone who is not available to work.

[3] In labour economics, researchers split the overall level of work activity into the size of labour force and the intensity of work supplied by individual workers. The marginal contribution of the former is referred to as the extensive margin of labour supply, and the marginal contribution of the latter is referred to as the intensive margin of labour supply.

[4] For a more detailed description of the socioeconomic indices, see ABS (2006).

Table 1 Descriptive statistics by education

Variable	Certificate	Bachelor	Total
Log hourly wage	3.12	3.37	3.25
	(0.02)	(0.03)	(0.02)
Work experience (years)	7.01	5.88	6.43
	(0.42)	(0.34)	(0.26)
Employment rate	0.81	0.85	0.83
	(0.02)	(0.02)	(0.02)
Unemployment rate	0.05	0.02	0.04
	(0.01)	(0.01)	(0.01)
Not economically active	0.14	0.13	0.13
	(0.02)	(0.02)	(0.02)
Full-time work	0.84	0.84	0.84
	(0.02)	(0.02)	(0.01)
Hours worked	40.96	39.82	40.36
	(0.73)	(0.62)	(0.45)
Urban	0.62	0.86	0.74
	(0.02)	(0.02)	(0.02)
Female	0.41	0.58	0.50
	(0.02)	(0.02)	(0.02)
Married	0.41	0.47	0.44
	(0.03)	(0.03)	(0.02)
Age	29.88	29.83	29.86
	(0.15)	(0.19)	(0.12)
SES1	4.94	6.76	5.87
	(0.13)	(0.16)	(0.12)
SES2	5.19	6.64	5.93
	(0.12)	(0.15)	(0.11)
Father certificate	0.35	0.33	0.34
	(N/A)	(N/A)	(N/A)
Father bachelor	0.20	0.51	0.37
	(N/A)	(N/A)	(N/A)

Notes: People aged 25−35. Number of observations: 2442. All numbers are estimated means using enumerated person population weights. Linearised standard errors in parentheses.

Source: 2001 HILDA data.

Interesting differences between certificate and bachelor degree holders also emerge when comparing parental education background. The probability that a certificate holder's father also obtained a certificate is 35%, while the probability that the father obtained a bachelor's degree equals 20%. The corresponding probabilities for a bachelor degree holder are 33% (father obtained certificate) and 51% (father obtained bachelor's degree). This suggests an intergenerational state dependence of university education: the father's university education may be a good predictor of the child's university education.

The results in table 1 are merely descriptive. In table 2 we attempt to estimate the effects of various characteristics on the education decision. In order to do so, we restrict the sample further to 25 to 35-year-olds with completed secondary education.

The table contains marginal effect estimates from a non-linear probit estimation of the binary education choice on a list of observables. For example, the marginal effect of the variable 'urban' equals 0.129 when the binary dependent variable is 'bachelor'. This means that being from an urban area increases the probability of choosing a bachelor degree by 12.9 percentage points. Likewise,

being female or married increases the probability of obtaining a bachelor degree. Among the two socioeconomic variables, only the first one is statistically significant (and positive). Also, the father's education background is also strongly significant for holders of bachelor degrees.

Table 2 Probit estimation results

Characteristic	Dependent variable	
	Bachelor	Certificate
Urban	0.129*	-0.098*
	(0.050)	(0.036)
Female	0.085*	-0.095*
	(0.037)	(0.029)
Married	0.020	-0.009
	(0.043)	(0.032)
Age	-0.016	-0.003
	(0.015)	(0.010)
SES1	0.033*	-0.042*
	(0.017)	(0.015)
SES2	-0.029	0.026
	(0.018)	(0.015)
Father same degree	0.123*	0.005
	(0.043)	(0.032)

Notes: People aged 25−35 with completed secondary education. Number of observations: 984. Estimates robust to survey design; linearised standard errors in parentheses. Items marked * indicate significance at 5% level.

Source: 2001 HILDA data.

The estimated marginal effects have the opposite sign when the dependent binary variable is 'certificate'. For example, the estimate for the variable 'urban' is -0.098. This means that being from an urban area decreases the probability of choosing a certificate degree after completing Year 12 by about ten percentage points. Most importantly, the socioeconomic status matters significantly (and negatively) as measured by SES1, and a father's certificate degree is not predictive of the child's choice of VET versus university education.

Tables 1 and 2 suggest that a person's socioeconomic background is predictive of the choice between VET and university education. A person with a relatively high socioeconomic status whose parents are well educated is much more likely to choose university over VET. On the other hand, a person with a relatively low socioeconomic status with uneducated parents is not unlikely to choose VET over university education.

An important determinant of education choice not addressed by the preceding analysis is a person's academic ability. Socioeconomic background and parents' education do not fully explain a person's education choice. An academically gifted person from a family with low socioeconomic status can choose to attend university. In developed countries such as Australia, such a person can draw on resources (such as government HECS education loans) that remove barriers that otherwise would make higher education unattainable. To study the role of academic ability on education choice, we look at data from the Longitudinal Surveys of Australian Youth from the year 2006.

For LSAY 2006, a nationally representative sample of 14 170 students aged 15 years was selected to participate in the Programme for International Student Assessment (PISA). Through PISA, students' achievement in mathematical literacy, reading literacy and scientific literacy was assessed during the

year 2006. The cohort of 15-year-olds was followed annually for five years and asked questions on education, training, work, job history, health, finance etc.

To study the role that academic aptitude plays in the choice between VET and university education, we restrict the sample to people who had completed 12 years of formal education by the year 2010 and who either chose to pursue a certificate program or a bachelor degree during 2010. We then study the average PISA test score of these people, splitting the sample between the two education levels. Table 3 contains the results.

Table 3 Pisa plausible value averages by education

Skill	Bachelor	Certificate
Maths	556	478
	(73)	(78)
Reading	553	470
	(70)	(88)
Science	567	485
	(86)	(93)

Notes: Number of observations: 3421. Estimates robust to survey design and attrition. Standard deviations in parentheses.
Source: 2006 LSAY data.

The table shows that students who attended university in 2010 had an average mathematical literacy PISA (plausible value) score of 556 compared with 478 for certificate students. For reading literacy the bachelor cohort attained a score of 553 versus 470 for the certificate cohort. The difference between the two education levels for literacy in science equals 82 (567 compared with 485). These differences are considerable and statistically significant. The large gap in academic aptitude between university students and certificate students suggests that the choice between a university and a VET degree is largely determined by such differences in academic ability. It is noteworthy that the PISA score was taken in the year 2006, while the education choice was measured in 2010. This indicates that the actual education choice may be predetermined early on, at least for those students who find themselves in the tails of the ability distribution. (Note that biases resulting from longitudinal sample attrition have been eliminated, as best as possible, through use of survey sampling weights that connect subsequent survey waves.)

Quality 'report cards' for education providers

One of the most important factors affecting a student's choice of education provider and course of study is the quality of the program and the provider. However, as with health care and legal services, education is an 'experience good', whose actual quality is unknown to consumers until consumption takes place. That means, without other information, students have to choose a provider and course without sufficient knowledge of the quality of their future education. In economics, making an uninformed decision like this is called 'adverse selection', where informational asymmetry may give rise to inefficient allocation of resources. In other words, students may have been better off had they been able to base their choices on the 'quality' of the provider and the course undertaken.

To provide consumers of goods with more transparency and to solve the problem of adverse selection, there has been a trend whereby governments mandate the goods and service providers to disclose information about their service. Such policies are dubbed 'report card policies'. In Australia since 2010 the government has launched a series of websites aimed at releasing information that compares

schools and hospitals, including My School, My University, My Child and My Hospital. While 'provider quality' is a general term, the information revealed on each website is specific. For example, for universities, the quality information includes student survey results and student outcomes, whereas for primary and secondary schools, the focus is on the results of the National Assessment Program — Literacy and Numeracy (NAPLAN). Table 4 provides a brief summary of the specific quality information disclosed on the three websites for education providers.

Table 4 Quality information from education provider websites

Name	School types	Main quality information disclosed	Website	Launched in
My University	Universities	Subject area level: 1 Student survey results, including overall satisfaction rate, good teaching scale, and generic skills scale 2 Enrolment information, including number of applications, number of offers, and number of commencing students 3 Basis of admission 4 Student outcomes – domestic students, including attrition rate, retention rate, and number of completing students University level: 1 Graduate outcomes 2 Student demographics 3 Staff demographics, including staff qualifications percentage 4 Student to staff ratio	<myuniversity.gov.au>	2012
My School	Schools offering part or all of education from preschool to Year 12	Results of The National Assessment Program – NAPLAN compared with the national average and the schools with statistically similar backgrounds	<myschool.edu.au>	2010
My Child	Child care service providers	1 National Quality Framework Rating 2 Accreditation history in the child care quality assurance systems	<mychild.gov.au>	2012

In addition to the government's report card approaches, rankings for universities are provided by many independent organisations. The well-known ones include the US News World's Best Universities Rankings,[5] the Times Higher Education World University Rankings,[6] and the QS World University Rankings.[7]

While to date there have been no similar report card policies or rankings for the Australian VET providers,[8] we notice that NCVER has been developing an 'Atlas of Australian public VET', of which a beta version is available on the NCVER's website.[9] The atlas presents summary information of a variety of VET data at three levels: the national level, the state/territory level and the statistical division level. However, it is noticeable that, unlike My School and My University, institute-level data are not yet available.

[5] Website: <www.usnews.com/education/worlds-best-universities-rankings/top-400-universities-in-the-world>.

[6] Website: <www.timeshighereducation.co.uk/world-university-rankings>.

[7] Website: <www.topuniversities.com/university-rankings/world-university-rankings>.

[8] Though the government has developed a website <training.gov.au/>, which shows information on training packages, qualifications, courses, units of competency and registered training organisations, the website to date has not shown much information about the education providers' quality.

[9] Website: <www.ncver.edu.au/resources/atlas.html>.

Supporters of the report card policies and the school rankings argue that not only do they allow students to make informed decisions when choosing the institution and the course area, they also provide institutions with an incentive to take measures to improve their education quality. For example, in the United States, both federal and state accountability laws mandate schools to disclose statistics of student performance as a measure of school quality, as highlighted by the 2001 *No Child Left Behind Act*. Studies find the laws have had a positive effect on student outcomes.[10]

However, despite the increasing popularity of the report card policies and the long existence of rankings, there has always been a concern among the profession, policy-makers and researchers alike that such policies and rankings may promote 'moral hazard' in the education providers. In particular, they may give institutions the incentive to strategically select students in order to improve their disclosed quality information. In addition, sceptics argue that it is difficult to detect and deter such strategic selections because institutions normally enjoy the freedom to turn down an application without giving specific reasons.

In what follows, we would like to argue that the concern over an institution's moral hazard can be alleviated, if not dismissed, if a report card for education providers can exhibit multiple performance indicators. While our argument can be more formally presented as a two-stage signalling game model, a norm in the economic literature, we will present it in plainer language so that it becomes more accessible to a wider audience.

Consider a general report card policy that mandates that each education provider is to release two indicators to the public: one indicator is a *quantity* indicator, namely, the enrolment, and the other is a *quality* indicator, such as graduate outcomes or nation-wide test scores. For concreteness, consider a two-period situation in which there are two providers. One provider offers a higher quality of education than the other, which can be attributed to exogenous factors such as funding sources and history. In each period there is a mass of new students choosing between the schools. Students are heterogeneous in their learning abilities. In the end of each period, a 'report card' will be issued for each provider, publishing the quantity and the quality indicators in a format similar to that we have seen in My School or My University.

Without other information sources, students in the first period do not know which provider has a higher quality before they receive their education from the schools. That means that when they are applying neither school will hold a particular attraction for them, resulting in an identical distribution of students for each provider. If the providers do not engage in the strategic selection of the students, then at the end of the first period the provider will have the same quantity indicator, while the high-quality providers will have a better quality indicator. To imitate the high-quality provider indicator, the low-quality institute has to shun the less able students, but this means at the end of the first period the low-quality provider will have a lower quantity indicator than the high-quality institute. In other words, by no means can the low-quality provider imitate the high-quality provider in both quantity and quality indicators. So at the end of the first period the two providers' report cards necessarily differ, and this allows the students in the second period to distinguish the high-quality provider from the other one, and thus make informed applications. Moreover, the high-quality provider knows that its quality will be signalled to the public regardless of the low-quality provider's actions and it will have no incentive to shun students. For the low-quality institute, it understands that by no means can it disguise its type, and hence it will not engage in strategic selection of students either. Therefore, the two-indicator report card policy reveals the providers' qualities to the

[10] See Carnoy and Loeb (2002).

students without causing any providers to strategically turn down students. In other words, the policy solves the problem of students' adverse selection without causing moral hazard in the providers.

While the above conceptual framework illustrates the essence of a report card policy with multidimensional indicators, the conclusion is drawn from a simplified setting, from which, like all economic models, not all details of the reality can be captured. So the results should be interpreted with caveats, and a few points are worth further discussion.

First, the model suggests that in the first period both providers will receive the same mixture of students in term of abilities. This seems to be the necessary condition by which the low-quality provider cannot imitate the high-quality one on both indicators. One may argue that if the condition is not met: more exactly, if the high-quality provider admits students whose abilities on average are lower than the low-quality provider, then the former's quality indicator may be lower than that of the latter, leaving the low-quality provider with room to imitate its counterpart. While conceptually such an argument is valid, it should not be a realistic concern. In the conceptual framework it is assumed that there are no other sources of information regarding the provider quality. In reality, however, word of mouth of previous students and their parents will inform a proportion of new students about the providers' qualities. Since those informed new students are more likely to choose the high-quality provider, the high-quality provider will have a larger pool of applicants than the low-quality one. As a result, the high-quality provider can admit more high-ability students, which makes it even more difficult for the low-quality provider to mimic its opponent's quality indicator.

Second, one assumption in the conceptual framework is that the students are fully rational decision-makers and therefore they understand the relationship between the quantity and quality indicators and can utilise it to distinguish the high-quality provider from the low-quality one. Even though such a rationality assumption is fairly standard in the economic literature, in reality it is possible that the students (or people who influence their decisions, such as parents) are not aware of the quantity—quality trade-off, and in their consideration they put more weight on the quality indicator than the quantity indicator. A biased weight on the quality indicator makes it possible for the low-quality provider to strategically imitate the high-quality provider at the expense of the students' welfare. In addition, implementation of the report card policy involves a step whereby the policy-makers (report card producers) collect performance information from the agents (schools, hospitals etc.). It is also possible that the agents may take the risk and bluntly temper the information they submit to the policy-makers.[11]

However, whether a report card policy causes moral hazard or not may be statistically verifiable. Although few studies have been undertaken on education report card policies such as My School or My University, there is a relatively large number of studies on health care report cards, and the methodologies used and the results may shed some light on the education sector. To evaluate the impact of a policy such as the school or hospital report cards, a widely accepted statistical approach is the Difference-in-Difference (DID) method (Cameron & Trivedi 2005, p.55). This quasi-experimental design technique treats individuals who have been subjected to a particular policy as a 'treatment group' and individuals not subjected to a particular policy as the 'control group'. The technique compares the changes of the treatment group's characteristics before and after the policy with the before-and-after changes of the control group's characteristics. It is important to note that a report

[11] For example, it is reported that Canberra Hospital engaged in 'doctoring' its emergency room waiting times in the period when My Hospital was launched: <www.abc.net.au/pm/content/2012/s3538141.htm>. 'Canberra Hospital caught fudging thousands of records', ABC, 3 July 2012.

card policy not only may cause the providers to act strategically, but it may also have an impact on consumers' choices. A standard DID method will not be able to separate measuring the policy's effect on providers from measuring its effect on consumers. To test if the policy causes providers' moral hazard, one approach is to focus on the first period as suggested in the conceptual framework, because this is the period where providers are aware of the policy, while the consumers do not yet have access to the report cards. Following this direction, Chen and Meinecke (2012) tested the impact on hospitals of a well-known health care report card policy in the United States and found no statistical evidence of provider moral hazard. Their finding offers empirical support for the result in the above conceptual framework, meaning that similar empirical approaches can be taken to evaluate an education report card policy.

The merits of a report card policy with quantity and quality indicators also indicate the limitation of a simple ranking for education providers. By summarising various characteristics of an education provider into a number, a ranking table provides the consumers with a succinct way to compare providers. However, as consumers' attentions are typically more captured by how well the providers perform on the table, it is likely that they will spend less time on the raw information, if it is available at all, or on the methodology used to compute the providers' scores. This gives the providers more incentive to distort their effort or resources in order to climb up the ranking, and more ability to do so.[12]

If students regard VET and universities as equal alternatives, then there is another challenge confronting VET, given that websites such as My School and My University have been launched and have gained increasing public awareness. Naturally people may wonder if a similar website such as My VET will be introduced soon. There is a well-known 'unravelling result'[13] in the economic literature regarding the question of whether competing firms will voluntarily disclose their quality information. The term 'unravelling' refers to the process whereby the firm with the best quality will be the first to disclose its quality, because by doing so it distinguishes itself from firms with lower quality. After the disclosure of the first firm, the second-best firm has the same incentive to disclose and separate itself from the rest, and so forth, until all but the worst firm discloses. In the context of choosing between VET and universities, if the unravelling result holds, then students may contrast the launch of My University to the absence of (a plan for) My VET, and draw the conclusion that university education is better than VET. This may (mis)lead some students, for whom VET actually is a better choice, to decide to go to universities. Therefore, while the previous conceptual framework and the ensuing discussions offer support for report card policies for education providers, the unravelling result further suggests that when it comes to the implementation of a policy such as My VET, *ceteris paribus*, sooner is better than later.

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[12] For example, Stake (2006) shows how law school rankings in the United States misled the schools' resource allocation.

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What role does price play in student behaviour?

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Tuition fees are potentially the main direct price of undertaking further education. Price increases may thus discourage some individuals from undertaking such education. Difficulties in borrowing for education costs suggest that price increases may have larger effects on individuals from lower socioeconomic backgrounds. Price increases may raise the revenues of education providers if government funding of providers is maintained. Education providers may respond to revenue increases by opening up more places for study. Thus price increases may lead to increases in enrolment, but perhaps less able students will be admitted. Such a response may in turn lower completion rates conditional on enrolment. Higher prices may also, however, encourage students to choose courses more carefully, raising completion rates. On the other hand, price increases may result in students working more while studying, lowering study performance and potentially lowering completion rates. The potential effects of price on the education choices of more mature adults (that is, after initially entering the workforce) are also discussed, as is the role of employers and other government policies in education and training decisions. Existing evidence on the relationship between tuition fees (price), enrolment and completion is provided. The evidence is rather sparse regarding the effect of price on completion.

Introduction

The decision to undertake further education is usefully thought of as a choice of whether or not to 'invest' in such education. Individuals weigh up the benefits of the further education against the costs. These benefits and costs are both monetary and non-monetary. The benefits include potentially higher earnings from the jobs that individuals with more education can obtain, higher occupational prestige, better non-wage benefits (flexible working hours, travel), more interesting work, personal growth etc. The costs include any tuition or other fees that students or families may have to pay, costs of books and materials, travel costs, 'psychological costs' (some individuals may dislike studying) and most importantly, the value of the time needed to study. This time value or opportunity cost comes about because individuals could work instead of studying, and thus receive higher income levels sooner.

The role of price — or tuition fees — in this decision seems reasonably straightforward. If prices are increased, the costs of education rise. Thus the net benefits of further education fall. Fewer individuals may therefore choose to enrol in further education. Determining how many and which particular individuals will be affected by a price change is a complex problem.

My main objective here is to lay out the main issues regarding the role of price in individuals' education enrolment and completion decisions and in their outcomes. These issues include the potential effect of financial constraints on the individual's education decisions, the effect of price increases in a government-funded education system with price and quantity (number of student

[1] Many thanks to Chris Ryan and Domenico Tabasso for useful comments.

places) constraints, the decisions of both youth and more mature-age individuals, the role of employers and the interactions of education policies with other government policies. A particular focus is the potential effects of price on course completion, both in the aggregate and conditional upon enrolment. I discuss some of the evidence on the effect of price increases on enrolment and completion, and whether such evidence is applicable to Australia and to the vocational education and training sector in particular.

Although questions of whether or not individuals should pay more for their education, and why governments subsidise education, are extremely important, I will leave discussion of those issues to others. I will focus on the topic at hand: the role of price in student behaviour.

The enrolment decision

A workhorse model that economists use to represent the individual's decision to undertake (invest in) further education involves standard net present value calculations (see for example, Norris, Kelly & Giles 2005). Individuals add up the value of all future income gains (after tax) from undertaking the extra study over the expected working career and compare those gains with the current costs of study. As money today is more valuable than money some time in the future, individuals 'discount' the future income gains when calculating the net benefit in today's dollars (that is, the net present value of the investment). If prices rise, current costs rise, and the value of a particular investment in education falls.

This model of investment is readily applicable in a world where individuals can easily borrow to invest in the additional education. Banks are, however, generally unwilling to provide loans to individuals without collateral, that is, without having access to some object owned by the individual that can be claimed by the bank and sold if the borrower (a student) does not repay the loan. In most modern countries, banks cannot sell individuals into indentured service if student borrowers do not repay their loans.

Due to the general unavailability of private bank loans for students, many governments intervene to make student loans available. Governments may either provide loans to students directly, or may guarantee student loans that are provided by private banks (agree to repay the bank if students do not). Many governments also subsidise the interest payable on these loans, particularly while the student is still studying. A standard student loan system involves loans that are repayable in the ten years after course completion, irrespective of whether the individual obtains a well-paying job. Student loan schemes such as this are employed in countries such as Canada, the United States and Germany. In these countries, only youth from less advantaged backgrounds (low parental income and assets) can obtain government guaranteed and subsidised student loans.

In the past two to three decades, a number of countries have adopted what is known as an income-contingent loan system for student loans. Under such a system, students only pay back their loans if their income exceeds a particular income threshold level. One motivation for such a scheme rather than a standard loan is that it should not deter youth from low-income backgrounds from undertaking investments in further education. The first such scheme was implemented in Australia in the late 1980s (the Higher Education Contribution Scheme, or HECS), with loan amounts covering tuition fees, but not living expenses, while studying. Such schemes have since been adopted by several other countries, including New Zealand, the United Kingdom, Chile, South Africa and Thailand. (See Chapman & Ryan 2005 for further details.)

An important aspect of the decision to invest in further education is uncertainty. Evidence suggests that the net benefits of further education are quite variable across individuals. Many individuals obtain well-paying jobs after completing their studies, but others do not. (See Borland 2002 for evidence on the variation in net benefits across individuals at the university level.) Investments in further education are thus quite risky. Future benefits are uncertain, but up-front costs are not. This risk, if it cannot be mitigated in some way, may lead to underinvestment in further education, as individuals generally prefer certainty in their income levels. Insurance for individual employment risk is generally not provided by insurance companies. This is due to the standard problems of adverse selection (only individuals with high probabilities of not finding a good job may buy such insurance) and moral hazard (the individual may not put in effort to gain a good job if insured).

Income-contingent loan schemes such as HECS help to mitigate the risk stemming from uncertainty in future earnings, as repayments are only made once income exceeds a threshold level. If individuals do not obtain a well-paying job post-study, their income may never exceed the threshold, so they never pay the tuition fees. The government is essentially bearing the cost of non-repayment if an individual does not gain from her/his investment in education. Progressive income tax systems, coupled with welfare payments, also provide some insurance against this investment uncertainty. If you do not obtain a well-paying job post-study, you pay less income tax (at a lower percentage of income) than someone who does obtain a well-paying job. If you do not obtain a job at all, welfare benefits can provide some income.

Price increases may affect some potential students more than others. Youth with less access to funding (for example, from parents) may be more sensitive to price increases than other youth. Some youth may also be less future-oriented than others, such that the up-front cost of undertaking education today may bear a more than proportional weight in their decision than potential future positive wage benefits. Youth often expect that the potential wage benefits from undertaking further education are much smaller than they actually are. Youth from less advantaged backgrounds also have lower expectations of the wage gains from undertaking further education than youth from more advantaged backgrounds (see Usher 2005).

Part of the focus of this discussion, and the majority of the evidence on the effects of price on student behavior discussed below, is based on the post-secondary education systems in the United States and Canada. This focus is due to those countries having systems that are closest in spirit to the workhorse model of investments in education employed by economists. Students must pay tuition fees up front to attend higher education, particularly at the university level, even at public institutions (the majority). The vast majority of students in European countries attend public higher education institutions. These institutions have not, until recently, charged students any tuition fees. European students are also often provided with grants to pay for living expenses, particularly if they are from less advantaged backgrounds.

Amounts provided under standard student loan systems (United States and Canada) generally do not cover the full costs of undertaking higher education. Empirical evidence on the effect of tuition fee increases on college and university enrolment in the United States and Canada generally shows a more negative effect on youth from low-income backgrounds. For the United States, see the survey article by Kane (2006). For Canada, see Coelli (2010). This more negative effect on low-income youth may be due in part to loan limits not increasing with tuition fee increases.

In Australia, HECS covers all the tuition fees of university students irrespective of family background, but has not in the past covered living expenses. The introduction of HECS coincided with the charging

of university tuition fees for the first time since they were abolished back in 1975. The evidence suggests that the introduction of HECS has not resulted in any real change in the proportion of youth from low socioeconomic status attending university. Attendance rates are much lower for low-socioeconomic status groups, but relative rates of attendance have not deteriorated since HECS was introduced. Attendance rates have increased for all socioeconomic status groups. (For further details, see Chapman 1997; Andrews 1999; Aungles et al. 2002; Department of Education, Science and Training 2003; Chapman & Ryan 2002, 2005).

The HECS scheme has been extended to diploma-level study in recent years. Will such a scheme be as successful at the VET level? The incomes earned by VET graduates are generally not as large as those earned by bachelor degree graduates. If tuition fees for diploma-level studies are increased significantly, some individuals may choose not to attend, even if payment of fees can be delayed via a HECS scheme to when working. Evidence will become available over coming years as our experience with the HECS scheme at the diploma level grows.

Interpreting the effect of introducing HECS combined with higher fees may, however, be difficult at the diploma level. The higher fees being charged in Victoria since 2009 in particular were initially coupled with the provision of concessional rates for many students. Thus gauging the effect of higher fees coupled with a HECS scheme has been somewhat 'tainted' by the provision of concessional rates to some. HECS take-up rates among Victorian diploma students have also been quite low. In addition, Victoria has recently reduced the funding allocated to TAFE institutes. Making sense of enrolment responses to all of these simultaneous changes will prove difficult.

The signalling value of price may also be important to the individual's education decision. If the government of the day is attempting to encourage individuals to undertake further education, in part by offering places at low prices (heavily subsidised), then individuals may be more likely to enrol. Increases in price resulting from reductions in government support for VET may discourage some individuals from undertaking VET study, particularly if the earnings benefits are not clear.

Potential supply effects of price changes

In Australia and in many other countries, governments play a large role in the provision of education at the post-secondary level. Federal or state governments often choose the prices students pay for further education (by setting tuition fee levels), and choose the amount and type of government funding of post-secondary institutions. Governments may also decide on the number of available places at public institutions and even the number of places in particular fields of study. For example, until recently, the federal government decided on the number of students universities could enrol by field of study. The recent move to allow universities to choose enrolment levels by field of study according to student demand ('uncapped' places) does reduce this government control. Nonetheless, the government still controls the maximum price universities can charge domestic students, and they control the amount of government funding provided to universities.

This government control of price, funding and potentially quantity of available places by field of study may considerably restrict student behaviour. If post-secondary institutions are not free to set prices for courses, but are able to choose the number of available places, it may be the case that there is excess demand (demand exceeds supply) for courses at current price levels. Prices may be kept too low for institutions to provide all the places demanded by potential students, given government funding (subsidisation) levels. Some potential students will not be offered places in such cases.

If prices are such that there is excess demand, price increases may actually lead to higher enrolments, if government funding levels for public providers are maintained. Education institutions may use the extra revenue from increased tuition fees to fund expansion of student places. One of the initial arguments made for implementing the HECS scheme after years of fee-free university education was the need for more revenue to fund an expansion of Australia's higher education system.

In order to understand the potential amount of excess demand for post-secondary education, it may be tempting to look at the difference between the number of individuals applying for study and the number obtaining a place. Applications may, however, underestimate the demand for further education, if some individuals choose not to apply when they believe their chances of acceptance are very low or zero. Thus it is difficult to gain a complete understanding of the level of excess demand for education using available data sources. We can of course gauge whether there exists excess demand, just not its size.

Course completion

One reality of the education landscape is that not all individuals complete the courses they initially enrol in. There is particular concern about completion rates in the VET sector in Australia and overseas. How do we think about this 'decision' to drop out? What may cause it? Does price affect it?

Non-completion may occur due to the individual choosing to drop out, or it may be due to the failure to pass the required thresholds of learning for being granted a qualification. Failure may occur for a number of reasons. It may be due to an inherent lack of ability or prior knowledge, but may also be due to a lack of effort while studying. The former type of failure may be due to errors in admission, that is, individuals were admitted without the requisite prior knowledge. The latter type of failure may be more akin to the drop-out decision itself, that is, they chose not to put in the effort required.

According to the workhorse model of investment in education discussed above, individuals choose the level of education up to the point where the benefits no longer exceed the costs. So why would individuals choose to drop out prior to completion? Evidence suggests that completion of qualifications yields much higher labour market returns (wage rates) than partial completion of study. These course completion effects are often termed 'sheepskin' effects — reflecting times when some academic qualifications were printed on sheepskin rather than paper or parchment. These sheepskin effects are usually identified as follows. We compare two individuals who report undertaking the same number of years of education. If one individual obtains a particular qualification, but the other one does not, the earnings difference between the two is termed the sheepskin effect. (For evidence on these effects in Australia, see Barrett 2012.)

Individuals may choose to drop out if they learn more about their abilities, options and potential outcomes while studying. Students may reassess the value of completion of their current course of study. For example, they may learn that their current course of study no longer interests them as much as some other field may. They may learn that returns are higher in another field, whether in terms of higher salaries, or in terms of the expected match between their own specific interests and working condition preferences and the attributes of different occupations. Individuals may also find a job in a particular occupation that interests them, and may not need to complete their current course in order to keep that job. They may also decide that completing their current course but achieving low grades will not provide a higher return than dropping out and obtaining a job in a different occupation.

How might tuition fee increases affect completion? If we are thinking about course completion rates, that is, the proportion of students enrolled in a course who actually complete it, tuition fee increases may have two offsetting effects. If fees are higher, students may need to work more while studying, potentially lengthening completion times and increasing dropout rates. Neill (2006) found that increases in tuition fees in Canada increased the amount of time students spent working while studying. Stinebrickner and Stinebrickner (2003) found that work during college study lowered academic performance.

It should be kept in mind, however, that in Australia price increases may not lead to increased amounts of working while studying if tuition fees can be deferred using HECS-type schemes until completion. If HECS is available, price increases may not lower completion rates due to a working time response.

Higher tuition fees may, on the other hand, result in higher course completion rates conditional upon enrolment, when only those individuals whose expected benefits (given uncertainty) are significantly higher than costs choose to study. That is, only the most motivated individuals decide to enrol. Individuals may also be more careful in their choice of field of study, if costs are higher. This may raise the probability of completion conditional on enrolment, as individuals may be less likely to experiment with course selection. Higher tuition fees may also provide a stronger incentive for completion, as some wage gains only accrue if the course is completed (the sheepskin effects discussed above), but tuition is paid irrespective of completion.

As discussed above, price increases may alter the mix of students who enrol in post-secondary education if a HECS-type scheme is unavailable. If low-income youth are the least able to pay for further study, they may no longer be able to afford to enrol if prices rise. The low-income youth who would otherwise (at lower prices) choose to study may have high ability, thus price increases may lower the average ability of enrolled students. If such ability is related to completion conditional upon enrolment, then higher prices may reduce completion rates via this mechanism.

If we are interested in unconditional aggregate levels of course completion, that is, not just completion conditional on enrolment, then price increases may lower demand for further study, as discussed above. Enrolment and completion may not fall, however, if there is excess demand for such courses, as described above, and if price increases allow more places to be made available by providers.

Regarding VET study in particular, completion rates in Australia are generally measured to be quite low. Completion rates are as low as 27%, according to Mark and Karmel (2010). This low completion rate may be due in part to students enrolling in certain studies (individual subjects or modules) but not actually intending to complete a qualification. The labour market returns from completing lower-level VET qualifications (certificates I and II in particular) have been found to be modest at best. (See, for example, Lee & Coelli 2010.)

Adult education

A large proportion of post-secondary education in Australia is undertaken by more mature adults (that is, at ages where individuals have usually already entered the workforce). Australia has one of the highest rates of formal adult education among developed countries. According to the Organisation for Economic Co-operation and Development (2011), Australia had the second highest participation rate of those aged 40 and over among all OECD countries in 2009, at 4.6%, which was over three times the OECD average of 1.5%. For those aged 30 to 39, Australia's participation rate ranked fourth highest overall, at 11.7%, which was nearly twice the OECD average of 6.2%.

The motivations for undertaking further education at more mature ages in Australia are quite varied. While there are a number of non-employed individuals at more mature ages undertaking further education and training in order to get a job (particularly females re-entering the labour force after a career break), there are many more who are already employed. The most common main reason such employed individuals provide for undertaking further education is because it is a requirement of the job, or because they wanted extra skills for their current job. Other less common reasons provided include: to get a promotion, obtain a new job, start their own business, for personal interest, enjoyment, self-esteem etc. (See ABS 2009 for more details.)

Ongoing education and training is required in some occupations in order for individuals to maintain occupation certification. Price increases for such education and training may discourage some individuals from maintaining certification and remaining in such skilled occupations. This potential loss of skills and experience may deserve consideration when policies are set regarding tuition fee increases and government support. The effect of such price increases on the education and training decisions of individual workers, however, will in many instances be determined by their employers. Employers often provide the funding for the education and training of their workers.

The role of employers

As Karmel (2012) discusses, both employers and individuals are at the centre of VET in Australia, with employers being arguably its primary client. Industry is heavily involved in the purchase of training for existing and new employees. If the costs of training go up, will employers continue to purchase such training to the same extent, without further government assistance? If prices rise, will workers be required to pay for part or all of such education and training instead? Given that the labour market benefits (increased wages) of certificate-level training in particular are modest, individuals may be unwilling to pay for such training if prices rise.

Many employers provide financial support for their workers to undertake further education. Such employers often pay for all or a significant proportion of study for graduate certificates and diplomas, even for master's and PhD qualifications. The response of workers considering such study to price changes will no doubt depend on how employers respond to such changes. Do employers continue funding at the same level, or do they raise it as prices rise?

Employers also have a significant role in the training decisions of young people just entering the labour market. In many cases, particularly for apprentices and trainees, the up-front 'net cost' of VET for the individual is a function of what the individual could earn without the training (the opportunity cost discussed above), the amount they are paid while undertaking the apprenticeship or traineeship, and the cost of VET to the individual undertaking the training. If the price of the formal education component of an apprenticeship or traineeship goes up, fewer individuals may choose such a method of training unless the wages they are paid rise. Note that in many cases, employers of apprentices and trainees may pay tuition fees on behalf of students. Thus employers themselves may in these instances respond to fee increases by reducing the number of apprentices or trainees that they take on (employ).

There is, however, the issue of the 'supply' of apprenticeships and traineeships. If apprenticeship and traineeship places are not freely available for all youth who wish to obtain one, then the relationship between the price of formal study and enrolment is not at all clear. There may be excess demand for such apprenticeships and traineeships, given current supply, so increases in tuition fees may not affect enrolment or completion much at all.

Interactions with other government policies

Education and training is an important component of responses to industry change. The size of the Australian manufacturing sector in particular has fallen considerably over the past several decades. Job losses in manufacturing are continuing, particularly as the Australian dollar stays high. Getting these individuals back into gainful employment no doubt requires some amount of retraining and education. Without government assistance to pay for the potentially higher costs (prices) of such retraining, these individuals may stay unemployed for longer, losing their remaining work-related skills. The need for such training arrives just when these individuals are least able to pay, due to their employment loss. Thus government policies regarding responses to industry change interact with any change in policy regarding the price of education and training.

The federal government's current 'learn or earn' policy, which was introduced in 2010, requires young people under the age of 21 who have not finished Year 12 or have equivalent qualifications, to be studying in order to qualify for the Youth Allowance. Youth affected by this policy may be more likely to choose a course of learning based on price rather than on the potential value of the course to the individual and their future prospects. Changes in the government funding of particular fields of study, as occurring in Victoria, may lead to significant changes in the prices charged for different courses. This in turn may affect the decisions of these particular youth considerably.

Existing evidence

There exists considerable evidence on the relationship between post-secondary education enrolment and price, including the effects of tuition fees, scholarships and grants. While tuition fees are expected to be negatively related to enrolment, scholarships and grants are expected to have the opposite effect, as they lower the net price or cost of attendance. The vast majority of this evidence is based on experiences in the United States and Canada, and particularly for four-year colleges or university, but also for two-year or community colleges. North American community colleges provide education and training in several areas, including vocational training, pathways to four-year colleges (university) and general work and life skills. Tuition fees at public education providers vary across states or provinces in these two countries, providing the variation required for estimating price effects. Most European countries have not charged fees for post-secondary education at their public education providers until recently.

A large volume of older United States enrolment studies were surveyed by Leslie and Brinkman (1987), while Heller (1997) and Kane (2006) provide updates. The United States studies generally find that increases in tuition fees result in lower college enrolment rates among 18 to 24-year-olds. As discussed briefly above, the effects were more negative for low-income youth than high-income youth. They were also more negative for community college enrolment than for four-year college enrolment, but this may be due in part to low-income youth being more likely to attend lower-priced two-year community colleges. Several studies also found that tuition fees had larger effects than changes in financial aid (grants, scholarships).

Canadian studies of price effects on enrolment are surveyed by Coelli (2009). Many Canadian studies found that enrolment rates overall did not respond much at all to tuition changes, but as discussed above, low-income youth did respond negatively to tuition increases, while high-income youth had marginally higher enrolment rates when tuition fees rose. The findings of no overall relationship in Canada may reflect excess demand for education due to limited supply.

With regards to course completion rather than just enrolment, there are fewer studies, as completion is a more difficult outcome to measure than enrolment in many available datasets. The small numbers of estimates of the effect of price changes on completion that do exist were not covered in the surveys of existing literature mentioned above. Bettinger (2004) finds that grant aid provided to low-income students increases student persistence at college in the United States and raises completion. Dynarski (2008) found that broad-based merit aid programs in the form of tuition fee scholarships increased aggregate course completion in the United States, and her results also imply higher completion rates conditional on enrolment.

Light and Strayer (2000, 2002) investigate the relationship between individual ability and the level of quality of the college attended, using United States data. They model both the decision of which college to attend vis-a-vis its quality and the probability of graduation. Although not a major focus of their two studies, they find that tuition is negatively related to enrolment in two out of four college quality levels, but that tuition is not significantly negatively related to completion in their preferred specifications.

Bound, Lovenheim and Turner (2010) investigated the decline in four-year college completion rates (conditional on enrolment) in the United States from 1972 to 1988. While the authors did not study the effect of price on this decline, their findings are potentially of interest. They found that a small part of the completion rate decline was due to a reduction in the average quality (ability) of entering students, while a larger part was due to declines in resources per student at post-secondary institutions. Given these findings, changes in price may positively affect completion rates if the less able respond to the price rises by not enrolling, and if the revenues from the price increases are employed to raise resources per student (lower student—staff ratios) at post-secondary institutions.

More recently, Stern (2011) attempted to estimate the effect of recent price increases on individual subject completion rates (conditional on enrolment) in California's community college system. The author finds a small positive relationship between price and subject completion, suggesting that higher costs may encourage students to stick with courses rather than drop out, and perhaps choose their subjects with more care. Overall enrolments fell as prices rose, but enrolments were also negatively affected by cuts to government funding. Dropping out of subjects is a common problem in United States community colleges.

The level of tuition fees at the time of initial enrolment may have no effect on persistence, as the level would have been taken into account by the individual when deciding to enrol. Unexpected increases in tuition, however, may have a negative effect on persistence as students at the margin may re-assess the value of continuing. Johnson (2008), however, found that neither the level of tuition nor increases in tuition during the time an individual is at university affected persistence at universities in Canada.

There have been a couple of recent studies of European higher education outcomes. Arendt (2008) studied the effect of grants on completion in Denmark (tuition is zero in Denmark). Higher grants were associated with lower drop-out rates, but there was no discernible effect on completion. Garibaldi et al. (2012) studied the effect of tuition increases at a particular private university in Italy. The authors found that higher tuition fees, particularly fees in years beyond the normal time for completion of a qualification, can shorten time to completion. That is, higher prices encourage students to put in more effort in their early years to ensure they complete their qualification on time. Higher prices did not increase drop-out probabilities. Increasing time to completion is a notable

feature of higher education in many developed countries over the past several decades and has been a cause for concern in many jurisdictions.

There is precious little evidence on the effect of tuition fees on enrolment in Australia, at the VET level in particular. Obtaining accurate measures of tuition fees at the TAFE level across states is not particularly straightforward. It is also unclear whether there has been enough variation in tuition fees across jurisdictions over time to enable an estimation of tuition fee effects. Recent changes in Victoria may produce the tuition variation required to construct such estimates at the VET level. But as discussed above, other aspects of education policy changed at the same time, making isolation of the price effect rather difficult.

The introduction of HECS for the university sector in Australia was akin to a change in tuition fees, as were subsequent changes in the levels of HECS contributions over time and across fields of study. It is difficult, however, to estimate the effect of such changes on enrolment and completion in the Australian setting, as the changes affected all students across Australia. It is thus difficult to separate out the effects of such HECS changes from the effects of other influences on the enrolment and completion outcomes of individuals. Excess demand for university places also results in difficulties in interpreting changes in enrolment as changes in demand. Thus the effect of HECS contribution changes on student behaviour is difficult to establish.

International students

The effects of price on international student behaviour are likely to be considerably different from the effects on Australian domestic students. International students are likely to be much more price-sensitive than domestic students, as they are considering education options across many countries. But the 'price' for international students is much broader than tuition fee levels in Australian dollars. The prices that international students consider are determined by exchange rates, which affect the level of fees in their local currencies and in the currencies of Australia's international education competitors (the United States, the United Kingdom and Canada in particular). The price comparisons that international students are making across potential study destinations also include costs of living (rent, food) and travel from their home countries.

International students, however, also react strongly to non-price differences across destinations, such as perceived levels of safety and the possibility of settling in the country post-education if desired. Rules regarding opportunities for working while studying also affect their decision on where to study. Evidence on the effects of price changes (fee levels and exchange rate movements) alone on international student choices is thus very difficult to establish, given the many differences across countries that affect destination decisions. Thus the potential responses of international student numbers to changes in the prices charged in Australia are difficult to predict.

Conclusion

The potential effect of price changes on student behaviour is a complex issue. It may not be as simple as a price increase leading to lower enrolment and thus completion of a qualification. The effect that price may have depends on a number of factors. Can students delay payment of fees until working via a HECS-style scheme? Is there excess demand for education opportunities, such that price increases may raise provider revenue and thus increase the availability of places? How will employers and other government policies respond to tuition fee changes? These are all important factors that will affect how students respond to price changes in Australia, and these factors will determine whether the

overseas evidence on enrolment responses to price increases are applicable to the Australian setting. Regarding completion of courses conditional upon enrolment, fee increases may actually raise completion rates, for the reasons discussed above. The effect of price on student behaviour is thus not as straightforward as might initially be expected.

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Regulating for learning in the tertiary education system

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This paper introduces a broad conception of regulation. It explains how narrow conceptions of laws, rules and compliance systems place positive outcomes at risk through not meaningfully connecting with the educational enterprise as it is understood by teachers, students and prospective employers. When regulatory hot spots flare in response to harms to the public, a common practice is to fix the problem through the government taking control. When, as happened recently, tertiary education providers closed their doors on students part-way through their studies, government responded with demands for greater accountability and better risk management in the sector.

Containment strategies tend to be applied universally. They impose significant burdens and divert resources from mainstream activities. In the process the efficacy and achievements of the sector are placed in jeopardy. Top-down regulatory impositions can diminish responsibility within the sector for dealing with its own problems and with the public that has experienced the harm: regulated actors follow government instructions without feeling they can or should come up with any initiatives to improve the situation.

The burden of new layers of regulation is not only felt by the sector but becomes a highly coloured 'unproductive burden' of the regulatory agency and a drain on the government budget. Once in place, it can be hard to return responsible stewardship to the sector from which it had been taken. While top-down intervention may be necessary to prevent further harm in moments of crisis, fixing the problem in the long-term may require greater sharing of the responsibility for ensuring stability and quality in the tertiary education sector. The argument of this paper is that there are many ways in which this sharing of responsibility can occur earlier rather than later in the life of a government regulator.

This paper introduces four well-established approaches to regulation: risk management; commitment and responsible self-regulation; nodal governance and meta-regulation; and responsive regulation. The argument is that all of these approaches, while emanating from different sources with different purposes, share a common element. When implemented well, they will leave the stronger aspects of the learning culture intact and apply pressure for reform to the weaker parts. Just as important is that considered together these regulatory ideas recognise diversity among regulated actors. One step on from recognising diversity is understanding how to manage the diverse reactions of individuals to regulatory intervention. This paper argues for a new regulatory sensibility, one that comes to terms with the psychology of individuals and their dislike for the loss of freedom that occurs when they come into contact with regulatory authorities. Two psychological principles are articulated.

The first involves deterrence. Deterrence works best if it is something that is in the background, something to be feared rather than something that people have experienced. With experience comes the temptation to defy and challenge authority. The sensibility of being a good citizen is lost. Acts of non-compliance come to be regarded as clever, as a win, and sometimes even assume 'hero-like' status.

The second psychological principle is practising the justice of respect. This idea comes from the procedural justice literature, where communicating respect to regulated actors is crucial to eliciting their cooperation and earning legitimacy for the regulator.

The purpose of this essay is to present a model of regulatory intervention that builds on strengths in the sector, that recognises both teaching professionalism and the responsibility of the sector to be responsive to labour market needs and which restricts regulatory intervention to educational providers who fail to show commitment to quality education and skills development. Regulation no longer needs to conform to a one-size-fits-all package. It can be designed in such a way as to be tough on those abusing the system, while supportive of those committed to the provision of quality education and training.

Introduction

Seeing regulation through a bigger lens

For most people, government regulation means laws, rules and formal systems of control. This is but one slice of regulation. To understand regulation we need to start with a much bigger view of what it is and how it works. The purpose of regulation is to steer the flow of events so that harms are avoided and benefits realised. In the broadest sense, regulation then is commonplace. It can be informal and local and, most importantly, responsive to individuals, contexts and environments. At most times, regulation is so low key and taken for granted that we would not even think of it as regulation (Parker & Braithwaite 2003, pp.119—45).

No one would be surprised at the statement that teachers regulate students by issuing grades for courses or certifying skills. But they may be surprised at the notion that when teachers invite students to ask questions in their class they are engaging in regulation. Teachers spontaneously empower students to participate in the learning process. At the same time they are regulating the learning process. Through question time, teachers take stock of what has been learnt and where students are struggling in their understanding. Teachers are engaging in a deliberate attempt to redirect the flow of events towards better learning in response to contextual factors that make learning difficult: the material may be complex, students may appear bored or lost, the teacher may have doubts about her delivery of the material, or disruption in the class may have led to a less-than-ideal learning environment. Allowing for question time is not prescribed in a formal set of rules. Instead it is a practice that is embedded in the professional role of being a teacher with responsibilities — to help with and check on students' learning.

A host of regulatory activities are of this kind — embedded in professional roles, cultural norms and knowledge of best practice (Braithwaite 1989). Certain ways of doing things become widely accepted in communities, and there is a clear expectation that people will cooperate and adopt these practices because doing so shapes the flow of events in meaningful ways for them. The social system works to make sure no one steps too far out of line through internal sanctions. If teachers don't turn up to class or students don't come to class, a range of strategies will be used to rectify the situation and communicate the expected standards of behaviour. Some will be informal, such as a quiet word, some will be more formal, such as checking attendance rolls or counting hits on instruction websites, and some will take the form of a reprimand for the misdemeanour, citing school rules or codes of conduct, and setting out expectations for future conduct. There may also be warnings of how sanctioning could escalate and be placed in the hands of an outside or higher authority. None of this necessarily requires the intervention of a regulatory body.

In most instances, people regulate themselves and each other successfully within their own organisational settings. Sometimes, however, informal social controls, even formal internal controls, are not enough. The controls may break down as professional cultures or learning cultures fragment (Akers 1998; Reiss 1951; Matza 1964). Or the risks of harm may be so new that informal and internal systems of control are not yet sufficiently well developed to protect the community. This is where government agencies step in. It could be argued that the learning and professional culture of the tertiary sector has been stressed by opening the market to private providers, a low investment in the teaching profession and an explosion in international students. At the very least the changes have brought new challenges to providers, for which they were neither prepared nor adequately resourced. The immediate concern of government understandably has been to fix the problem.

When informal and local social control systems fail, however, it is not necessarily the case that everything about them is dysfunctional and should be replaced with a government-led solution. Getting to the bottom of the failure and understanding the root causes of a regulatory problem should highlight system weaknesses that need to be addressed. But such an analysis also can shed light on the parts of the informal system that can be strengthened and supported. Strengths can be used to counter or contain the impact of weaknesses. Building on strengths is usually more productive for a government regulator than cleaning the slate and starting again.

A range of regulatory interventions

Traditional command-and-control approaches to regulation may be contrasted with other more recently developed forms, which in many circumstances may be more effective and efficient. Table 1 provides a snapshot of the range of regulatory approaches that regulators have at their disposal to change the flow of events. They may be used individually or in combination to provide the leverage that regulators need to bring about the desired change. Four are of particular interest in the educational context: risk-based regulation; commitment and responsible self-regulation; nodal governance and meta-regulation; and responsive regulation and regulatory pyramids, which enforce compliance and strengthen commitment. Together they help regulators to deal with the inherent difficulties in practising regulation in a freedom-loving society. They also can be brought together to build a regulatory framework that is essentially responsive in nature and avoids intruding on those who are able and willing to not only meet regulatory standards but surpass them. Before discussing how these four regulatory approaches can work in harmony, a body of theory and research summarised below explains psychologically why considerably more nuance is required in regulatory design than is provided through the old style command-and-control approach.

Table 1 Different approaches to regulation

Regulatory approach	Key features	Examples	Advantages	Disadvantages
Command and control	▪ Legal definition of offences ▪ Prescription of actions to ensure compliance ▪ Regulatory authorities reliant on coercive powers ▪ Rigid sanctioning regime	Regulation of traffic	Offers certainty	▪ High admin. cost ▪ Inefficient compliance activity ▪ Can offend fairness
Market mechanisms	▪ Requirements for market entry ▪ Established operating standards ▪ Informed choice by consumers ▪ Complaint mechanisms	Tertiary education	Allows innovation Supports competition	▪ Potential for fraud ▪ Requires informed consumers
Risk-based regulation	▪ Assessment of probability of harm ▪ Prioritisation of impact ▪ Analysis and definition of risks ▪ Targeted action to address risks in order of impact	Drugs and poisons	Efficient Avoids inefficient compliance activity	▪ Requires capacity to measure risk ▪ Requires open exchange of information
Commitment and responsible self-regulation	▪ Shared understanding and belief in behaviour as intrinsically worthwhile ▪ Committed actors demonstrate good practice	Japanese car manufacturers	Efficient Supports innovation and productivity	▪ Requires trust
Nodal governance and meta regulation	▪ Third-party or shared responsibility for regulation ▪ Engages nodes with resources, power and influence ▪ Systemic approach to compliance	Management of banking system	Efficient Taps expertise and resources Builds strong relationships	▪ Risk of learned non-compliance
Responsive regulation	▪ Starts with opportunity for self-correction, with escalating intervention ▪ Incorporates risk management, commitment and responsible self-regulation, and nodal governance	Health and aged care, taxation	Supports development of sector	▪ Requires significant coordination and repeat encounters with non-compliant entities

Costs of regulation

The costs of regulation are particularly draining on resources of a human, social and economic kind when cooperation with the regulatory authority is low. A regulator might struggle to gain cooperation for many reasons, but the systemic problem for regulators revolves around freedom (Brehm & Brehm 1981; V Braithwaite 2009a). It is in the nature of human beings to react adversely to intrusions on their freedom, even when that intrusion comes from a legally constituted authority. Potential loss of freedom is a threat that triggers wariness and readiness to defend that freedom. At the same time, reasoned argument initiated by the regulator can put such fear to rest. Such argument would insist that regulation was needed to prevent widespread harm, that the regulation would provide *benefits*, be implemented with *justice*, and that it would not in any way threaten those with *moral obligation* to do the right thing (V Braithwaite & Wenzel 2008; V Braithwaite 2009b).

Acceptance of this perspective by those being regulated depends on the degree to which they see the regulator as trustworthy (V Braithwaite 2003; Tyler 1990; Braithwaite, Makkai & Braithwaite 2007). High levels of trust currently are not enjoyed by the governments of the world (Dalton 2005). Many citizens are cynical about the benefits of government regulation. This is not unreasonable. There can be a host of unintended consequences of regulation that prove counterproductive to achieving the *benefits* that have been promised, particularly in times of social change (Grabosky 1995). Counterproductive side effects can alienate the regulated community en masse.

Less common, although equally significant, is failure to hold any *moral obligation* to obey the law or respect the authority charged with administering the law, regardless of whether the regulation brings

with it benefits or justice. Most regulated actors in stable democracies have such an obligation (Schwartz & Orleans 1967). There are segments of the population, however, who have disassociated themselves from government institutions and adopt a view that government and its laws and rules are to be either ignored or treated as a game as one pursues one's interests and goals (McBarnet & Whelan 1999). Those displaying a disrespectful attitude to law consume a disproportionate share of the regulator's attention because they openly challenge regulatory legitimacy.

For all these reasons regulators can find it difficult to be beacons of hope, or even to be accepted as legitimate authorities. As a consequence, it becomes difficult to elicit meaningful change in people's ways of doing things, even when the authority overseeing the change has access to the full force of the law to back up its demands.

Mixing and matching different types of intervention

Theory around deterrence, the justice of respect and benign big guns

Traditionally, compliance depends on deterrence. Deterrence is intended to discourage people from breaking the law. Empirical work on whether deterrence works or not variously investigates deterrence as being punished or sanctioned by the legal system. In reality, people experience deterrence in a broader and highly variable way. When a business owner is convicted of fraud and a failure to pay taxes, he will receive financial penalties, may even be given a jail term through the legal system. But he is also likely to suffer the pain of seeing his family life descend into chaos, lose his livelihood and experience shame, as friends and acquaintances learn of his fate, and possibly even guilt and remorse over taking an illegal course of action.

All of this is to say that, while deterrence may be a simple construct when we consider what the legal system delivers, it is highly complex when one considers how it is experienced psychologically and the effect it has on future behaviour. The psychological impact of deterrence is clearly going to depend on many other factors: the propensity to feel shame and guilt; the values of significant others and the social norms of one's group; tolerance for criticism; and the quality of one's family life, to name but a few. Such factors differ from one person to another. Importantly it is the psychological meaning associated with the sum of these different pressures that will determine future behaviour, not the penalty imposed by the legal system (Kennedy 2008).

Amidst a complex set of findings from research investigating the effectiveness of various faces of deterrence in different contexts, the one factor that does seem to shine through is the person's perception of how likely it is that they will be caught for not complying, rather than how severe they think the penalties will be (Braithwaite, Makkai & Braithwaite 2007). In other words, a belief that in the future one might be caught appears to be one of the best constraints on those who are contemplating breaking the law. Most people prefer not to be in trouble with the law.

Tom Tyler and his colleagues have spent more than two decades showing how people are more likely to obey the law, support authorities and cooperate with them when they are treated with procedural justice (Tyler 1990, 2011). Procedural justice for Tyler means believing that one has been treated with respect and that one has been looked upon as trustworthy and with impartiality. This meaning, which emphasises how one interprets one's treatment at the hands of an authority, sits alongside notions of procedural justice as fair and due process. Tyler's work has been important in demonstrating that how we are treated is far more important in determining our cooperation and law abidingness than whether or not authorities make decisions in our favour. When people are treated as valued members of a community, they come to view themselves as part of that community and want

to keep their good standing with others in the group. Fair treatment paves the way for taking on board a pro-social hoped-for self. When individuals are treated with procedural justice, they are more likely to be open to being persuaded that the laws are legitimate and are important to follow. They are more likely to act positively. Procedural justice provides an avenue for lowering resistance to and doubts about the regulator among members of a regulatory community. In the process, cooperation around regulatory reform is built.

These two literatures inform the design of regulatory systems and how such systems can manage the task of regulating. Deterrence is more effective in steering individual behaviour when it is something that could happen in the future and is feared as such. It may be feared because it brings transactional, social or economic costs or some combination thereof. The effects of deterrence after they have occurred are less predictable. The actual experience of punishment may or may not elicit compliance. It can give rise on multiple grounds to beliefs that one's treatment lacks fairness, is oppressive and inhumane. Punishment may therefore facilitate people's movement to the periphery or out of the regulatory community and generate defiance against the authority. This defiance inoculates against the regulator's endeavours to be procedurally fair, to educate and to persuade that a certain course of action may be desirable or morally right.

Two principles to guide regulatory practice

The bodies of research on deterrence and on procedural justice indicate that the following two principles should guide the development of regulatory practice:

- The regulatory system should be seen as a 'benign big gun' peopled by regulators who walk and talk softly — with respect and concern, but who are known to carry a big stick and are able to coerce compliance if they so choose (Ayres & Braithwaite 1992; V Braithwaite 2009a). In other words, deterrence works through being feared more than through being experienced as punishment. When deterrence is used against an individual or group, it loses much of its power and creates the opportunity for defiance and rebellion. It is to be used sparingly, when other methods of influence fail. At the same time, regulated actors know it can and will be used if a resolution to their differences with the regulator is not found.
- The regulatory system should uphold the justice of respect through: communication within the regulatory community to ensure respectful, inclusive treatment; regulatory interventions that are transparent and in accord with previously agreed standards; and willingness to work to build commitment to regulatory goals (Tyler 1990).[1] In other words, procedural justice (particularly the justice of respect) keeps members of the regulatory community at the table with hoped-for selves drawing them down the path of compliance and feared possible selves keeping them away from paths of non-compliance.

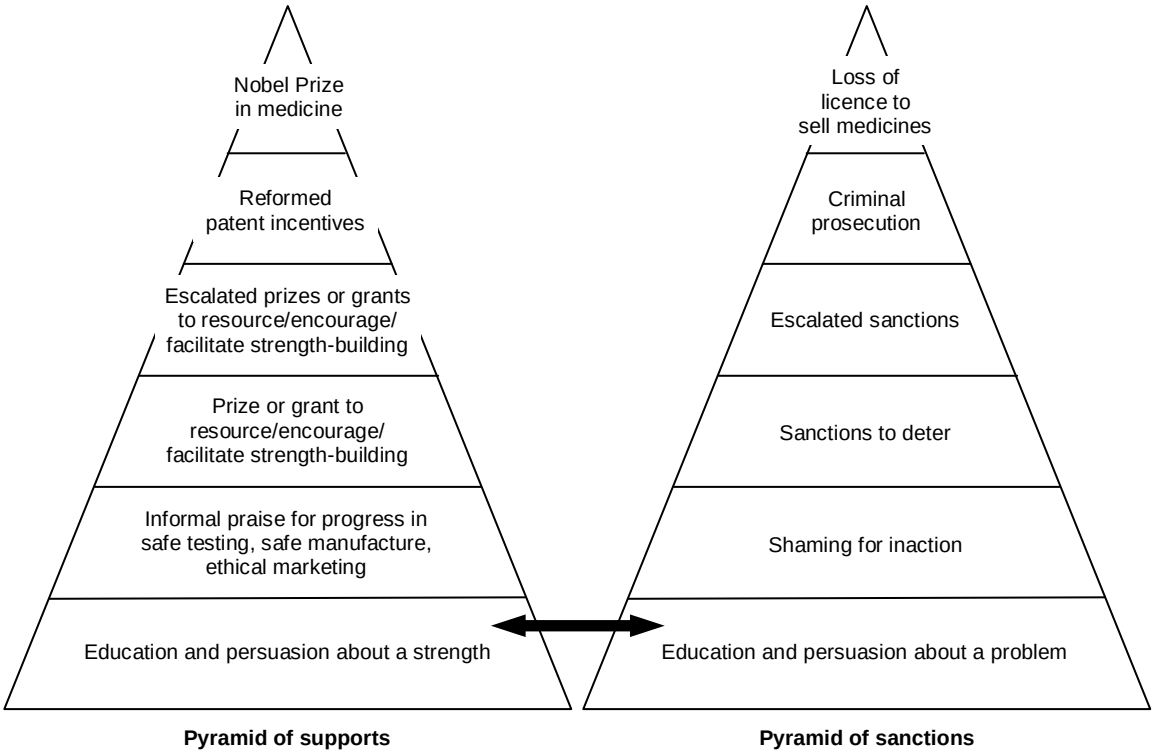
These two principles are essentially psychological. They are central to discussions of responsive regulation, but are not necessarily explicitly acknowledged in discussions of risk management, commitment and self-regulation, and nodal governance and meta-regulation. Nevertheless, all four regulatory practices are well suited to accommodating the principle of credible deterrence as a benign big gun and the principle of regulating with the justice of respect.

[1] For a discussion on these issues in the context of child protection, see Braithwaite, Harris & Ivec (2009, pp.5–21); Harris, Braithwaite & Ivec (2009, pp.69–75).

Regulatory pyramids of sanctions and supports

These ideas are encapsulated in regulatory pyramids. There are pyramids of sanctions (sometimes called enforcement pyramids) and pyramids of supports (sometimes called strengths-based pyramids). An example of both types of pyramids appears in figure 1 in the context of the regulation of medicines. The idea of a pyramid of supports is that it recognises and rewards virtue, each step representing a higher achievement than the one below and each step conferring more status than the one below. The recognition offered through a pyramid of supports to those doing the right thing plus the incentive structure provided through rewards and awards have the effect of motivating high performers to strive for excellence and average performers to do better. A pyramid of supports not only raises the bar, but it supports organisations as they try to get over that bar (Braithwaite 2008). It nurtures hoped-for possible selves, while the pyramid of sanctions brings to the fore feared possible selves.

Figure 2 Pyramids of supports and sanctions being developed by John Braithwaite in his work with Graham Dukes and James Maloney on the regulation of medicines



Regulatory pyramids need to focus on particular problems: there is no one size fits all with responsive regulation. To illustrate, one particular risk for a tertiary education regulator may be the assessment of training skills. A responsive regulatory approach would begin by understanding the problem. Are there economic or political pressures that are contributing to the problem? Is the problem widespread in the industry and if so why? Or is the problem restricted to businesses of a certain kind?

Critically analysing these issues would involve bringing together nodes of expertise and influence from across the sector — teachers, students, providers, employers and workforce participants with knowledge of how skills were translating into the workforce. Knowledge of best practice would be exchanged and evaluated.

Next would be conversations with providers who had been identified as using inadequate assessment procedures. The first step would not involve sanctioning but rather the opportunity for the provider to work with the regulator to develop an action plan to address the problem. Others may be involved in

this process: training of staff may be necessary, assessment protocols may be shared. It may even be possible for a group of regional providers to cooperate in setting up an assessment process for all students in the region.

Should the problem of assessment not be dealt with responsibly by providers, regulators would increase their control over the process. They may audit courses to see how assessment is undertaken. Desk audits may be followed up through visits to observe the assessment process. Industry councils may be invited to accompany the regulator to observe assessment processes and certify their legitimacy. If improvements are not evident, penalties and fines may be applied. In the absence of compliance, the next steps may involve restrictions on conditions of operation for the non-compliant provider, resulting eventually at the top of the compliance pyramid in removal of registration to operate.

It is useful at this point to consider what a non-responsive approach to the assessment problem might look like. The problem is illustrated by considering the limitations of web-based programs for education (for example, language teaching) that incorporate standard assessment modules so that one can gauge one's level of competence before proceeding to the next level. These are enjoyable and valuable learning tools, but as most of us who have used these programs know, they provide no assurance that in another context, when we are travelling or working, we will be able to understand and speak our new language. Assessing whether we are ready to take on the world with our new-found skills requires not a standard and rigid assessment process, but rather one that can test how we cope at the limits of our competence. Do we adapt, learn and engage with the challenge or do we become panic-stricken or withdraw in despair?

Assessment, like learning, gains much of its meaning and value in the hands of teaching professionals. The qualities required to judge who is ready and who is not to effectively use their skills in another environment cannot be scripted. A person could answer every question correctly on a computer-based language test, but be totally incapable of applying that skill in a work context which requires group conversations and group problem-solving. Extending testing to include all possible contexts for application of the skill is hardly feasible. Assessors need to make judgments, not just about what a person can do at a particular point of time, but about their retention, understanding and application of that skill in the future. The 'learning to learn' factor is essential for knowledge transfer and adaptation. The problem cannot be addressed without teaching professionals who give students confidence in what they know and how to learn more. Exercises in assessment are an inherent part of developing the learning to learn skill.

Strengthening professionalism and commitment is not generally achieved through legislation or coercion. Both require a regulator that is nurturing of these qualities. It is in the nature of regulation that regulators see both good and bad practices. It makes sense for regulators to give attention to good things happening in the regulatory community and being open to the prospects of better things happening with a bit of support. Regulatory activity around recognising strengths and promoting good news stories for the sector can be organised around a pyramid of supports (Healy 2011; Braithwaite, Makkai & Braithwaite 1997).

Regulator recognition of strengths can be given in a variety of ways but, importantly, the ways must be valued and meaningful to the sector. In practice, pyramids of supports, like pyramids of sanctions, need to be developed in consultation with the regulatory community. Nevertheless, the steps included in figure 1 have applicability in most sectors, including tertiary education, where innovation, commitment and cooperation are critical for raising quality and extending best practice.

One point is worth emphasising in relation to pyramids of support. Regulators can develop an unhealthy focus on the negatives: they regard the positives as not within their remit and they fear that through recognising positives they weaken their case for sanctioning and leave themselves open to being challenged (Braithwaite 2011; Braithwaite, Makkai & Braithwaite 1997). The answer to this argument lies in the regulatory purpose. The evidence shows that if the objective is to improve standards, a regulatory agency that ignores the positives and only notes the negatives does so at its own peril. It is surprising how few regulators praise those who are undertaking innovative steps to ensure compliance or improved outcomes that are beyond the standards expected by the regulator. Praise works: in a study of 410 Australian nursing homes, inspectors who made greater use of praise achieved higher compliance rates two years after their inspection (Makkai & Braithwaite 1993).

Responsive regulatory pyramids work because they deal with the psychology of defiance, the desire to protect one's territory from an intrusive regulator. Where regulation is seen as an unnecessary burden — a not uncommon reaction — people turn away and don't want to know anything about it. 'Won't do' and 'can't do' become one, because people place themselves at a social distance from either being persuaded of the benefits or learning what is required for compliance. Social distance prevents them from moving to the more compliant-ready states of 'want to do' and 'can do' (V Braithwaite 2009a).

The task of the good regulator is to reduce this social distance, to turn the situation around to one where the regulated party is willing to give it a go. Heavy-handed enforcement is often counterproductive to winning over the non-compliant (Makkai & Braithwaite 1994; Braithwaite & Makkai 1991). A good long chat, on the other hand, can work (Bardach & Kagan 2002). The regulator may persuade the regulated party to comply. It is also possible that the regulated party will take the opportunity to persuade the regulator that the regulation is unreasonable and needs to be changed. Under such circumstances of knowing that their criticisms and grievances are being taken seriously, most law-abiding individuals will comply. They opt for deference with dissent (V Braithwaite 2010). Either way, a light touch to achieve compliance is superior to heavy-handed approaches, which more often than not will ratchet up tensions and defiance and increase the likelihood of protracted contestation. At the heart of these battles at the top of the enforcement pyramid is the law. Just as important for future compliance, however, is the disrespect that each party communicates to the other, which often is not quickly forgotten (Braithwaite 1989).

Conclusion

This paper presented the argument that building a regulatory community that is supportive of the regulatory enterprise and which shares a sense of genuine commitment to the regulatory purpose is fundamentally important for any regulator and is an ongoing process. This outcome is not achieved exclusively through law and an enforcement rulebook. Rather it is achieved through dialogue about the benefits that the regulator will bring to the sector, the justice that will guide its decision-making and its processes, and the reasons why the sector should feel a moral obligation to work with and defer to the regulator's authority. The dialogue may be tense at times. But it is only through such a process that a regulator can establish its integrity, that is, its soundness of purpose, its dedication to holding standards high and improving them if possible, its commitment to operating with justice of respect and, most importantly, its responsiveness to the regulatory community that it serves.

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DISCUSSION

Interactions with the system

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There are two main themes in the essays on which I am providing a commentary: the determinants of an individual's decision of whether and where to participate in tertiary education; and the appropriate form of regulation for tertiary education.

The decision to participate in tertiary education

In their essay Yijuan Chen and Juergen Meinecke review the theory and some empirical evidence on the determinants of an individual's decision whether to undertake tertiary education. Mick Coelli's essay provides a nice conceptual overview of the channels through which changes to price (student payments) might affect participation in tertiary education and reviews international evidence on price effects.

I had two responses to the material these essays present. First, I think our knowledge about the determinants of participation in tertiary education in Australia is a bit more developed than a reading of the essays would suggest. Second, it's important to emphasise the word 'bit'; because there is still a large amount that we don't know.

My first example of our knowing a bit more is with regard to returns from university education and VET in Australia. Most recent studies begin by taking a structured approach to describing the benefits and costs of acquiring a tertiary qualification. Table 1 shows a possible taxonomy. It makes the point that, for example, a comprehensive accounting of the benefits of tertiary education in Australia would want to test for both pecuniary and non-pecuniary effects (see for example, Norton 2012).

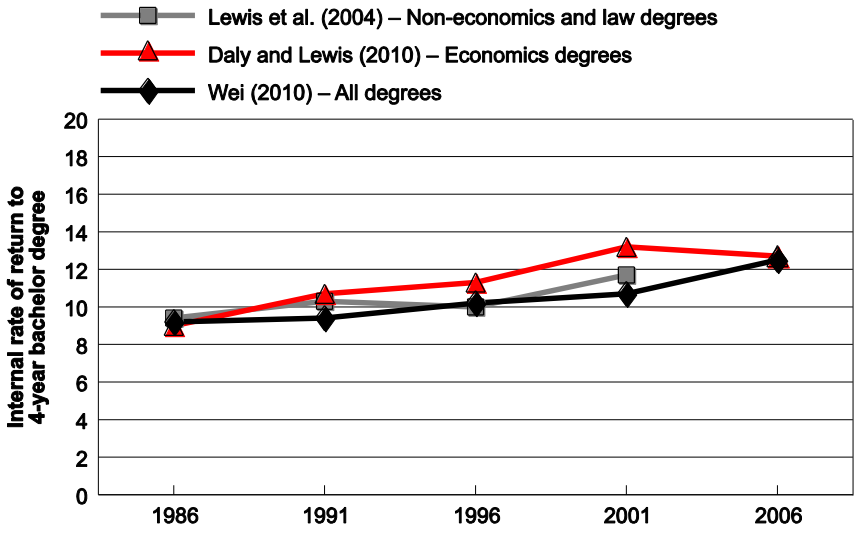
Table 1 Costs and benefits of university education

		Returns to:	
		Private	Social
Costs		Forgone earnings from labour market activity during period of education	Loss of output (but displacement effects?)
		Fees	Cost of provision of education
		Direct costs minus student benefits	Government student benefits
Benefits	Pecuniary	Increase in after-tax earnings from labour market activity	Increase in value of output in society due to higher productivity of worker acquiring education
		Higher probability of employment	Spillover benefits on productivity of other workers
	Non-pecuniary	Job satisfaction	Better citizens; greater political stability
		Health	Reduced crime rates
		Marital stability	Lower population growth

Regarding the pecuniary benefits, there are now many studies which estimate the private returns from a university bachelor degree in Australia, from which a consistent set of findings emerge. Foremost is that the average return from completing a university bachelor degree is relatively high,

and in recent years has remained stable. As an example, figure 1 shows the internal rates of return from a bachelor degree for males in Australia between 1986 and 2006 taken from several different studies. The rate of return has been consistently above 10%, and has increased slightly over the 20 years to the mid-2000s.

Figure 1 Annual internal private rates of return from university education in Australia: multi-year studies, males, 4-year bachelor degree



Sources: Lewis, Daly & Fleming (2004); Daly & Lewis (2010); Wei (2010).

There is also, however, a high degree of heterogeneity in estimated returns from a university bachelor degree. The return has been found to vary — potentially by large amounts — with factors such as the length of degree; whether a student is employed while studying; field of study; and whether the effects of extra education on employment are taken into account (see Borland 2002; Daly et al. 2011). Furthermore, even for those who complete the same degree, subsequent differences in earnings suggest substantial differences in the rate of return; for example, Norton (2012, p.55) shows that even for a degree such as medicine, there are 10—20% of graduates who are estimated to have a negative return from undertaking the degree.

There have been fewer studies of the private returns from VET qualifications in Australia. Tables 2 and 3 include a selection of findings from more recent analyses by (respectively) Borland, Johnston and Webster (2005) and Long and Shah (2007). These studies generally find positive rates of return from the higher-level VET qualifications — certificate III/IV and diploma; but rates of return from certificate I/II are lower and in some studies are negative. For example, in Borland, Johnston and Webster (2005) private rates of return are estimated to be negative for a certificate I/II, positive (above 50%) for a certificate III/IV, and positive (20% using the Household, Income and Labour Dynamics in Australia Survey; 60—100% using the Survey of Education and Training and Information Technology [SETIT]) for a diploma. In interpreting the findings on returns from certificate I/II qualifications it is also necessary to take into account that these levels of qualification are often a stepping stone to higher qualifications.

Table 2 Annual rate of return to VET qualifications, 2001

		HILDA			SETIT		
Qualification		Certificate I/II	Certificate III/IV	Diploma	Certificate I/II	Certificate III/IV	Diploma
Counterfactual		*Complete Year 10 high school*	*Complete Year 10 high school*	*Complete high school*	*Complete Year 10 high school*	*Complete Year 10 high school*	*Complete high school*
Males	Study full-time/ work part-time	Negative	Negative	18.0	Negative	48.5	62.5
	Study part-time/ work full-time	Negative	Negative	31.5	Negative	38.5	37.5
Females	Study full-time/ work part-time	Negative	82.5	20.0	Negative	>100	>100
	Study part-time/ work full-time	Negative	55.0	27.5	Negative	75.0	37.5

Source: Borland, Johnston & Webster (2005, tables 5 and 6).

Table 3 Annual private rates of return to VET qualifications, Australia, 2005

Qualification	Counterfactual	Years of full-time equivalent study	Age when studying	Rate of return — males	Rate of return — females
Diploma	Year 12	2	18–19	19.9	15.1
	Year 10	2	18–19	21.6	21.2
Certificate III or IV	Year 12	1	19	20.6	14.6
	Year 10	1	19	25.0	30.2
Certificate I or II	Year 10	0.5	19	5.8	34.9
	Year 9	0.5	19	15.9	7.8

Source: Long and Shah (2007, table 18).

There is a much higher degree of variability between estimates of the average private internal rate of return from VET qualifications than for estimates of the return from a university degree. For example, Borland, Johnston and Webster (2005) estimate a negative return from undertaking a certificate I/II, whereas Long and Shah (2008) estimate positive (albeit low) rates of return.

The sensitivity of estimates of returns from VET qualifications seems to occur due to the methodology for calculating the internal rate of return, which attaches most weight to costs and benefits in the initial years of studying and working. With a relatively short duration of courses and low VET fee costs, differences in earnings profiles in the initial years after graduation for workers who acquire and do not acquire a VET qualification become the main influence on returns. But these differences in earnings profiles for young workers with different levels of qualification are very sensitive to assumptions such as whether the worker is working full-time or part-time while studying. For example, Ryan (2002) shows that the rate of return can vary by over 40%, depending on whether it is assumed that a student works full-time while studying part-time or works part-time while studying full-time.

My second example of our knowing a bit more is about the effect of price on participation in university education in Australia. Here, I'd characterise the main stylised facts we know to be that:

- The financial return from undertaking a university degree in Australia is not highly sensitive to the level of required student payments. For example, several studies have shown that the private rate of return from acquiring a degree is hardly affected by varying the size of HECS payments (see Borland et al. 2000; Chapman & Ryan 2005; Norton 2012).

- Changes to required student payments in the HECS era have not affected total demand for university places or demand by students from low socioeconomic status backgrounds (see for example, Andrews 1999; Aungles et al. 2002; Norton 2012; a more recent study by Deloitte Access Economics 2011 concluded that increases in HECS in 1997 and 2005 have each reduced student applications by 8%, with most impact on students from low socioeconomic status backgrounds; however, amongst other issues with this analysis, it is very likely that price is proxying for other influences on demand).
- Participation in university education in Australia is not significantly related to socioeconomic status once a student's university entrance score is controlled for. Rather, differences in university participation by socioeconomic status groups reflect differences between the groups in the likelihood of completing high school and the university entry score obtained (see for example, Marks et al. 2000; Cardak & Ryan 2009).

To my mind, these stylised facts are all pointing in the same direction: that the decision whether to undertake university study in Australia is not highly price-sensitive. The size of student payments does not have a substantial effect on the financial return from completing a university degree. Hence, it is not surprising that changes to required HECS payments do not seem to have had an appreciable effect on demand for attending university. But what then explains differences in university participation rates between various socioeconomic status groups? Well, it seems it is an association between socioeconomic status group and the university entry score a student obtains, rather than a reflection of the inability of low-income households to bear the costs of university education.

So we do know a bit. But there is much that we don't know that is relevant to the topic that Chen and Meinecke consider. A major example is suggested by the title of their essay: 'Student choice between VET and university'. At least to my knowledge, this is a topic that has not been studied extensively. Here, I make some suggestions about how progress might be made in investigating the question. To analyse an individual's choice between university and VET it seems important to start by understanding when individuals effectively make that choice: is it at the end of high school, or at some earlier stage of high school? Knowing this timing tells us about the context in which the choice is made and the information available to the individual at the time of making the choice. Then it would be necessary to think about potential drivers of the choice. To the extent that the choice between VET and university will ultimately be manifested in the occupation in which an individual works, the choice of where to undertake tertiary education is likely to reflect individuals' preferences over the type of job they want to do. This directs attention to the way in which aspirations and preferences over jobs are formed; for example, perhaps reflecting neighbourhood or peer effects (Heath 1999). Studies which show the important effect of a student's university entry score on university participation suggest that the 'choice' between VET and university may also to some degree reflect the rationing of university places.

The appropriate form of regulation for tertiary education

In their essay Valerie Braithwaite and Sue Fergusson provide an introduction to the general principles that they argue are appropriate for regulating tertiary education. Chen and Meinecke discuss a more specific issue associated with regulation: how to ensure that higher education institutions cannot strategically manipulate information on the quality of the education and training they are providing.

Braithwaite and Fergusson enumerate two general principles: the need to use deterrence appropriately; and the importance of procedural justice. These principles give rise to what are

referred to as 'regulatory pyramids of sanctions and supports'. These pyramids emphasise that regulation should attach equal importance to rewarding good performance and to addressing poor performance; and adopt a staged approach to dealing with problems. Braithwaite and Fergusson provide an example with regard to how a tertiary regulator should go about regulating how a provider assesses skills:

> A responsive regulatory approach would begin through understanding the problem … Next would be conversations with providers who have been identified as using inadequate assessment procedures. The first step would not involve sanctioning but rather an opportunity for the provider to work with the regulator to develop an action plan … Should the problem of assessment not be dealt with responsibly by providers, regulators would increase their control over the process. They may audit courses … If improvements are not evident, penalties and fines may be applied.

This approach makes intuitive sense to me. Where there is to be regulation, having a staged approach, giving equal weight to recognition of good performance as to sanctioning bad performance, and doing this in a way that is seen as fair, all seem important elements of doing this task successfully. In reading the essay, my main thought was therefore: Where do we go from here? How would you take these general principles and apply them in a specific context? Thinking this way gave rise to a variety of comments:

- *Costs may also matter*: the Braithwaite and Fergusson essay is about finding a regulatory approach that is best suited to achieve a goal, such as a satisfactory assessment of skills by providers. This is about benefits. But to an economist, it is the net gain to society, benefits minus costs, that matters. We would only want to apply regulation where the benefits outweigh the costs. And, where it is desirable to apply regulation, the optimal structure of regulation will also need to take costs into account. Take the example of the idea of having a regulatory pyramid. Where the costs of implementing each stage of the pyramid are equivalent or increasing at later stages, or the benefits of the staged regulatory approach are far above those of a truncated process (such as moving more quickly to legal action), then the optimal structure of regulation may be as proposed by Braithwaite and Fergusson. Some explicit consideration of costs does, however, seem necessary to justify this conclusion.
- *Diversity and context*: my feeling is that the regulatory pyramid would need to be adapted for different types of tertiary education providers and in different contexts. After the Global Financial Crisis it may be unfashionable to say that there are market sectors not in need of regulation (and perhaps also self-serving given it's my area of activity), but when you look around the world I see little regulation of the top universities. These institutions are driven by a self-sustaining culture: people come to work there because they value being in an outstanding intellectual environment and when they are there it is in their self-interest to maintain that environment. When I consider, for example, the improvements that have come in teaching practices in my own time at the University of Melbourne (such as student surveys of teaching quality, opportunities for the training of lecturers and tutors and curriculum development), I can't think of a single case where this has been due to external regulation or government. Instead, all of the significant improvements have come from university leadership or individual academics wanting to enhance teaching quality. The introduction of student surveys in 1994 by the then Vice-Chancellor David Penington is one good example (see Penington 2010, p.285). So I think there has to be recognition of how diversity implies differences in the need for regulation within the tertiary education sector. Perhaps it might be argued that this is exactly what the Braithwaite and Fergusson regulatory pyramid is doing — by having an initial stage where intervention only occurs if problems are observed. But my response would be that I think diversity implies the need to have different starting points in the

regulatory pyramid for different types of providers. In some circumstances I'd suggest that it is optimal to move more quickly to the audit or penalties stages of the pyramid. An example would be the 'bees to the honey pot' syndrome, which we observe when government funding in new areas is opened up. A sudden increase in funding is likely to cause a sudden increase in suppliers, whose quality may be variable (think the recent Commonwealth home insulation program; think the greater role for for-profit providers of vocational education in Victoria). So in this situation it seems important to be ready to sanction more quickly than in an environment with a stable set of long-term providers.

- *Dealing with political economy*: a major issue is how to deal with the politics of getting an optimal regulatory framework. Admittedly this is based only on casual observation, but I would characterise the cycle of regulatory policy-making as often involving: (i) an initial stage where regulation lags behind a new issue or problem that has arisen in a sector; (ii) mounting public concern or some crisis forces policy-makers to react; and (iii) because there is a crisis, the response is to adopt a regulatory approach that jumps straight to penalties and legal action. The challenge therefore is to maintain a speed of regulatory reform such that an appropriate regulatory pyramid is in place before rather than after problems arise.
- *Need to punish to keep punishment credible*: it makes sense that 'deterrence works through being feared more than through being experienced as punishment'. But of course, in order to be feared, it's also important that it is credible that punishment will, at some stage, be applied.

Chen and Meinecke address a more specific question regarding regulation. They begin from the position that an individual choosing whether and where to attend tertiary education will use information on the quality of alternative courses or providers. Their concern is that providers therefore may seek to manipulate indicators of quality. The solution they propose is that providers would be required to report another indicator, from which it could be inferred whether they had manipulated their quality indicator, and for this purpose Chen and Meinecke suggest a measure of the quantity of enrolments.

I accept that strategic manipulation is a potential problem with quality indicators, and that in theory a way to deal with this problem is to make that manipulation observable. Having said that I'm not sure, however, of the practical application of the solution that Chen and Meinecke propose. The capacity to make inferences from the quantity of enrolments seems to depend heavily on the special case considered in the essay, which would, for example, become much more difficult when universities differ in their potential enrolments.

More generally, worrying about what indicator to use in order to reveal whether a university is manipulating indicators of its quality seems to be putting the cart before the horse. If we accept that there is a market failure motivation for government having a role in providing or promoting information on the quality of tertiary providers, I would worry first about what indicator(s) of quality to provide. In doing this, I think it is important to begin from a behavioural perspective: asking what relevant information can be provided to people in a way that will be incorporated into their decision-making. By contrast, too often the objective with the provision of information by government appears to have been to tell people what 'they should know', without much regard for whether they will take it in.

A related issue is whether providing information on quality is enough. This issue seems pertinent to the choice between attending university or VET. Perhaps the quality of providers in these sectors does matter to an individual's choice of where to attend tertiary education, but my impression is that knowing other information such as types of careers available after doing a course, or differences in

the types of education between the sectors would be more valued. Providing other types of information may also be important for promoting participation by students from low socioeconomic status backgrounds. Some recent studies in the United States, for example, have suggested that limited knowledge of opportunities to attend higher education is a constraint on participation by students from disadvantaged backgrounds. Hoxby (2011, p.3) suggests that there is 'an array of evidence that indicates that low-income students lack information about college-going. While it is hard to argue that these students do not have access to materials (since most colleges' materials are readily available on-line), they have few contacts with *people* who attended selective colleges'.

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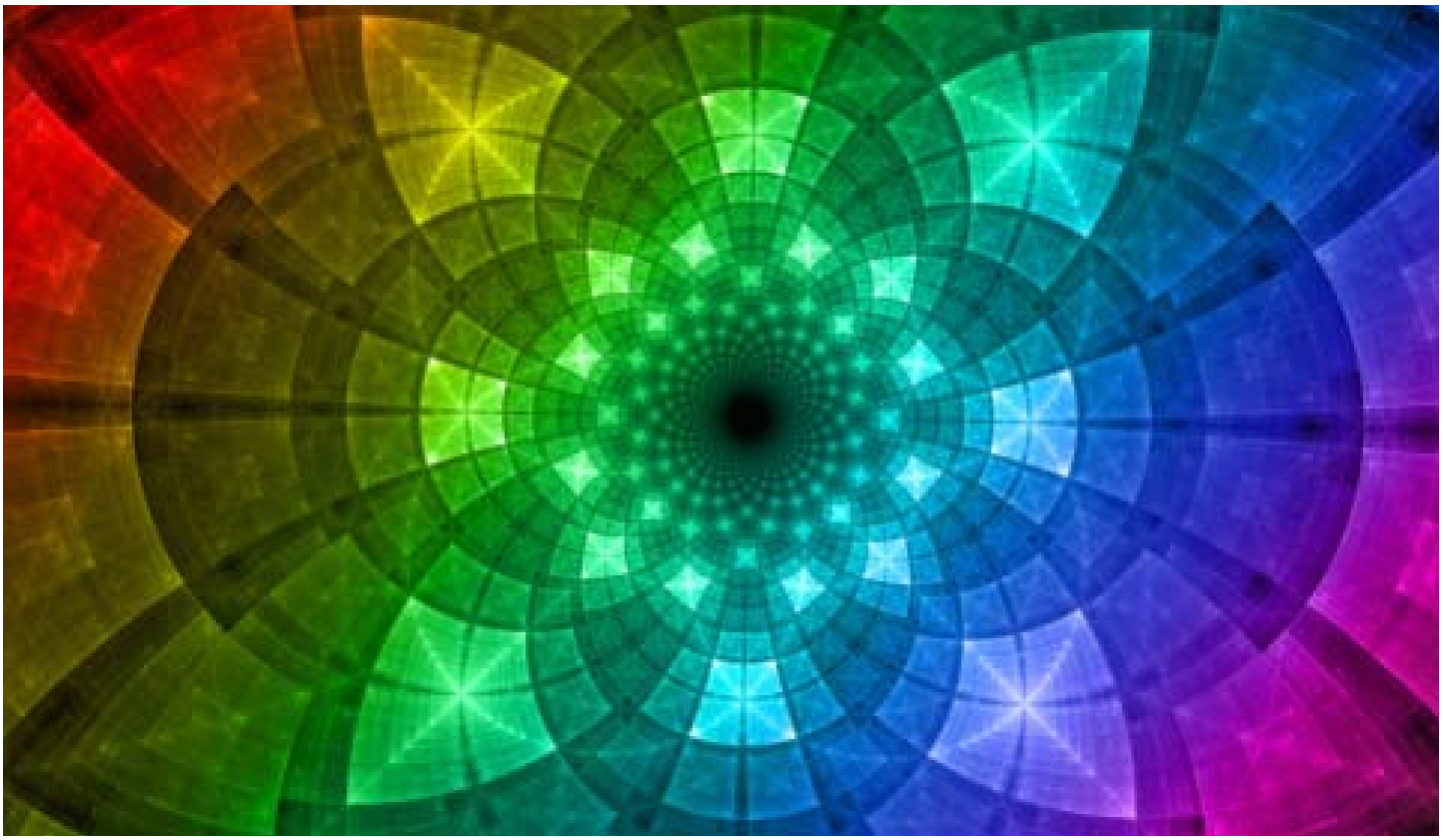

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