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PREVIEW

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# RETHINKING APPRENTICESHIPS

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Institute for Public Policy Research

## ABOUT THE AUTHORS

Brian Knight is principal research consultant at the National Centre for Vocational Education Research, Australia.

Tom Karmel is managing director at the National Centre for Vocational Education Research, Australia.

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IPPR 4th Floor 14 Buckingham Street London WC2N 6DF T: +44 (0)20 7470 6100 E: info@ippr.org www.ippr.org Registered charity no. 800065

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# ABOUT THE EDITORS

Tony Dolphin is senior economist and associate director for economic policy at IPPR.

Tess Lanning is a research fellow at IPPR.

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# RETHINKING APPRENTICESHIPS

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# IDEAS to CHANGE LIVES

# 3.2 APPRENTICESHIPS AND TRAINEESHIPS IN AUSTRALIA

BRIAN KNIGHT AND TOM KARMEL<sup>1</sup>

NATIONAL CENTRE FOR VOCATIONAL EDUCATION RESEARCH LTD, ADELAIDE, AUSTRALIA

Apprenticeships in Australia began with British settlement, when they were concentrated in the trades and restricted to teenage boys. By the 21st century the model has been broadened to cover a wide range of occupations, industries, employment arrangements, person characteristics, and durations of training. The nomenclature has also been widened to become apprenticeships and traineeships, with apprenticeship being used for trade and traineeship for non-trade occupations, even though both use the same training model.

Apprenticeships are three or four years in duration and at certificate III or IV level in the Australian Qualifications Framework (AQF). Traineeships are usually in non-trade occupations, at AQF certificate II or III level, and usually one or two years in duration. More recently, traineeships have been made available in technician and para-professional occupations, at AQF diploma and advanced diploma level, but the take-up has been relatively limited (5.1 per cent of commencements in 2010, in contrast to 64.9 per cent for AQF certificate III; NCVER 2011a).

| Table 1   | Characteristic   | Apprenticeships  | Traineeships   |  |
|---|--|--|--|--|
| Major options and<br>characteristics of<br>apprenticeships and<br>traineeships in 2010 <sup>2</sup> | Year introduced in Australia   | 1788   | 1985   |  |
|   | Occupations covered  | Trades and crafts  | Non-trade occupations  |  |
|   | Most common occupational areas,<br>in descending order <sup>a</sup>          | Construction trades, automotive<br>and engineering trades, food<br>trades, electro-technology and<br>telecommunications trades                         | Clerical and administrative<br>workers, sales workers, community<br>and personal service workers,<br>labourers, machinery operators<br>and drivers |  |
|   | Most common AQF levels   | Certificate III or IV, mostly III  | Certificate II or III, mostly III  |  |
|   | Other AQF levels   | None   | Certificate I and IV, diploma  |  |
|   | School-based contract of training  | Yes, from 1996   | Yes, from 1996   |  |
|   | Other part-time contract of training   | Yes, from 1998   | Yes, from 1998   |  |
|   | Existing workers   | Yes, from 1998   | Yes, from 1998   |  |
|   | Age range  | Mid-teens upwards, no upper limit  | Mid-teens upwards, no upper limit  |  |
|   | Average age at commencement  | Mean 23 years, median 19 years   | Mean 28 years, median 23 years   |  |
|   | Standard Australian Government incentives payable to employers <sup>b*</sup> | Yes, AUS\$1,500 on<br>commencement, AUS\$2,500 on<br>successful completion, and extra<br>payments for occupations on the<br>National Skills Needs List | As for apprenticeships if certificate<br>III upwards; if certificate II and<br>in a nominated equity group,<br>AUS\$1,250 on commencement          |  |
|   | Government personal benefits and support payable to employees <sup>b</sup>   | Yes, restricted to occupations on the National Skills Needs List   | Usually not, unless disadvantaged<br>(Indigenous, have a disability etc.)  |  |

\* AUS\$1 = £0.65

Sources:

Table 1

<sup>a</sup> NCVER 2011a, tables 4 and 5

<sup>b</sup> Australian Government 2011 and NCVER 2010a

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The views and opinions expressed in this document are those of the author and project team and do not 1 necessarily reflect the views of the Australian Government or state and territory governments.

<sup>2</sup> Australia is fortunate in having detailed and accurate statistics on its apprenticeship and traineeship system and on provision in the public vocational education and training system, particularly for the last two decades (Cully and Knight 2007).

All apprenticeships and traineeships are defined by a regulated, employment-based training arrangement, governed by a registered legal agreement ('contract of training') which specifies the rights and responsibilities of the major parties. The employer employs the apprentice or trainee, at the prescribed training wage, and provides on-the-job training in a specified occupation. A registered training organisation provides concurrent formal training – usually off-the-job – that leads to a recognised qualification related to the occupation. Both the apprentice or trainee and the employer are subject to the provisions of the relevant industrial award or agreement, and to employment-related laws and regulations.

Although the apprenticeship or traineeship is constructed through a legal contract, there are no penalties if the employer or apprentice/trainee breaks the contract – unlike the mediaeval indentures that were their forerunner. This is no trivial difference, with contract completion rates around 45 per cent for trade and 52 per cent for non-trade occupations (NCVER 2011b, 2011c).

Occupational licensing plays only an incidental role in the apprenticeship model. Among the traditional trades, occupations that require a formally recognised qualification and a licence to practise include: electricians, plumbers, builders, pressure-vessel welders and specialist trades in the aviation industry. Among non-trade occupations, childcare and aged care increasingly require a formal qualification. This leaves many of the occupations that are covered by an apprenticeship or traineeship able to be practised without a formal qualification. Examples in the trades are chefs and motor mechanics, while virtually all non-trade occupations fall into this category.

Over time there have been major structural changes in Australia's economy resulting in the growth of the services sector, the relative decline of manufacturing, the boom in extractive industries (mining, natural gas), expansion of the health and personal care sectors, and the use of more productive technologies in practically all economic sectors. Many apprenticeship occupations have become almost redundant as a result of technological change or no longer exist in Australia (for example, printing compositors and trades specific to heavy shipbuilding and repair) while others have declined because the products they are associated with have declined in importance.

Even so, apprenticeship occupations have a clear identity and status which is not shared by traineeship occupations. Apprenticeships have more recognition and status because of the occupations they lead to, with trade occupations enjoying higher status than many of the occupations covered by traineeships. A major theme throughout the history of apprenticeships in Australia is that the community, employers, employees, and their representatives have been reluctant to change their structure (Knight 2011, forthcoming). Apprenticeships have been defended as *the* model of occupational training for the trades.

Notwithstanding their popularity with the industrial partners, apprenticeships and traineeships are not the dominant mode of vocational education and training (VET) in Australia: they constitute about 20 per cent of the students in the public VET system (NCVER 2010b, 2010d).

Acquiring skills in a work context, supplemented by formal learning represents a joint investment by the employer and employee, and in Australia, a substantial investment by government. The return on this investment is realised through skills acquisition leading to higher wages. However, the arrangement may not be optimal. The apprentice or trainee is not bound to the employer as was once the case and, therefore, employers may not get

a return on their investment. Institutional arrangements such as industrial awards may set wages too high for an individual's productivity, in which case employers will be unwilling to take on an apprentice or trainee. Finally, government incentive payments may promote wage subsidisation rather than skills acquisition in some situations (Cully 2008, NCVER 2010d). The original Australian conception of a traineeship emphasised the transition to employment of disadvantaged youth rather than skills acquisition (Committee of Inquiry into Labour Market Programs 1985).

### Development of apprenticeships and traineeships

In the first half of the 20th century a strong and enduring tradition of government regulation and protection of all aspects of trades' employment and training was established. This was reinforced by provisions incorporated into industrial awards and strongly supported by organised labour. As a result, government regulation of the apprenticeship system in Australia has increased, the content and standards for the formal part of the training program has become prescribed, and delivery has been institutionalised in the hands of government institutes of technical and further education (TAFE).

Change also occurred as a result of economic developments, technological change and shifts in labour force requirements. In some occupations where entry had originally been through apprenticeships, the levels of knowledge and skill required steadily increased and training moved to the higher education sector. Nursing is the major, recent example (Committee of Inquiry into Nurse Education and Training 1978), and until the 1950s, apprenticeships in surveying and pharmacy existed in Australia.

In other occupations, the standard duration for most apprenticeships was reduced from seven years to three or four years. At the same time, schooling became compulsory until the age of 15 or 16 years (NOOSR 2000). More recently, most Australian states have introduced an 'earning or learning' requirement until the age of 17 years, and an apprenticeship or traineeship is one of the allowable options.

The 1950s and 1960s were a period of growth and prosperity for Australia's economy, and it generated a need for increasing numbers of tradespeople. This need was met by training apprentices, supplemented by immigration of skilled workers from abroad, whose qualifications and skills were formally assessed. Throughout this period, the apprenticeship system remained under the control of the state governments and the list of licensed trades, including those where an apprenticeship was an entry requirement, could vary by state, along with the content and standards for each training programme. In the last decade this has become a considerable source of frustration for employers that operate in more than one state and the Council of Australian Governments has moved to eliminate unnecessary differences (COAG 2008).

The period from 1945 until the introduction of the National Apprenticeship Assistance Scheme in 1973 was also characterised by much questioning of the efficacy of Australia's apprenticeship system but relatively minor changes. Numerous official inquiries confirmed the benefits of apprenticeships but criticised their inflexibility and capacity to meet changing labour market needs; new approaches were suggested, yet few reforms resulted (Ray 2001). This demonstrates how fundamental changes in apprenticeships in Australia are difficult to achieve because of strong support for the status quo among employers, unions, governments, and the community. 3.2 | B Knight and T Karmel Apprenticeships and traineeships in Australia

Some of the changes that did occur in this period followed broader social trends and brought apprenticeships within the ambit of anti-discrimination and equal-opportunity legislation. Preferment on the grounds of sex was abolished. Minimum and maximum ages were increased and a maximum age was eventually abolished, making it easier to complete year 11 or even year 12 schooling before starting an apprenticeship. The time-based approach to apprenticeships continued, despite the move toward competence-based training and assessment in the whole vocational education and training system (Harris et al 1995, Guthrie 2009), although over the last 10 years or so, early completion has become more prevalent.

The period from 1973 onward saw some of the most significant changes in Australia's apprenticeship system. In 1985, as a result of the Committee of Inquiry into Labour Market Programmes (1985), the apprenticeship model was extended to shorter traineeships, essentially as a labour market programme aimed at disadvantaged early school-leavers. However, the take-up of traineeships was slow until government incentive payments to employers were introduced in the mid-1990s. Competence-based training was formally adopted in the late 1980s and later incorporated into the qualification and unit-of-competency standards specified in national training packages. Apprenticeship options for older workers, part-time workers, existing workers, and school-based apprenticeships and traineeships were introduced as part of the New Apprenticeship arrangements in 1998 (later called Australian Apprenticeships) and numbers have grown.

Table 2Apprenticeship andtraineeship statistics,selected years1963–2009

| Category (annual commencements) | 1963   | 1978   | 1988    | 1998    | 2009    |
|---------------------------------|--------|--------|---------|---------|---------|
| Apprentices                     | 22,600 | 45,300 | 55,000  | 45,000  | 73,100  |
| Trainees                        | _      | _      | 9,200   | 81,200  | 198,100 |
| Total                           | 22,600 | 45,300 | *64,200 | 126,100 | 271,200 |

Source: NCVER 2010, tables 1, 4 and 5. Note breaks in series in 1971, 1975, 1987 and 1994. \* Estimated figure, derived on the assumption that all in-training in non-trade occupations at 30 June 1988 commenced in the previous 12 months. Apprenticeships equate to trade and traineeships to non-trade occupations.

Government incentives have no doubt played an important role, particularly in the growth in traineeships. Ostensibly, the name change in 1998 eliminated the distinction between apprenticeships and traineeships by placing them under a single banner. In reality, the community, most employers, and the state governments continue to distinguish between apprenticeships in the trades and shorter traineeships in non-trade occupations.

The 1990s are often viewed as an era of training reform. This period includes the establishment of the Australian National Training Authority (ANTA, abolished in 2005), the Mayer review proposals for key competencies (1992), the Australian Quality Training Framework (AQTF), and increasing numbers of non-government registered training organisations, which now number over 5,000. The varied responses to skills formation and high levels of unemployment, and the associated government funding, helped establish traineeships as an alternative, though lower-status, pathway to traditional apprenticeships and employment in the trades.

Beginning in the 1980s, governments also allowed group training organisations to be the primary employer of apprentices and trainees. Under this arrangement, apprentices and trainees can be placed with one or more employers to undertake their on-the-job training. This is designed to assist with the management of the risks associated with recruiting and employing apprentices and trainees, and to facilitate small-business involvement.

Government funding was also provided to group training organisations but has since been reduced or withdrawn, and their operations are now largely funded from fees paid by the employers.

The developments since the 2008 global financial crisis, which had much less impact on Australia than other developed countries, have been prompted by concerns that the growth of mining will be constrained by the responsiveness of the trade training system.3 The Council of Australian Governments has taken action to eliminate state variation in licensing, and in interstate recognition of trade qualifications in the same occupation (COAG 2008). In 2009 the Australian Apprentices Taskforce was established and in 2010 undertook a detailed review of apprenticeships and traineeships (Australian Government 2011a and 2011b). The government response to date comprises funding for support programmes to improve apprenticeship completion rates, and a National Trade Cadetship to facilitate transition from secondary school to a post-school trade apprenticeship (from 2012).

Employers and their representatives have generally supported the changes in the apprenticeship system that began in 1973. They have embraced competence-based training and have input significantly into the development of national training packages, which are the responsibility of national industry skills councils and include the formal qualifications completed by apprentices and trainees. They have mostly supported uniform licensing arrangements, a single national quality framework (the AQTF), and a national VET regulator. In keeping with the pluralism which underpins much policy development in Australia, the governance arrangements for the apprenticeship and traineeship system include extensive employer representation at both national and state levels (Knight and Mlotkowski 2009, Cully et al 2009, Ryan 2011).

### Government funding

As far as NCVER is aware, Australia is the only country to pay incentives on a large scale to employers of apprentices and trainees. The economic rationale for the incentives is that they will offset wages and other costs and encourage employers to make more training places available. They are also structured to encourage successful completion of apprenticeships and traineeships at certificate III level and above. Nechvoglod et al (2009) showed that the incentives offset only a very small proportion of the cost of an apprenticeship in a trade and therefore it is only in low-wage traineeships that the incentives are likely to have any impact. It is significant that traineeships were slow to take off until the injection of significant government incentive payments to employers in the mid-1990s, particularly in the retailing and service sectors.

Australia's governments also pay a range of incentives to those employers who provide an apprenticeship or traineeship to a person who has a disability, is an indigenous Australian, or is disadvantaged in some other way. Apprentices and trainees on very low wages may also be eligible for supplementary income support (NCVER 2010a).

Other government financing or concessions are provided. Australia's state governments cover practically all the cost of the formal, off-the-job training delivered to apprentices and trainees, even when this training is delivered by a non-TAFE training provider (including enterprises which have registered as training providers). Many employers are eligible for payroll tax exemptions. Some incentives, such as those paid to employers for training women in traditional trades, had limited success and have been discontinued. Personal benefit support is also provided to help offset the effects of low wages during training,

<sup>3</sup> Although, for an alternative perspective see Richardson 2007 on skills shortages.

including public transport and car registration concessions, the Living Away from Home Allowance, the Tools for Your Trade Allowance, travel and accommodation allowances when the training provider is located some distance from home, and capping of apprentice/trainee student tuition fees.

The government contribution to Australia's apprenticeship and traineeship system is substantial: the total in 2008/09, taking account of all expenditures, is estimated at AUS\$28,324 for a four-year apprenticeship in a trade and AUS\$7,081 for a typical one-year traineeship (NCVER 2010a). On occasions the incentive payments to employers have been restructured, and the amounts paid are not indexed for inflation, but these factors reduce the total cost to government only at the margins. Recent suggestions by the Australian Apprentices Taskforce (Australian Government 2011a) that employers should meet more of these costs or contribute via a levy have been resisted strongly by employer representatives, and the government has accepted this view (Evans 2011).

Does Australia get good value for money from large-scale public funding of its apprenticeship and traineeship system? The statistics are certainly impressive, approaching 300,000 commencements a year in a workforce of about 12 million, a training commencement rate of around 2.5 per cent; in many occupations the training rates are even higher (NCVER 2011a). The major component of the government spending is off-the-job training, which is made available for practically all apprenticeships and traineeships with little regard to the likely returns. While apprenticeships in electrotechnology offer handsome returns on completion, others such as traineeships in retail sales and the fast-food industry do not (Karmel and Mlotkowski 2010, 2011).

### **Completion rates**

Low completion rates reduce the value that Australia gets from its expenditures on apprenticeships and traineeships, and the return on the investment that employers make. There is also a view that it reduces skills formation in key occupations, sufficient to prompt the government in 2011 to announce funding for support programmes to raise completion rates. From the employer's perspective, less than 50 per cent of trade and a little over 50 per cent of non-trade apprentices and trainees successfully complete. Most attrition occurs in the early stages of the apprenticeship or traineeship programme, and is caused by personal factors or a breakdown in the relationship between the apprentice/trainee and the employer. In non-trade occupations there is generally much less variation by occupation than in the trades, except for food preparation assistants, where only about a third of trainees complete.

In the trades there is considerable variation in the completion rate by occupation, employer size and employer type (NCVER 2010b, 2011a). The rate is lowest for food trades workers (about 28 per cent) and hairdressers (about 37 per cent), and highest for engineering, ICT and science technicians (about 60 per cent) and electro-technology and telecommunications trades workers (about 55 per cent). Contract completion rates also vary by the number of apprentices the employer has: 45 per cent for those with 1-10 apprentices, and 55-58 per cent for those with more than 10, though experience varies by industry. For example, completion rates among electro-technology apprentices are 20 percentage points higher for employers with 100 or more apprentices compared with those who have one. On the other hand, employer size has little effect on completion rates for apprentices in the construction trades. A third factor in completion rates in the trades is employer type: 49 per cent for the private sector, 52 per cent for group training organisations, and 80 per cent for government employers. For individuals, the overall completion rates are around 25 per cent higher for trade apprentices because some non-completers with one employer are able to continue with another. This 'employer churn' is of little consequence for trainees but may affect employers' willingness to participate (Karmel 2011a). One issue that has been raised is the importance of wages to the low completion rates of trainees. In the trades it is the earnings premium associated with becoming a tradesperson that matters rather than the training wage. For males in non-trade occupations both the earnings premium associated with completion and the training wage matter, whereas, for females in non-trade occupations, the training wage does have some impact on completion rates (NCVER 2010b, Karmel and Mlotkowski 2010, 2011).

### Apprentice and trainee learning programmes

Where an apprentice or trainee is a young person undertaking entry-level training, there are important connections with their general education and major implications for meeting the goals of schooling. Although the proportion has fallen, it is still the case that a majority of the commencements in trade occupations (62 per cent in 2009) are young people aged 19 years or under (NCVER 2010: 17). About 35 per cent of young apprentices now complete 12 years of schooling before commencement, and around 50 per cent of trainees. Also, the levels of underpinning knowledge that are needed for apprentices and higher-level trainees in many occupations have been rising in curriculum areas such as numeracy, scientific and technical knowledge, information technology, communication skills, and literacy.

As the apprenticeship and traineeship system has evolved over the long term the underpinning philosophy and rationale have shifted in significant ways. Apprentice and trainee training have been separated from the general education and personal development of the individual, which are seen as responsibilities of the school system and of parents. There has been a shift from a system that was almost exclusively about providing entry-level training and employment to young males in the trades to one that provides both entry-level and continuing training, and paid employment, to people of all ages and both sexes (NCVER 2011a). Half a century ago practically all commencing apprentices were age 19 years or less and all but a few were male. By contrast, in 2009, 38 per cent of the commencements in trade occupations, and 72 per cent in non-trade occupations, were adults aged 20 years or older, and females comprised 17 per cent of the commencements in trade occupations, and 53 per cent in non-trade occupations.

It has been argued that the current system does not adequately address the general education needs of young people if they leave school early to start an apprenticeship or traineeship (Sweet 2009). This occurs because the national training packages that now specify the standards and outcomes required for the formal component of the training programme include very little general education content, and providers are not usually funded to provide general education if it is not part of the qualification. Sweet (2010) concluded that unlike many other OECD countries, 'broad general education requirements are almost entirely absent from post-compulsory vocational education programmes [in Australia]'. Countries such as Germany, Singapore, China and many others design their entry-level apprenticeship programmes to ensure that general education continues. The extent to which this difference matters is not clear from the evidence currently available.

Pre-apprenticeship programmes have become a feature of the Australian system, with the primary motivation being better matching of potential apprentices so that trainees have a clearer idea of what the apprenticeship or traineeship involves. A secondary motivation is

perhaps to fill gaps in language and literacy. While such programmes have been popular with policymakers, the evidence that they have improved completion rates in general is scant (Karmel and Oliver 2011).

School-based apprenticeships and traineeships were introduced in 1996 and were part of the 1998 package of reforms. This allowed a young person to start a part-time apprenticeship or traineeship while still attending secondary school. After a slow start numbers increased, from 6,100 in 2002 to 20,900 in 2008, but declined to 16,700 in 2009. For mainstream schools the logistics of school-based apprenticeships and traineeships are difficult, and the phasing-out of Australian Technical Colleges may have contributed to the decline in commencements in 2009. Most take-up is at AQF certificate II level and by students in Year 11 (Knight 2008).

Australia's vocational education and training (VET) system has adopted competencebased training and assessment. In the early stages, the introduction of the competency approach was by no means smooth, even though employers and unions were generally supportive. Educationists were often critical because, it was argued, the importance of generic skills, underpinning knowledge, and time-on-task was being downplayed. Some also argue that competence-based training can promote the vocationalisation of learning at the expense of general education (see for example, Meyer 2009, on Switzerland). In Australia, some states were reluctant to implement competence-based training in their public systems without first developing a supporting curriculum. Widespread criticism of the quality of delivery and learning outcomes with the 'pure' competence-based model also emerged as a major issue. The *Report of the High Level Review of Training Packages* (Schofield and McDonald 2004) addressed these concerns, and those that have been developed since have been more readily accepted.

From 1999 onwards, national training packages progressively replaced the course and module curricula developed by the states as the specifications for the content and outcomes needed for recognised VET programmes, including apprenticeships and traineeships. The changes since Schofield and McDonald's 2004 review have increased the role of industry skills councils and employers in the development process while ensuring that the views of training providers are taken into account. More recently, a tendency towards excessive proliferation of units of competency and qualifications has been controlled, and the underpinning knowledge and generic skills that are needed have been embedded more fully in unit-of-competency standards.

### Concluding comments

In the 223 years of European settlement of Australia there has been a slow evolution from the apprenticeship system originally imported from Britain. The period of greatest change has been the last 25 years, with the expansion of the model to school students (MCEETYA 2001, 2003), part-time workers, existing workers and older workers, and to non-trade occupations at low and middle skill levels. Some of the changes have followed more general shifts in the labour market and society, but many have been driven by government policies and funding. As a result, Australia's apprenticeship and traineeship system has a number of distinctive features not found in other countries.

The attraction of the apprenticeship model is understandable. The linking together of formal training with employment is an appealing package: for the apprentices and trainees there is an immediate income – unlike the standard institutional training model – and they get the benefit of practising their training on the job. For the employer, there is the

prospect of moulding the individual to the requirements of the firm, as well as immediate access to labour at lower starting wages. For governments, there is the opportunity to subsidise particular groups of workers who need assistance in gaining a foothold in the labour market.

It is not surprising that Australia's apprenticeship and traineeship system is highly regarded in many quarters (for example, Hoeckel et al 2008), not least because of the unusually high training rates that it entails, particularly among 15- to 24-year-old technicians and trades workers (Knight 2011, forthcoming). Training rates increased over the first decade of the 21st century, especially in the trades (from 9.5 per cent to 12.1 per cent) and among 15 to 19-year olds (from 13.4 per cent to 16.6 per cent; NCVER 2011a, table 10). These figures are undoubtedly impressive, but, for a variety of reasons, it can be argued that the system is at a crossroads and important issues need to be addressed.

The first issue is the long-term trend to higher level qualifications (Karmel 2011b). Australia's state governments believe that the number of people undertaking training programmes – particularly apprenticeships in traditional trades and courses at higher AQF levels – needs to increase to meet future skills needs and to raise productivity. However, the most recent figures suggest that growth in commencements in the trades is running out of steam, and the uptake at diploma and advanced diploma levels has been relatively limited – 5.1 per cent of commencements in 2010, in contrast to 64.9 per cent for AQF certificate III (NCVER 2011a).

The economics of the system that has evolved is another issue. By any standards it is costly for government – AUS\$2.9 billion in 2008/09 (NCVER 2010a) – and perhaps this expenditure could be targeted more effectively or used in better ways. Completion rates are generally quite poor, particularly from an employer's perspective. In some occupations the premium from completion is non-existent, suggesting that skills acquisition in these is very limited (NCVER 2010e, 2011b). The fine balance between the investment of individuals through low training wages and the desire to be paid a 'living wage' could be hard to maintain, particularly as fewer apprentices and trainees live in the parental home. Yet higher wage rates would undoubtedly make the model less attractive to employers.

Structural change is a major feature of modern advanced economies and the apprenticeship model might not be sufficiently flexible to meet the challenges this creates. Its success is also contingent on employers offering jobs for apprenticeships or traineeships, which might not happen in a severe economic downturn (Karmel and Misko 2009). Similarly, in boom times employers may not offer sufficient new apprenticeships and traineeships and an institutionally-based model could be easier to ramp up quickly. The more recent developments in the Australian system have confounded skills acquisition with labour market equity subsidies.

Education is at least as important as training because of the fundamental role of generic skills. Australia's current apprenticeship and traineeship system may not embody sufficient general education, including basic language, literacy and numeracy skills, given that the one thing that is certain in Australia and other advanced economies is that tomorrow's labour market will differ from today's.

While the long-standing resistance to promoting alternative training models within the trades persists in Australia, there is a long-term trend toward institutionally-based training. It is not so long ago that nurses were trained within hospitals in a type of apprenticeship and lawyers as legal clerks within law firms. We suggest that, in the longer term, the role

of apprenticeships and traineeships in skills acquisition is likely to diminish, despite their outward appeal and strong support. In the meantime, the challenge is for governments to get the best return from their investment, making sure that they purchase real skills on one the hand and meet equity objectives on the other.

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