

Pathways and Roadblocks

Challenges for education policy in a changing labour market

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Abstract

The changing labour market in the new services economy relies heavily on publicly funded education and training to provide a workforce with the skills required for international competitiveness and economic growth. Education and training institutions play the critical role of producing sufficient numbers of graduates with high level qualifications to meet industry demand. A further goal of education and training policy is to provide pathways to attainment for people with low level skills who are at risk of marginalization in the changing labour market. The potential of education and training providers to meet the needs of people with low levels of formal education is hampered by the traditional structures, policies and practices that govern Australia's education and training system. The division of education and training into four sectors and the different funding arrangements for each sector pose a major obstacle to reform.

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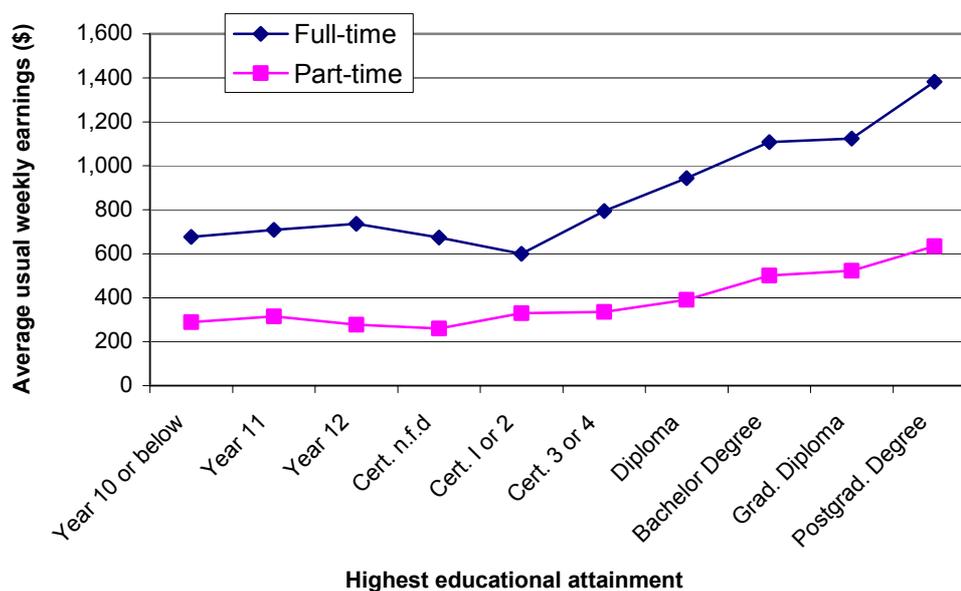
Introduction

This paper examines how the changing labour market has created new challenges for education and training in Australia. We discuss changes in the nature of work and the demand for skills, and the implications of these changes for education and training policy.

Education and employment

There is a strong demand for people with university qualifications in the Australian labour market. University graduates attract the highest salaries, are more likely to be employed full-time and enjoy more job security than workers in less skilled occupations. Income rises significantly in both part-time and full-time jobs for people with higher levels of education. As shown in Figure 1, full-time workers with qualifications at or below Certificate Level 3 or 4 or Year 12 earn on average between \$600 and \$800 per week. The average full-time weekly earnings for people with Diplomas are \$943; people with Bachelor's degrees earn \$1,108 per week; and postgraduate degree holders earn on average \$1,383 per week. The average income of people with higher degrees in Australia is nearly double that of people who have completed Year 10 or Certificate Level 1 or 2.

Figure 1 Average usual weekly earnings, by highest level of education



Source: ABS Cat. No. 6278.0. *Education and Training Experience, 2001*.

Notes: "Certificate n.f.d" means certificate not further defined. Table excludes workers aged 15-24 still attending school and workers whose level of education is not determined.

People with high levels of education are more likely to be employed full-time and to experience lower rates of unemployment than people in low skilled occupations. The average hours worked by employed people in Australia ranges from 46.1 hours per week for Managers and Administrators to 24.4 hours per week for Elementary Clerical, Sales and Service Workers. People employed in the highest two skills

categories (1 and 2) account for 38 per cent of total jobs in Australia and work the highest number of average hours per week. Although some 45 per cent of occupations are in the lowest two skill bands (4 and 5), people in these jobs work on average less hours per week and are more likely to face unemployment than workers in high skilled jobs (Table 1).

Table 1 Employment by skill level, Australia, February 2003

Skill level	Occupational Groups	Share of total jobs (%)	Average hours per week	Unemp. Rate (%)
1	Managers and Administrators	7.0	46.1	1.4
	Professionals	18.5	37.0	2.6
2	Associate Professionals	12.4	41.3	1.9
3	Tradespersons and related workers	12.8	39.6	3.2
	Advanced Clerical and Service workers	4.1	27.6	2.5
4	Intermediate clerical, sales and service	17.4	30.5	4.6
	Intermediate production and transport	8.6	38.5	4.0
5	Elementary clerical, sales and service	10.0	24.4	6.1
	Labourers and related workers	9.2	29.4	9.9
	TOTAL	100.0	35.2	6.7

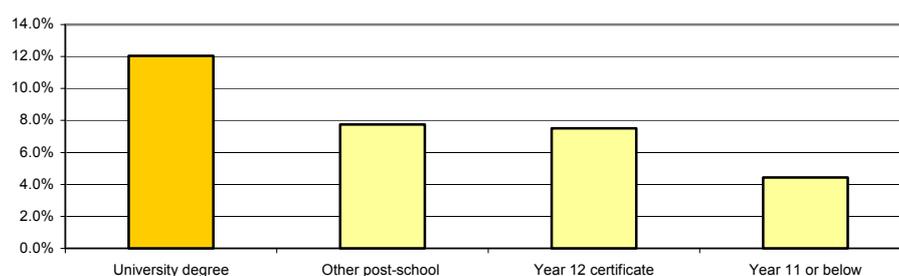
Source: ABS Cat. No. 6203.0 *Labour Force Australia February 2003*.

Notes: Unemployment rate refers to skill level of last job.

People with low level qualifications have lower rates of labour force participation in general, compared to people with Year 12 qualifications or above. People who have not completed Year 12 comprise over 50 per cent of adults reporting as not in the labour force or as unemployed (ABS Cat. No. 6203.0 *Labour Force Australia*).

Among people who are employed, recent data confirms that workers with lower level skills fare worse in terms of promotional opportunities than those with Year 12 qualifications or above. The Household, Income and Labour Dynamics in Australia (or HILDA) Survey is a household-based panel survey, which tracks members of an initial sample of households over an indefinite life. Using the first two waves of the HILDA Survey (2001), we examined the employment experience of individuals aged 25 year and older, according to their level of education.

Figure 2 Adult employees promoted in the previous 12 months, by qualification

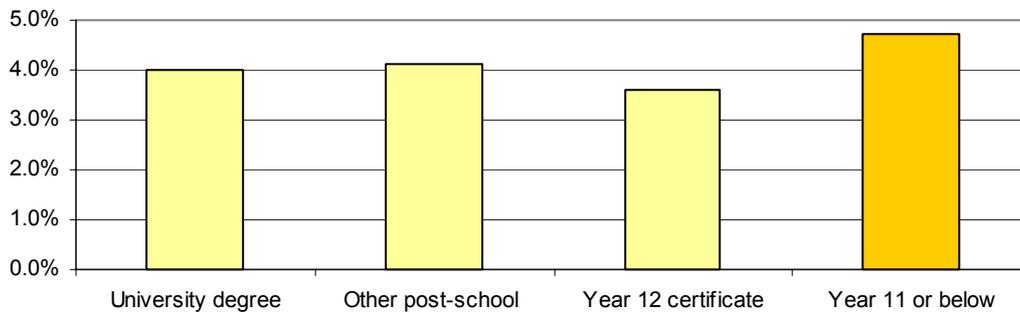


Source: *The Household, Income and Labour Dynamics in Australia (HILDA) Survey 2001*

In Figure 2, we report the number of respondents 25 years and older who were employed in the first wave of HILDA and who were promoted between wave 1 and wave 2. As indicated, adult employees with university degrees are almost three times more likely to be promoted than workers whose educational attainment is Year 11 or below.

The rate of job loss differs slightly between high skilled and low skilled people. Around 4.7 per cent of workers with Year 11 or below lost their jobs between the first and second wave of the survey, compared to 3.6 per cent of people with Year 12 qualifications and around 4 per cent of workers with post-school qualifications (Figure 3)

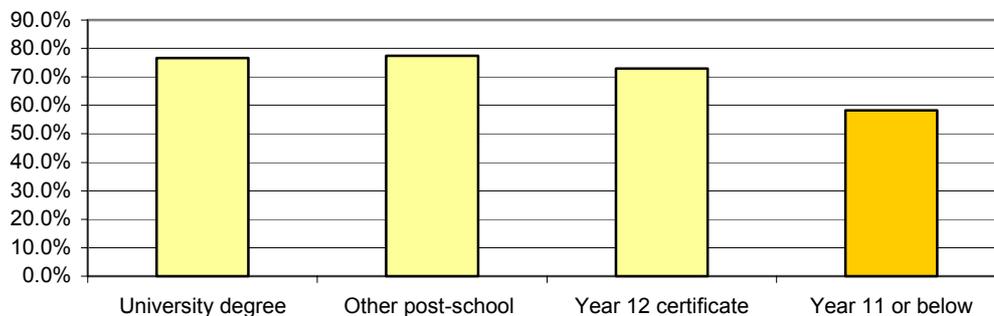
Figure 3 Adult employees who lost their job in the previous 12 months, by qualification



Source: The *Household, Income and Labour Dynamics in Australia (HILDA)* Survey 2001

The rate at which people who lost their jobs were re-employed is lower for people with Year 11 qualifications or below. Only 58 per cent of people with Year 11 or below who had lost their jobs were re-employed within 12 months, compared to over 73 per cent of the unemployed adults with Year 12 qualifications or higher (Figure 4).

Figure 4 Adult employees who had lost their job, who found a new job within 12 months, by qualification

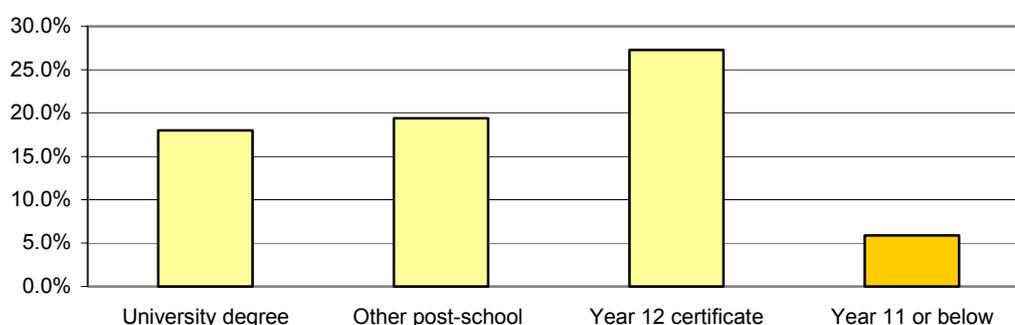


Source: The *Household, Income and Labour Dynamics in Australia (HILDA)* Survey 2001

Participation in further education and training is an important factor for employment in a changing labour market. Of the people who had lost their job between the first

and second waves of the survey, a total of 15 per cent were engaged in further study by the second wave of the survey, but with significant variation between sub-groups. Only six per cent of people with Year 11 qualifications or below were engaged in study, compared to 27 per cent of people who had attained Year 12 (Figure 5).

Figure 5 Adult employees who had lost their job, who were now engaged in further study



Source: The *Household, Income and Labour Dynamics in Australia (HILDA)* Survey 2001

As the number of people who had lost their job and were participating in further study is quite small, it is not possible to report conclusively that education improved an unemployed person’s prospects of re-employment. With this qualification in mind, we found that the re-employment rate of people who were participating in further study while unemployed was similar across all four groups. In other words, unemployed people with Year 11 qualifications who were engaged in further study were as likely to be re-employed a year later as people with university degrees.

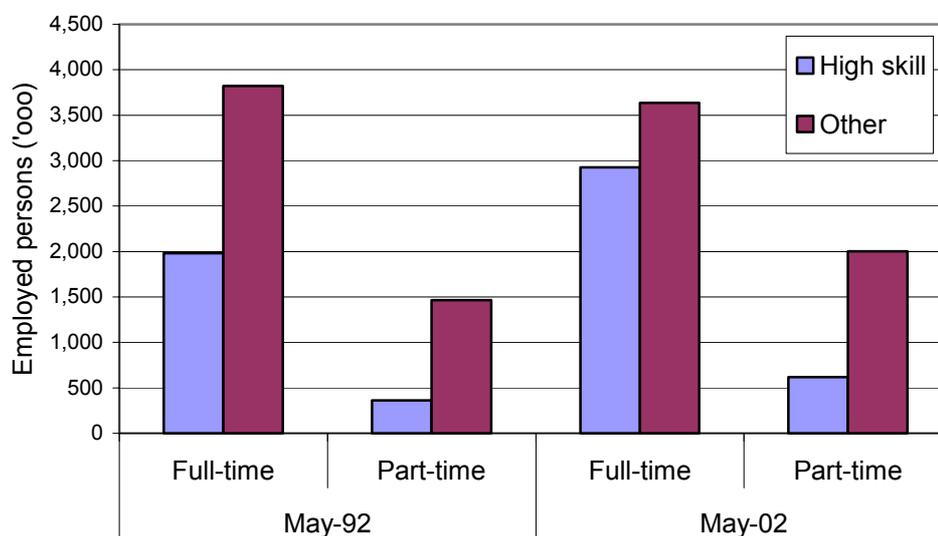
The changing labour market in Australia is consistent with the predictions of Peter Drucker and Robert Reich that people with high levels of skill would be in demand in the 21st Century. Almost 15 years ago, Reich predicted that workers with higher levels of education would be the most highly remunerated in the new services economy – and that low-skilled workers would become more vulnerable to economic shocks. Reich differentiated highly skilled worker, whom he called “symbolic analysts” from two other types of workers- “routine production workers” – the old blue-collar workers and routine supervisors, whose jobs are the most vulnerable to the impact of new technology or global competition; and “in-person service workers” – personal carers, solicitors, hospitality and health workers, whose income and job security depends largely on the wealth and lifestyle preferences of the high skilled “symbolic analysts”. He argued that “symbolic analysts” had the most promising job prospects, would be increasingly in demand; and would attract the highest salaries in the global economy (Reich 1991: 171-180).

In an Australian survey, Cully concludes that employment has grown most rapidly for professionals, and for intermediate clerical, sales and services workers. Growth in these fields accounts “for roughly three in five of the (net) new jobs created over the past 15 years” (Cully 2003: 19).

Full-time employment also appears to be increasingly the privilege of people with formal educational qualifications at a high level, rather than people with lower level qualifications. As shown in Figure 6, full-time jobs for Australians with higher levels

of education increased by almost one million between 1992 and 2002, but the number of full-time jobs at lower skill levels has declined. Part-time work in both high-skilled occupations and lower skilled occupations has increased.

Figure 6 Occupation of full-time and part-time workers, Australia, 1992 and 2002.



Source: *Labour Force Australia*, ABS Cat. No. 6203.0.

Notes: “High skill” refers to occupations classified as “Managers and Administrators, Professionals and Associate Professionals”. According to the *Australian Standard Classification of Occupations, 2nd Edition 1997* (ABS Cat. No. 1220.0), these occupations require “skill commensurate with a bachelor degree or higher qualifications, or at least five years relevant experience” (Managers, Administrators and Professionals) or “skill commensurate with an AQF diploma or advanced diploma or at least 3 years relevant experience” (Associate Professionals).

Why is education so important?

As educational qualifications and participation in further study appear increasingly important for an individual’s employment prospects, this suggests that there has been a change in the demand for skills. Although it is difficult to generalize about the changing nature of work, several studies identify common themes about the demand for skills in the new economy (DEST 2002, Sheehan 1998, Field and Mawer 1996, Reich 1991, Drucker 1993).

There is a general consensus that the major force driving the change in demand for skills in the global economy is the impact of information and communications technologies (ICT). Historical evidence suggests that major technological innovations have usually resulted in increased demand for skilled labour. In a review of literature on the impact of computerisation on the demand for skilled labour in the United States, Lawrence Katz found the rapid rate of relative demand growth for more-skilled workers over the last few decades of the 20th Century had been concentrated in the most computer-intensive sectors of the US economy. He also pointed out that there has been strong growth in the relative demand for more skilled workers throughout the twentieth century, and that technological changes, such as

electrification and computerisation, appear to have been major factors in this steady growth in the relative demand for skill (Katz 1999).

Although developments in global communications have spread rapidly over the past decade, the impact of ICT on occupations and industries has not been uniform. In many service industries, such as hairdressing and hospitality for example, ICT has had little impact at all, other than to streamline management information systems. On the other hand, some industries have been completely transformed by ICT, particularly in the manufacturing sector and the information services sector.

In some industries, the diffusion of ICT has meant that certain aspects of traditional jobs can now be performed by “lay” workers, such as typing and desktop publishing. Electronic technologies have also facilitated the computerisation of certain aspects of the production process. There now appear to be fewer jobs where occupants are employed on the basis of a narrow set of skills, particularly at the lower end of the skills hierarchy. In the printing industry, for example, specialized mechanical trades (such as typesetters and engravers) as well as the repetitive manual work of collators, have been replaced by a computerised production process.

In general, jobs tend to be broader in scope and more multi-skilled, and most workers today require a basic level of literacy to undertake the clerical and computing work that is a feature of almost all occupations. In industries where a large proportion of the production process has been computerised, workers need a broader knowledge base to effectively manage the production process, as well as the capacity to solve technical problems at many levels. Communication skills are increasingly valued in all occupations due to the increased complexity of interactions between workers and suppliers, colleagues and clients.

In summary, educational attainment and participation has become more important in the modern labour market because computerisation has replaced or collapsed many aspects of the production process. So while technical skills are still needed, most occupations also require workers to have a broad knowledge base, problem-solving skills, and interpersonal or communication skills. The basic clerical and computer skills that are now a feature of most jobs also require a higher level of literacy among workers than in the past.

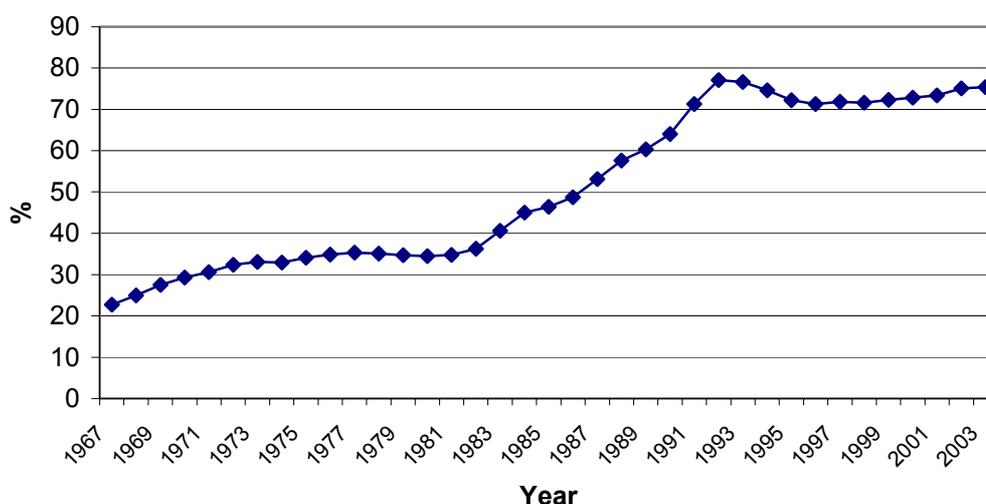
Challenges for education policy

Given the strong link between formal qualifications and success in the labour market, there is a clear policy imperative to increase participation in education and training. A critical learning benchmark – both for job security and for participation in further education – is the attainment of Year 12 or its equivalent (Anderson and Darkenwald 1979, Courtney 1992). This section discusses the challenges involved in meeting the education and training needs of people who do not possess formal qualifications, focusing on two distinct groups: young people at risk of leaving school early, and adults with low levels of formal schooling.

Early school leavers

Although 84.5 per cent of Australian teenagers were in full-time study or full-time work in May 2004, 15.5 per cent of teenagers are not in full-time work or education (DSF 2004). Australia's Year 12 retention rate increased steadily throughout the 1980s and peaked at 77 per cent in 1992, as shown in Figure 7. For the rest of the 1990s, the Year 12 retention rate hovered around 72 per cent, finally rising to 75 per cent in 2002 and 2003.

Figure 7 Apparent Year 12 retention rate, Australia, 1967 – 2003



Sources: *Schools Australia* ABS Cat No. 4221; DEET1991 *Retention and Participation in Australian Schools 1967 to 1990*.

Year 12 retention rates may well be at the limit of what can be achieved within the existing structures of secondary schooling. A large proportion of the students not completing Year 12 in the 1990s are young people from disadvantaged backgrounds. In 2000, 78 per cent of students from the highest three socio-economic deciles completed Year 12 compared to 61 per cent of students from the lowest three deciles (MCEETYA 2001: 43-44). Given the strong societal expectations about school completion, the students who are not presently retained in senior secondary education could represent the “hard core” of the student body who require substantial levels of additional support to achieve the goal of completing Year 12.

Failure to complete Year 12 has an inter-generational dimension. Today's students who fail to complete secondary school are more likely to come from families where their parents are in low skilled jobs or low levels of education. Students whose parents are in manual jobs are almost twice as likely to leave school early as students whose parents are from professional backgrounds. Eleven per cent of students whose parents' education level is more than one standard deviation below the mean left school early, compared to only three per cent of students whose parents' education level is more than one standard deviation above the mean, as shown in Table 2.

Table 2 Early school leavers by social group (%)

	Male	Female	All
Total cohort population	10	7	9
Parents Occupation			
Professional/Managerial	7	5	6
Clerical/Personal Service	7	5	6
Skilled Manual	13	9	11
Unskilled Manual	17	9	12
Parents' Education level			
> 1 SD above mean	4	2	3
Mean to 1 SD above mean	9	7	8
1 SD below mean	12	7	10
< 1 SD below mean	13	9	11
Aboriginal or Torres Strait Islander			
ATSI	22	20	21
Non-ATSI	10	7	8
Language background			
NESB	7	4	6
English-speaking	10	8	9
Region			
Metropolitan (> 100,000)	7	6	6
Regional (1,999 – 99,000)	12	8	10
Remote	17	10	14

SD = Standard Deviation

Source: Marks Gary and N Fleming 1999. *Early school leaving in Australia: Findings from the 1995 Year LSAY Cohort*. Research Report No. 11. ACER. Melbourne

Students are more likely to leave school early when they are not equipped to cope with the demands of the senior secondary school curriculum. The students with the lowest levels of achievement in literacy and numeracy are predominantly from lower socio-economic groups. The learning/achievement gap widens as young people progress through schooling. For example, in Victoria at Year 6, only 10 per cent of children are at the lowest benchmark of achievement in reading, but by Year 10, this has increased to 20 per cent (Teese 2003).

Although many studies point to the fact that young people's transitions from study to work are longer and more varied than in the past, the long-term employment prospects of young people who do not complete Year 12 are poor. This group of young people is at risk of not engaging successfully with the labour market if they do not re-engage with education or training.

“What works” for early school leavers

Meeting the educational needs of young people at risk of leaving school early is complex and expensive. Early school leaving is associated with low levels of literacy and a general dislike of formal schooling. As Year 12 assessment is used to rank students for the purpose of university entrance, it can be difficult for secondary schools to provide alternative learning programs for students at risk.

There is now a large body of research on ‘what works’ in terms of supporting young people at risk of leaving school early. The OECD *Thematic Review of the Transition from initial education to working life* (2000:13) highlighted the minimal set of key ingredients of successful transition systems as:

- A healthy economy;
- Well-organised pathways that connect initial education with work and further study;
- Widespread opportunities to combine workplace experience with education;
- Tightly-knit safety nets for those at risk;
- Good information and guidance; and
- Effective institutions and processes.

Programs that have been demonstrated to be the most effective means of supporting young people at risk have the following features. They:

- are managed locally;
- bring together the range of education, labour market and welfare agencies in a coordinated service responding to individual needs;
- focus on prevention as well as remediation; and
- involve genuine shared ownership of responsibility and outcomes.

(OECD 2000, Spierings 2001).

Australian education and training institutions already provide an array of locally based initiatives to support young people at risk of leaving school early. Programs that are consistent with the OECD’s four criteria of effectiveness are usually the product of coalitions of local agencies such as ACE providers, TAFE institutes, local government and welfare agencies, employers and schools. Customized education and training services that are case-managed include Managed Individual Pathways in Victoria and the Queensland government’s Retention and Reform Strategy. The distinguishing feature of programs to assist young people at risk of leaving school early is that they operate outside of traditional educational structures and are based on networks of education providers, local government and employers at a community level.

A pioneering example of this approach was the Whittlesea Youth Commitment, sponsored by the Dusseldorp Skills Forum in 1999. This project brought together education and training providers from ACE, schools and the VET sector, employment and work placement agencies, welfare agencies and local government within the Whittlesea community to expand the learning options for young adults, particularly young people at risk of leaving school early, and those who had left school but were not involved in employment or work.

The objectives of the Whittlesea Youth Commitment in 1999 were to support young people to complete Year 12 or its equivalent, with reference to individual needs and offering new learning, work and training options to youth-at-risk. A Spirit of Co-operation Agreement was signed by the Whittlesea Local government, eight local

secondary schools, TAFE, ACE, JPP, RMIT, ACC, Centrelink, employment assistance and training organisations, and community welfare agencies, that acknowledged their shared responsibility for the destinations and outcomes of young people in the region. The support services were co-ordinated by a brokerage team who worked with the signatory agencies to ensure that every student leaving school before completing Year 12 secured a place in employment, training or education or was actively engaged in job-search activities.

The services offered to young people at risk included:

- Modules from the Certificate of General Education that have been tailored for young people
- Job-search training
- Work placement with local employers
- Access to VET modules at the secondary college
- Personal development assistance through youth workers
- Creative arts
- Driver education
- Computer training and internet access; and
- A Mentoring program

The Commitment took about two years to develop before concrete steps on the ground resulted in measurable outcomes. Between 1999 and 2000, the number of early school leavers in Whittlesea dropped by a third, from 558 to 375. In 2000, the schools surveyed all students in Years 9,10 and 11 to ascertain the number of self-selected school leavers. The 300 potential early school leavers were then interviewed, and subsequently 180 of these students opted to stay on at school. Files were opened for 230 students who received follow-up and support from a community team of teachers, youth workers and community agencies (Spierings 2001).

An evaluation of the Whittlesea Youth Commitment (Kellock 2001) conveys the complexity of the project and emphasizes the importance of “signing up” all relevant educational and employment stakeholders to the project at the community level. It highlights the importance of obtaining data on potential early school leavers while they are still at school, as it proved more difficult to engage with them once they had left the system. The role of “transition brokers” (case managers) also proved critical in providing high quality support to young people at risk (Kellock 2001).

Funding for the Whittlesea Youth Commitment was provided by the Dusseldorp Skills Forum, the Enterprise and Careers Education Foundation, resources pooled by the eight local schools, RMIT and the State government.

Effective programs to support young people at risk are difficult to implement because they involve collaboration and commitment from a range of stakeholders at the community level. This level of collaboration also requires additional resources and co-ordination mechanisms that are not always in place at the community level. But in the long term, expenditure on young people at risk pays off. A report commissioned

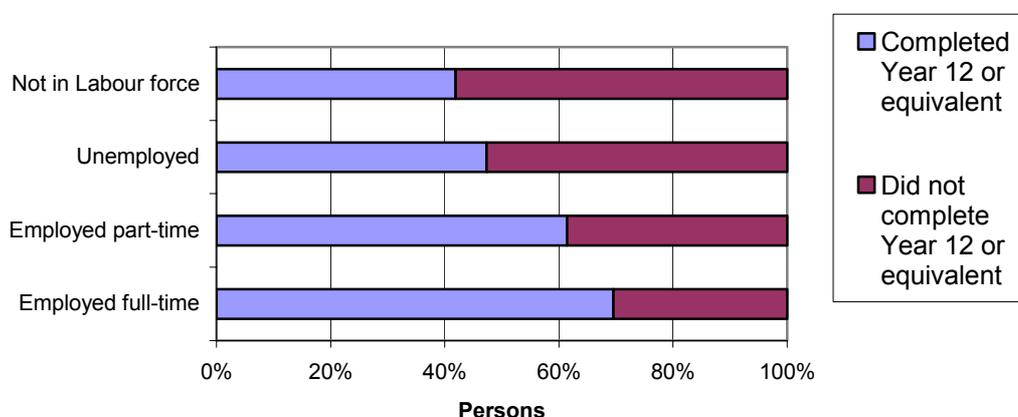
the Dusseldorp Skills Forum estimated that that around \$1 billion is currently spent on youth pathways programs in Australia – of which 60 per cent is funded by the Commonwealth government and 40 per cent by State and Territory governments. The report estimated that if governments aimed to increase Australia’s level of participation in post-compulsory education and training from 80 per cent to 90 per cent over the next five years, it would cost a total of \$2.9 billion, but that by 2011, the value of tax receipts generated by the initiative would approximately equal the present value of the government’s outlays (DSF 2002).

Mature workers with low levels of formal education

The Australian population is relatively poorly educated international standards. In 2002, Australia ranked 19th out of 30 OECD countries in terms of the percentage of its population who had attained at least upper secondary education – 61 per cent compared to the OECD average of 64 per cent (OECD 2004).

Adults with low levels of formal education and training have worse labour market outcomes than the rest of the population, and are more likely to be not engaged in the labour market at all. As illustrated in Figure 9, 70 per cent of people employed full-time had completed Year 12 or a Certificate level 3 or 4, whereas the majority of people reporting as unemployed or not in the labour force had not completed Year 12.

Figure 8 Year 12 or equivalent completion rates by labour force status, Australia 2001



Source: ABS Cat. No. 6278.0. *Education and Training Experience, Australia 2001*.

Notes: Excludes people studying at school. “Completed Year 12 or equivalent” includes people who have completed Year 12 or Certificate level 3 or 4 courses and higher. “Did not complete Year 12 or equivalent” includes: Year 11; Year 10 and below; Certificates level 1 and 2; Level not determined; and Certificates not further defined.

Adults who have not completed Year 12, are often reluctant to engage voluntarily in education and training. In spite of the potential economic and social benefits in the longer term, people with low levels of formal schooling do not participate in further education to the same degree as people with higher levels of education.

Although many Australian workers engage in education and training in the workplace, their level of participation is influenced by occupational status. Lower skilled workers are less involved in education and training than those in high skilled jobs. In the twelve months prior to 1997, 90 per cent of people in professional and managerial occupations participated in some form of education or training compared to 64 per cent of workers at the lowest skill level. Participation in education and training is also influenced by the employment status of the employee. Workers who are permanent employees or full-time undertake the most education and training, whereas workers who are casual undertake the least (ABS *Education and Training Experience Australia 1997* Cat. No. 6278.0).

As a pathway out of low-skilled work, education and training appears to be of “critical importance” in “helping low-income individuals and families beat the poverty trap” (Business Council of Australia 2003). But, people without formal qualifications, such as Year 12, are the least likely to engage in education and training, in spite of the potential benefits.

“What works” for mature learners

Support for mature learners in Australia is provided under a range of government programs, much of which is targeted to the development of work-related skills. Like programs for early school leavers, adult learning for people with little formal education appears to be most effective when it is delivered outside of traditional educational institutions – in workplaces and within the community. People with low levels of formal education tend to resist any “formal” learning that reminds them of school.

One example of adult learning delivered in the workplace is a course delivered to six employees of Darley Refractories by the Bacchus Marsh Adult Education Centre. The Company, which produces fire bricks, tiles and refractory concrete, obtained funding under the Workplace English Language and Literacy (WELL) Program to provide training to improve communication between staff, to develop plant documentation and to increase the level of teamwork among employees.

The initial training plan, developed by the Bacchus Marsh Adult Education Centre, was based around a number of structured learning activities designed to develop the workers’ skills in writing, analysis and word processing, as a precursor to writing up standard operating procedures in the second half of the program. But early in the program, the group reacted negatively to what they perceived as the “back to school” approach of the first half of the program. Their response was, “Tell us what you want to achieve mate, and we will tell you how we can work with you to achieve it, but don’t send us back to school!” (ACFE Board 2001: 9).

To accommodate the group’s resistance to “formal” learning, the program was re-structured to focus on the primary task of developing standard operating procedures with the relevant teaching and learning provided as the need for skills arose. This individualised approach while working towards an agreed outcome engaged the group effectively. The learning experience was so successful that the group agreed to attend the Bacchus Marsh Adult Education Centre for the computer training component, and

from there, some members expressed interest in following up other training courses (ACFE Board 2001:9).

Reluctance to approach formal learning institutions is common among adult learners with low levels of education. The experience of an Aboriginal woman in her early forties who participated in a VET course delivered by an ACE provider illustrates this.

I did the NOW (New Opportunities for Women) course here. Well, I didn't want to come. I was going through a hard time and two people told me about it so I came along and I enjoyed it. I wouldn't ever have known these other people (other interviewees and her class mates) without that. Aboriginal people are shy. I wouldn't have went to TAFE if I hadn't come here. I would never have enrolled straight into TAFE.

But I got the courage to go to this and then to TAFE. They (her tutors and classmates) encouraged me to go. When the NOW course started they talked to me and told me what it would be like. Not like a classroom situation like it was at school, and not treated like at school. Cultural thing, even when you go to the shops, they look at me because I'm black. They think I'm stealing or something, so I'm always very shy . . . An Aboriginal person won't tell you they can't do it. They'll just sit there and scribble, because of the shame. You need someone who will be sympathetic that you can tell.

Jane, reported in Jenkin, Volkoff and Golding, 1998: 7).

Programs to support learning among mature adults with low levels of formal qualifications can be expensive because of the time it takes to break down resistance to formal learning and to build individual's confidence. Although some low-skilled people engage in work-related training, these programs depend on the support of employers. It is even more difficult to meet the learning needs of people who are unemployed or not in the labour force. Programs which are successful in re-engaging low-skilled adults with formal education tend to be welcoming, accessible (in the sense of located in the community), flexible and highly responsive to learner needs. A common characteristic of successful entry-level programs for this group of learners is that they are delivered *outside* of the formal education and training system.

Pathways and Roadblocks

When we analyse successful learning programs for early school leavers and adults without formal qualifications, it is obvious why our current system of education and training fails to meet their needs. A comprehensive policy agenda to raise the level of educational attainment among people with low levels of formal skill would have to address three issues or "roadblocks" that currently impede progress towards this goal:

- the policy dominance of the three formal sectors;
- a patchwork of funding responsibilities between the Commonwealth and State governments; and
- narrow policy goals for publicly funded education and training.

Australia's formal sectors of education and training evolved in the context of an industrial age in the 19th Century, when the economy required a large unskilled workforce. Secondary schooling in particular, was intended to prepare a small group of young people for university, as the majority of students were expected to enter the unskilled labour market after completing primary school. The three formal sectors of schools, vocational education and training (VET), and higher education, provided "front end" education and training that "tracked" individuals into specific categories of lifetime employment (Watson, Wheelahan and Chapman 2002: 51-66). These three formal sectors continue to deliver most publicly funded education and training in Australia. In contrast, the Adult and Community Education (ACE) sector evolved independently at the community level. It receives relatively little recurrent government funding and has traditionally provided further education and training on a user-pays basis (Foley and Morris 1995).

Today, Australia's three formal sectors of education and training still cater for their traditional constituencies. The institutions in each sector are funded annually on a per student basis and deliver formal education and training during academic semesters, based on a set curriculum and with mandated forms of assessment. This system meets the needs of the majority of Australians who are already engaged with education and training. Although schools, TAFE institutes and universities can assist in supporting low-skilled people onto a formal learning pathway, there are structural impediments that will work against their success. Young people and adults who have failed to engage successfully with formal education, are very reluctant to approach formal learning institutions such as schools, TAFE colleges and universities and are far more likely to be reached at the community level. People with low levels of formal qualifications are not likely to respond to any program that has "education" or "training" in its title, or that involves structured forms of curriculum and assessment. They are more likely to respond to programs that are flexible and responsive to their learning needs and that may, over time, provide them with the confidence to enter a formal learning pathway.

With its community base and traditional emphasis on informal learning, the Adult and Community Education (ACE) sector is better placed than any of the three formal sectors to meet the needs of low-skilled learners, but it is not funded systematically for this purpose. Community education providers rely heavily on income from course fees (about 73 per cent of total revenue) and receive around 27 per cent of their funding from government, most of which is tied to specific programs, and allocated on an annual, rather than a recurrent basis (Watson, Wheelahan and Chapman 2002). In comparison, schools and universities receive a specified level of recurrent funding per student determined by the total number of students enrolled.

Although the needs of low-skilled learners – particularly young people at risk – are best met through collaborative efforts between all providers, the divisions between the formal sectors work against this type of co-operation. As each sector is intended to serve a specific sub-set of clients from different occupational categories, it is difficult for institutions to work outside of their traditional roles. When they do co-operate across the sectors, for example to provide VET in schools, differences in funding can result in accusations of cost-shifting between sectors or levels of government (SWRSBEC 2000: 241-242, Wheelahan 2000).

The division of financial responsibilities between State and Territory governments and the Commonwealth reinforces the policy dominance of the three formal sectors and exacerbates problems associated with sectoral divisions in Australian education and training. Although education is the financial responsibility of State and Territory governments under the Australian Constitution, the Commonwealth has become involved in education funding using Section 96 of the Constitution. As the pattern of Commonwealth financial support is not consistent across the sectors, we have a patchwork of funding responsibilities whereby one level of government has more “purchase” on one sector than another¹. This diminishes the prospects for cross-sectoral co-operation and can also result in policy “stand-offs”, whereby each level of government is reluctant to fund new policy priorities that fall outside of their traditional domain, such as meeting the needs of young people “at risk”, or the provision of early childhood education.

Finally, the policy goals of publicly funded education and training are heavily tied to the outcome of employment. Although this is a logical objective for government funding, its application can lead to short-term programs with the specific aim of re-training the unemployed, rather than pursuing the long-term objective of re-engaging individuals with formal education and training. Delors defined the goals of education in terms of four principles (or “pillars”): 1) Learning to know; 2) Learning to do; 3) Learning to live together; and 4) Learning to be. The Delors report points out that “formal education has traditionally focused mainly, if not exclusively, on *learning to know* and to a lesser extent on *learning to do*”. He says that the two other pillars – *learning to live together* and *learning to be* – are “to a large extent left to chance”. Delors argues that equal attention should be paid to each of the four pillars so that “education is regarded as a total experience throughout life, dealing with both understanding and application and focusing on both the individual and the individual’s place in society” (Delors 1996: 86). If the Delors conception of education and training gained greater acceptance in Australian policy circles, it would be possible to direct more government funding to learning programs for low-skilled people. These programs would be less instrumental in purpose and more responsive to the range of individual motivations for learning.

Australian governments will need to address these policy “roadblocks” if they want to increase the rate of participation in formal education and training, and to reap the social and economic benefits associated with having a highly skilled workforce. The strong association between education and national income has led some economists to argue that education is *endogenous* to economic growth. This view suggests that developing human capital can push economies onto faster growth paths because educated parents produce better educated children, and educated workers raise the productivity of the less educated members of their team, as well as being more responsive to new technology (Romer 1990, Lucas 1988, Solow 1991).

Targeting the learning needs of people with low levels of formal qualifications is also essential if we aim to reduce the deepening divide between the people who have

¹ The Commonwealth is now the main funding source for higher education but the Commonwealth and States share funding (roughly equally) for the VET sector. The Commonwealth provides about 10 per cent of funding for government schools and 70 per cent of funding for private schools. Almost all funding received by the ACE sector is provided by State and Territory governments although it is difficult to quantify the amount of money that may flow to community providers through employment programs.

successfully engaged with education and training and those who have not. Income inequality in Australia is growing and the proportion of people living in poverty has increased (Harding and Greenwell 2002). If we do not equip all people with the skills to engage successfully in the new economy, the extremes of wealth and poverty that currently exist in Australia may have significant economic and social costs.

Conclusion

The changing labour market has created challenges for education and training policy because of the high demand for workers with skilled qualifications and the declining job prospects of people with low-level skills. Education appears increasingly important for employment because the diffusion of ICT has changed the nature of work so that higher levels of general knowledge, literacy and communication skills are required in most occupations. The challenge for education policy is to recognize that formal systems of education and training are not adequate to meet the needs of all learners – particularly people who have not attained the qualification of Year 12 or its equivalent. If we wish to address the deepening social and economic divide between people who are highly skilled and those who are not, government funding policies for education and training should be re-oriented towards meeting the needs of low-skilled learners. This could be pursued by providing more stability in the funding arrangements for community providers, rationalizing the funding arrangements between levels of government, reducing unnecessary divisions between the formal sectors and broadening the policy goals of publicly funded education and training.

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