NCVER

Linkages between Australian vocational education and training and the labour market

TOM KARMEL
MANAGING DIRECTOR

NATIONAL CENTRE FOR VOCATIONAL EDUCATION RESEARCH

Paper presented to 2nd Sino-Australia Vocational Education and Training Conference

on 3–5 August, 2005

at Chongqing

This paper canvasses a range of areas which bear on the linkages between vocational education and training (VET) and the labour market. The first is described as institutional linkages. These are the formal legal and administrative structures that tie together VET and the labour market. The second area is that of general skills development. Australia's general approach is based on the idea that education and training increases an individual's human capital leading to higher wages and better employment outcomes. The final area is labelled the dynamics of the labour market. This is the most complicated and covers things such as occupational mobility, the contrast between occupation-specific and general skills, the way VET changes to reflect changes in the structures of the labour market, and the way individuals choose their training. The paper ends with a short conclusion.

© National Centre for Vocational Education Research Ltd 2005

Vocational education and training (VET) in Australia is, as its name implies, focussed on providing skills for the labour market. It is very large, with the number of students in 2004 representing around 11% of the population aged 15–64 and around twice the number of students attending university.[1] It trains a large percentage of the entry-level cohort as well as older persons who wish to add to their skills. From a student's perspective it is directly tied to the labour market with around 90% of students, the vast majority of whom are employed, studying part-time.

1 Institutional linkages

It is beyond the purpose of this paper to provide a detailed description of the Australian VET sector. However, there are five institutions that bear directly on links between vocational education and training and the labour market:

- training contracts (apprenticeships and traineeships)
- training packages
- industry skills councils
- industry advisory arrangements
- licensing arrangements.

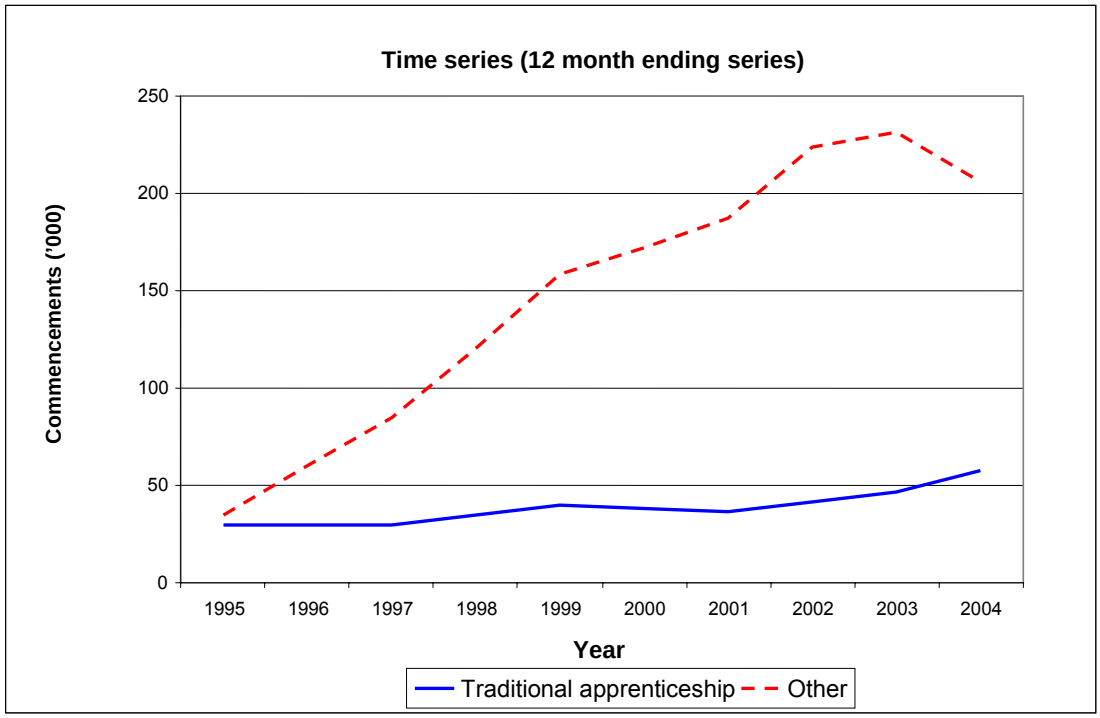
1.1 Training contracts

Apprenticeships and traineeships are contracts of training between an employer and an employee. The apprentices and trainees are expected to acquire the skills of the occupation through work and (in most cases) off-the-job training. These are an important part of Australia's VET system and numbers have grown dramatically in recent years, reflecting largely an expansion of this model into new occupations. As at December 2004, there were around 380 000 apprentices and trainees, with almost 250 000 enrolled in the public VET system (representing 16% of the 1.6 million public VET students). Figure 1 shows commencements since 1995. Traditional apprenticeships have remained relatively static, with some growth since 2002. By contrast, 'other' apprenticeships grew remarkably between 1995 and 2003, although more recently there has been some decline.

Table 1 gives some idea of the range of occupations covered by these arrangements.

[1] These figures refer to the publicly funded sector.

Figure 1: Apprenticeship and traineeship commencements, 1995–2004, Australia



Source: NCVER (various) *Australian vocational education and training statistics: Apprentices and trainees – Summary*

Table 1: Apprenticeship and traineeship commencements by occupation, 12 months ending 31 December 2004, Australia

		Males	Females	Total
1	Managers & administrators	2 620	1 320	**3 940**
2	Professionals	1 040	1 530	**2 570**
3	Associate professionals	9 150	9 640	**18 790**
4	Tradespersons & related workers	60 200	10 090	**70 280**
40	Tradespersons & related workers – nfd	230	20	**250**
41	Mechanical & fabrication engineering tradespersons	7 790	150	**7 940**
42	Automotive tradespersons	10 210	270	**10 490**
43	Electrical & electronics tradespersons	8 980	130	**9 110**
44	Construction tradespersons	17 430	210	**17 640**
45	Food tradespersons	8 100	3 070	**11 160**
46	Skilled agricultural & horticultural workers	2 800	490	**3 290**
49	Other tradespersons & related workers	4 660	5 730	**10 390**
5	Advanced clerical and service workers	1 380	3 190	**4 570**
6	Intermediate clerical, sales & service workers	24 130	56 530	**80 660**
7	Intermediate production & transport workers	24 390	3 650	**28 040**
8	Elementary clerical, sales & service workers	9 330	13 210	**22 540**
9	Labourers & related workers	22 840	8 840	**31 680**
Total		**155 060**	**108 000**	**263 060**

Note: nfd = not further defined.

1.2 Training packages

Training packages are a set of nationally endorsed standards, guidelines and qualifications for training, recognising and assessing people's skills. They are developed by industry with the aim of meeting the needs of an industry or group of industries. The reason that the training packages are important to the link between VET and the labour market is the latter point—that they are created by industry. As can be seen from table 2, they form the basis of the formal training component of virtually all apprenticeships and traineeships.

Table 2: Apprenticeship and traineeship commencements for selected training packages, 12 months ending 31 December 2004, Australia

	Males	Females	Total
WRR - Retail	12 480	21 370	**33 860**
BSB - Business services	10 020	21 150	**31 170**
TDT - Transport & distribution	18 740	3 150	**21 900**
THH - Hospitality	9 220	11 920	**21 140**
AUR - Automotive industry retail, service & repair	13 550	730	**14 280**
CHC - Community services	1 730	11 220	**12 950**
BCG - General construction	11 920	160	**12 080**
MEM - Metal and engineering industry	10 840	320	**11 160**
PMB - Plastics, rubber & cablemaking	6 950	1 870	**8 820**
MTM - Australian meat industry	6 830	1 840	**8 670**
ICT - Telecommunications	3 320	4 640	**7 960**
UTE - Electrotechnology industry	7 570	100	**7 670**
FDF - Food processing industry	3 980	2 120	**6 100**
PRM - Asset maintenance	2 580	3 240	**5 820**
WRH - Hairdressing	440	5 050	**5 490**
HLT - Health	840	3 310	**4 140**
FNB - Financial services	760	2 340	**3 100**
RTF - Amenity horticulture	2 600	390	**2 980**
PRS - Asset security	2 430	440	**2 860**
LMF - Furnishing industry	2 690	110	**2 800**
Top 20 training packages	**129 480**	**95 460**	**224 940**
Total in training packages	148 410	105 700	**254 110**
Not in training package	6 650	2 300	**8 950**
Total apprentices/trainees	**155 060**	**108 000**	**263 060**

Training packages are also now the dominant training model for vocational education and training as a whole (table 3).

Table 3: VET students by major course accreditation, 2000 to 2004, Australia

Course accreditation	2000 ('000)	2001 ('000)	2002 ('000)	2003 ('000)	2004 ('000)
National package	377.3	553.5	692.9	788.1	811.2
Nationally accredited courses	869.0	771.6	619.6	439.5	372.4
Locally accredited courses	375.3	248.6	269.8	389.8	336.2
Subject only (no qualification)	86.3	105.5	100.6	100.3	75.4
Total students	**1707.9**	**1679.1**	**1682.9**	**1717.8**	**1595.2**

1.3 Industry skills councils

Industry skills councils are amalgamations of the former national industry training advisory bodies (ITABs). Their role is to provide information to government on industry trends and future skill needs and training requirements. Another major role is to support the development, implementation and continuous improvement of nationally recognised training products and services (including national industry training packages).

As at June 2005 there were nine industry skills councils:

- Service Industries Skills Australia
- Transport and Distribution Training Australia
- Resources and Infrastructure Industry Skills Council
- ElectroComms and Energy Utilities Industry Skills Council
- Community Services and Health Industry Skills Council
- Agri-Food Industry Skills Council
- Innovation and Business Industry Skills Council
- Manufacturing
- Construction and Property Services

Still to be endorsed is the industry skills council for government services. A description of the industry areas covered by each of these industry skills councils appears in table 4.

Table 4: Industry skills councils according to industry sector coverage

Endorsed industry skills councils	
Service Industry Skills Australia	Wholesale and retail trade, tourism, hospitality, sport and recreation, hairdressing, funeral services and beauty therapy industries
Transport & Distribution Training Australia	Transport and logistics: road transport, warehousing, rail operations and rail infrastructure, stevedoring, logistics management, maritime and aviation industries
Resource & Infrastructure Industry Skills Council	Extractive and renewable resources exploration, extraction, harvesting, primary processing, civil construction
Electrocommunications & Energy Utilities Skills Council	Electronics, electrical, communications including telecommunications—voice, data, video computer systems, instrumentation, lifts, refrigeration and air conditioning, and renewable and sustainable energy
Community Services & Health Industry Skills Council	Child care, aged care, nursing
Agri-food Industry Skills Council	Food production and processing
Innovation & Business Industry Skills Council	Business services, cultural industries, education, financial services, information and communication technologies, printing
Manufacturing	Light manufacturing, manufacturing and process manufacturing
Construction & Property Services	General construction, offsite construction and plumbing, property services
Industry skills councils still to be endorsed	
Government	National, state and local government business sectors

1.4 Industry advisory arrangements

Following recent changes in administrative arrangements that have seen the functions of the Australian National Training Authority transferred to the Australian Department of Education, Science and Training, the establishment of a small body, named the National Industry Skills Committee, has been mooted. The purpose of the committee will be to provide the Ministerial Council (comprising the Australian and state ministers with responsibilities for VET) with high-level, evidence-based advice on workforce planning, future training priorities and other critical issues facing the training sector.

The proposed membership will include a number of employers nominated by the Australian Government and a number of employer peak bodies as a nomination of the Australian Council of Trade Unions. All employer representatives are to be current, active employers.

The National Industry Skills Committee would be required to bring broad-based advice to the Ministerial Council, and to formally engage with all relevant stakeholders, including registered training organisations and group training companies.[2]

1.5 Licensing arrangements

A very direct link between vocational education and training and the labour market is provided by licensing. By licensing, I mean regulations that mandate the possession of certain qualifications for practising an occupation or task. There are numerous occupations (electrician, for example) where the worker must be licensed. There are other licences (occupational health and safety, fork-lift driving) which are required for certain aspects of a job. We do not have an overall estimate of the proportion of the workforce covered by licensing arrangements. However, it is substantial and covers most industries, from manufacturing to community service. Table 5 below gives some examples. While it is not exhaustive it gives some idea of the breadth of licensing arrangements.

Table 5: Some examples of licensed occupations

Higher education trained
Accountant, actuary, building surveyor, doctor, engineer, lawyer, minerals process engineer, nurse, optician, pilot, surveyor, teacher
Vocational education and training trained
Aircraft maintenance engineers, betting clerk, blaster, bookmaker, builder, catering manager, chauffeur, child care worker, crane operator, creche attendant, customs broker, drainer, driving instructor, electrical motor winding, tradesperson, electrician, electrotechnology (data) communications technician, environmental engineer, fire extinguisher servicer, fishing inspector, food process worker, fumigator, gaming dealer, gasfitters, horse trainer, insurance broker, lift mechanic, local government inspector, marine officer, mechanical engineering technologist, optical dispenser, pest management technician, plumbers, property valuer, real estate salesperson, scaffolder, security officer, shotfirer, telecommunications technician, welder

2 General skills development

The dominant way of thinking about the links between education and the labour market is the human capital model. Under this model, education is seen as an investment in an individual's productive capacity, and is motivated by an expectation of a return to that investment. That is, an individual invests the cost of tuition and his or her time on the basis that he or she will end up with a better job. Typically, two aspects of labour market outcomes are considered: the probability of obtaining employment, and the wage. Table 6 shows labour force status by highest educational qualification.

[2] Registered training organisations are accredited to deliver specific accredited courses. Group training companies employ apprentices and trainees and hire them out to other employers. This arrangement is particularly attractive to small employers.

Table 6: Labour force status and highest educational qualification, 2001, Australia (%)

	Degree & post-graduate	Diploma	Cert. III & IV	Cert. I & II	No post-school quals	Total
Males						
Employed full-time	80	79	79	66	54	**66**
Employed part time	9	9	8	13	16	**12**
Unemployed	2	3	3	11	8	**6**
Not in labour force	8	9	10	11	23	**16**
Total	**100**	**100**	**100**	**100**	**100**	**100**
Females						
Employed full-time	52	43	40	34	23	**33**
Employed part time	30	33	32	34	31	**32**
Unemployed	2	3	5	5	5	**4**
Not in labour force	15	20	23	27	41	**31**
Total	**100**	**100**	**100**	**100**	**100**	**100**

Source: Australian Bureau of Statistics (2002)

The relationship between qualification levels and labour force status is striking. Full-time employment rates are high for those with higher level qualifications. Conversely, unemployment rates and not-in-the-labour-force rates are much lower.

It must be remembered that there is no precise link between formal education and training and the labour market outcomes. While many jobs require formal qualifications, many do not. Table 7 shows the distribution of qualifications across occupations.

Table 7: Occupation group and highest educational qualification, 2001, Australia (per cent)

	Degree & post-graduate	Diploma	Cert. II & IV	Cert. I & II	No post-school qual.	Total
Managers & administrators	31	10	16	11	33	**100**
Professionals	66	13	5	4	11	**100**
Associate professionals	18	15	19	10	36	**100**
Tradespersons & related workers	4	4	55	9	29	**100**
Advanced clerical & service workers	13	9	8	25	46	**100**
Intermediate clerical, sales & services workers	8	10	14	16	51	**100**
Intermediate production & transport workers	4	3	19	9	65	**100**
Elementary clerical, sales, service workers	6	4	8	13	69	**100**
Labourers & related workers	3	4	13	11	70	**100**
Not applicable	8	5	9	11	66	**100**

Source: derived from Australian Bureau of Statistics (2002)

If we take the VET qualifications as advanced diplomas, diplomas[3] and certificates I–IV, we see that they are important in all occupational groups except professionals. Another point worth noting is that VET qualifications range from basic (certificates I and II) to highly skilled (diplomas and certificates IV) and that the types of jobs available tend to depend very much on the skill level of the qualification.

[3] There is some ambiguity in the Australian Qualifications Framework in respect of diplomas and advanced diplomas. These qualifications can be either higher education or VET qualifications. They were important higher education qualifications in the 1970s but now tend to be almost all VET qualifications.

A more direct measure of the return to different qualification levels can be observed from wages. Cully (2004) used standard wage equations to estimate the wage premium associated with qualification levels (table 8).

Table 8: Wage premium attributed to completed education, 2001 (%)

Highest educational attainment	Men	Women
Degree or higher	43.2	41.2
Advanced diploma or diploma	28.3	20.4
Certificate III or IV	13.1	7.6
Certificate I or II	7.5	4.8
Year 12	13.8	8.9

Notes: The wage premium is the percentage difference in earnings of an individual with a given level of educational attainment relative to the earnings of an individual who has not completed Year 12, taking into account a wide range of other contributing factors.

Source: Cully, M (2005) based on multivariate analysis of the 2001 Survey of Education and Training

The clearest feature of the table is the relationship between the skill level of qualifications and wages, for both men and women. Within the VET qualifications there is very large variation, with premiums ranging from 7.5% (certificates I and II) to 28.3% (diplomas) for males and 4.8% (certificates I and II) to 20.4% (diplomas) for females. Of note is that certificates do not necessarily attract a wage premium relative to completion of school. However, it must be remembered that for those who are vocationally inclined the certificates offer an alternative pathway to the completion of Year 12 at school.[4]

It is also worth commenting on an underlying tension that is pertinent to links between VET and the labour market. It is not uncommon to read in the press arguments bemoaning the fact that many parents and young people choose university education over vocational education, and this has led to skill shortages in some of the trades. On the face of it, the above table makes clear why many choose higher education—there is a fairly obvious wage premium associated with university education. On the other hand, this evidence does not take into account (because it is based on wages of employees) that the tradesmen who have the highest incomes tend to be self-employed, and their earnings are not included in these data.

An important aspect of skills development that should not be overlooked involves skills developed on the job, which build on entry-level qualifications. Arguably, these skills are more important than actual qualifications and show that education—whether VET or higher education—needs to provide individuals with general education skills as well as specific vocational skills. From an economic perspective, there is no point in the VET sector only supplying narrow, industry-specific skills to the labour market. Rather, education and training should contribute to an individual's 'human capital' by providing them with both specific and general skills which they will be able to use across a variety of jobs as they develop their career.

3 Dynamics of the labour market

I'm not sure that this is the right heading for this section. However, it is very important to understand that the labour market is very dynamic and that one should not think of the education sector as a process that produces what the labour market requires at an occupational level. My point is that a person's education equips them for many possible occupations and that people will change occupations over their working lifetime. Thus in matching the output of the VET sector with the labour market, we need to note that many

[4] It should also be noted that these wage premiums do not taken into account that personal characteristics (such as academic ability) impact on both the types of qualifications undertaken and wages. So these types of models tend to over-estimate the return to qualifications.

graduates will not work in jobs that they have trained for. In addition, attrition rates, or the number of individuals leaving a particular occupation, are in some cases more important than the number of qualified workers. For example, if a particular occupation entails difficult or poor working conditions, it will always have a high turnover. Improvements in working conditions would lead to lower turnover and lessen the need for newly trained workers. This observation points to two things. The first is that the general aspects of training (those aspects that are not specific to an occupation) are as important as the specific skills. The second is that conditions within occupations have arguably a larger impact on skill shortages than the number of newly qualified persons. To put some flesh on these points we first provide some data on destinations of graduates and then look at training rates.

Table 9: Destination occupation matches by intended occupation of training activity, 2003 (%)

Intended occupation of training activity (major and sub-major group)	Match at major group	Match at sub-major group
Managers	16.9	na
General managers	17.9	3.8
Specialist managers	14.2	9.4
Farm managers	29.6	27.0
Professionals	31.2	na
Science & engineering professionals	20.8	7.4
Business & info professionals	35.0	9.2
Health professionals	28.9	18.4
Education professionals	38.0	26.4
Social and arts professionals	26.6	14.7
Associate professionals	16.1	na
Science & engineering associate professionals	20.8	11.1
Business & administration associate professionals	14.0	8.3
Managing supervisors (sales & service)	10.4	5.6
Health and welfare associate professionals	15.1	12.9
Tradespersons	54.1	na
Mechanical and fabrication trades	65.6	48.9
Automotive trades	76.4	66.3
Electrical and electronics trades	68.4	62.9
Construction trades	75.8	68.8
Food trades	42.3	41.0
Skilled agricultural and horticultural trades	25.3	20.6
Other trades	47.6	42.0
Advanced clerical and service	13.5	na
Secretaries & personal assistants	8.3	5.4
Other advanced clerical & service	17.2	12.2
Intermediate clerical, sales and service	42.8	na
Intermediate clerical	37.1	28.8
Intermediate sales	13.0	1.5
Intermediate service	50.8	44.0
Intermediate production and transport	33.8	na
Intermediate plant operators	38.3	22.1
Intermediate machine operators	32.6	25.5
Road and rail transport drivers	39.9	29.3
Other intermediate production and transport	29.7	15.7
Elementary clerical, sales and service	39.0	na
Elementary clerks	16.7	0.0
Elementary sales	30.8	25.8
Elementary service workers	43.2	25.1
Labourers and other	27.1	na
Cleaners	71.6	67.8
Factory labourers	29.5	15.2
Other labourers & related workers	20.2	14.9
Total	**31.3**	**22.8**

Note: Base is those graduates employed in May 2003.
Source: 2003 TAFE Student Outcomes Survey, NCVER

Table 10: Apprentices and trainees as a proportion of employed persons by occupation (%)

	1996	2002
Mechanical and fabrication engineering tradespersons	10.2	7.9
Automotive tradespersons	16.8	16.3
Electrical and electronics tradespersons	9.1	9.1
Construction tradespersons	9.2	11.3
Food tradespersons	18.6	25.3
Skilled agricultural and horticultural workers	4.6	7.5
Other tradespersons and related workers	9.6	9.8

Note: The proportions have been calculated after pro-rating the number of 'tradespersons not further defined' amongst other trades occupations.

Source: Brooks 2004, p.26

A second aspect of dynamics is that the labour market itself is continually undergoing structural change. So, as can be seen from table 11, the growth rate of occupations over the ten years to 2003 varies from 52.2%or associate professionals to a decline of 1.5% for *advanced clerical and service* occupations. While the supply of trades persons has been an issue during the current period of an extremely buoyant labour market, growth in these occupations has been subdued over the longer period.

Table 11: Occupational composition of Australian employees, 1993 and 2003

Occupational group	February 1993	February 2003	Net growth
	(´000)	(´000)	%
Managers & administrators	362.9	491.5	35.4
Professionals	1069.4	1586.3	48.3
Associate professionals	641.2	976.2	52.2
Tradespersons & related workers	836.8	923.7	10.4
Advanced clerical & service	326.5	321.5	-1.5
Intermediate clerical, sales & service	1190.1	1571.9	32.1
Intermediate production & transport	600.9	716.4	19.2
Elementary clerical, sales & service	625.7	906.6	44.9
Labourers and related	684.5	770.9	12.6
All employees	**6337.9**	**8265.0**	**30.4**

Sources: Cully (1999); Australian Bureau of Statistics (2003)

The challenge for VET is to keep up with these structural changes. As can be seen from table 12, VET has not been standing still.

Table 12: VET course enrolments by field of study, Australia 1991 and 2000

	1991		2000	
	('000)	%	('000)	%
Business, administration, economics	287.8	24.3	442.1	21.0
Services, hospitality, transportation	115.4	9.7	343.8	16.3
Engineering, surveying	208.6	17.6	246.1	11.7
Health, community services	43.7	3.7	170.9	8.1
Science	57.7	4.9	163.1	7.7
Art, humanities & social sciences	102.3	8.6	145.5	6.9
Land & marine resources, animal husbandry	49.6	4.2	110.5	5.2
Architecture, building	77.6	6.5	101.4	4.8
Education	12.3	1.0	53.9	2.6
Law, legal studies	5.3	0.4	13.4	0.6
Veterinary science, animal care	1.4	0.1	4.4	0.2
VET multi-field education	223.2	18.8	313.1	14.9
Total	**1185.0**	**100.0**	**2108.0**	**100.0**

Source: 1991 & 2000 national VET provider collections, NCVER

The largest growth has been in services, hospitality and transportation and also health and community services. This partly reflects growth in the labour market but also reflects changes in the level of training. For example, training rates have increased in community services associated with increased regulation of standards of provision. It should be noted that the traditional VET areas of engineering and surveying and architecture and building are now considerably less important than they once were. This reflects long-term structural changes that have seen growth in the services sector at the expense of manufacturing and building.

Of interest is how the changes occur within the training system. There is no simple answer to this. First, it needs to be noted that much of the student data referred to in this paper reports on the publicly funded sector (where students pay nominal fees); there is a large, although imperfectly measured, training sector that operates as a traditional market with training organisations charging full fees and students (or their employers) paying them. Here growth occurs because demand increases and private providers are willing to supply training at an acceptable price. The increase in demand is driven by the individual decisions of employers and potential students who believe that there will be a return on their investment in training. Supply is driven by firms seeing business opportunities.

Things are not so straightforward in the public sector, and changes in provision will be affected by decisions of students (and their advisers), the providers, the government, employers and industry and union bodies.

- Student enrolments reflect demand and over time it would be expected that courses in high demand will expand. Students' decisions will depend on their views on the likely pay-off from training, and the cost and the availability of courses. In some cases training may be part of a 'mutual obligation' dictated by welfare policy. In others, it will be sponsored by employers.

- Governments are obviously key players. Public provision is essentially a supply-driven system and the level of funds and agreed number of student places set overall provision. The nature of the provision is typically negotiated between state training authorities and the providers (TAFEs), and changes tend to be at the margin.[5] In some states the TAFEs have more discretion than in others. In the state training authorities there are typically planning units which collect and disseminate large amounts of information about labour markets, and in some cases undertake or commission economic modelling. State training

[5] Government providers are known collectively as institutes of technical and further education (TAFE).

authorities also may have views on appropriate strategic directions for the VET sector, fashioned by economic and social priorities of the government. Governments also set fee levels and the conditions under which fees are waived. As well as providing direct funding for VET places, the Australian Government provides incentives for employers to take on apprenticeships and traineeships, and (subject to financial circumstances) income support for full-time students.[6]

- Employers are absolutely critical in the apprenticeship and traineeship system, because without an employer there is no contract of training. This provides a real challenge to the system at times of economic downturn when apprenticeship and traineeship numbers tend to decline. Employers also pay the fees of some training undertaken by their employees.
- Providers actually deliver the training. The nature of their offerings will depend on the level of funding, the availability of infrastructure, perceptions of student demand, availability of staff (many teachers have tenure, although the use of casual teachers is increasing) and links with local communities and employers.
- Industry and union bodies reflect the views of their members and tend to argue their particular interests to governments. Typically, they argue the merits of government funding to underpin expansion to service their industry sectors, or models of training that they believe would better meet the needs of their members.

How is one to judge whether the outcomes of these forces satisfactorily match the demands of the labour market with the output of the VET system? Of course, there is no simple answer here because the interests of different parties differ. For example, employers worry about skill shortages, but graduates prefer to have many job opportunities. However, a range of indicators can be used to get an overall view. Such indicators include:

- evidence of skill shortages or surpluses
- differential unemployment rates (by qualification level and field of study)
- differential wage rates (by qualification level and field of study)
- level of unmet student demand
- course completion rates
- graduate outcomes (employment, further study, course satisfaction).

4 Conclusion

In this paper, I have argued that there are three areas to be considered in analysing the links between vocational education and training and the labour market. The first is what I call *institutions*, the second *general skills development*, and the third *dynamics of the labour market*. In respect of institutions, Australia has a well developed set, but these constantly need to be modified to ensure that they are relevant. In respect of general skills development, the major point is that we are dealing with individuals' human capital, and this is the critical link between VET and the labour market. People get trained and educated to equip themselves better for the labour market, and this goes much wider than specific training for specific jobs. Finally, the dynamic nature of the labour market, both in terms of labour mobility at a point in time and structural change occurring over longer periods, implies that the VET system has to be flexible and responsive. This is a world of many players and constant change; it is not a world of targets and getting it right.

[6] Funding for VET places is provided by both the federal and state governments.

References

Australian Bureau of Statistics 2002, *Education and training experience*: *Confidentialised Unit Record—Australia, 2001,* cat.no.6274.0, ABS, Australia.

——2003, *Australian labour market statistics*, cat.no. 6105.0, ABS, Australia.

Brooks, L 2004, Australian vocational education and training statistics: Trends in 'traditional apprenticeships'. Adelaide, NCVER.

Cully, M 1999, 'More or less skilled workforce? Changes in the occupational composition of employment, 1993 to 1999', in *Australian Bulletin of Labour*, vol.25 no.2, June pp.98–104.

——2004, 'Working in harmony: The links between the labour market and the education and training market in Australia', presented at the 7th Annual KRIVET Conference, Seoul, November.

——2005, *What it's worth: Establishing the value of vocational qualifications to employers*, NCVER, Adelaide.

NCVER (National Centre for Vocational Education Research) 1991 & 2000, national VET provider collections, NCVER, Adelaide.

——2003, *Australian vocational education and training statistics: Student Outcomes Survey 2003—National report*, NCVER, Adelaide.