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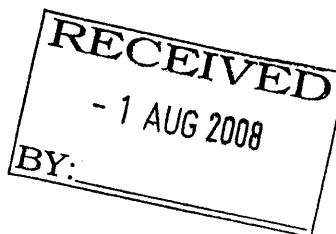


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Our Ref: #63299

31 July 2008

Secretariat  
Review of Australian Higher Education  
Location 023  
GPO Box 9880  
CANBERRA ACT 2601



Dear Sir / Madam

**Review of Australian Higher Education**

Please find enclosed NCVER's response to the Review of Australian Higher Education.

Our response provides comments to three of the Terms of Reference, namely - 'Productivity and participation', 'Underpinning social inclusion through access and opportunity', and 'A broad tertiary education and training sector'. Data and references to relevant reports and publications are also provided. I trust this information will be useful for the Review.

If NCVER can be of further assistance, please do not hesitate to contact me.

Yours sincerely

A handwritten signature in black ink that reads "Tom Karmel". The signature is written in a cursive, flowing style.

Tom Karmel  
Managing Director

enc.



# Submission

by the National Centre for Vocational Education Research (NCVER)

to

## The Review of Australian Higher Education

The National Centre for Vocational Education Research (NCVER) collects, analyses and brokers information about vocational education and training (VET). The organisation is responsible for collecting and managing national VET provider and New Apprenticeship statistics, and managing national surveys of graduates and students, and employers' views of training. We undertake a strategic program of research, and collect and provide VET research findings from Australian and international sources through the Vocational Education and Training Research Database (VOCED).

### RESPONSE TO TERMS OF REFERENCE

We wish to comment on three of the Terms of Reference. A comprehensive bibliography is also provided.

#### **Productivity and participation**

##### *Meeting labour market and industry needs*

We wish to make three points about how the higher education sector should meet the needs of the labour market. The first point is that there is no neat relationship between the tertiary education sector, both higher education and vocational education and training, and the labour market. As can be seen from Table 1, in all occupational groups there are people with both higher education qualifications (degrees) and vocational education and training qualifications (diplomas and certificates) and with no formal qualification at all. The clearest delineation occurs among professionals where degree holders dominate and technicians and trades workers where certificate holders are by far the largest group. However, in other occupations there is a mix of people with a degree, people with a VET qualification and people with no qualification at all. The point is that any notion of the workforce 'demanding' people with a certain qualification is misleading, except where a specific qualification is mandated as is the case in some professional jobs, some associate professional jobs, and some trades jobs.

The second point is that in relatively few occupations is there a strong link between the course and the job. In licensed occupations it is necessary to have a formal qualification in the relevant field but the great bulk of people work in jobs where there is no such requirement. We observe that people with a particular qualification work in all sorts of occupations.

The third point is that skills valued by the labour market are obtained on the job as well as through formal qualifications. Thus we observe experienced workers earn more than inexperienced workers and people working in jobs that require a high level of skills who do not have a formal qualification. Richardson (2004) estimates, for example, that a person in the finance industry with 19 years of experience earns \$242 more than the novice.

The over arching point we are making is that care has to be taken with the notion that the tertiary education sectors should be meeting the needs of the labour market. Tertiary education will provide skills which are valued in the labour market, but many of these skills are generic in nature and it is not useful to plan the output of the education sector on a presumption that we can estimate how many of a particular type of graduate is needed. Rather, differential wages and conditions provide a signal to prospective students about how the labour market values particular skills. The exceptions to this generalisation are occupations which are tightly regulated, doctors being the prime example.

**Table 1 Employed persons by level of highest post-school qualification by occupation, Australia, 2007**

	Postgrad. Degree '000	Grad. Diploma/ Grad. Cert '000	Bach. Degree '000	Adv. Diploma/ Diploma '000	Cert. III/IV '000	Cert. I/II '000	Cert. n.f.d. '000	Without non- school qual. '000	Total '000
Managers	78.2	44.1	256.3	132.7	205.1	57.0	17.8	431.3	1,233.3
Professionals	258.7	175.3	971.8	260.4	94.9	25.1	12.1	239.1	2,057.4
Technicians and trades workers	12.3	10.6	85.5	111.4	744.5	76.1	25.8	497.9	1,571.6
Community and personal service workers	10.0	18.4	88.1	148.9	190.0	49.8	34.3	368.5	918.6
Clerical and administrative workers	28.9	23.2	198.0	163.1	219.0	155.4	32.2	785.9	1,616.1
Sales workers	9.6	7.5	75.4	63.4	108.1	51.5	18.4	609.3	949.2
Machinery operators and drivers	3.3	2.3	20.7	23.9	133.0	36.8	12.5	451.3	688.6
Labourers	3.3	4.7	42.3	42.4	151.0	57.3	17.3	762.6	1,086.2
<b>Total</b>	<b>404.3</b>	<b>286.1</b>	<b>1,738.1</b>	<b>946.4</b>	<b>1,845.6</b>	<b>509.0</b>	<b>170.3</b>	<b>4,145.9</b>	<b>10,121.0</b>

Source: ABS, Education and Work, May 2007, cat. no. 6227.0.

## Relevant reports and publications

Eickenloff, P & Porter, R 2004, *Stairway to a license and beyond: Licensing Issues National Project: volume four*, Brisbane, ANTA.

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Ryan, C 2002, *Longer-term outcomes for individuals completing vocational education and training qualifications*, NCVET, Adelaide.

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Stanwick, J 2006, *Outcomes from higher-level vocational education and training qualifications*, NCVET, Adelaide.

## A broad tertiary education and training sector

### *Connecting with other education and training sectors*

In the discussion above we have made the point that few occupations can be characterised as requiring either a higher education qualification or a vocational education qualification. Professional occupations generally require people with a degree and trade occupations generally require a people a VET certificate. Thus from the point of view of the labour market it does not make that much sense to think of the higher education and VET sectors as being completely separate.

The lack of a clear boundary between the sectors is further emphasised by looking at the numbers of higher education students who subsequently enroll in VET and vice versa. Table 2 shows that the number of VET students who already have a higher education degree is approaching 100,000 whereas Table 3 shows that a very considerable number of VET graduates subsequently undertake a higher education course.

**Table 2** Number of VET students by previous highest education level, 2006

	Number	%
Bachelor degree/Higher degree level	93,398	5.6
Advanced diploma/Associate degree	19,525	1.2
Diploma	50,173	3.0
Certificate IV	52,196	3.1
Certificate III	120,668	7.2
Year 12	360,967	21.5
Year 11	159,708	9.5
Certificate II	24,220	1.4
Year 10	279,864	16.7
Certificate I	4,110	0.2
Miscellaneous education	12,086	0.7
Year 9 or lower	119,586	7.1
Did not go to school	3,312	0.2
Not known	376,151	22.4
<b>Total</b>	<b>1,675,964</b>	<b>100.0</b>

Source: NCVET, National VET Provider Collection, 2006

**Table 3 Number of domestic students commencing a course at Bachelor level or below by highest prior qualification attained, 2004**

	Number	%
Postgraduate	3,835	2.1
Bachelor	15,698	8.7
Advanced Diploma (AQF) or Diploma (AQF)	4,712	2.6
TAFE Award	24,328	13.5
Completed secondary education and other qualification	14,843	8.2
Completed secondary education – no other qualification	103,623	57.4
Completed other qualification – no secondary education	4,315	2.4
No qualification or certificate of attainment	9,299	5.1
<b>Total</b>	<b>180,653</b>	<b>100.0</b>

Source: DEEWR, Selected higher education statistics, 2004.

We also see that the fields covered by the two sectors are by no means distinct (Table 4). There are very few VET students in the field of natural and physical sciences and very few higher education students who undertake a course in food, hospitality and personal services. However, in all other fields there are very considerable numbers of both higher education and VET students.

**Table 4 Number of VET and higher education students by field of education, 2006**

	VET students		Domestic higher education students	
	Number	%	Number	%
01 - Natural and physical sciences	5,505	0.3	64,553	8.8
02 - Information technology	56,991	3.4	28,638	3.9
03 - Engineering and related technologies	284,793	17.0	47,298	6.4
04 - Architecture and building	111,983	6.7	17,163	2.3
05 - Agriculture, environmental and related studies	77,423	4.6	14,936	2.0
06 - Health	80,168	4.8	103,026	14.0
07 - Education	46,748	2.8	91,776	12.5
08 - Management and commerce	324,478	19.4	160,065	21.8
09 - Society and culture	170,580	10.2	196,419	26.8
10 - Creative arts	44,381	2.6	53,360	7.3
11 - Food, hospitality and personal services	166,472	9.9	87	0.0
12 - Mixed field programmes	200,815	12.0	1,950	0.3
Not known	105,627	6.3	-	-
Non-award courses	-	-	8,944	1.2
<b>Total</b>	<b>1,675,964</b>	<b>100.0</b>	<b>733,352</b>	<b>100.0</b>

Source: NCVET, National VET Provider Collection, 2006; DEEWR, Selected higher education statistics, 2006.

## Relevant reports and publications

Harris R, Rainey L & Sumner, R 2006, *Crazy paving or stepping stones?: learning pathways within and between vocational education and training and higher education*, NCVET, Adelaide.

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Karmel, T 2007, *The demand for tertiary education in Australia*, NCVET, Adelaide.

Phillips KPA 2007 *National study to improve outcomes in credit transfer and articulation from vocational and technical education to higher education: Stage 1 report, Byron Bay, Phillips KPA.*

Stanwick, J 2006, *Outcomes from higher-level vocational education and training qualifications*, NCVET, Adelaide.

## **Underpinning social inclusion through access and opportunity**

### *Opportunities to participate in higher education*

We would argue that in looking at issues of social inclusion that higher education should be looked at in conjunction with VET. VET covers a much broader slice of the population in terms of both age and other characteristics. It is VET that provides the bulk of opportunities for those who come from a disadvantaged background. It is not for nothing that VET could be described as the sector that provides 'a second chance' (see Karmel and Woods, 2008). Table 6 provides a snapshot of VET students against a range of classifications. Of particular note is the high participation of Indigenous students, where the participation rate far exceeds the share in the population. This over representation in VET is associated with poor educational performance at school.

We are not arguing that the role of VET providing opportunities for disadvantaged groups means that we should be sanguine about unequal educational participation and outcomes. Rather, we are arguing that policies to address disadvantage must cover both sectors and that disadvantage in higher education might be best addressed through, in the first instance, efforts in the school and VET sectors.

**Table 6 VET activity by selected student characteristics, 2006**

	Students (% of total)	Delivery hours (% of total)
<b>Sex of student</b>		
Female	47.5	48.9
Male	52.4	51.0
<b>Age of student at 30 June</b>		
15-19 years	25.5	31.2
20-24 years	16.5	21.3
25-44 years	35.2	32.3
45-64 years	18.0	13.5
Other, including age not reported	4.7	1.7
<b>Indigenous status of student</b>		
Indigenous	4.0	3.8
Non-indigenous	80.5	85.7
Unknown	15.4	10.5
<b>Disability status of student</b>		
People with a disability	6.1	7.2
People without a disability	75.2	79.8
Unknown disability status	18.7	13.0
<b>Language background of student</b>		
People with an English-speaking language background	69.7	71.3
People with a language background other than English	13.1	18.1
Language background unknown	17.2	10.6
<b>Employment status of student</b>		
Employed full-time	30.5	28.4
Employed part-time, self-employed or in unpaid employment	21.3	24.5
Unemployed seeking full-time or part-time employment	12.3	16.8
Not in the labour force	9.9	11.7
Unknown	25.9	18.6
<b>Region of residence of student</b>		
Major cities	54.1	57.9
Inner regional	22.9	21.1
Outer regional	15.1	12.1
Remote or very remote	4.8	3.5
Outside Australia	1.9	4.3
Not known	1.3	1.1
<b>Total (%)</b>	<b>100.0</b>	<b>100.0</b>
<b>Number ('000)</b>	<b>1,676.0</b>	<b>372,100.2</b>

Source: NCVET, National VET Provider Collection, 2006

## Relevant reports and publications

- Barnett, K & Spoehr, J 2008, *Complex not simple: the vocational education and training pathway from welfare to work*, NCVER, Adelaide.
- Boote, J 2005, 'Young VET learners with disabilities: acquiring 'learning skills' for life and work', Paper presented at Australian Vocational Education and Training Research Association Conference: 8th.
- Dawe, S 2007, (ed) *Vocational education and training for adult prisoners and offenders in Australia: research readings*, NCVER, Adelaide.
- Dawe, S, Saunders, J & Nguyen, N 2007, *Vocational education and training and casual workers in the home and community care sector*, NCVER, Adelaide.
- Dockery, M & Milsom, N 2007, *A review of Indigenous employment programs*, NCVER, Adelaide.
- Dymock D 2007, *Community adult language, literacy and numeracy provision in Australia: diverse approaches and outcomes*, NCVER, Adelaide.
- Figgis, J, Butorac, A, Clayton, B, Meyers, D, Dickie, M, Malley, J, & McDonald, R 2007, *Advancing equity: merging 'bottom up' initiatives with 'top down' strategies*, NCVER, Adelaide.
- Garlick, S, Taylor, M & Plummer, P 2007, *An enterprising approach to regional growth: implications for policy and the role of vocational education and training*, NCVER, Adelaide.
- Griffin, T & Curtin, P 'Regional partnerships: at a glance', NCVER, Adelaide.
- Helme, S 2005, 'Indigenous students and vocational education and training in schools: ladder of opportunity or corrugated iron ceiling', *Australian journal of education*, v. 49, no. 2, 2005. pp.169-181.
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- Karmel, T & Woods, D 2008, *Second chance vocational education and training*, NCVER, Adelaide.
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- Miller, C & Nguyen, N 2008, *Who's supporting us?: TAFE staff perspectives on supporting students with mental illnesses*, NCVER, Adelaide.
- Miralles-Lombardo, B, Miralles, J, & Golding, B 2008, *Creating learning spaces for refugees: the role of multicultural organisations in Australia*, NCVER, Adelaide.
- Stokes, H, Stacey, K & Lake, M 2006, *Schools, vocational education and training, and partnerships: capacity-building in rural and regional communities*, NCVER, Adelaide.
- Young, M, Guenther, J & Boyle, A 2007, *Growing the desert: educational pathways for remote Indigenous people*, NCVER, Adelaide.

## Appendix: Bibliography and abstracts

Barnett, K & Spoehr, J 2008, *Complex not simple: the vocational education and training pathway from welfare to work*, NCVER, Adelaide.

The welfare-to-work policy aims to encourage certain welfare recipients to pursue pathways that lead to paid employment. This report explores the role that the vocational education and training (VET) system can play in assisting people to move from welfare to work. The researchers examined the experiences of VET students from the relevant welfare groups and sought the views of other key stakeholders such as TAFE staff and Centrelink personnel. Conclusions include that VET can play a positive role but that there needs to be collaboration between VET and income support sectors to ensure that potential barriers are overcome.

This report and supporting documents may be found on the NCVER web site at:  
<<http://www.ncver.edu.au/publications/1987>> (viewed April 2008).

Boote, J 2005, 'Young VET learners with disabilities: acquiring 'learning skills' for life and work', Paper presented at Australian Vocational Education and Training Research Association Conference: 8th,

Young people are being prepared for employment through VET [vocational education and training] studies both at school and in TAFE. Students with disabilities are actively encouraged to access VET studies delivered by either provider. Within VET, the 'employability' skills are recognised to be of increasing significance, particularly by employers. 'Learning' is identified as one of these generic skills - that is, students need to acquire the skills for learning, particularly for work. Lifelong learning skills are recognised as essential in preparation for a vocation, and should be addressed within VET in Schools modules. This paper reports on a 5-week overseas study tour to investigate various approaches to developing the 'learning skills' component of generic (employability) skills in young VET students - especially those who have a disability. People who are specialists in equity, integration, diversity, vocational learning in schools/polytechnics/institutes, lifelong learning and generic skills - including students - were interviewed in England, Scotland, Ireland, Netherlands, Switzerland, Italy and France. The findings of this study, and the resultant recommendations to the NSW Department of Education & Training, will be discussed.

This document may be found on the AVETRA web site at:  
<<http://www.avetra.org.au/publications/documents/P....>> (viewed May 2005)

Dawe, S 2007, (ed) *Vocational education and training for adult prisoners and offenders in Australia: research readings*, NCVER, Adelaide

This book of research readings provides clear evidence that adult prisoners and offenders who participate in vocational education and training (VET) during their sentence are less likely to re-offend. A reduction in recidivism represents significant cost savings to the community. This book highlights recent improvements in the delivery of VET for adult prisoners and offenders in Australia. Chapters include: International research and trends in education and training provision / Raymond Chavez and Susan Dawe; The role of VET in recidivism in Australia / Victor Callan and John Gardner; Ex-prisoners and ex-offenders and the employment connection: assistance plus acceptance / Joe Graffam and Lesley Hardcastle; The role of education and training in prison to work transitions / Margaret Giles, Anh Tram Le, Maria Allan, Catherine Lees, Ann-Claire Larsen and Lyn Bennett; Should education and vocational training be compulsory in corrections? / Peter de Graaff; The provision of VET for adult prisoners in Australia / Sian Halliday Wynes; Using research to inform practice: Western Australian correctional education / Christine Laird, Raymond Chavez and Melanie Zan; Throughcare and VET for adult prisoners and offenders within the New South Wales Department of Corrective Services / Karen Banfield, Steve Barlow and David Gould; Improving VET for adult prisoners and offenders in Australia / Sian Halliday Wynes; Improving literacy for adult prisoners and offenders / Bernard Meatheringham, Pamela Snow, Marine Powell and Michael Fraser; Education and training for Indigenous people in prisons / Cydde Miller.

This report may be found on the NCVER web site at:  
<<http://www.ncver.edu.au/publications/1789.html>> (viewed October 2007).

Dawe, S, Saunders, J & Nguyen, N 2007, *Vocational education and training and casual workers in the home and community care sector*, NCVER, Adelaide

Around a quarter of all Australian wage and salary earners are casual workers. Casual workers, in general, receive less training than those in ongoing employment. This occasional paper considers

whether the prevalence of casual employment is sustainable. It looks at the home and community care sector in which vocational education and training (VET) has a prominent role in developing the skills of workers, and in which casual employment is relatively high. It notes that, where employers pay for training, they usually prefer to use ongoing part-time employees rather than casuals. But many employers believe that casual employees prefer the flexibility of casual employment.

This report and supporting documents may be found on the NCVET web site at:  
<<http://www.ncver.edu.au/publications/1971.html>> (viewed February 2008).

Dockery, M & Milsom, N 2007, *A review of Indigenous employment programs*, NCVET, Adelaide

Successive Australian governments over the last 20 years have focused on providing employment programs which support Indigenous people into their jobs. This report critically reviews evaluations of the major post-1985 labour market assistance measures for Indigenous Australians, with a view to helping shape future policy in addressing Indigenous disadvantage. Its scope is not limited to programs targeted to Indigenous Australians, but includes 'mainstream' programs and activities, such as vocational education and training (VET), in which Indigenous people participate along with non-Indigenous Australians. The focus is not so much upon processes and outcomes, but on the evaluation framework and approach. The report finds that the effectiveness of such programs has rarely been rigorously evaluated against their diverse objectives. It highlights a recent shift in policy toward strict employment outcomes, making programs easier to evaluate, but also cautions against applying the same 'mainstream' objectives to all Indigenous communities. It is vital that any evaluation distinguishes between the objectives relating to Indigenous self-determination and community capacity-building and those which relate to employment and earnings outcomes in the non-traditional (or 'mainstream') labour market. Conventional measures of success in the labour market, such as employment rates and market wages, may apply to the latter, but have limited relevance to remote communities and traditional Indigenous lifestyles. The accumulated evidence from major programs suggests that Indigenous-specific programs and wage subsidy programs in particular are among the more effective forms of assistance in promoting mainstream employment outcomes. As well, evidence from a number of quarters points to greater effectiveness when Indigenous personnel are involved in program or service delivery, reflecting their ability to provide such services in culturally appropriate ways. Instances are noted of non-Indigenous teachers also performing very well with Indigenous students, which has meant that this conclusion has been disputed within the education literature. Given the almost imperceptible pace at which the socioeconomic disadvantage of Indigenous Australians is narrowing, a new framework for formulating policy on Indigenous social and economic development is needed urgently. It is imperative that such a framework incorporates explicit mechanisms to reconcile the important goals of self-determination and cultural preservation with the forces of economic integration. An important challenge will be to accommodate the diverse range of aspirations among Indigenous people in the process.

This report and supporting documents may be found on the NCVET web site at:  
<<http://www.ncver.edu.au/publications/1729.html>> (accessed March 2007)

Dymock, D 2007, *Community adult language, literacy and numeracy provision in Australia: diverse approaches and outcomes*, NCVET, Adelaide.

This study examined non-accredited community language, literacy and numeracy provision in Australia. It looks at the extent of provision, the characteristics and motivations of the students, learning outcomes and pathways to other education and employment, and how providers can best be assisted to maintain and expand their programs. A diverse range of providers assist many adults who do not need or cannot yet cope with accredited training. Growth in self-confidence appears as important as development of literacy and numeracy skills, with teachers and tutors playing a key role in this. Providers believe that non-accredited language, literacy and numeracy teaching makes a valuable contribution to the community and that greater recognition and funding are warranted.

This report and supporting documents may be found on the NCVET web site at:  
<<http://www.ncver.edu.au/publications/1796.html>> (viewed October 2007)

Eickenloff, P & Porter, R 2004, *Stairway to a license and beyond: Licensing Issues National Project: volume four*, Brisbane, ANTA.

The Queensland Dept of Employment and Training has been funded by the Australian National Training Authority (ANTA) to facilitate a National Licensing Issues Project in specific areas of licensing. This project is concerned with how to enable the vocational education and training (VET) system to address licensing standards within national training standards to the satisfaction of licensing authorities and industry. The areas specifically examined were occupational health and safety licensing, multi-combination driver licensing and dangerous goods licensing requirements.

The definition of an occupational license adopted for this study is 'any form of regulation that restricts entry to an occupation or a profession to those who meet competency-related requirements stipulated by a regulatory authority'. The findings of the project are presented in four volumes. This fourth volume contains additional feedback on the first three volumes and on the 'Licensing line news' publication.

Figgis, J, Butorac, A, Clayton, B, Meyers, D, Dickie, M, Malley, J & McDonald, R 2007, *Advancing equity: merging 'bottom up' initiatives with 'top down' strategies*, NCVET, Adelaide

The purpose of this study was to investigate the way in which short-term funded 'pilot' equity initiatives permeate the TAFE institutes where they were located and to identify the factors which help successful equity initiatives seeded in these TAFE institutions through short-term funding to 'take root and spread'. The study highlights a message heard by the researchers, that the cause of equity seems to have lost traction during the past decade of vocational education and training (VET) reform. The study found that funds allocated through short-term pilot equity initiatives have been primarily used to purchase direct support for learners, including a substantial increase in teacher-to-student ratios. This individual support for disadvantaged clients, often with multiple disadvantages, results in good outcomes. However, the initiatives rarely permeate into the institutes to the extent of influencing other practitioners. As well, the most successful initiatives are those which had been established by people in the community rather than by government or government agencies, 'outsiders' who had a long-term commitment to the specific equity group. The study found that the funding model ('seed funding') is flawed, suggesting that one-off pilot projects rarely generate ongoing provision and need to be systematically applied in other contexts to test their long-term applicability. The overall conclusion was that such initiatives lack cohesion and their spread was minimal. Policy-makers and funding bodies responsible for equity in the VET sector need to rethink the funding mechanisms currently used to stimulate innovative equity practice.

This report and supporting documents may be found on the NCVET web site at: <http://www.ncver.edu.au/publications/1742.html> (viewed May 2007).

Foster, S, Delaney, B, Bateman, A & Dyson, C 2007, *Higher-level vocational education and training qualifications: their importance in today's training market*, NCVET, Adelaide.

The purpose of the project reported here was to investigate the relevance of higher-level vocational education and training (VET) qualifications for addressing the skill needs of enterprises in six industry sectors: disability services; nursing; engineering; electronics/electro-technology; multi-media; and design. The research included a review of the relevant literature on higher-level VET skills and qualifications. Quantitative data on participation in higher-level awards and the outcomes of these programs were also collected. Qualitative data were collected through focus groups and interviews with representative enterprises, students enrolled in higher-level VET qualifications and training package developers in all six industry sectors. The report suggests some possible improvements, including a greater emphasis on opportunities within training programs for extended and practical workplace experience and in cross-discipline knowledge and industry skills.

Garlick, S, Taylor, M & Plummer, P 2007, *An enterprising approach to regional growth: implications for policy and the role of vocational education and training*, NCVET, Adelaide

This report explores patterns of regional economic growth in Australia over the period 1984 to 2002 with the aim of identifying the drivers of variation in regional growth; the research also aimed to identify regional opportunities and the policies and practices that can assist in realising them, in particular, the contribution the vocational education and training (VET) sector may make towards regional growth. The research found that human capital, especially 'enterprising' human capital, whereby individuals take responsibility for action, is the key driver of regional growth. Other drivers include access to high technology, greater industry specialisation and less government intervention. The VET sector's size and significant presence in the regions makes it ideally placed to play a key role in regional growth by developing enterprising skills, knowledge and cultures and using its connections with business to establish regional coalitions.

This report and supporting documents may be found on the NCVET web site at: <http://www.ncver.edu.au/publications/1801.html> (viewed October 2007).

Gorgens, T & Ryan, C 2006, *The impact of additional educational qualifications for early school leavers*, DEST, Canberra.

The study examined the impact of acquiring post-school vocational and technical education (VTE) qualifications on young people's labour market outcomes by around their mid twenties. Separate analyses were undertaken of the impact for young people in general and for those who experienced

a substantial period of unemployment before completing the VTE qualification. The study found that VTE qualifications significantly improved the employment outcomes of both Year 12 completers and early school leavers, as well as for those who experienced lengthy periods of unemployment. The increase in the likelihood of being in full time employment by age 22 years in the case of the longer term unemployed school leavers was of the order of 10-13 percentage points. The most beneficial VTE qualification was an apprenticeship or traineeship. The multivariate statistical analyses used Longitudinal Surveys of Australian Youth (LSAY) data.

Griffin, T & Curtin, P *'Regional partnerships: at a glance'*, NCVET, Adelaide.

Vocational education and training (VET) has a key role in facilitating regional economic development. One way that VET can do this is by forming partnerships with other organisations, such as other training providers, business/industry, schools and local government. This brief publication gives an overview of recent research exploring how partnerships can address regional needs.

This report may be found on the NCVET web site at:  
<<http://www.ncver.edu.au/publications/1938.html>> (viewed December 2007)

Harris, R, Rainey, L, & Sumner, R 2006, *Crazy paving or stepping stones? learning pathways within and between vocational education and training and higher education*, NCVET, Adelaide.

One of the significant issues in vocational education and training (VET) is student pathways and how students use them to achieve their personal goals. These pathways can be within or across sectors, as well as into and out of paid work. This study examines patterns of pathways between and within VET and higher education and compares the notion of straightforward pathways with what is actually happening. The researchers interviewed 49 students in South Australia who had participated in VET and/or higher education and who had been through more than one transition between VET and higher education. The study found that patterns of movements are quite complex within and across different fields of study and were overlaid with a range of barriers along the learning journey, including finance, juggling work, other commitments, transportation and institutional location, as well as a range of other personal and provider issues. The study reveals the richness and complexity of ways individual learners use and exploit available options and is not only of interest to those in policy, but also to staff involved in teaching and counselling students in both the higher education and VET sectors. It concludes that pathways, while not necessarily seamless or straightforward, do work for the students interviewed.

Helme, S 2005, *'Indigenous students and vocational education and training in schools: ladder of opportunity or corrugated iron ceiling'*, Australian journal of education, v. 49, no. 2, 2005. pp.169-181.

Indigenous students complete secondary education at about half the rate of non-Indigenous students, yet are twice as likely to participate in vocational education and training (VET) in schools subjects. This paper explores the reasons for this phenomenon. It draws on data from two national studies: a survey of 20 000 young people and their experience of vocational learning, and a qualitative study that included interviews with 118 Indigenous VET in schools students and 160 school staff and other stakeholders. It discusses the role of VET in addressing the needs and aspirations of Indigenous students, and identifies key aspects of good practice in the provision of VET for Indigenous students. The paper argues that VET in schools cannot succeed as a 'stand alone' solution to the problem of Indigenous educational disadvantage, but must be offered within the context of educational provision that accommodates the diverse educational needs and aspirations of Indigenous students.

Hill, A & Helme, S 2005, *'VET in schools for Indigenous students: 'hands on', 'default', or promising'*, International journal of training research, v. 3, no. 1, 2005. pp.1-22.

A comparatively large number of Indigenous students participate in Vocational Education and Training in Schools (VETiS) programs. This paper draws on data from two national studies: a survey of 20,000 young people and their experience of vocational learning, and a qualitative study of VETiS in 21 schools in diverse settings, which included interviews with 118 Indigenous VETiS students and 160 school staff and other stakeholders. It provides a rare insight into the way in which VETiS is experienced by Indigenous students, and of the role VETiS plays in addressing their educational needs and vocational aspirations. Students' views of VETiS, including their reasons for enrolling, what they valued about it, and their critique of VETiS subjects are summarised. While much of the interview data supports previous research on the need to support individual Indigenous students systematically, successful engagement in VETiS is demonstrated to require broader system and school support, including wide ranging policy commitment and engagement with principles of social justice.

Karmel, T 2007, *The demand for tertiary education in Australia*, NCVER, Adelaide.

This paper looks at the domestic demand for tertiary education, including both higher education and vocational education and training and excluding overseas students. It argues that the concept is problematic because of the dominant role of the government in provision, and discusses the factors that impinge on it: fees, returns to study and demographics. The paper looks at unmet demand and the factors that drive demand. It then discusses what has been happening to student demand over the last decade or so. It considers whether we can expect student demand to continue to increase or is the point being reached where the market is saturated. It also looks at the effect the ageing population will have on student demand, given that the biggest inflow of students comes from the school leaver population and looks at likely trends in coming years.

Karmel, T, Mlotkowski, P & Awodeyi, T 2008, *Is VET vocational? The relevance of training to the occupations of vocational education and training graduates*, NCVER, Adelaide.

Vocational education and training (VET) is, by definition, vocational in intent. It is about acquiring skills to be used at work. The issue explored in this report is how VET is actually used in the labour market, in particular the match between what people study and the jobs they get. If the match is very good, then it can be concluded that the VET system is performing its role in providing individuals with vocational skills. If the match is poor, then the effectiveness of the VET system needs to be reviewed. The National Centre for Vocational Education Research (NCVER) Student Outcomes Survey provided a mapping between the intended occupation of training activity and the occupation after training, with the intended occupation derived from the Australian and New Zealand Standard Classification of Occupations (ANZSCO) assigned to training package qualifications. The study sample was restricted to graduates, that is, those people who have completed a qualification. The study found that the match was pretty poor in most occupational groups, technicians and trades workers being the exception rather than the rule. In order to understand the mismatch the study looked at the changes in skill level for graduates not employed in their intended occupation. However, the report asks whether the low level of matching in the majority of occupations meant a waste of training, or whether the training was being used as a generic preparation. While the conclusion is that the mismatch reflects the generic nature of VET rather than wastage, this is an overall conclusion not a universal one. There are clear examples of wastage in the sector, where graduates do not end up in jobs where the training is relevant. This must be of concern to planners and to potential students.

Karmel, T & Nguyen, N 2007, *The value of completing a vocational education and training qualification*, NCVER, Adelaide.

Using wage data from the Student Outcomes Survey and the national vocational education and training (VET) collection conducted annually by the National Centre for Vocational Education Research (NCVER), this study examines whether there is a benefit to actually completing a VET qualification, noting that many VET students do not complete full qualifications. It is important to acknowledge that VET is very varied in terms of motivation and educational background. Returns to study also vary, and analysis indicates that low-level qualifications (certificates I and II) appear to have little return. This report is useful to policy-makers in terms of defining performance indicators for the sector and also in terms of thinking about resourcing and fee models for the sector.

Karmel, T & Woods, D 2008, *Second-chance vocational education and training*, NCVER, Adelaide.

The purpose of this paper is to examine the extent to which vocational education and training (VET) is providing individuals with a second chance in education. 'Second chance VET' refers to opportunities in education taken by individuals who have not followed the conventional academic pathway of school completion followed by post-school study. Two groups are looked at. The first group consists of young early school leavers aged up to and including 24 years who have not completed a non-school qualification. The second group consists of adults aged 25 years and over who have not completed a non-school qualification. The paper examines three research questions: (1) How important is second-chance education within the VET sector?; (2) What proportion of the relevant population avails themselves of the opportunity?; (3) What are the outcomes of those who do undertake second-chance education? The study found that: the percentage of VET students who can be characterised as second chance is very substantial (41% of publicly funded VET students in 2004); females access second-chance VET at higher rates than males; second-chance students enrolled in VET are less likely to undertake higher-level qualifications (certificate IV and higher) compared with other students enrolled in VET; and the percentage of the second-chance population actually completing an award is low, in particular for the completion of VET qualifications at certificate III or higher.

This document may be found on the NCVER web site at:  
<http://www.ncver.edu.au/publications/1831.htm>>

Knight, B 2004, *Vocational learning in schools as an equity strategy, Equity in vocational education and training: research readings* (edited by Kaye Bowman). pp.194-205

This book of readings was developed as a contribution to the Australian National Training Authority (ANTA) document 'Shaping our future: Australia's national strategy for vocational education and training 2004-2010' (indexed at [TD/ANTA 73.11](#)). It reviews the achievements realised for the equity groups identified in 'Bridge to the future: Australia's national strategy for vocational education and training 1998 - 2003' (indexed at [TD/ANTA 54.39](#)), and reveals the issues these groups are currently facing and how they might be addressed. It also considers whether there are other groups who experience disadvantage and the role that vocational education and training (VET) could play to improve their opportunities. Finally, it discusses approaches and frameworks which need to be developed to bring about further improvements in equity in VET.

This chapter looks at how well the development of vocational learning in schools has worked as a means of keeping young people engaged in education who otherwise might have left school early. It complements research which argues that, where the reasons for leaving school early are due to lack of interest in school work or low achievement, this is best tackled at its roots, through the introduction of more varied programs in schools. Although VET works well for many early school leavers as a means of offsetting, or at least lessening, the potentially negative effects of interrupted schooling, this pathway perhaps should be promoted mainly to those young people who leave school early for economic reasons.

This document may be found on the BVET web site at:

<<http://www.bvet.nsw.gov.au/pdf/FinalReportImprove....>> (viewed August 2005)

Little, T 2005, *Improved VET outcomes for people with a disability: a BVET commissioned project: final report*, New South Wales. Department of Education and Training. New Apprenticeship Centre (DETNAAC), Sydney

The New South Wales (NSW) Board of Vocational Education and Training (BVET) commissioned the NSW Dept of Education and Training New Apprenticeship Centre (DETNAAC) to pilot a brokerage service linking up to 40 Higher School Certificate (HSC) VET in School students with a disability with an employer and appropriate support services. The aim of the project was to provide a practical means of assisting this cohort in the transition from school to employment in a New Apprenticeship. This pilot invited 40 students from the Western Sydney Region of the NSW Dept of Education and Training (DET) schools to participate in the project. Disability Works Australia (DWA) the National Disability Recruitment Service was engaged by DETNAAC to assist in the assessment of suitable, work ready students and the management of a database regarding the students. DWA was also engaged to promote to employers in an attempt to locate employment vacancies for the students in the project. The project produced the following outcomes: (1) eleven of the 32 school leavers involved in the project had gained employment within four months of leaving school; (2) a network was created between DETNAAC, DET Disability Programs, and VET in Schools and Support Teachers Transition in DET schools in the Western Sydney Region; and (3) raised awareness in schools about New Apprenticeships as a vocational option for school leavers with a disability. The project outcomes highlighted the ongoing need for a brokering service to address the unique challenges students/school leavers with a disability encounter in accessing employment in a New Apprenticeship pathway.

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Long, M 2006, *How young people are faring 2006: key indicators: an update about the learning and work situation of young Australians*, Dusseldorp Skills Forum, Sydney.

This report is one of an annual series documenting changes in the learning and work circumstances of young Australians. This report has a special focus on the extent to which young Australians participate in full-time education and training or full-time work. The report is divided into two sections. Section one, 'Less than full engagement in study and work', describes the education and labour force participation of young Australians in 2006 and changes over the last two decades in the proportion not fully engaged in study or work. The measure of less than full-time engagement in work and study is presented for: teenagers aged 15-19 years; school leavers aged 15-24 in the year after they leave school; and young adults aged 20-24 years. Section two, 'The youth labour market', reviews changes in the level of full-time employment and the participation of young Australians in part-time work, unemployment and the activities of those not in the labour force. It describes the decline of the full-time labour market, and the rise of part-time work and under-employment among Australia's young people. Highlights include that: growing numbers of young people will continue to contribute to the workforce; most teenagers are studying or working full-time; full-time work remains important for teenagers, especially males; most of Australia's school-leavers continue with study; almost as many school-leavers go to TAFE as university; and three-quarters of young adults are in full-time learning or work. Major issues identified are that: substantial proportions of young Australians are not fully engaged in work or study in May 2006; overall, 540,000 young Australians

were not in full-time learning or work; about a quarter of young Australians are not fully engaged in study or work in the years after leaving school; completing Year 12 makes a difference; and, although full-time jobs for Australians aged 25-64 have risen by more than one million since 1995, they have declined by 14,000 for teenagers and 52,000 for young adults.

Miller, C & Nguyen, N 2008, *Who's supporting us?: TAFE staff perspectives on supporting students with mental illnesses*, NCVER, Adelaide

The number of students reporting mental illnesses in the public vocational education and training (VET) sector was just over 9800 in 2005. Those reporting mental illnesses achieve poorer educational outcomes compared with other disability groups and the general VET student body, and this is a challenge to the sector. Teachers and support staff in technical and further education (TAFE) institutes are at the frontline in responding to the needs of these students. This research explored staff perspectives on how TAFE institutes in Australia are supporting students with mental illnesses.

Miralles-Lombardo, B, Miralles, J & Golding, B 2008, *Creating learning spaces for refugees: the role of multicultural organisations in Australia*, NCVER, Adelaide.

Through the experiences of refugees from Bosnia, Iraq and Sudan, this research sought to explore the role multicultural community organisations play in creating important informal networks and learning spaces that connect people from refugee backgrounds to the wider Australian community. In particular, the research sought to identify how such organisations assist refugees in their learning of English language and work skills. The research documented the critically important role of multicultural community organisations in Australia in the successful settlement of refugees from Bosnia, Iraq and Sudan. Through network analysis, it is concluded that multilingual, multicultural organisations provide both a bonding and bridging function. These organisations impart informal learning about the wider Australian context, while also providing links to formal education and employment. This informal learning, whether in their first language or in English, is vital to refugee engagement in the wider community, because it builds social capital by re-establishing the trust, reciprocity, shared norms and networks depleted during the refugee experience. The research identified the features of the most successful organisations and their practices and recommended a closer link between these community-based organisations and the various education sectors.

This report and supporting documents may be found on the NCVER web site at:  
<<http://www.ncver.edu.au/publications/1964.html>> (viewed April 2008).

Phillips KPA 2007, *National study to improve outcomes in credit transfer and articulation from vocational and technical education to higher education: Stage 1 report*, Byron Bay, Phillips KPA.

This report provides useful background reading and an overview of the field. It includes: definitions; a typology of credit transfer and articulation; drivers for enhanced credit transfer; an analysis of levels of credit transfer; factors affecting credit transfer; a literature review; and an overview of national and international developments.

Richardson, S 2004, *Employers' contribution to training*, NCVER, Adelaide.

The development of high levels of skills in the workforce is expensive, requiring a major investment of learner time, large public expenditure on the formal education system, and high levels of formal and informal on-the-job skills development facilitated by employers. There is understandable tension about just how much should be spent on skills development, and what share of this total should be borne by each of the main players (individuals and their families, governments and firms). In contemplating the answers to these questions, it is important first of all to have an accurate view of the current size of the investment in skills, and who pays. The answer to this apparently straightforward question is surprisingly elusive. This report provides new and enhanced estimates of the employers' full contribution to skills development. This paper argues that current estimates of the total level of vocational skills development and the employer contribution to this development seriously underestimate the true levels in Australia. Where conventional measures put the total cost of training at around \$8.5 billion per annum, this research estimates it to be about \$30 billion. Even this large number is probably an underestimate of the total, because it does not put a value on student time spent in classroom instruction. The main policy implication to be drawn is that what is happening informally in the workplace is very important for determining the future quantity, quality and character of the skills of the workplace.

This paper is a companion piece to the paper 'Employers' contribution to training: how does Australia compare with overseas?' prepared by the National Institute of Labour Studies (NILS) for the National Centre for Vocational Education Research (NCVER) in 2002.

This report may be found on the NCVER web site at:  
<<http://www.ncver.edu.au/publications/1506.html>>

Richardson, S & Teese, R 2008, *A well skilled future*, NCVER, Adelaide.

This is the final report, the synthesis report, of the research program 'A well-skilled future: tailoring VET to the emerging labour market'. This research program examined the evolving labour market and changing work organisation and management in the context of the vocational education and training (VET) sector and its role in the development of the appropriate levels, types and quantities of skills required to satisfy the future demands of Australian industry. As an overview, this report draws together the key points identified across the research and integrates the conclusions from each of the National Centre for Vocational Education Research (NCVER) five research themes to produce a coherent picture of the VET sector's role in responding to changes in the skills required by employers and the skill development needs of the workforce.

This report and supporting documents may be found on the NCVER web site at:  
<<http://www.ncver.edu.au/publications/2001.html>>

Richardson, S & Peng, L, 2008, *Changing forms of employment and their implications for the development of skills*, NCVER, Adelaide.

This report is a component of the research program entitled 'A well-skilled future: tailoring VET to the emerging labour market' (a collection of overviews of this program is indexed at [TD/TNC 88.16](#)). In this program, the evolving labour market and changing work organisation and management in the context of the vocational education and training (VET) sector are examined. This study focuses on work-based ways in which people learn how to be productive workers. It asks three questions: (1) How does the way in which people are employed affect the level of skills development they acquire as a result of their employment?; (2) How have the ways in which people are employed changed over the past decade or so?; and (3) How do the changing ways in which people are employed affect their opportunities for the development of vocational skills? The 'non-standard forms of employment' (part-time, casual, labour hire and self-employed workers) are contrasted with the 'standard' form of employment (full-time continuing jobs). The study found that the shift away from full-time continuing employment is likely to put the informal and semi-formal processes for skill development seriously at risk. If it does so, then Australia must look to other ways of ensuring the continuing enhancement, refreshment and updating of its stock of vocational skills. In particular, it is likely that the burden of such skills enhancement will shift, at least to some extent, from the employer to the publicly funded VET providers and to workers themselves.

This report and supporting documents may be found on the NCVER web site at:  
<<http://www.ncver.edu.au/publications/1994.html>>

Ryan, C 2002, *Longer-term outcomes for individuals completing vocational education and training qualifications* NCVER, Adelaide.

This study aimed to assess the longer-term effect for individuals of completion of vocational education and training (VET) qualifications. It aimed to identify how VET graduates' employment and education outcomes change over time after they complete their qualifications. Associate diploma graduates' outcomes are compared with those of individuals who completed Year 12 but completed no further education qualification. The outcomes of skilled and basic vocational qualification graduates are compared with individuals who did not complete Year 12 and did not undertake any post-school qualifications. Key findings are: (1) completion of VET qualification improves the full-time employment outcomes of graduates compared to individuals who do not undertake post-school qualifications; (2) male VET graduates appear to enjoy more substantial immediate benefits from completion of their qualifications than do female graduates; (3) the actual fields in which VET graduates complete their qualifications also have an impact on their outcomes; (4) People with a disability, people who live in non-metropolitan regions of Australia and people from non-English speaking backgrounds experience poorer full-time employment rates than other groups in Australia, however there does not appear to be a VET-specific element to these outcomes; (5) individuals who complete VET qualifications and work full-time tend to enjoy higher wages, work in higher status occupations and have higher rates of permanent employment than members of their comparison groups; and (6) VET graduates appear less likely to be studying at any point in time or to have recently undertaken a training course than university graduates in the data used in this report.

Ryan, C 2002, *Individual returns to vocational education and training qualifications: their implications for lifelong learning*, NCVER, Adelaide.

This study first looks at research on the financial benefits to individuals of investing in vocational education and training (VET) and gaining qualifications, building on the existing literature in three ways. First, it contains estimates of returns to associate diploma and basic vocational qualifications when most previous studies have concentrated on the returns to apprenticeships. Second, it identifies how the estimated returns to VET qualifications vary, depending on the combination of work and study individuals engage in while undertaking their courses. Third, it takes a small step beyond the use of individuals' 'highest qualification' level as the sole description of their education and training to estimate the effect on wages of follow-up qualifications. Key findings are: (1) individuals who complete VET qualifications generally receive higher wages than similar individuals who do not complete VET qualifications; (2) the wage effects are higher for males who complete VET qualifications than for females who complete VET qualifications; (3) wages vary by qualification level; (4) VET qualification effects provide a continuing benefit to individuals throughout their careers; (5) VET study that does not lead to qualifications may have little effect on wages; (6) estimated returns to VET qualifications depend critically on the work/study combination used by individuals to undertake their courses; (7) returns to VET qualifications are highest for those who work full-time and study part-time while undertaking their course; (8) those who undertake follow-up VET qualifications receive higher wages for doing so.

Shah, C & Burke, G 2006, *Qualifications and the future labour market in Australia: report prepared for the National Training Reform Taskforce*, CEET, Melbourne.

This report examines the future supply of, and requirements for, vocational education and training (VET) qualifications in the Australian labour market from 2006 to 2016. Prepared for the National Training Reform Taskforce, it is intended to inform the next stages of reform of the sector to be considered by the Council of Australian Governments (COAG). The report provides: a projection of the qualifications profile of people in employment in Australia in 2016; estimates of the additional number of qualified people required in the next 10 years to attain the 2016 qualifications profile of employed people; estimates of the supply of people with VET qualifications from 2006 to 2016; estimates of the gap between supply and requirements in the number of people with VET qualifications from 2006 to 2016; and estimates of the additional student contact hours required to meet the shortfall in the number of people with VET qualifications from 2006 to 2016. The report indicates that, from 2006 to 2016, the occupational and qualification composition of employment in Australia is forecast to change in the following ways: employment in Australia will grow more slowly in the coming decade; employment will grow more quickly in higher skilled occupations than in lower skilled occupations; the proportion of the employed workforce with a post-school qualification will increase; in most occupations, more than half the workers will have qualifications; and more workers will have higher level qualifications. The report suggests that, at current levels of supply, there will be a shortfall of 240,000 people with VET qualifications over the 10 years to 2016. The number of net completions will need to increase 1.9 per cent each year over the next decade to overcome the shortfall. Shortfalls are expected at advanced diploma, diploma and certificate III. Surpluses are expected at certificate I, II and IV. Thus to meet requirements both the quantity and distribution of supply of VET qualifications will need to change. The hours of training required will grow faster than the number of people acquiring VET qualifications. The number of training hours will need to increase five per cent per year over the next decade to meet the requirements. The report concludes that, if policy is to attain the 2016 target for the qualifications profile, the VET system will need to expand over the coming decade.

Shah, C, Cooper, L & Burke, G 2007, *Industry demand for higher education graduates in Victoria 2008-2022: an identification of the higher education graduates required to meet industry skill demands*, Dept of Innovation, Industry and Regional Development. Office of Training and Tertiary Education (OTTE), Victoria.

This report assesses supply and demand for people with higher education qualifications in Victoria from 2008 to 2022 and in particular, it estimates the shortfall or surplus of people with higher education qualifications in Victoria over the next 15 years. The contents of the report are: Chapter 1 - introduction and background information to the report; Chapter 2 - provides current qualification profiles of Victorian workers by occupation and other demographic variables; Chapter 3 - forecasts employment by occupation and qualification for 2022 and also assesses additional people with qualifications needed between now and then to achieve Victoria's projected qualifications profile; Chapter 4 - describes current patterns of supply of people with higher education qualifications for the Victorian workforce from various sources; Chapter 5 - assesses the imbalance in the supply and requirements for people with higher education qualifications over the next 15 years. Estimates are provided in terms of the number of qualifications and enrolments required to meet any shortfall; Chapter 6 - contains a synthesis of industry consultations and their views on the initial results of the modelling; and Chapter 7 details concluding comments.

Stanwick, J 2006, *Outcomes from higher-level vocational education and training qualifications*, NCVET, Adelaide.

The purpose of this project was to examine where diploma- and advanced diploma-level vocational education and training (VET) qualifications lead. In particular, do they lead to employment in associate professional or professional occupations, and are they used as a pathway to university-level studies? These questions are addressed using data from the National VET Provider Collection and the Student Outcomes Survey, both of which are maintained by the National Centre for Vocational Education Research (NCVER). Analysis of the data provides an overall picture suggesting that undertaking diploma and advanced courses in VET leads to employment outcomes for many students. However, the research also demonstrated that many, particularly younger people, are employed at an occupational level below that intended by the course. There are significant further study outcomes from these courses, with about a third of young graduates going on to university studies. There are also variations in outcomes by field of education, with graduates in architecture and building, and also health having the best employment outcomes. However, high proportions of young graduates in minor fields, such as accountancy, and banking and finance, going on to university study following the course. Another noticeable feature of the overall picture is that subjects-only completers do not have nearly as good employment outcomes as graduates. They are considerably less likely to state an employment-related benefit and are more likely to be employed at an occupational level below that of associate professional.

Stokes, H, Stacey, K & Lake, M 2006, *Schools, vocational education and training, and partnerships: capacity-building in rural and regional communities*, NCVER, Adelaide.

Rural and regional schools are becoming increasingly involved in vocational education and training (VET). This often occurs as a result of schools developing partnerships with registered VET providers, industry groups and/or local employers; these partnerships present both opportunities and challenges for everyone involved. This research project looks at how school-VET partnership members analyse local issues and harness the unique features of their communities, develop models and processes that work for all partnership members and utilise the partnership to make a real difference to young people's educational and work opportunities and thus contribute to community viability. It focused on successful examples of school-VET partnerships in rural and regional communities, conducting case studies in three rural and four regional schools from three states which were perceived as operating successful school-VET partnerships. It explored how communities demonstrated the building or strengthening of social and economic capital, as reported by school-VET partnership members, and how different stakeholders experienced the partnership. The research identified three different models that these seven rural and regional communities used to organise a school-VET partnership. A regional cluster or specialised program model was found in regional communities, while a whole-of-community model was characteristic of rural communities. The main differences between the models relate to their structure, the main leadership driver, and the size and nature of their target population. The research raised several implications for policy and practice with three main areas of consideration being: choosing models to respond to community needs; organisational cross-cultural work in VET; and special needs of rural and remote schools. The project found that from the perspective of transferability, there is value in sharing the diversity of lessons learned from different locations and, in drawing on and adapting successful models and strategies to a community's unique circumstances, this learning can prevent schools from reinventing wheels, and save time and effort in the processes of trial and error.

This report and supporting documents may be viewed on the NCVER web site at: <<http://www.ncver.edu.au/publications/1686.html>> (accessed September 2006).

Young, M, Guenther, J & Boyle, A 2007, *Growing the desert: educational pathways for remote Indigenous people*, NCVER, Adelaide

This study examines data and issues related to the participation of Indigenous people in vocational education and training (VET) and adult and community education (ACE) across the desert regions of Australia. It maps the context of training delivery in terms of demography, infrastructure and access to services, and draws together a summary of data from a variety of sources. The study highlights emerging evidence that Indigenous participation in VET across the desert may be decreasing and that there has been a significant decline in the labour force participation of remote Indigenous people since 2002. This suggests a mismatch between the largely mainstream VET offerings available across the desert and the place-based livelihoods and work opportunities available locally; there also appears to be a mismatch between the needs and aspirations of learners themselves and what is being supplied. The unique geography, demography, settlement patterns and cultural diversity of the arid and semi-arid regions of Australia present unique challenges for the delivery of all services, including education.

This report and supporting documents may be found on the NCVER web site at: <<http://www.ncver.edu.au/publications/1911.html>> (viewed December 2007).

