

Vocational education and training and young people: Last but not least

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Vocational education and training (VET) is much more important to young people than might be immediately apparent. This paper focuses on how young people participate in VET, what they study and their outcomes. Of particular note is the importance of VET for those young people who do not proceed on the conventional academic path of 12 years of school followed by university. However, while the levels of participation are extremely high, the proportion emerging with a qualification is much lower, and the proportion emerging with a middle-level qualification or higher is lower again.

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Foreword

This paper, drawing largely on a presentation to the VISTA 2006 annual conference, focuses on the transition of young people from school to vocational education and training. It was motivated by an earlier paper, *Young people and vocational education and training in South Australia* (Karmel 2004), submitted to the 2004 inquiry into the South Australian Certificate of Education.

The main point of the paper is that the importance of vocational education and training for young people is often underestimated. A very large proportion of school leavers—both early leavers and those completing Year 12—go on to vocational education and training, if not immediately. Apprenticeships and traineeships are particularly important for young men.

While the level of access to vocational education and training is remarkably high, the level of courses undertaken by many is low, as are completion rates for some groups.

The paper should be of interest to policy-makers and those wanting a broad perspective on young people's involvement in education and training.

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Vocational education and training and young people: Last but not least

The vocational education and training sector is poorly understood, particularly in relation to the important role it plays in the education of young people. While apprenticeships are seen as a desirable pathway between school and work, and technical and further education (TAFE) is acknowledged as an alternative to university, the actual magnitude of its role is not appreciated. The main reason, at least in my view, is that it does not fit neatly in a linear world; the ‘complete Year 12 and go to university’ is easy to understand, but for many young people pathways involving vocational education and training (VET) are a lot less straightforward. The purpose of this paper is to remedy this perception by spelling out the extent of participation in VET and the various pathways that this participation covers. The paper also looks at what is studied and the outcomes, in terms of completion rates, employment and further study, and satisfaction. What emerges is that participation is extremely high for young people, and there are many positive outcomes. But completion rates are variable, and relatively few young people emerge with a middle-level, or higher, qualification.

Extent of participation of young people in VET

We first consider young people not attending school (table 1), noting that around 50% of students in Years 11 and 12 participate in the VET in Schools program.¹

Table 1 People aged 15–20 years, not at school^(a), attending VET, 2004^(b)

	Age 15	Age 16	Age 17	Age 18	Age 19	Age 20
Male	7 170	17 050	29 110	52 030	51 920	43 020
Female	5 220	11 250	20 080	40 930	39 280	30 860
Unknown	10	30	60	70	80	110
Total	12 400	28 330	49 250	93 030	91 280	73 980

Note: (a) Not at school includes not attending school and not known.

(b) Figures may not sum to total due to rounding.

Source: NCVET VET Provider Collection, 2004

Not surprisingly, the numbers are modest for 15-year-olds and 16-year-olds, but grow to very substantial numbers for those aged 18 to 20 years. The participation rates in table 2 underscore this, so that at ages 18 and 19 over a third of young men are participating, as are over a quarter of young women.

¹ Based on VET in Schools statistics derived from the Ministerial Council for Education, Employment, Training and Youth Affairs (MCEETYA) Transition from School Taskforce (2004). A forthcoming NCVET report, *Australian vocational education and training statistics: VET in Schools 2005—Summary*, based on a new data collection arrangement, suggests that the 2005 participation rate is somewhat lower than 50%.

Table 2 Participation rates of people aged 15–20 years, not at school^(a), attending VET, 2004 (%)^(b)

	Age 15	Age 16	Age 17	Age 18	Age 19	Age 20
Male	5.1	12.3	20.9	36.9	36.4	30.2
Female	3.9	8.5	15.2	30.5	29.0	22.9

Notes: (a) Not at school includes not attending school and not known.

(b) Data adjusted for sex unknown.

Sources: NCVET VET Provider Collection, 2004; ABS (2005)

This table provides participation rates at a point of time and understates the importance of VET for young people. Of more interest is the proportion of school leavers who go on to VET. At a minimum it must be at least the participation rate of 19-year-olds (36.4% for males, 29.0% for females). However, with some difficulty we can make an estimate of the actual proportion. The simplest approach would be to take either a single-year age cohort, follow the cohort through school and afterwards, and count up the percentage going on to VET immediately, after one year, two years and so on. Unfortunately, we do not have an identifier that allows us to do this, so we must be a little more devious in coming up with an estimate. Another approach, and the one we have taken, is to focus on all students at VET in 2004 and then count those who are at VET for the first time, irrespective of whether they left school the previous year or the year before that. We then express this number as a percentage of a typical age cohort to obtain an estimate of the proportion of a cohort attending VET after school.

The calculations are spelled out in table 3. Our data are imperfect in that we have had to impute the year left school for some students. We are also limited by our confidence in identifying those at VET for the first time. Thus we limit our estimates to those students leaving school either one or two years before.²

Table 3 Proportion of school leavers proceeding to VET, within two years of leaving school, 2004^{(a) (b)}

Left school 2003	100 390
Left school 2002, but not in VET 2003	40 070
Total	140 460
Cohort size ^(c)	274 659
Per cent of cohort	51

Notes: (a) School leavers aged 15 to 24 years.

(b) Figures may not sum to total due to rounding.

(c) 15 to 20-year-old cohorts at June 2004.

Sources: NCVET VET Provider Collection, 2004; cohort size: ABS (2005)

We can get an alternative estimate based on the Australian Bureau of Statistics (ABS) Survey of Education and Training Experience, which collects data on educational history as well as current participation and qualifications. Figure 1 plots estimates for people in 2001, classified by year left school.³ After four years, almost 50% of both males and females have attended VET.

² Another issue is that the VET collection does not cover fee-for-service activity of private registered training organisations.

³ Figure 1 is based on a derived variable covering people with a VET qualification, people without a non-school qualification but currently enrolled in VET, and people without a non-school qualification and not currently enrolled in VET but have an incomplete VET qualification within the last five years.

Figure 1 Percentage of school leavers going to VET^(a), 2001



Note: (a) 'VET' includes enrolments in advanced diploma and below qualifications and qualification level not known.

Source: Derived from ABS (2001).

Student characteristics

We now look at the school leavers of 2003 in more detail. To simplify matters we focus on the school leavers who proceed to VET the next year. Table 4 shows the highest level of schooling. For males, around 40% of the VET students had not completed Year 12 and over 25% had not got past Year 11. School retention rates are higher for females and this is reflected in those continuing to VET, with around 70% of the female school leavers reporting that they had completed Year 12.

Table 4 Characteristics of 2003 school leavers aged 15–24, in VET in 2004, by highest level of schooling^(a)

	Male		Female	
	No.	%	No.	%
Year 9 or lower	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
Total	46 720	100.0	38 750	100.0

Note: (a) Figures may not sum to total due to rounding.

Source: NCVET VET Provider Collection, 2004

As would be expected, these students are undertaking a range of courses over a variety of fields. Not surprisingly, both fields of study and level vary by educational attainment, as can be seen from tables 5 and 6. Table 7 breaks down the data by whether students are full-time or part-time.

Table 5 Fields of education in 2004 by highest school level completed for people aged 15–24 years, who left school in 2003 (%)

	Year 9 or lower	Year 10	Year 11	Year 12	Unknown	Total
01—Natural and physical sciences	0.0	0.1	0.2	1.1	0.3	0.8
02—Information technology	1.6	3.4	3.8	5.9	0.3	4.9
03—Engineering and related technologies	15.5	24.0	26.3	15.7	14.5	18.4
04—Architecture and building	7.2	13.8	11.5	6.4	1.3	8.3
05—Agriculture, environ. and rel. studies	3.3	4.8	3.9	3.0	2.3	3.5
06—Health	0.7	1.1	1.7	3.1	0.6	2.5
07—Education	0.6	0.2	0.3	0.4	0.3	0.4
08—Management and commerce	8.7	15.6	16.2	30.2	10.0	24.6
09—Society and culture	2.0	4.2	5.1	12.2	1.6	9.3
10—Creative arts	0.9	1.4	1.8	6.5	1.3	4.7
11—Food, hospitality and personal services	10.4	17.6	17.2	11.5	2.6	13.2
12—Mixed field programs	47.3	12.9	10.7	3.3	64.6	8.7
Subject only—no field of education	1.8	1.0	1.3	0.6	0.3	0.9
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: NCVET VET Provider Collection, 2004

Those with Year 12 are over-represented in management and commerce, society and culture, and engineering and related technology. Those with Year 10 or 11 are over-represented in engineering and related technology, management and commerce, and food, hospitality and personal services. Almost half of those leaving before Year 10 are doing mixed field programs—essentially general education.

Table 6 Major qualification level in 2004 by highest school level completed for people aged 15–24 years, who left school in 2003 (%)

	Year 9 or lower	Year 10	Year 11	Year 12	Unknown	Total
Diploma or higher	0.6	1.1	2.8	25.5	1.6	17.0
Certificate IV	0.9	2.9	4.6	16.8	2.3	11.9
Certificate III	19.1	45.6	46.2	33.2	11.9	36.0
Certificate II	42.8	29.9	24.7	13.3	17.7	19.3
Certificate I	20.6	8.6	7.4	2.7	2.3	5.3
Secondary education	1.7	3.3	4.9	0.6	0.6	1.6
Non-award courses	1.3	1.2	1.2	1.8	0.3	1.6
Other education	11.1	6.3	7.0	5.5	63.0	6.3
Subject only—no qualification	1.8	1.0	1.3	0.6	0.3	0.9
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: NCVET VET Provider Collection, 2004

The data in table 6 are worth noting because they show that early school leavers tend to be studying relatively low-level qualifications. The numbers at certificates I and II level suggest that VET post-school is offering a pathway. In educational terms it could be argued that certificates I and II are more important in providing an entry into qualifications of some substance (certificate

III and above) rather than an end-point qualification. At the other end of the scale, one-quarter of those with Year 12 are undertaking a diploma or advanced diploma.

Table 7 Mode of study in 2004 by highest school level completed for people aged 15–24, who left school in 2003 (%)

	Year 9 or lower	Year 10	Year 11	Year 12
Full-time	20.9	20.1	21.3	39.0
Part-time	79.1	79.9	78.7	61.0
Total	100.0	100.0	100.0	100.0

Source: NCVET VET Provider Collection, 2004

While part-time study is the norm, around 39% of Year 12 completers are studying VET full-time.

The clear impression from these tables is that for many school leavers having completed Year 12, VET is an alternative to university. For many others, however, it would seem that VET is an alternative to school. For these students part-time study is the norm, with most of the full-time VET students continuing after completing Year 12. Thus, if we are considering VET as an alternative to school, it is within a broader framework of education and training being mixed with other activities, rather than VET merely providing a different institutional setting to another year of education. From the above it is clear that there are large numbers of early school leavers who go on to VET. It is worth pointing out that these students are doing more than participating in VET; most of them are performing satisfactorily in their studies. Table 8 shows that subject pass rates are around 75% or higher, even for those students who left school after Year 10 (the Year 9 or lower leavers don't do so well).

Table 8 Subject completion rate^(a) for people aged 15–24 years who left school in 2003, by highest school level completed, 2004 (%)^(b)

	Males	Females	Total
Year 12	78.5	82.2	80.3
Year 11	80.9	76.5	79.4
Year 10	79.2	74.3	77.4
Year 9 or lower	66.5	65.3	66.0
Highest school level unknown	89.5	91.4	90.4
Total	78.4	80.1	79.2

Notes: (a) Subject completion rate = (assessed—passed + recognition of prior learning + not assessed—completed)/(total continuing students x 100).

(b) Excludes data for sex unknown category.

Source: NCVET VET Provider Collection, 2004

Apprentices and trainees

In the above tables we have focused on students in VET. For many young people, the defining characteristic of their further education is an apprenticeship or traineeship, rather than study in VET as such. There is a very large overlap between apprentices and trainees and VET students because most of the former do attend publicly funded VET institutions (and hence have been included in the statistics described in preceding tables). However, there are some who receive all their training on the job or whose off-the-job component is outside the public sector. We provide some details of young apprentices and trainees below, but it needs to be kept in mind that these are pretty much a subset of the data presented earlier.

In table 9 we present the number of apprentices and trainees commencing in 2004, classified by highest school level. We have also included an estimate of the proportion of an age cohort who undertakes an apprenticeship or traineeship.

Table 9 Commencements over 12 months ending December 2004 for apprentices and trainees, 15–20 years and not attending school, by highest school level completed and sex

	Male	Female	Total
Year 12	29 310	21 880	51 190
Year 11	10 910	4 880	15 790
Year 10	19 650	8 260	27 900
Year 9 or lower	3 820	1 380	5 200
Did not go to school	(a)	(a)	(a)
Unknown	390	100	490
Total	64 080	36 500	100 570
Discount for multiple commencements	15	11	
Estimate of first-time commencements	54 267	32 374	86 641
Typical cohort size ^(b)	140 788	133 870	274 659
% of cohort	38.5	24.2	31.5

Note: (a) Due to confidentiality, the exact number is not given; represents between one and nine people.

(b) 15 to 20-year-old cohorts at June 2004.

Source: NCVET Apprentice and Trainee Collection, based on September 2005 estimates; ABS (2005)

Around half of apprentices and trainees have completed Year 12, with substantial numbers having left after Year 10, as well as some after Year 9. It is worth noting, as can be seen from table 10, that almost half do not commence immediately after leaving school. Indeed for 9% there is an interval of three or more years.

The other point of interest is the importance of apprenticeships and traineeships for the cohort as a whole, with almost two-fifths of young males and almost a quarter of young women commencing an apprenticeship or a traineeship.⁴

Table 10 Commencements over 12 months ending December 2004 for apprentices and trainees, 15–20 years and not attending school by year left school and sex (%)^(a)

	Male	Female	Total
2003 and onwards	56.1	53.1	55.0
2002	21.9	23.8	22.6
2001	12.2	14.1	12.9
2000 or earlier	9.2	8.7	9.0
Total	100.0	100.0	100.0

Note: (a) Figures may not sum to 100% due to unknown data for year left school.

Source: NCVET Apprentice and Trainee Collection, based on September 2005 estimates.

The importance of apprenticeships and traineeships for young people is further emphasised by comparing the numbers to teenage employment as a whole. Brooks (2004, table 10) notes that

⁴ These calculations are 'back of the envelope', based on a steady state. The commencements refer to 2004, while the typical cohort is the average of the 15 to 20-year-old cohorts as at June 2004. The discount factor is necessary because we know that some individuals end one training contract and begin another. The value of the discount factor is based on Ball and John (2005), who estimate the completion rates for individuals as well as contracts: let the contract completion rate = r_c and the individual completion rate = r_i . Now $r_c = \text{completions/contract commencements}$ and $r_i = \text{completions/individual commencements}$. We know contract commencements from the National Apprentice and Trainee Collection, and we have estimates of r_c and r_i from Ball and John (for the 1999 commencing cohort $r_c = 50.9\%$ and $r_i = 60.1\%$ for males, and $r_c = 52.6\%$ and $r_i = 59.3\%$ for females), so we can derive the ratio of individual commencements to contract commencements.

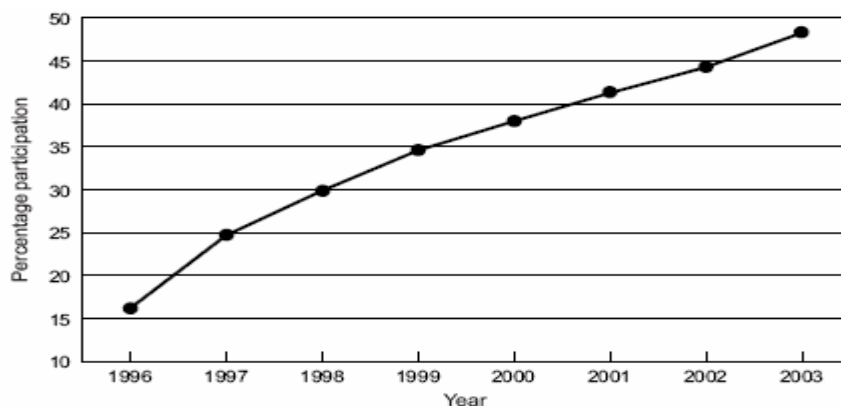
full-time apprentices and trainees account for 36.1% of full-time teenage employment, and trades apprentices and trainees account for 83.5% of teenage trades employment.

Vocational education and training in schools

To complete our picture it would be remiss not to include vocational education and training in schools. Vocational study has, of course, had a very long tradition in secondary schooling. Technical high schools were a notable feature of the school scene up to the 1970s, and vocational subjects, from woodwork to home economics and bookkeeping, have always been provided at the secondary level. What is distinctive about the current approach is the combination of Australian Qualifications Framework (AQF) courses and school certificate studies. That is, courses denoted as *VET in Schools* are accredited under the AQF framework (mostly at a certificate I or II level) but must also contribute to the respective state secondary school certificates. The idea is that these courses provide training recognised by industry and offer an alternative to the more academic offerings. Figure 2 shows the rise in the numbers of students studying under such arrangements, while table 11 provides some summary information on what the students are studying.

A couple of the features of the table are worth commenting on. Information technology and management and commerce (closer to traditional academic subjects?) are relatively common at school, while engineering and related technologies (expensive?) are relatively less frequent. Food, hospitality and personal services are popular both in and outside school. In terms of qualification levels, certificates I and II dominate at school and there are relatively few school students studying at certificate III level—the bread and butter of the VET system.

Figure 2 Proportion of Years 11 and 12 students undertaking vocational education and training in schools



Source: Anlezark, Karmel and Ong (2006)

Table 11 Field of study and level of VET, school and non-school, 2003

	Boys			Girls		
	16–17 yrs, school VET (n = 59 235) %	16–17 yrs, non-school VET (n = 72 544) %	18–19 yrs, post-school VET (n = 108 774) %	16–17 yrs, school VET (n = 58 739) %	16–17 yrs, non-school VET (n = 58 827) %	18–19 yrs, post-school VET (n = 87 568) %
<i>Field of education</i>						
Natural & phy. sciences	0.0	0.2	0.4	0.1	0.3	0.8
Information technology	24.4	6.9	7.4	10.8	2.7	2.0
Engineering & rel. tech.	18.6	30.6	31.6	2.2	2.8	3.3
Architecture & building	10.2	13.1	13.4	0.3	0.5	1.2
Agriculture, env. & rel. studies	4.3	6.7	5.3	3.0	3.3	2.0
Health	0.1	2.3	2.0	0.6	2.2	4.0
Education	0.2	0.7	0.2	0.1	1.8	0.6
Management & commerce	15.8	10.0	14.2	32.8	29.8	37.5
Society & culture	3.9	3.5	3.9	9.3	12.7	15.6
Creative arts	4.1	2.8	3.5	4.0	4.6	5.1
Food, hospitality & pers. services	12.0	9.8	10.2	31.0	24.1	18.1
Mixed field programs	6.3	12.3	6.9	5.7	13.5	8.5
Subject only	0.0	1.2	0.8	0.0	1.8	1.4
	100.0	100.0	100.0	100.0	100.0	100.0
<i>Qualification level</i>						
Diploma or higher	0.0	2.7	15.4	0.0	3.5	20.6
Certificate IV	0.3	3.0	9.5	0.3	3.4	11.5
Certificate III	8.1	30.6	42.4	9.3	26.6	31.5
Certificate II	61.2	32.5	15.0	73.3	44.0	18.8
Certificate I	23.6	14.3	4.1	11.6	5.8	2.5
Secondary education	0.0	1.2	1.1	0.0	1.9	1.6
Non-award courses	0.4	3.2	3.0	0.2	2.8	2.8
Other education	6.4	11.3	8.7	5.3	10.2	9.2
Subject only—no qualification	0.0	1.2	0.8	0.0	1.8	1.4
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Anlezark, Karmel and Ong (2006)

Outcomes

To date we have considered participation. We now turn to outcomes from VET study. We focus on three broad areas. The first is the completion of a course, the second is study at a higher level and the third is employment.

Completion

While the VET collection collects data on qualifications completed, there are some issues associated with the collection that need to be understood. The first issue is that we know that the completion figures are understated because some of the systems used by the providers do not automatically inform the student when they have undertaken sufficient units for an award. Second, we know from the Student Outcomes Survey that some students whom we have recorded as having not completed an award tell us at the survey that they have. Finally, the lack of a unique identifier means that it is difficult to track individual cohorts to measure the percentage of a student cohort achieving an award.

Putting these issues to one side, we make an attempt to understand completions. First, table 12 presents the data of the number of students and completions by qualification level.

Table 12 Number of students and completed awards, 15–24 years, 2003

	Students	Qualifications completed	Completions/students
	('000)	('000)	%
Diploma or higher	88.2	18.8	21.3
Certificate IV	58.4	14.8	25.3
Certificate III	206.1	45.0	21.8
Certificate II	130.2	37.4	28.7
Certificate I	34.6	8.3	24.0
Secondary education	6.2	0.2	3.0
<i>Sub-total</i>	<i>523.7</i>	<i>124.4</i>	<i>23.7</i>
Non-award courses	26.0		
Miscellaneous education	73.0		
Subject only (no qualification)	9.7		
Total	632.4		

Source: NCVET VET Provider Collection, 2003

This table shows a number of things. First, very substantial numbers of students are studying units that are not designed to lead to an award. If all the students were studying full-time, then it would appear that completion rates are very low. However, part-time study is the dominant mode in VET and so it becomes difficult to interpret the data. That said, the table suggests that completion rates are higher for the diploma-level courses than for the lower-level courses. We deduce this by observing that on average the diploma-level courses are of longer duration than the lower-level courses.⁵ Thus it would be reasonable to conclude that the certificate I completion rates are probably around 20%, while the completion rates for diplomas would be at least double that.

Stanwick (2005) has examined the extent to which students who commenced a certificate I or II qualification in 2002 had completed an award by the end of 2003 (see table 13). This provides an estimate of the proportion of students who completed a course, albeit only over a two-year period.⁶

⁵ The TAFE NSW Handbook 2003 says (p.11): 'As a general guide, courses range from about 18 weeks full-time for Certificate I courses to two years full-time for Diploma courses'.

⁶ These proportions do not account for people not enrolled in 2003 who re-enter the system at a later time.

Table 13 For students commencing in 2002, enrolment status end 2003 (%)

	Certificate I			Certificate II		
	15 to 19 yrs	20 to 24 yrs	Total	15 to 19 yrs	20 to 24 yrs	Total
Completed an award	26.9	19.0	25.7	35.6	27.1	34.3
Were doing a higher-level qualification in 2003, no award	13.4	8.0	12.7	5.9	5.2	5.8
Still enrolled in certificate I or II in 2003, no award	6.4	8.4	6.7	11.1	11.2	11.2
Enrolled in course below certificate I or II in 2003, no award	2.4	2.6	2.4	2.4	2.7	2.4
Not enrolled in 2003 and no award received	50.9	62.0	52.5	45.0	53.8	46.3
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Stanwick (2005)

The key feature of this table is that a minority of students who had commenced certificate I or II qualifications in 2002 had completed an award by the end of 2003. The table also indicates that about one-fifth of certificates I and II students were still in the system at the end of 2003, with some proportion of these having enrolled in higher-level courses.

We can also calculate the overall proportion of subjects completed for those who had completed an award and for those who exited the system without an award. That is, we can get a measure of the extent to which people complete subjects.

Table 14 shows that there is a marked difference in the rate of completing subjects by those completing an award by comparison with those who do not—about a 30% differential throughout the categories shown in the table. Hence, those who did not complete awards also do not complete as many subjects.

Table 14 Rates of completing subjects over 2002–03 (%)

	15 to 19		20 to 24		15 to 24	
	Cert. I	Cert. II	Cert. I	Cert. II	Cert. I	Cert. II
Completed an award during 2002–03	88.2	85.9	91.2	93.9	88.4	86.7
No award and not enrolled in 2003	59.4	57.7	58.0	64.4	59.3	58.5

Source: Stanwick (2005)

The conclusion that substantial numbers of students get very little out of the VET system is further underlined by the large numbers of students who leave without any recorded achievement (table 15). These students have not passed a single subject in their period of study.

Table 15 People aged 15–19 years with no positive outcomes^(a), by qualification enrolled in, 2004

Diploma or higher	3 710
Certificate IV	3 850
Certificate III	13 030
Certificate II	12 750
Certificate I	4 320
Secondary education	820
Non-award courses	660
Statement of attainment	2 600
Other education	1 020
Subject only—no qualification	530
Total	43 290
All student enrolments, 15–19 years	357 950

Note: (a) 'No positive outcomes' is defined as students with no subject outcomes of assessed—passed; recognition of prior learning; or not assessed—completed.

Source: NCVET VET Provider Collection, 2004

Longer-term rates of completing courses

Table 14 provided information on the status of students at the end of 2003, including those who were still in the system. Using Markov chain analysis⁷, Stanwick (2005) projected⁸ proportions of students who eventually complete a qualification⁹, or alternatively, do not complete a qualification.

Table 16 quite clearly shows that the majority of students are unlikely to complete a course, more so at certificate I level.

Table 16 Projected completion rates of certificates I and II in the longer term (%)

	15 to 19		20 to 24		15 to 24	
	Cert. I	Cert. II	Cert. I	Cert. II	Cert. I	Cert. II
Completed a course	34.6	44.2	23.5	33.5	32.9	42.6
Did not complete a course	65.4	55.8	76.5	66.5	67.1	57.4
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Stanwick (2005)

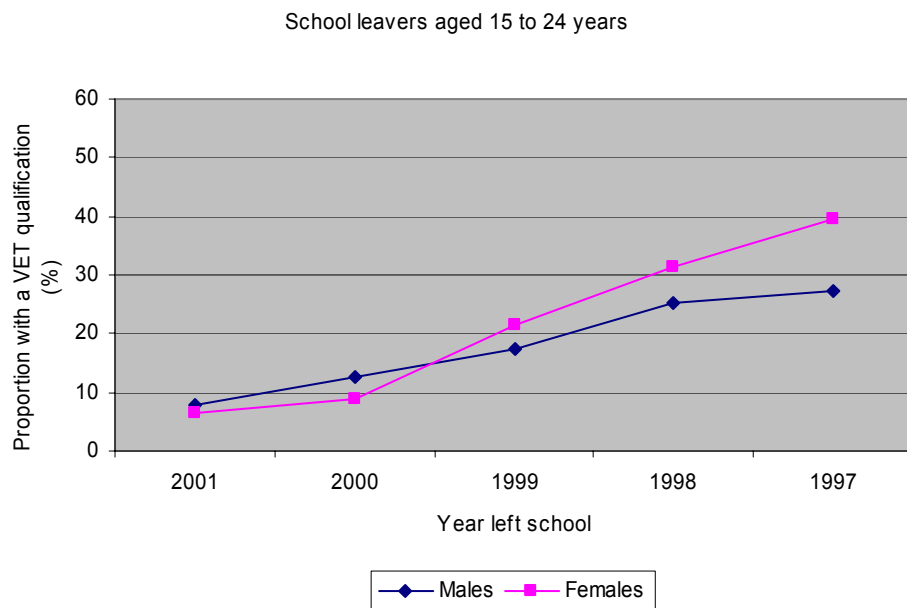
Stanwick's calculations are based on matching data between two VET collections. The ABS Survey of Education and Training Experience (used in figure 1 to present an alternative estimate of the proportion of a cohort going to VET) provides an alternative estimate. Figure 3 shows the proportion of a school-leaving cohort completing a VET qualification, while figure 4 shows the proportion completing a certificate III or higher VET qualification.

⁷ This analysis predicts probabilities of long-term outcomes (in this case, completers and non-completers) based on what has happened previously. We use status as of 2003 as a basis for the long-term predictions.

⁸ Note that this projection assumes that completers and non-completers have the same characteristics, which is not necessarily the case. However, it is still useful as a guide to proportions who eventually complete a course.

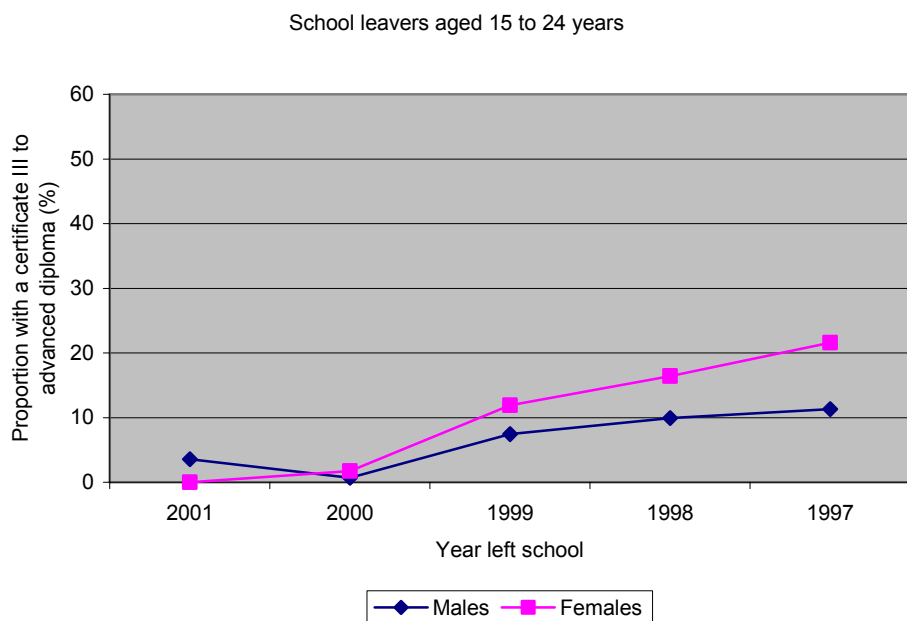
⁹ Some of these maybe at a higher level than the course in which originally enrolled in 2002.

Figure 3 Proportion of school leavers obtaining a VET^(a) qualification



Note: (a) 'VET' includes advanced diploma and below qualifications and qualification level not known.
 Source: Derived from ABS (2001).

Figure 4 Proportion of school leavers obtaining a certificate III or IV, diploma or advanced diploma



Source: Derived from ABS (2001).

We have better information for those involved in an apprenticeship or traineeship. Ball and John (2005) estimated completion rates by following individuals in the National Apprentice and Trainee Collection. They estimate completion rates according to three concepts: completion of a training contract; completion of an apprenticeship or traineeship but possibly with a different employer; and finally completion of any apprenticeship or traineeship, possibly in a different area or with a different employer. The three sets of calculations are presented below, categorised into

‘traditional’ and ‘other’. It can be seen that, particularly for the traditional category, the completion rates are pretty respectable, although there is clearly a fair amount of changing of occupation and employers taking place.

Table 17 Estimated rates of completion by ‘traditional apprenticeship’ category^(a), commencing cohort of 1999 (%)

	Original contract	Same occupation, possibly different employer	Any occupation, any employer
Traditional apprenticeships	51.6	60.4	68.9
Other	51.5	53.1	57.4
All contracts	51.6	54.6	59.8

Note: (a) Contracts identified as ‘traditional apprenticeships’ are defined as those contracts in the trades and related workers occupational group at AQF III qualification or above with more than two years expected duration for full-time contracts and more than eight years expected duration for part-time or school-based contracts.

Source: Ball and John (2005)

Outcomes after VET

Completion and pass rates measure academic success, but of more interest are the actual outcomes post-study and what students think of their training. We are fortunate in having detailed data on these from the annual Student Outcomes Survey. The survey follows up students who have either completed a qualification (graduates) or who are no longer studying but who have successfully completed at least one unit (module completers). We focus on employment, further study and satisfaction.

On the whole, the outcomes after training are pretty positive: employment rates have increased and large numbers of graduates continue with further study. Nevertheless, it must be remembered that young people are in a period of transition, so that increased levels of employment would be expected, even without training. However, it is noticeable that the outcomes for graduates are better than those of module completers, and this provides direct evidence that the training itself is assisting the transition process.

The course satisfaction and responses to the questions about the benefits of training also paint a very positive picture. Eighty-seven per cent of graduates were satisfied with the overall quality of training and around the same proportion fully or partly achieved their main reasons for doing the training. It also is the case that the training is directly assisting with their jobs, with 69% reporting that the training is relevant to their job, and nearly 80% reporting that they had received at least one job-related benefit. The respective figures for module completers are all lower (see table 18.)

To pursue these outcomes further, we refer to work at the National Centre for Vocational Education Research (NCVER) (Cully et al. 2006) on looking at the match between post-training occupation and intended occupation (in the sense that the training is intended preparation for an occupation). While this analysis only looked at New South Wales, it is reasonable to assume that it is applicable more generally. Table 19 shows that only around one-quarter of graduates at the time of the survey were working in the occupation for which they had been trained. Some graduates were unemployed at the time of the survey, while others were in occupations at both higher and lower skill levels than the ‘intended’ occupation. The match is highest for those training as a tradesperson and lowest for those in courses assigned as advanced clerical and service. Of some concern is that almost one-third of those in training in associate professional courses were employed at a lower skill level.

Table 18 Outcomes and course satisfaction, Student Outcomes Survey 2005^(a) (%)

	Graduates	Module completers
	15–24 years	15–24 years
Employment and further study outcomes		
Employed after training (as at 27 May 2005)	78	67
Employed before training	67	62
Not employed before commencing their training and employed after	18	14
Employed in first full-time job after training	22	13
Employed or in further study after training	89	NA
Enrolled in further study after training:	40	NA
Studying at university	10	NA
Studying at TAFE Institute	21	NA
Studying at private provider or other registered provider	8	NA
Satisfaction outcomes		
Satisfied with the overall quality of training ^(b)	87	80
Fully or partly achieved their main reason for doing the training	86	75
Benefits of training		
<i>Of those employed at May 2005:</i>		
Reported that the training was highly or somewhat relevant to their current job	69	46
Received at least one job-related benefit	79	61

Notes: (a) Data include TAFE, other government and private providers (and vocational part of community education providers in New South Wales and Victoria).

(b) 'Satisfied with the overall quality of training' is defined as rated a 4 or 5 on a 5-point scale.

Source: NCVET Student Outcomes Survey, 2005

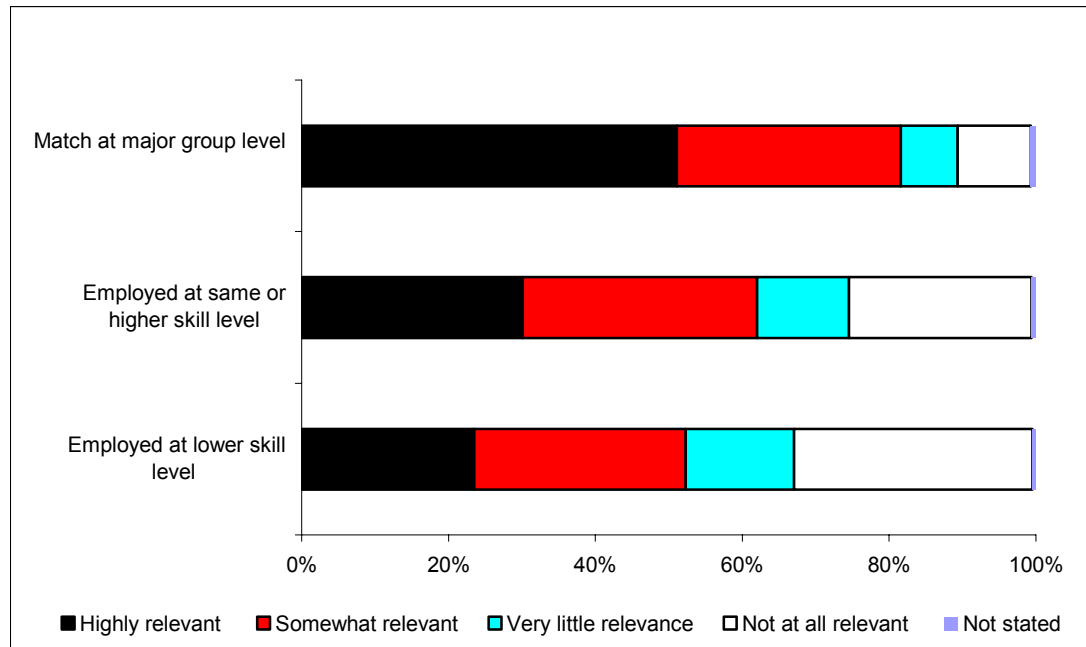
Table 19 Employment status, skill level and occupational match, by intended occupation, New South Wales, 2005 (%)

	Unemployed	Employed in intended occupation	Employed at same or higher skill level	Employed at lower skill level	Employed at unknown skill level
Managers and administrators	5.1	22.1	48.3	23.1	1.4
Professionals	9.8	29.4	39.7	19.7	1.4
Associate professionals	12.2	19.9	34.7	31.6	1.6
Tradespersons and related workers	7.8	52.5	26.6	11.5	1.5
Advanced clerical and service workers	11.6	13.4	31.2	43.0	0.8
Intermediate clerical, sales and service workers	18.0	32.5	34.8	13.3	1.4
Intermediate production and transport workers	3.5	34.9	46.6	13.3	1.8
Elementary clerical, sales and service workers	12.9	27.0	52.7	5.5	1.9
Labourers and related workers	10.3	22.5	63.2	2.2	1.8
Total	13.8	25.9	43.5	14.9	1.8

Source: Cully et al. (2006)

This tends to indicate that VET needs to be thought of as more than narrowly focused training for a particular job. However, it does appear that graduates report that their training was particularly relevant when they achieved a job related to their training.

Figure 5 Relevance of skills acquired in training to current job, New South Wales, 2005



Source: Cully et al. (2006)

The study also made an assessment of the quality of outcomes. A good outcome was defined as one where an individual is:

- ✧ employed post-training in their intended occupation
- ✧ employed post-training at the same or a higher skill level than their intended occupation or
- ✧ enrolled in study towards a qualification at a higher level than the original study.

A poor outcome was defined as one where an individual is:

- ✧ employed post-training at a lower skill level than their intended occupation or is unemployed and
- ✧ not undertaking further study, or undertaking further study but not at a higher level than the original study.

Table 20 indicates that around three-quarters of young men achieved good outcomes. The outcomes for young women were appreciably poorer.

Table 20 Summary of good and poor outcomes for graduates, by selected characteristics, New South Wales, 2005 (%)

	Good	Poor	Unknown
Males			
15–24	75.9	23.5	0.7
25–44	72.4	25.9	1.7
45 and over	71.0	27.0	2.1
Females			
15–24	62.3	36.9	0.9
25–44	65.9	32.8	1.4
45 and over	70.1	27.6	2.3

Note: Base is all graduates in New South Wales who are either employed or unemployed as at May 2005, excluding the adult and community education (ACE) sector.

Source: Cully et al. (2006)

The Student Outcomes Survey collects information in May of each year, a relatively short time after participation in VET has finished. In order to better understand the process of transition, NCVER undertook a follow-up survey, in which the sample (more precisely, 15 to 24-year-olds) in the Student Outcomes Survey in 2002 was followed up again in 2004.

Table 21 and figure 6 focus on occupation/skill levels. From table 21, it is clear that six months after the end of training is early on in the transition process. Two years later, considerably more people have moved to a higher skill level. Similarly, figure 6 shows changes in occupational employment patterns, with substantially more people working as managers, professionals, associate professionals, trades and advanced service occupations, and fewer in elementary service occupations or as labourers.

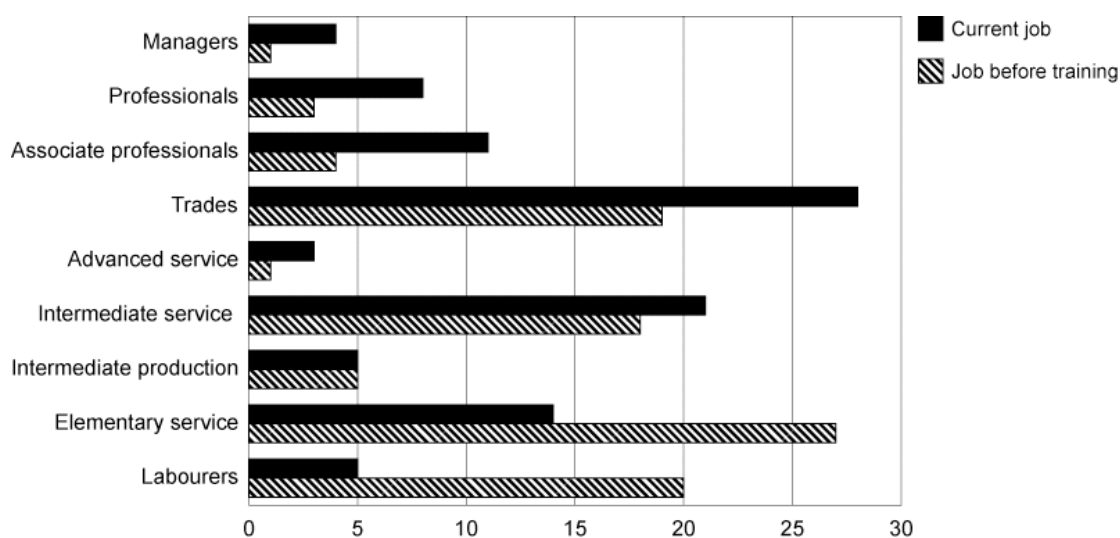
Table 21 Change in skill of students, aged 15 to 24, who undertook TAFE training in 2001, from before training to May 2002 and from before training to September 2004, by age

Age	Change in skill	Graduates		Module completers	
		Before training— 2002 (%)	Before training— 2004 (%)	Before training— 2002 (%)	Before training— 2004 (%)
15 to 19 years	Movement to a higher skill level	32	52	28	48
	Movement to a lower skill level	8	11	12	8 ^(a)
	No change in skill level	60	37	60	44
Total		100	100	100	100
20 to 24 years	Movement to a higher skill level	34	46	19	39
	Movement to a lower skill level	8	15	11	11
	No change in skill level	58	39	71	50
Total		100	100	100	100

Note: (a) indicates the estimate has a relative standard error greater than 25% and therefore should be used with caution.

Sources: NCVER Down the Track Survey 2004; NCVER Student Outcomes Survey 2002

Figure 6 Graduates, aged 15 to 24 years, who undertook TAFE training in 2001, occupation at September 2004 and 6 months prior to training (%)



Sources: NCVET Down the Track Survey 2004; NCVET Student Outcomes Survey 2002

Table 22 looks at patterns of further study. Around 20% of graduates have completed an additional qualification within two years of completing their earlier qualification. Particularly noteworthy is the number upgrading from a certificate II and a certificate I (at least for females). However, it needs to be kept in mind that we are talking about relatively small numbers (because of the low completion rates in the first place).

Table 22 Proportion of graduates^(a) aged 15 to 24, who undertook TAFE training in 2001, who completed an additional qualification at a higher level than that completed in 2001, by qualification completed in 2001 (%)

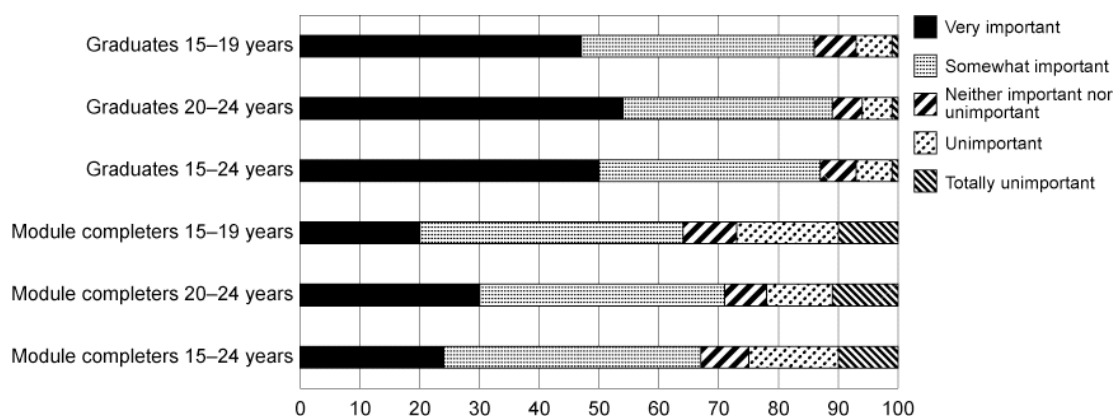
		Qualification completed in 2001					
		Total	Diploma or associate diploma	Certificate IV	Certificate III	Certificate II	Certificate I
Age	15–19	22	3	11	11	43	13
	20–24	21	13	21	21	28	33
Sex	Male	21	15	18	17	42	13
	Female	22	8	17	19	35	33
Total		21	11	18	18	37	18

Note: (a) Given that module completers by definition did not complete a qualification, data by qualification completed are not provided.

Sources: NCVET Down the Track Survey 2004; NCVET Student Outcomes Survey 2002

Finally, to finish on an optimistic note, students generally have a positive view of their training two years after completing it (figure 7). Graduates, in particular, almost universally rated their training as very important or somewhat important. Not surprisingly, module completers were somewhat less positive.

Figure 7 Students aged 15 to 24, who undertook TAFE training in 2001, importance of training in 2004



Sources: NCVET Down the Track Survey 2004; NCVET Student Outcomes Survey 2002

Conclusion

This paper has looked at VET and young people. Participation in VET is very high and we estimate that over one-half of the cohort of school leavers will attend VET in the early years after leaving school. Apprenticeships and traineeships are a very important component. Pathways are not neat and tidy: VET is particularly attractive to early school leavers, and many young people will come back to training after a year or two off. For some students VET is an alternative to completing school, for others an alternative to university.

While participation is high, outcomes are mixed. Completion rates are variable, and 12% of students have no recorded achievement at all. Relatively few young people graduate at certificate III or higher, and only a small proportion of people undertaking certificates I and II complete the qualification and move on to further training.

The employment picture certainly improves for young people after they finish their training (although part of this reflects the transition process for young people, independent of any training). However, not everyone obtains a job directly related to their training and this underscores the importance of the general aspects of training. Finally, most students have a positive view of their training, particularly graduates. This points both to the value of training (because graduates have more relative to those who do not complete) and to the need for policy-makers to concentrate on completion as well as participation.

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