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A competent recovery? Economic downturn and Australia's vocational education and training system

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About the research

A competent recovery? Economic downturn and Australia's vocational education and training system

Richard Sweet

This paper reflects on some of the challenges for the vocational education and training (VET) sector in responding to the current economic crisis and ensuring that it is well placed to meet the demands of the recovery phase. It is the result of a roundtable organised by the National Centre for Vocational Education Research (NCVER) at Parliament House, Canberra, held on 30 July 2009.

The forum participants identified a number of groups particularly affected by an economic downturn. As well as those made redundant, new entrants to the labour market—notably young people and recent migrants—and those who are generally disadvantaged in the labour market are particularly vulnerable. The apprenticeship system, because of its reliance on employers offering apprenticeships, is also directly affected.

Key messages

- In terms of youth, there is overwhelming agreement on the importance of education and training in the downturn, and this is driven by short-term considerations—the need to keep young people usefully engaged—and long-term considerations—the need to have skilled people in the future.
- The downturn puts the spotlight on a number of tensions within VET:
  - the role of institution-based training relative to workplace training, noting that apprenticeships come under pressure if there are insufficient numbers offered by employers. There are clearly different views on this, with some questioning the absolute preoccupation with the apprenticeship model, and those affirming its superiority
  - the type of education and training that should be promoted; in particular, there is much support for vocational education which is more broadly based, as distinct from the narrow industry focus of current training packages. We also need to be mindful of the need to ensure that students are engaged in their training, particularly the least academic, who will be most affected by the downturn
  - the funding structures, which make it difficult to develop new models. New governance and funding models may be required to create fluidity between the sectors and with fewer institutional barriers.

Tom Karmel
Managing Director, NCVER

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Overview

On 30 July 2009, at the invitation of the office of the Honourable Julia Gillard, Deputy Prime Minister and Minister for Education, Employment and Workplace Relations, the National Centre for Vocational Education Research organised a roundtable in Parliament House, Canberra. It was attended by researchers, employer and trade union representatives, Commonwealth and state government policy-makers, and senior managers from vocational education providers. The purpose of the roundtable was to discuss the longer-term implications for the vocational education and training (VET) system of the global economic downturn, and how the system should respond to these implications to best play a role in the recovery.

Key points of the discussion are presented below.

Who is vulnerable?

Economic downturns have a particularly strong impact upon new entrants to the labour market. These can include recently arrived migrants and refugees, women returning to the labour force after a period of child rearing, and young people.

Issues for young people

- Reduction in the proportion of young people in full-time work during a downturn might not be a particular problem: it depends on what else they are doing.
  - If youth job loss translates into increased educational participation, this can be positive—for both the individuals involved and for human capital formation.
  - On the other hand, if young people find themselves without a job or other productive activity, this is a waste of human potential and, a loss of skills. It also risks 'scarring' effects due to the longer-term consequences of entering unemployment directly from education.
- Apprentices are particularly vulnerable to the economic cycle. It is desirable to consider options that reduce this exposure.

Some possible solutions

A consensus emerged during the discussion that young people require a better mix of general education and vocational training. The current uneasy institutional arrangements between schools and technical and further education (TAFE) institutions do not meet the needs of the post-compulsory age group particularly well, and make it difficult to develop and deliver a more useful set of programs, which ideally would span the sectors. It would be desirable to look into:

- new models of training that devote greater attention to foundation skills
- more flexible funding models that allow cost-sharing across educational sectors and institutions
- increased financial incentives for employers, either through direct payments or through the taxation system
  - Note, however, that many employers are reporting that financial incentives are less important in apprenticeship recruitment decisions than is the availability of work. Without

the work, financial incentives to hire additional apprentices will have little impact. Some participants also expressed concern that subsidies may be a way of extending the life of, and shoring up, the 'old' economy.

- ✧ greater reliance upon group schemes within the apprenticeship system
  - ◆ While it was observed that many group schemes are already at bursting point, their expansion could be a way of spreading the risk associated with training apprentices and trainees.
- ✧ increased use of pre-apprenticeship programs and the development of alternative training models for those trades where the provision of training is less dependent upon obtaining employment.

Issues for adults

Training is only one element in the assistance needed by jobless adults and those marginalised in the labour market (for example, people with a disability). Direct job creation and subsidised work experience might often be more appropriate responses. Other social services such as counselling and advice, child care and relocation assistance are also likely to be part of the mix.

Some possible training solutions

- ✧ carefully targeted training that avoids 'deadweight' losses and substitution effects
- ✧ training for real jobs, which incorporates a wider view of competence and capability than simply short-term skills training. This training needs to take account of the reduced demand for motor skills and the trend for increased demand for cognitive and social skills.
- ✧ more systematic information and guidance for adults about the nature of available training and its labour market outcomes.

Implications for the system

The downturn has revealed the flexibility of the Australian labour market, which has seen very large occupational and industry shifts in employment over the last 12 months. This in turn emphasises the loose relationship between vocational qualifications and occupations in Australia.

Issues

- ✧ Does the system need to rethink the high degree of occupational specificity in our approach to vocational education and training?
- ✧ How does the nation respond to occupational skill shortages? What role does forecasting play and where does skilled migration fit?
- ✧ How do we meet the demand for higher levels of general education and more general vocational skills? Can the narrow industry focus of current training packages meet Australia's future needs for broader competence and capability?
- ✧ Does the VET workforce have the capacity to deal with a wider range of needs and client groups?

Some possible solutions

- ✧ It may be time to consider a new approach to human capability, one with a focus on broad occupational families; for example, food trades, engineering occupations, or personal and social services, rather than cooking, sheet metal work or child care, with a subsequent progression to more specific training and/or to higher education.

- ✧ Non-formal training has a place in meeting individuals' needs for both upskilling and lateral skilling. Recognition of prior learning has yet to reach its potential as a means of preparing people for career change, for receiving gap training, or as a pathway into higher-level education.
- ✧ The system might be more efficient if funds were deployed to cater to the diversity of learners whose educational needs vary over the course of a working life.
  - ◆ One approach might be a student entitlement, whereby funds are attached to the learner rather than the institution or sector.
- ✧ There is more to be done within the workplace to assist in the skilling effort, for example, through the use of workplace mentors; better in-house preparation of workers for change; and work redesign.

Conclusion

The roundtable raised some fundamental issues about Australia's vocational education and training system, and about its relationships to other parts of the education landscape. These cannot be resolved by quick fixes or short-term solutions. This applies whether the focus is on the future of apprenticeships and traineeships, on the desirability for a wider response to the post-compulsory age group, or on the needs of jobless adults.

In considering the longer-term contribution that the vocational education and training system should make to Australia's future, we need to recognise the importance of reconfiguring institutional types and relationships in a way that reflects a wider and more integrated view of human capability than that which characterises the system at present. This has implications for what people learn, how they learn it, how they are taught it, and how their training is financed.

A competent recovery?

Introduction

This report summarises and reflects upon the discussion that took place at the Training for the Recovery roundtable. This focused on three main sets of issues:

- the impact of the downturn upon particular groups
- the impact of the downturn upon the level and quality of demand for education and training, with a particular emphasis upon apprenticeships and traineeships
- longer-term implications for the structure of demand for skills and qualifications in the Australian labour market.

What is the scale of the downturn?

For 15 years, between 1993 and late 2008, Australia experienced declining unemployment and had one of the best performing labour markets in the Organisation for Economic Co-operation and Development (OECD) countries. However, the global financial crisis that began in the United States in mid-2007 has begun to have an impact upon the Australian labour market, with the total unemployment rate rising from 4.3% to 5.8% between May 2008 and May this year. This translates into around 186 000 more people looking for work in May 2009 than 12 months previously. Although the Commonwealth Treasury has forecast that unemployment could reach 8.3% by mid-2010, the unemployment rate is starting from a lower base than in the recession of the early 1990s, and currently is only some two-thirds of the level experienced during 1991, the first year that unemployment began to rise during the downturn of the early 1990s (see table 1).

Another encouraging sign, when judging the scale of the downturn, is that the labour force participation rate has not shown the sharp decline that was observed in the early years of the last recession, and indeed it is at a historically high level of 65.5%. A decline to 64.3% by mid-2011, as forecast by Treasury, would still see it at a level that is high in terms of recent experience. Similarly, although the employment-to-population ratio has fallen by around one per cent in the last year, the rate of decline is substantially less than experienced during the last recession, when the employment rate fell by around two per cent in the first year and by around four per cent over three years. Furthermore, the rise in unemployment that can be observed since mid-2008 has not been associated with any overall reduction in employment: there has, in fact, been an overall small 0.3% increase in total employment.

Recently a number of commentators have pointed out that there appears to have been a shift in favour of part-time work as a result of the downturn, suggesting that employers are reducing hours of work rather than reducing overall employment. While this may be the case, it continues a long-term trend that can be observed since the early 1990s, with only a slight pause in the early-to-mid-2000s. The current level of part-time work is only slightly higher than it was during the strong economic growth of the mid-2000s. This trend seems to reflect strong underlying structural changes in the Australian labour market, albeit changes that might have been somewhat strengthened by the current downturn.

Table 1 Selected labour market indicators, May 1990–May 2009

	Unemployment rate	Participation rate	Part-time employment as a share of total employment (%)	Employment-to-population ratio, persons aged 15 and over
May 1990	6.3	63.9	21.6	59.9
May 1991	9.2	63.4	22.7	57.6
May 1992	10.4	62.8	24.1	56.3
May 1993	10.5	62.3	23.7	55.7
May 1994	9.4	62.7	24.4	56.8
May 1995	8.1	63.6	24.9	58.5
May 1996	8.0	63.4	25.1	58.3
May 1997	8.3	63.1	25.8	57.9
May 1998	7.7	63.1	26.3	58.2
May 1999	7.1	62.7	26.7	58.3
May 2000	6.4	63.3	26.8	59.2
May 2001	6.9	63.4	27.6	59.1
May 2002	6.4	63.1	28.2	59.1
May 2003	6.1	63.7	29.1	59.8
May 2004	5.3	63.4	28.8	60.0
May 2005	5.1	64.4	28.9	61.1
May 2006	4.8	64.7	29.0	61.6
May 2007	4.3	65.1	28.4	62.4
May 2008	4.3	65.4	28.8	62.6
May 2009	5.8	65.5	29.6	61.7

Source: ABS (various issues).

Who is being affected by the downturn?

The impact of the economic downturn upon the Australian labour market appears to be milder than was the case in the early stages of the last recession, but this does not mean that its impact is not greater upon some groups than upon others. Within quite a short period of time there have been significant shifts in the composition of employment by industry and by occupational group (tables 2 and 3), as well as by gender, hours of work and age.

Trends by industry, occupation and gender

Between May 2008 and May 2009 there were:

- ✧ falls in employment of five per cent or more in real estate services, mining, manufacturing, and agriculture, forestry and fishing
- ✧ increases in employment of five per cent or more in transport, postage and warehousing, health care and social assistance, electricity, gas, water and waste services, public administration and safety, and arts and recreation services
- ✧ relatively substantial declines in employment opportunities for machinery operators and drivers, labourers and sales workers
- ✧ relatively large increases in employment opportunities for managers, clerical and administrative workers, and community and personal service workers.

Not surprisingly, these industry and occupational shifts have been associated with changing employment opportunities for females and males. Between May 2008 and May 2009, the employment-to-population ratio for males fell by 1.7% (from 69.5% to 67.8%), whereas the

employment-to-population ratio for females fell only by 0.1% to 55.7%. Total male employment fell by 0.6% and total female employment rose by 1.5%.

Again it is important to emphasise that these developments represent continuations of long-term trends. The proportion of males aged 15 and over in employment has been falling steadily for 30 years or more, and did not reach its 1990 level at any point during the period of recovery from the recession of the early 1990s. Among females the employment-to-population ratio had regained its 1990 level by 1995, and has been climbing steadily ever since.

These shifts in employment by gender have interacted with the shift towards part-time work noted above, with the result that male full-time employment has been one of the big losers of the current downturn. In the 12 months to May 2009, employment by full- and part-time status changed as follows:

- ✧ male full-time employment: -1.6%
- ✧ male part-time employment: +4.7%
- ✧ female full-time employment: +0.8%
- ✧ female part-time employment: +2.4%.

Table 2 Change in employment by industry, May 2008–May 2009 (%)

Industry	% change
Rental, hiring and real estate services	-8.6
Mining	-7.4
Manufacturing	-7.2
Agriculture, forestry and fishing	-5.5
Financial and insurance services	-3.7
Professional, scientific and technical services	-2.4
Education and training	-2.0
Retail trade	-1.4
Other services	-1.2
Wholesale trade	0.2
Administrative and support services	0.3
Information media and telecommunications	0.8
Construction	0.9
Accommodation and food services	1.3
Transport, postal and warehousing	5.7
Health care and social assistance	7.2
Electricity, gas, water and waste services	9.1
Public administration and safety	10.4
Arts and recreation services	14.9
Total	**0.3**

Source: ABS (2009a).

Table 3 Change in employment by occupation, May 2008–May 2009 (%)

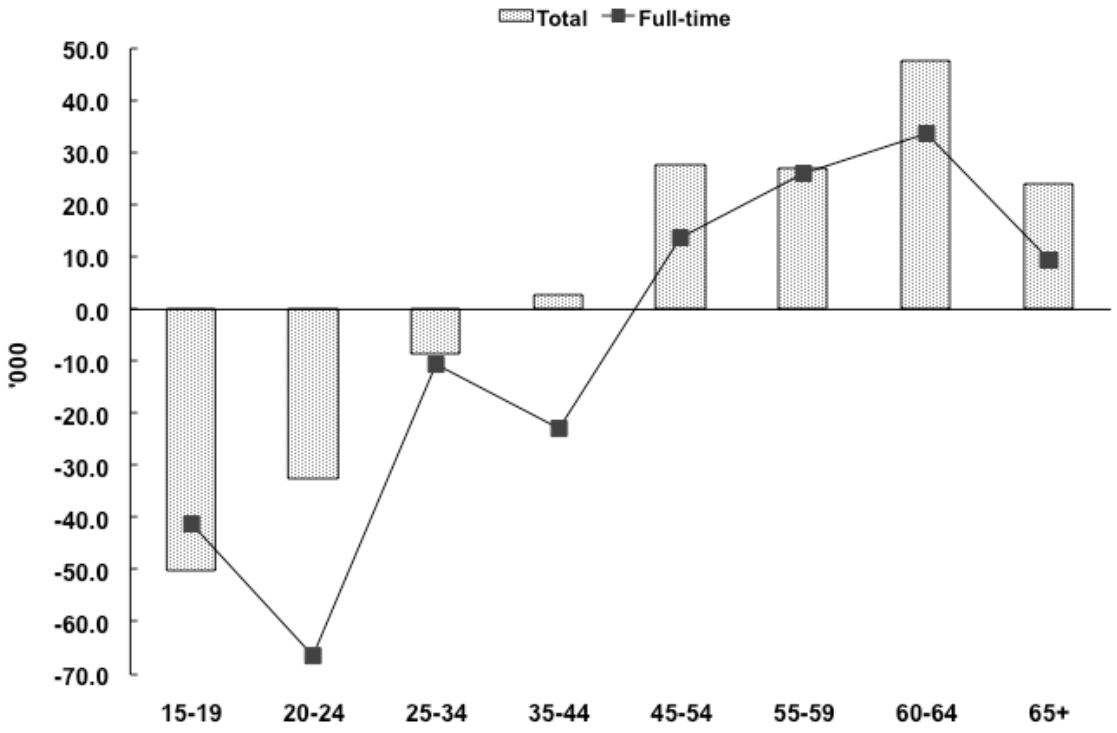
Occupational group	% change
Machinery operators and drivers	-4.4
Labourers	-2.2
Sales workers	-1.6
Professionals	-0.7
Technicians and trades workers	0.4
Managers	1.4
Clerical and administrative workers	2.9
Community and personal service workers	5.6
Total	**0.3**

Source: ABS (2009a).

Trends by age

Participants in the roundtable emphasised the fact that economic downturns have a particularly strong impact upon new entrants to the labour market. These can include recently arrived migrants and refugees, women returning to the labour force after a period of child rearing, and youth. Nevertheless, discussion focused very largely on the impact of the downturn upon young people. This impact has been considerable, and can be illustrated in a number of ways.

Figure 1 Change in employment by age, May 2008–May 2009 ('000)



Source: ABS (2009b).

Figure 1 shows the changes in both total employment and full-time employment by age that occurred between May 2008 and May 2009. During a period in which there was almost no change in the overall level of employment[1], a major restructuring of employment by age has taken place, with employment shifting away from younger age groups and towards older age groups. Whether

[1] Total employment rose by 0.3% over the period and full-time employment fell by 0.8%.

we look at total employment or full-time employment, the loss of jobs by those under the age of 25 years has been very substantial and has been closely balanced by the number of jobs gained by those aged 55 years and over. During a 12-month period, full-time employment among those under the age of 25 years has fallen by 10.4%, and the number of people aged 55 years and over in full-time work has grown by 6.4%. Total employment fell by 6.4% for those under the age of 25 years but rose by 6.0% among those aged 55 years and over. An inverse relationship between age and the impact of the downturn can also be seen in the case of unemployment rates, with unemployment rates rising much more sharply among younger age groups, and very little among older age groups (table 4).

Among those under the age of 20 years the absolute loss of full-time jobs has been substantially greater for males than for females, with around 35 000 jobs disappearing in the 12 months to May 2009 for teenage males, compared with around 7000 for teenage females. Among 20 to 24-year-olds job loss has been somewhat greater for females, with around 40 000 jobs disappearing over the period but around 27 000 among males of the same age.

Table 4 Unemployment rates by age, May 2008 and May 2009 (%)

	Total			Seeking full-time work		
	May 2008	May 2009	Difference	May 2008	May 2009	Difference
15–19	12.8	16.7	3.9	17.4	26.2	8.7
20–24	6.5	9.0	2.5	6.6	9.9	3.3
25–34	3.7	5.7	2.0	3.4	6.1	2.7
35–44	3.5	4.5	1.0	3.3	4.8	1.5
45–54	3.0	4.3	1.3	2.9	4.8	1.9
55–59	2.3	3.0	0.8	2.3	3.3	1.0
60–64	3.2	3.5	0.2	3.6	4.6	0.9
65+	0.3	0.6	0.3	0.5	0.5	0.0
Total	**4.3**	**5.8**	**1.5**	**4.0**	**6.2**	**2.2**

Source: ABS (2009b).

This pattern could in part be due to those who are approaching retirement age delaying decisions to leave the labour force, as a result of the impact of the global financial crisis upon their capacity to fund their retirement. An additional explanation is that, having only recently had to find ways to adjust to skill shortages, employers are holding on to more experienced and qualified staff.[2] This explanation receives some support from a recent OECD paper (Brunello 2009) which, on the basis of a literature review, points out that, while apprenticeship commencements appear to decline during economic downturns, when broader measures of training are used that exclude apprentices, the weight of evidence is in favour of counter-cyclical training incidence. The author suggests that firms may have incentives to train incumbents during downturns at the same time as they reduce the recruitment and training of young employees. However, even if this is one factor currently operating, the scale of the employment growth among those aged 55 years and over, compared with other age groups, suggests that delayed retirement decisions are having a major impact upon the current Australian labour market.

It was highlighted at the roundtable that by itself a reduction in the proportion of young people in full-time work might not be a problem: it depends on what else they are doing. The implication is that youth job loss that translates into increased educational participation and hence into higher levels of human capital can be seen as part of a virtuous circle. On the other hand, youth job loss that translates into unemployment, marginal activity and inactivity represents a waste of human potential, a loss of skills, and risks scarring effects due to the longer-term consequences of entering unemployment directly from education (OECD 1996). Brunello (2009) points out that the Japanese

[2] See, for example, Gittins (2009).

experience of the 1990s suggests that the risk of being trapped in a sequence of temporary jobs with little training is serious, with permanent consequences on individual human capital and wellbeing. A pattern of youth job loss translating into increased educational participation can be seen between the mid-1960s and the early 1990s, as the types of productivity improvements arising from new technologies, improved work organisation and similar advances disproportionately affected the jobs of new entrants and of the less skilled and qualified (Sweet 1983). Furthermore, the operation of a 'shelter effect' resulted in educational participation by youth rising during both the economic downturn of the mid-1970s and that of the early 1980s.

However, the capacity of our post-compulsory education and training system to respond to the needs of young people, and particularly to those young people who are most likely to leave school early, came to a halt in the recession of the early 1990s, with job loss translating into unemployment, inactivity, and marginal part-time work, and with very little change to this picture up until the onset of the current recession (Sweet 1998; Lamb & Mason 2008).

Table 5 shows that this pattern is being repeated in the current downturn. Rather than young people responding to the loss of full-time jobs by higher rates of participation in education and training, increased numbers have become unemployed, have dropped completely out of the labour market without at the same time engaging in education and training, or are taking marginal part-time jobs that are normally not associated with on-the-job training. Between May 2008 and May 2009 the proportion of the age group not actively engaged in either full-time work or full-time education rose by between three and four per cent. Among 15 to 19-year-olds the loss of full-time jobs was actually accompanied by a slight fall in full-time educational participation.[3] Among 20 to 24-year-olds there has been a slight increase in full-time educational participation, but it has been insufficient to account for more than a very small proportion of the overall decline in full-time jobs.[4]

Table 5 Principal activities of 15 to 24 year-olds, May 2008 and May 2009

	Aged 15–19			Aged 20–24		
	May 2008	**May 2009**	**Difference**	**May 2008**	**May 2009**	**Difference**
Employed full-time, not in education	16.6	13.9	-2.7	50.1	45.5	-4.6
Attending full-time education	70.1	69.7	-0.4	28.4	29.2	0.7
Subtotal	*86.7*	*83.6*	*-3.1*	*78.5*	*74.7*	*-3.9*
Not in education and:						
Unemployed, seeking full-time work	2.9	4.5	1.6	3.5	4.5	1.0
Employed part-time	6.6	7.3	0.7	9.9	11.7	1.8
Not in the labour force	3.6	4.3	0.8	7.7	8.5	0.8
Subtotal	*13.1*	*16.1*	*3.1*	*21.1*	*24.7*	*3.6*
Other	0.2	0.3	0.1	0.4	0.6	0.2
Total	**100.0**	**100.0**	**-**	**100.0**	**100.0**	**-**

Source: ABS (2009b).

[3] All of this due to a fall in school participation rather than post-school education and training.

[4] Among 15 to 19 year-olds this pattern can be shown to vary among the states and territories. In Queensland, South Australia and Victoria the impact of full-time job loss on declines in active engagement has been compounded by falling educational participation rates. In Western Australia educational participation has changed very little and the fall in active engagement has been due entirely to declining full-time work. In the Australian Capital Territory and New South Wales increased educational participation has offset around half of the full-time job loss. In Tasmania, which introduced new institutional arrangements for post-compulsory education and training at the beginning of 2009, a rise in educational participation has been sufficient to reduce over 80% of the potential impact of job loss upon active engagement.

Responding to the downturn

Apprenticeships and traineeships

Karmel and Mlotkowski (2008) show that apprenticeship numbers in metal, vehicle, electrical and building classifications are particularly sensitive to labour market conditions. They also show that in the last ten years the long-term relationship has broken down in the majority of industries, with lower than expected apprenticeship numbers. Toner (2003) argues that this is due to a number of structural changes, which include: privatisation of public utilities; just-in-time production systems and leaner production methods; outsourcing and subcontracting; smaller firm sizes; and the expansion of labour hire firms.

Given the current combination of economic downturn and structural changes, with employment declining in a number of trades-intensive industries such as manufacturing and mining, it is not surprising that evidence available to the roundtable points to a significant recent decline in apprenticeship commencements, with the latest data (December 2008) showing these to have fallen by 13% (Karmel & Misko 2009). It is possible that to some extent these reduced intakes might be compensated for by reduced termination rates, as firms hang on to skills and apprentices show more reluctance to leave voluntarily. This possibility suggests that a future decline in completions might be less than the observed fall in commencements. Alongside the observed decline in apprenticeship intakes, traineeship numbers have been more buoyant. Traineeship intakes are more sensitive to government incentive payments than apprenticeships and incentive payments represent a higher proportion of total wage costs for trainees than for apprentices. Traineeships are less dependent upon the economic cycle and trainees are more readily able to be substituted for other categories of workers due to the lower skill levels. These patterns in apprenticeship and traineeship intakes are consistent with the greater employment decline observed among teenage males than among teenage females in the 12 months to May this year.

Discussion at the roundtable focused upon options for reducing the dependence of apprenticeships upon the employment cycle—and, by implication, the more recent sensitivity of apprenticeship intakes to structural changes in the labour market, such as those outlined by Toner (2003). There was a notable willingness to consider other models of training, with greater attention to foundation skills and different funding models with different ways of sharing costs. These discussions extended to entry-level vocational education more broadly.

A number of options were raised, including:

- Linking infrastructure stimulus expenditure to training requirements: it should be noted that at its 2 July 2009 meeting the Council of Australian Governments agreed that, when contracting for government stimulus and infrastructure projects, the states and territories will aim to secure at least 10% of the total contract labour hours to be undertaken by apprentices and trainees and those seeking to upskill, where this does not result in unreasonable costs to business.
- Increased financial incentives for employers, either through direct payments or through the taxation system; however, some participants pointed out that many employers are reporting that financial incentives are less important in apprenticeship recruitment decisions than is the availability of work, and that without this, financial incentives to hire additional apprentices will have little impact. Some participants also expressed concern that subsidies may be a way of extending the life of, and shoring up, the 'old economy'.
- Greater reliance upon group schemes: although it was reported that many group schemes are already at bursting point, expansion of group schemes was seen as a way of spreading the risk associated with training apprentices and trainees (Buchanan 2009).
- Increased use of pre-apprenticeship programs and the development of alternative training models in which the provision of training is less dependent upon obtaining employment: although many were, with good reason, cautious about the potentially negative impact upon the quality of skill development of reliance upon purely institutional training, there was a broad

agreement that alternative models need to be explored. Possibilities include both a stronger use of pre-apprenticeship training, as we currently know it, and the development of models, such as those found in France and Sweden, in which alternance or unpaid work placements, combined with institutional education and training, are extensively used for skill development.

The post-compulsory years more broadly

In addition to discussion of specific steps that might be taken to address reduced apprenticeship and traineeship intakes as a consequence of the downturn, the roundtable spent time discussing how the vocational education and training system might respond to the needs of young people more broadly in the context of economic downturn.

Youth unemployment in Australia is highly sensitive to the overall state of the labour market: over the 1966–2007 period, more than 80% of the variation in Australia's teenage unemployment levels can be explained by the level of adult unemployment.[5] This sensitivity is only in part a function of Australia's reliance upon initial training models (apprenticeship and traineeship) that require young people to obtain a job in order to obtain recognised skills. More fundamentally, it is the outcome of educational participation and upper secondary completion rates that are quite low by OECD standards: as a consequence young Australians are highly exposed to the vagaries of the labour market.

Low educational participation is particularly evident when participation is measured using Labour Force Survey data rather than administrative data (see table 6). This is a result of the nature of Australia's institutional arrangements for post-compulsory education rather than a statistical artefact. The substantially higher participation rates that are estimated from administrative data reflect the inclusion in this source of the large numbers of short course enrolments, mostly in courses with low levels of certification, that are typical of non-school students of school age who enrol in TAFE institutions. Furthermore, what appear to be high dropout rates among this group are not reflected in administrative data, but they are reflected in the single point in time measure (May in the case of Australia) used for the Labour Force Survey (Sweet 2001). Few other OECD countries provide this type of course, qualification and institutional combination for youth.

This raises issues about the ways in which the vocational education system might better contribute to increased education and training participation by young people, over and beyond its role in apprenticeship and traineeships. These issues become increasingly pressing in light of the National Partnership Agreement on Youth Attainment and Transitions signed by the Commonwealth and the state and territory governments on 2 July 2009.[6] Under this agreement, as from 1 January 2010, young people will be required to engage in education, training or work or a combination of these until the age of 17 years, and the Commonwealth will require 15 to 20-year-olds to engage in education or training as a condition of receiving income support.

[5] Calculated from unemployment-to-population ratio data in OECD statistics.

[6] <http://www.coag.gov.au/coag_meeting_outcomes/2009-07-02/docs/NP_youth_attainment_transitions.pdf> viewed 12 September 2009.

Table 6 Total educational participation rates for 15 to 19 year-olds estimated from two sources, OECD countries, 2006 (%)

	Source	
	Labour Force Survey	Administrative data
Australia	78	83
Austria	85	82
Belgium	89	95
Canada	82	81
Czech Republic	91	90
Denmark	88	83
Finland	92	88
France	90	86
Germany	92	89
Greece	86	93
Hungary	91	88
Iceland	86	85
Ireland	82	88
Italy	82	81
Korea	m	86
Luxembourg	93	73
Mexico	m	49
Netherlands	89	89
New Zealand	66	74
Norway	82	86
Poland	95	93
Portugal	80	73
Slovak Republic	91	85
Spain	80	80
Sweden	88	88
Switzerland	84	84
Turkey	m	45
United Kingdom	74	70
United States	85	78
OECD average	**85**	**82**

Source: Labour Force Survey data: OECD special tabulation; administrative data: OECD (2006).

There was broad agreement at the roundtable that at the moment we do not have available programs or institutions that are appropriate to the full range of the post-compulsory age group. This was expressed in a number of ways. Some reminded the group of the original purpose of traineeships to provide those who have not completed Year 12 with '… broad-based skills relating to families of occupations' (Kirby 1985, p.120) and contrasted this with the narrow industry-focused nature of the training content that has developed over time. Others pointed out that evidence on labour market returns indicates that many of the skills produced by traineeships are not useful (see, for example, Lewis 2008; Cully 2008) and that a much better mix of general education and vocational training needs to be developed for young people. A TAFE response that emphasises short courses at low levels of certification will not achieve this.

The current uneasy qualifications, curriculum and institutional arrangements between schools and TAFE do not meet the post-compulsory age group's needs well and make it difficult to develop and deliver a better set of programs. We do, however, have some good models to learn from. There are examples of good institutional models such as the Northern Beaches Secondary College in

Sydney[7] and Holmesglen Vocational College[8] in Melbourne that make it possible for young people to select from a very wide range of general education and vocational education subjects, such that most young people can find something to study that is of interest, and at the same time provide an adult learning environment. And there are good qualifications and curriculum models such as the Victorian Certificate of Applied Learning[9], which combines general and vocational education, applied work-based and contextual learning, and personal development.

Achieving seamless solutions to the needs of the post-compulsory age group will require the major regulatory and funding constraints that inhibit better combinations of general and vocational learning, including workplace experience, to be systematically identified and addressed. Funding models need to be at the heart of a future comprehensive settlement, with substantial discussion taking place about the notion of an entitlement. Discussion on the barriers created by the different funding models that inhibit the institutional cooperation required on a regional basis between and among schools, TAFE and other providers in order to meet the full range of needs comprehensively is also needed. Capacity constraints in TAFE were also raised as an issue requiring attention, with as much emphasis upon the issue of the need for upgraded teacher skills and pedagogical expertise in dealing with a wider range of needs and a different type of client group, as upon the need for adequate financial resources.

Discussion also focused on ways in which pathways for young people could be improved through a better set of arrangements between vocational education and training and higher education; for example, through the development of a wider suite of short-cycle higher education qualifications in TAFE. These issues are currently under discussion by the Australian Qualifications Framework Council. Recent international experience shows that, by increasing the attractiveness of vocational programs, these types of reforms can have benefits at the upper secondary level, but that doing so can require changes not only to the ways that existing qualifications articulate but also require the introduction of new institutional arrangements, new types of qualifications such as the United Kingdom's foundation degrees (Shreeve 2009), and changes to curriculum at both the upper secondary and tertiary levels.

Table 7 shows trends in enrolments in upper secondary level vocational programs in three Nordic countries which in different ways have recently taken steps to diversify the pathways into higher education. In each case the reforms have been associated with steadily rising participation in vocational education at upper secondary level.

- In Finland expanding enrolments in upper secondary level vocational education have been the result of the creation in the mid-1990s of a new type of tertiary education institution, one with a more applied focus (AMKs or polytechnics). These have been the principal source of expansion in the sector, along with the introduction in 1999 of legislation which gave those who have completed a three-year upper secondary vocational education program an entitlement to entry to all forms of higher education (OECD 2003).
- In Norway major reforms to upper secondary education in the mid-1990s increased the general education content of vocational programs, created broader entry points to vocational education built around occupational families rather than narrowly defined occupations, and created bridges to higher education through the introduction of both supplementary bridging programs and options for transferring between general and vocational tracks (Kuczera et al. 2008a).
- In Sweden in the early 1990s a broader vocational education curriculum was introduced in upper secondary education, with a stronger general education component in order to better prepare young people for a working life that requires more general competences, and to strengthen opportunities for higher education entry. In addition, a new type of shorter more applied, industry-relevant higher education qualification (*kvalificerad yrkesutbildning* or KY),

[7] <http://www.northernbeachessecondarycollege.nsw.edu.au/>, viewed 12 September 2009.

[8] <http://www.holmesglen.edu.au/programs/vocational_college>, viewed 12 September 2009.

[9] <http://www.vcaa.vic.edu.au/vcal />, viewed 12 September 2009.

delivered predominantly outside universities by a wide range of providers, was introduced in the late 1990s. It has proved to be an attractive pathway to higher education (OECD 1999; Kuczera et al. 2008b).

Table 7 Enrolments in vocational programs as a proportion of all upper secondary enrolments, 1998–2006

	1998	1999	2001	2002	2003	2004	2005	2006
Finland	52.0	53.2	56.7	57.2	58.8	60.1	63.9	65.4
Norway	52.5	53.6	57.6	58.0	59.2	60.5	60.8	60.0
Sweden	40.6	50.1	51.7	49.6	52.9	53.4	53.6	55.1

Source: OECD (various issues).

Jobless adults

While young people were the principal focus of discussion at the roundtable, many participants pointed out that jobless adults and adults marginalised from, and at risk in, the labour market more broadly, such as the disabled and the mentally ill, should not be ignored. To the extent that the training and retraining of adults is a response to the downturn (and participants pointed out that options such as direct job creation and subsidised work experience might often be more appropriate responses), two key messages seemed to emerge from discussion. The first was that we should learn lessons from previous downturns: target carefully; avoid deadweight and substitution effects; provide quality training for real jobs that incorporates a wider view of competence and capability than simply short-term skills training; and provide comprehensive packages of assistance tailored to individuals' needs, of which training is one component. This approach should be adopted in conjunction with interventions such as counselling and advice, child care, relocation assistance and the like (Martin & Grubb 2001).

A second theme was the importance of providing adults with improved and much more systematic information and guidance about the nature of available training and about its labour market outcomes. The OECD (2002) has pointed out that career information and guidance for adults are underdeveloped in Australia, but are important tools of labour market responsiveness and can be significant ways to address inequity and to better link disengaged and marginalised groups to education and training. Australian research highlights the need for career services for disengaged adults to be impartial, affordable and community-based if they are to serve these purposes (Beddie, Lorey & Pamphilon 2005).

Wider approaches to competence and capability

The changes in employment patterns that have taken place over the past year are at least as important a consequence of the economic downturn as the rise in joblessness. These changes are, in nearly all cases, not new phenomena but a continuation of long-standing structural trends in the Australian labour market. Like these longer-term trends, they have major implications for the demand for skills and qualifications, as well as for their supply. The current economic downturn simply throws them into sharper focus. For example, the industry and occupational shifts in employment that have been observed in the last 12 months (away from mining, manufacturing and agriculture; towards public administration, health, and arts and recreational industries; away from labourers and machine operators; towards clerical workers and community and personal service workers) represent a continuation and a strengthening of the trend that Lewis (2009), in his paper for the roundtable, refers to as a reduced demand for motor skills. In comments on the day, this was referred to as a shift towards increased demand for cognitive and social skills. It was pointed out that a key conclusion from these shifts is that labour market adaptability and flexibility increasingly require higher levels of general education and more general vocational skills.

This issue was closely linked to a discussion of flexibility. Some participants pointed out that in fact there is a high degree of flexibility in the Australian labour market—indeed the very large occupational and industry shifts in employment that have been observed over the last 12 months with minimal overall change in employment levels are a testament to this. Highly pertinent here is the loose relationship, except within some trades occupations, that exists between vocational qualifications and occupations in Australia (Karmel, Mlotkowski & Awodeyi 2008), which raises questions about the importance of a high degree of occupational specificity in our approach to vocational education and training. Comments made at the roundtable suggest that considerations such as this are underpinning a rethinking of the link between occupational skill shortages and Australia's independent skilled migration stream.

The challenge of increasingly incorporating higher levels of general education and more general vocational skills into Australia's vocational education and training system, and support for broader-based vocational education that incorporates a wider view of human capability, emerged as key themes at the roundtable, pervading discussion of apprenticeship and traineeships, of the needs of the broader post-compulsory age group, and of adult training and retraining. There was a strong undercurrent which recognised that the narrow industry focus of current training packages might not best serve Australia's future needs for broader competence and capability.

In a sense the creation of school-based apprenticeships as part of Years 11 and 12 is a significant recent development, with a potential to develop along the lines advocated at the roundtable. Even if many remain at quite low levels of certification and are poorly integrated with other school provision, they represent an opportunity for young people to combine substantial elements of vocational and general education within a single package of learning and to combine classroom-based and work-based learning. In this sense they have at least something in common with the approaches to upper secondary vocational education found in Finland, Norway and Sweden. The Victorian Certificate of Applied Learning initiative is another example, although it is not as tightly organised around particular vocational education packages. It should be acknowledged that there have been some recent signs of a broadening of the narrower approach represented by competency-based training. However, the changes advocated by the recent report of the VET Products for the 21st Century project (National Quality Council 2009) represent at best small and hesitant steps in light of roundtable participants' views of the need to develop more general occupational skills and to create better combinations of general and vocational learning.

In his paper for the roundtable Buchanan (2009) refers to vocational education and training organised around 'vocational streams' as a way to achieve a broader approach to human capability within the vocational education system.[10] This concept, which involves the entry points to vocational education programs being focused upon a limited number of broad occupational families; for example, food trades, engineering occupations, or personal and social services rather than cooking, sheet metal work or child care, with a later progression to more specific training, was used to re-organise and reform vocational education and training in Sweden in the early 1990s (OECD 1999; Kuczera et al. 2008b), in Norway in the mid-1990s (OECD 1998; Kuczera et al. 2008a) and in Denmark in 2000 (Nedergaard 2001; Shapiro 2006). The Danish changes are particularly interesting, as they have been part of a traditional apprenticeship-based system of vocational education and training rather than part of a system that is largely institution-based, and they have been combined with significant pedagogical innovations designed to incorporate active learning, develop generic competences, and promote lifelong learning skills. The Danish reforms have also been part of wider reforms intended to improve participation and engagement in learning by disengaged young people (Shapiro, Gammon & Panton 2005).

The Nordic reforms are important for seeing pedagogical reform as an integrated element of reforms to post-compulsory education and training designed to raise youth participation and engagement, to improve national levels of educational attainment and achievement, and to build a

[10] Buchanan et al. (2009) elaborate on the notion of vocational streams.

more solid foundation for lifelong learning. They would, as acknowledged at the roundtable, have major implications for the post-compulsory teacher workforce that would need to be taken into account in ensuring the success of any Australian initiatives designed to achieve the same objectives.

Conclusion

The roundtable raised some fundamental issues about Australia's vocational education and training system and about its relationships to other parts of the education landscape that cannot be resolved by quick fixes or short-term solutions. This applies whether the focus is on the future of apprenticeships and traineeships, or on a wider response to the needs of the post-compulsory age group, or on the needs of jobless adults. The roundtable has highlighted the importance, in considering the longer-term contribution that the vocational education and training system should make to Australia's future, of reconfiguring institutional types and institutional relationships in a way that reflects a wider and more integrated view of human capability than that which characterises the system at present. This has implications for what people learn, for how they learn it, for how they are taught it, and for how it is financed.

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