

## At a glance



Davinia Woods

### Key messages

- The outcomes for young people who have participated in vocational education and training vary, and are dependent on many factors. These include the gender of the student, the nature of the VET program undertaken, and how much time has passed since they participated in vocational education and training. However, one finding is clear: those young people who do not go on to university have better employment prospects if they have undertaken a VET course.
- For many VET students, it can often take more than six months to obtain an employment outcome, because some qualifications—such as certificate I and II courses—require further study at a higher level before students can achieve the job that they want. Two-and-a-half years after training, employment levels for participants in all initial VET qualifications tend to even out and fall between 80 and 90%.
- School VET programs have a particularly positive effect on the transition to successful post-school activities for early school leavers. These programs and paid part-time work both impact on the transition by providing real vocational experiences for school students to learn from when considering possible career options.
- Pathways to work undertaken by young people from VET programs both within and outside schools are typically not straightforward. (An exception to this is vocational education and training which is linked to the workplace, such as apprenticeships and traineeships.) Although this diversity can be advantageous—for example, it can encourage students to explore different types of jobs, hence gaining more skills and experience—the transition could be made easier by schools providing good career advice.

## Introduction

Educational policy for young people is focused on providing a smooth transition from school to work and/or further study. Sweet (2006) notes that young people's transition from compulsory education to work has been a research focus of the Organisation for Economic Co-operation and Development (OECD) for nearly three decades. In the last five years, Australia has also produced a large body of research on young people and the short-term employment outcomes which have resulted from their educational path. With the recent availability of appropriate longitudinal data, Australian researchers are only beginning to track young people through to their mid-twenties to report on the longer-term impact of education and training on labour market outcomes.

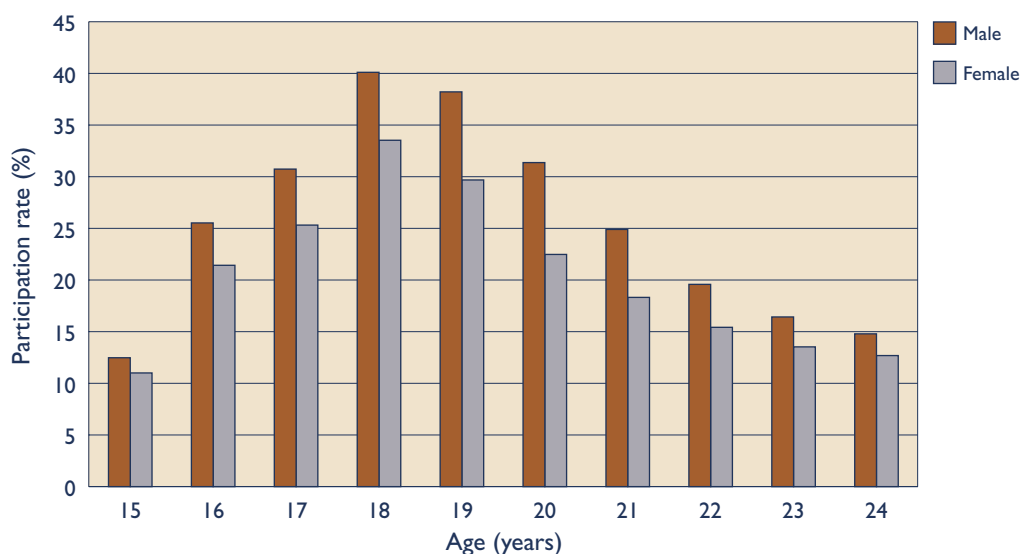
This *At a glance* explores recent Australian research on the role which vocational education and training (VET) plays in assisting young people's transition from school to work. Using longitudinal research findings where possible, it seeks to answer the following questions.

- How important is vocational education and training for young people?
- Is vocational education and training helping the transition from school to work?
- What factors impact on the employment outcomes that result from vocational education and training?

## How important is VET?

Between 1986 and 2005, there was a change in the activities of young people aged 15 to 24 years. Engagement in full-time education increased, while engagement in full-time work decreased (see ABS Labour Force Australia, cat. no. 6291.0.55.001, table 03a). With this increased emphasis on education, VET has become an important pathway to work for many young Australians. Figure 1 shows the high participation in publicly funded vocational education and training by young people, although this partly reflects the large proportion of young people who are engaged in apprenticeships or traineeships. In fact, nearly one in five employed 15 to 19-year-olds were engaged in apprenticeships or traineeships in 2005 (NCVER 2006).

Figure 1 VET participation<sup>(a)</sup> rate by age, 15–24 year olds, 2005



Note: (a) VET participation covers all VET activity delivered by technical and further education (TAFE) institutes, other government providers and community education providers as well as publicly funded activity delivered by private providers. This includes, but is not limited to, apprentices and trainees who enrol in a course at a TAFE institute as part of their contracted training arrangement and VET in Schools students attending TAFE institutes.

Sources: NCVER National VET Provider Collection, 2005; Australian Bureau of Statistics *Population by Age and Sex, Australian States and Territories*, cat.no.3201.0, June 2005. The 2005 population figures are preliminary.

Not surprisingly, the participation rates shown in figure 1 vary by age. Participation in vocational education and training is lowest at 15 years of age, when most young people are engaged in full-time schooling. Participation begins to increase at 16 to 17 years of age, which partly reflects the growing participation in VET in Schools programs<sup>1</sup>. Participation peaks at 18 years of age, with 40% of males and

<sup>1</sup> 'VET in Schools' refers to programs undertaken as part of the senior secondary certificate that also provide credit towards a nationally recognised VET qualification. In 2004, there were 211 900 VET in Schools students and around 50% of senior secondary students were participating in VET in Schools programs (NCVER 2005). In this publication, 'school VET programs' refers to all VET programs undertaken by school students as part of schooling (includes, but is not limited to, VET in Schools programs).

34% of females participating in vocational education and training at this age. As young people approach their mid-twenties, participation drops, suggesting that many complete the transition to work by 24 years of age.

Table 1 examines how 15 to 24-year-olds are participating in vocational education and training, with the data suggesting that the majority have left school. They also indicate that there are significant numbers of both early school leavers and Year 12 completers in this group.

**Table 1 Persons aged 15–24 years enrolled in VET by age and highest school level completed, 2005**

	15–19 years			20–24 years		
	Year 12	No Year 12 <sup>(a)</sup>	Highest school level unknown	Year 12	No Year 12 <sup>(a)</sup>	Highest school level unknown
<i>Apprentice and trainee commencements<sup>(b)</sup></i>						
School-based apprentices and trainees	340	13 450	620	*	20	*
Other apprentices and trainees at school	80	4 330	180	*	50	0
Apprentices and trainees not at school	42 440	44 510	450	29 470	15 960	140
<b>Total</b>	<b>42 990</b>	<b>62 560</b>	<b>1 250</b>	<b>29 560</b>	<b>16 100</b>	<b>140</b>
<i>Students enrolled in publicly funded VET<sup>(c)</sup></i>						
At school	3 690	71 950	19 710	910	1 430	1 320
Not at school	103 650	112 400	14 010	136 810	69 160	17 480
<b>Total</b>	<b>111 090</b>	<b>189 560</b>	<b>73 550</b>	<b>142 750</b>	<b>73 530</b>	<b>56 570</b>

Notes: (a) No Year 12 includes 'highest school level Year 11 or lower' and 'did not attend school'.  
 (b) The figures do not sum to the total as apprentice and trainee commencements with 'at school unknown' are not shown and figures have been rounded.  
 (c) The figures do not sum to the total as students with 'at school unknown' are not shown and figures have been rounded.  
 \* Due to confidentiality reasons, the asterisk represents between 1 and 9 students.

Sources: (b) NCVET National Apprentice and Trainee Collection, commencements over 12 months ending 31 December 2005, based on June 2006 estimates  
 (c) NCVET National VET Provider Collection, 2005

The statistics presented in figure 1 and table 1 provide an indication of the participation by young people in vocational education and training at a particular point in time—2005. Karmel (forthcoming) alternatively estimates that 51% of those students who left school in 2002 or 2003 would have moved on to vocational education and training by 2004.

Table 2 examines the 2003 school leavers who enrolled in vocational education and training in 2004. For males, around 40% of school leavers had not completed Year 12. School retention rates are higher for females and this is reflected in those continuing on to vocational education and training, with around 70% of the female school leavers reporting that they had completed Year 12.

**Table 2 VET students in 2004, left school in 2003, by sex and highest school level completed<sup>(a)</sup>**

	Males		Females	
	Number	%	Number	%
Year 9 or lower <sup>(b)</sup>	2 870	6.2	2 090	5.4
Year 10	9 530	20.4	5 800	15.0
Year 11	6 250	13.4	3 740	9.7
Year 12	27 910	59.7	26 960	69.6
Unknown	160	0.3	150	0.4
<b>Total</b>	<b>46 720</b>	<b>100.0</b>	<b>38 750</b>	<b>100.0</b>

Notes: (a) Considers young people aged 15–24 years. The figures may not sum due to rounding.  
 (b) Year 9 or lower includes 'highest school level Year 9 or lower' and 'did not attend school'.  
 Source: NCVET National VET Provider Collection, 2004

A clear message from this research is that vocational education and training is an important pathway to work for young people, but other research suggests that some are at risk of failing to access either further study or employment (see box 1).

## Box 1 Young people at risk

The Dusseldorp Skills Forum report that in 2005, around 15% of 15 to 19-year-olds and almost a quarter of 20 to 24-year-olds were not engaged in full-time work or full-time study (Long 2005). Longitudinal research adds to the picture by suggesting that it is not unusual for young people to spend short periods of time outside the labour force or education, particularly with some being engaged in other activities such as child rearing and travelling (Marks 2006; Hillman 2005). For these reasons, research on the 'at risk' group needs to follow young people to 24 years of age, look at outcomes at around 24 years of age, and/or consider their engagement in other activities.

Marks (2006) analyses data from the Longitudinal Survey of Australian Youth (LSAY) to track young people and concludes that those who are experiencing the most severe difficulties in their transition from school to full-time work have experienced prolonged periods of unemployment. This is in contrast to part-time workers who experience increases in job status and earnings over time. Marks suggests that re-entry programs need to target these people and aim to get them into employment as soon as possible. He estimates that this 'at risk' group accounts for less than 10% of the non-university-bound school leaver population. However, Rothman and McKenzie (2006) note that longitudinal surveys typically experience higher attrition rates for highly marginalised people, particularly the homeless. This may suggest that the less than 10% estimation could be underestimating the size of the 'at risk' group.

The remainder of this *At a glance* looks at the impact of vocational education and training on the transition from school to work. Research on this topic has moved towards tracking young people, preferably through longitudinal surveys, to take account of the multiple pathways undertaken. As Rothman and McKenzie explain, 'Transition is a complex process that happens over time. Longitudinal data allow analysts to map young people's experiences and the outcomes of the accumulation of experiences' (2006, p.1).

## Is VET helping?

Research suggests that around 21 years of age, the majority of young people are employed full-time and are satisfied with their career choice. Those not engaged in any post-school activity generally have lower levels of satisfaction (Hillman & McMillan 2005; Marks 2006). What does vary considerably between young people is the nature of their transition from school to a full-time job, and how easy or difficult this process is. It is also important to gauge whether participation in vocational education and training assists this transition compared with those who do not participate in post-school education and training.

Taking into account individual characteristics—such as school achievement levels—Dockery, Koshy and Stromback (2005) compared the labour market outcomes of two groups of young people: those who undertook traineeships after leaving school; and those who did not participate in post-school education and training. Using the Longitudinal Survey of Australian Youth data, they found that by 21 years of age, trainees were less likely to be experiencing unemployment and more likely to be earning higher wages than the comparison group of young people.

The findings from Dockery, Koshy & Stromback (2005) also highlight the importance of research that considers outcomes in the longer term. The gains in wages and employment prospects for those participating in traineeships were not present initially at age 19, but became more obvious by age 21. Thus, the longer-term analysis provided results which would not have been noticeable in the short term.

Gørgens and Ryan (2006) similarly used the Longitudinal Survey of Australian Youth data and took into account individual characteristics. They reported higher full-time employment rates for young people who completed a VET qualification compared with young people without a post-school qualification. This effect on full-time employment rates occurred for Year 12 completers and early school leavers, although the effects were greater for the Year 12 group than the early school leaver group. However, the difference was not statistically significant. Gørgens and Ryan also reported an improvement in full-time employment rates for young people who completed a VET qualification following a period of unemployment of at least six months or more compared with young unemployed people who did not complete later post-school qualifications. Again, the improvements occurred for early school leavers and Year 12 completers.

## What impacts on VET outcomes?

The young people participating in vocational education and training are taking various pathways to employment. Some pathways are more difficult and take longer than others. Harris, Rainey and Sumner (2006) suggest that pathways involving multiple fields of education and sectors of education can help students to explore different careers and have a variety of work experiences, although this process is more straightforward if they are given good career advice. On the other hand, Marks (2006) provides a clear message that the length and smoothness of pathways are an important factor; because the most successful and stable outcomes further down the track are linked to the amount of time young people take to find work after leaving school. That is, those school leavers who take some time to find work tend to have less successful outcomes over the years that follow than those who attain a job quickly.

Factors that impact on the pathways and time taken to obtain employment include the level of vocational education and training students undertook and their gender.

### Level of VET program

Stanwick (2005, 2006) and Sherman (2006) investigated outcomes from various levels of vocational education and training and found that the employment outcomes six months after training depend on the level of VET undertaken. Participants who undertook VET courses such as certificates I and II typically did not obtain their desired job after six months of training; instead, they had to do further study at a higher level.

However, this research shows that outcomes do improve over time. By two-and-a-half years after the initial training, employment levels for participants in all qualifications tend to even out and fall between 80 and 90% due, in part, to those undertaking further study at a higher level. The findings from Stanwick and Sherman are summarised in box 2.

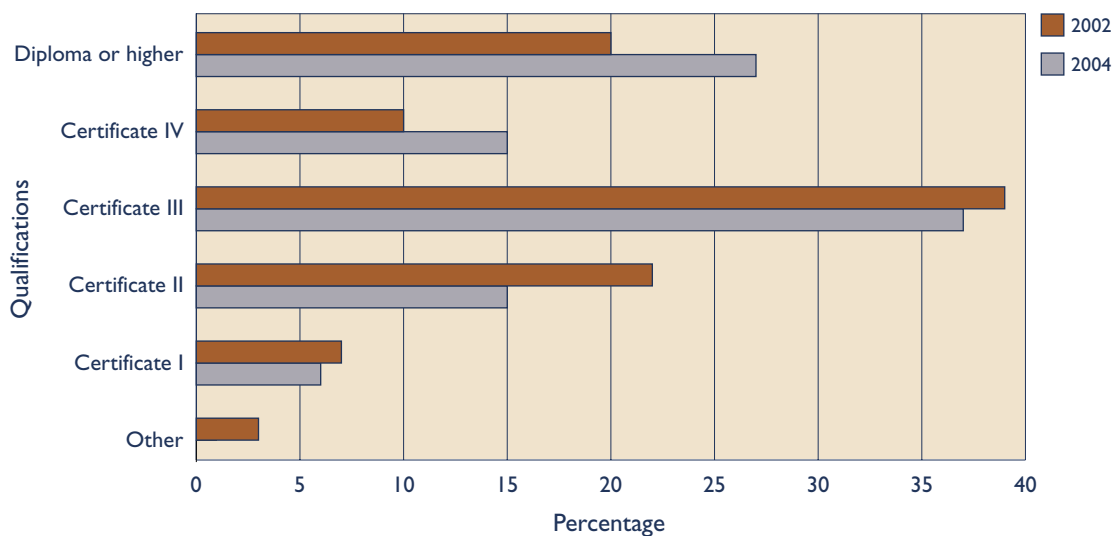
#### Box 2 Outcomes by level of VET for young people

AQF level	Key research findings
Certificate I and II	Most young people are going into certificate I and II level courses for employment-related reasons. However, for many, this level of VET is providing a pathway to further study.
Certificate III	A high proportion of certificate III graduates are employed six months and two-and-a-half years after training. This is largely attributed to apprenticeships and traineeships, as many certificate III graduates are apprentices and trainees undertaking the training as part of their contracted training arrangement and are, by definition, already employed.  Marks (2006) also notes that apprenticeships and traineeships and other VET programs linked to the workplace are providing the most rapid and successful transitions.
Certificate IV	Many certificate IV graduates report already being employed prior to training. Therefore, certificate IV qualifications are typically being used by young people as a method of up-skilling to gain a promotion or a better job. However, they are also used as a pathway to further study.
Diplomas and advanced diplomas	Young people enrolled in diplomas and advanced diplomas mainly consist of Year 12 completers, entering tertiary education for the first time.  Diplomas and advanced diplomas are leading to the first full-time job for many young graduates. However, the majority are initially employed at a level below that intended by the course (below associate professional level). Around a third of graduates alternatively use the course to go onto university studies. More graduates are employed at associate professional level or higher by two-and-a-half years after training, probably due to those going onto further study.

Sources: Stanwick (2005, 2006); Sherman (2006)

The findings in box 2 suggest that some VET qualifications, particularly certificate I and II level courses, are typically providing a longer pathway to work. Figure 2 looks at further study outcomes in more detail, and shows clearly that considerable numbers of young VET graduates embark on further study immediately.

Figure 2 Highest qualification completed, for graduates, aged 15–24 years, who undertook TAFE training in 2001, at May 2002 and September 2004 (%)



Source: Sherman (2006)

## Gender

Stanwick (2005) and Sherman (2006) considered initial outcomes by gender of VET students. They found that males had a smoother transition to employment, obtaining better employment outcomes six months after training when compared with females.

Two-and-a-half years after training, increases and gains in employment outcomes were still slightly more pronounced for males compared with females (Sherman 2006). The better outcomes for males included higher levels of full-time employment and overall employment and higher wages; however, females were more likely to have moved to a higher skill level.

Males obtained better employment-related outcomes at both six months and two-and-a-half years after training. This partly reflects that females are more likely to be employed part-time at those times. This could be due to females undertaking family responsibilities, which prevent them from taking on full-time work.

## Exposure to VET while at school

Three broad areas impact on how school VET programs affect the transition to work for young people: career exploration; pathways provided; and smoothness of the transition to work.

### Career exploration

School VET programs are a very effective way of students testing their career options; this is particularly the case when the length of time and variety of experiences in the workplace increase (Smith & Green 2005). Career testing is extremely important because Smith and Green found that some young people believe schools are not providing enough career advice.

Billett (2006) suggests that teaching school students to analyse and reflect on their paid-work experiences could provide them with useful information when the time comes to consider post-school options. Reflecting on paid work would help to make up for the lack of effective career advice provided, the shrinking pool of work experience placements, and the difficulties and costs associated with schools finding and organising placements.

### Pathways

Smith and Green (2005) conducted a follow-up survey of school students one to three years after they had left school. They found that participating in a school-based apprenticeship provides a clear pathway into apprenticeships or traineeships in a similar industry area. However, of the school-based apprenticeship participants who were working in a similar industry area after leaving school, there was a proportion who indicated that they wanted to move into other industry areas. Thus, it is important to ensure that students have the opportunity to undertake work experience in a variety of industries, rather than just being limited to one.

Using the Longitudinal Survey of Australian Youth data, Anlezark, Karmel and Ong (2006) found that school VET programs provide a clear pathway for some students, particularly for boys studying in the areas of building and engineering. However, few girls appear to keep on with the VET subjects taken at school. The authors also note a mismatch between the VET courses and programs which students undertook at school, and those which they studied after school. This leads to the question of whether school VET programs need to be better linked with the world of work and post-school study or, alternatively, should concentrate on providing broad pre-vocational skills.

Lamb and Vickers (2006) further examined the issue of whether VET programs within schools need to be aligned with those outside schools, and found that linked programs typically result in smoother transitions to work, particularly for students who do not go on to university. These VET programs tend to be stand-alone and are offered at a technical and further education (TAFE) institute or registered training organisation, and do not count toward the senior secondary certificate. However, school VET programs which are recognised by the certificate and part of the school curricula (in areas such as information technology, hospitality and engineering) tend to have a greater impact on influencing students to remain in school and complete Year 12.

### Smoothness of transition

Helme and Polesel (2004) suggested that VET in Schools programs have a particularly positive impact on the transition to post-school study for early school leavers. This is shown by a higher take-up of apprenticeships, traineeships and upper-level VET courses amongst the early school leavers who participate in VET in Schools programs compared with early school leavers who do not participate.

Similarly, Anlezark, Karmel and Ong (2006) concluded that school VET participants who left school after completing Year 11 had a much easier transition than their peers who left school after completing Year 11 without undertaking school VET programs. This effect can be seen in table 3, which shows the success of the Year 11 completers in 2001, the year after they had finished school. The positive impact of school VET programs was particularly significant for girls, with girls being 15% more likely to achieve a successful outcome after participation.

**Table 3 Predicted probabilities of successful outcomes<sup>(a)</sup> for Year 11 completers in 2001 by gender (%)**

	School VET	No school VET	Difference
Boys	78.9	67.6	+11.3
Girls	63.7	48.9	+14.8

Note: (a) The outcome variable 'success' is defined as full-time post-school engagement in employment or learning or part-time work combined with part-time study.

Source: Anlezark, Karmel and Ong (2006)

## Conclusion

The statistics indicate that vocational education and training is clearly an important pathway for young people, and could also benefit the 'at risk' group who experience multiple or prolonged periods of unemployment. However, until now, researchers have lacked an accurate understanding of the role VET plays in assisting the transition to work for young people. The difficulty in researching transitions and outcomes for young people is due to the individual and complex nature of their pathways from school to the workplace or further study.

By tracking young people, researchers are now able to conclude that vocational education and training assists the transition to work. However, the smoothness of this transition does vary depending on student demographics and the nature of the VET program undertaken. Students undertaking certificates I and II may not, in the short term, attain the jobs they hoped for without further study. Career development services can have a positive impact on transitions by better informing prospective students of the typical outcomes and further study required after completing particular VET courses. As Harris, Rainey and Sumner (2006) note, the students who experience multiple pathways are generally not aware of the career development services available or do not think they need them.

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Level 11, 33 King William Street, Adelaide SA 5000  
PO Box 8288 Station Arcade, Adelaide SA 5000, Australia

ph +61 8 8230 8400 fax +61 8 8212 3436  
email [ncver@ncver.edu.au](mailto:ncver@ncver.edu.au)  
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