



Down the Track: A follow-up of young people's outcomes 2½ years after TAFE training

REBECCA SHERMAN
SENIOR RESEARCH OFFICER

NATIONAL CENTRE FOR VOCATIONAL EDUCATION RESEARCH

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What benefits do young people get from training in the longer-term? Whilst there is information readily available on short term outcomes from vocational education and training, such as the Student Outcomes survey administered annually by the National Centre for Vocational Education Research, it has been suggested that outcomes six months after training is too short a time period to fully measure the effectiveness of the training.

Using survey results of student outcomes in 2002 and a follow up survey of these people in 2004, it is possible to show longer-term improvements for 15-24 year olds who completed TAFE training in 2001.

The aim of this presentation is to use data from these surveys to examine the longer-term outcomes from TAFE training including shifts in employment from prior to training to six months after training and a few years after training. Substantial improvements are seen over-time in terms of employment status, wages and skill level. It can also be seen that some graduates are using their training as a pathway into further study. Many graduates, especially those completing lower level qualifications, completed additional qualifications at a higher level compared to the training they undertook in 2001.

It is concluded that many gains can be achieved from undertaking training in the vocational education and training sector and these gains improve over time. TAFE training has many positive impacts for its participants in terms of employment outcomes, as a gateway to lifelong learning and for other personal benefits.

Introduction

Do outcomes from vocational education and training (VET) improve over time? This report examines outcomes for young people who have undertaken training with a technical and further education (TAFE) institute to determine if they improve down the track. We look at transitions from TAFE to the workforce and further study. Outcomes examined include changes in employment, wages and skill level and pathways to further study.

We know from information on transitions from school that a large proportion of school students go onto further education (see Dusseldorp Skills Forum 'How young people are faring' series). We are also interested in information on transitions from further education, and in particular VET, to the workforce. Information is readily available on short-term outcomes from VET such as the National Centre for Vocational Education Research's (NCVER's) annual Student Outcomes Survey. The Student Outcomes Survey collects information from students who undertook VET training approximately 6 months after the completion of the training. The survey collects key outcome measures such as employment status, relevance and benefits of the training, satisfaction with the training, further study undertaken and for those who didn't complete a full qualification, reasons for not continuing with the study.

NCVER's Student Outcomes Survey shows employment levels are high immediately after the training with 75% of graduates employed (NCVER 2004). Given a large proportion of TAFE students undertake training part-time while working, the high post-training employment levels may reflect the high pre-training employment levels. Indeed 69% of graduates were employed prior to training. Dumbrell (2000) suggests many VET providers place a higher importance on longer-term outcomes. It has been suggested that outcomes 6 months after training is too short a time period to fully measure the effectiveness of the training, as it can often take a longer time period for students to get what they want from the training. For example, Marginson (1999) states usual graduate destination surveys are collected 'too early in the year after graduation to provide a clear picture of graduate outcomes'.

To gain information on outcomes over time for TAFE students NCVER conducted a survey known as 'Down the Track' in August/September 2004. The survey was a follow up of students who participated in the 2002 Student Outcomes Survey and collected information approximately 2 1/2 years after training for 15-24 year olds who completed training in 2001. This paper draws on the Down the Track data to provide a descriptive analysis of outcomes of 15-24 year old graduates from the TAFE sector over time.

Method

The Down the Track Survey collected information in September 2004 which is approximately 2 1/2 years after the training. The 2002 Student Outcomes Survey collected information relating to employment six months prior to the training (no

specific date) and approximately six months after training in May 2002¹. The two surveys combined provide information on a cohort of students therefore allow for an examination of employment at three time points: 6 months prior to training, approximately 6 months after training in May 2002 and approximately 2 1/2 years after training in September 2004.

This paper focuses on graduates aged 15-24 who completed training in 2001. Data is used to examine changes in labour force status, wages and skill levels (based on changes in occupation) from before training to 2002, from before training to 2004 and from 2002 to 2004.

Data from both surveys is also used to compare what students were doing in May 2002 compared to what they are doing in September 2004. The Down the Track survey is used to examine further study students have undertaken since completing their training in 2001 and qualifications completed.

Findings

Change in labour force status

Given approximately three-quarters of 15-24 year old TAFE graduates stated their main reason for training was employment related, an examination of employment outcomes is a key indicator of how well TAFE serves its clients

Overall there has been an approximate 20 percentage point increase in employment from before training to September 2004 for 15-24 year old graduates. Table 1 shows this by outlining the labour force status for graduates at the 3 time points of concern: 6 months prior to training, approximately 6 months after training in May 2002 and approximately 2 1/2 years after training in September 2004. It is evident that the largest employment gains have been made for 15-19 year olds. This is most likely due to this group being new entrants into the labour force as many were school leavers with lower levels of employment prior to training. A corollary to this is that the older age group were more likely to be employed prior to training.

Of particular interest over these three time periods is that on the whole the proportion of those employed full-time has increased with the proportion of those employed part-time decreasing. This is particularly evident for 15-19 year olds where 57% of the graduates who were employed prior to training were working full-time with this increasing to 74% of those employed in 2004. The overall employment levels of male graduates are slightly higher than for female graduates in September 2004. Of particular note is the difference between males and females in full-time and part-time employment. Males are substantially more likely than females to be employed full-time at all time points with females more likely than males to be employed part-time. This is a pattern that has been evident for many years and is discussed by Dumbrell et al. (2000). A major reason for females part-time employment status could be attributed to lifecycle factors, such as females playing a larger role in child-rearing.

¹ The terminology “approximately 6 months and 2 1/2 years after training” is being used as the exact timing for students graduating is uncertain. Graduates in the sample completed their training during 2001 and the proxy of November is used for ease of reporting.

Table 1: The labour force status prior to training and after training in 2002 and 2004, by age

Age	Labour force status	6 months before training (%)	After training (May 2002) (%)	After training (Sept. 2004) (%)
15-24	Employed	66	76	86
	<i>Full-time</i>	28	50	63
	<i>Part-time</i>	37	25	23
	Unemployed	16	13	6
	Not in the labour force	17	10	7
	Total	100	100	100
15-19	Employed	57	71	88
	<i>Full-time</i>	14	41	63
	<i>Part-time</i>	42	29	26
	Unemployed	19	16	7
	Not in the labour force	24	12	5
	Total	100	100	100
20-24	Employed	72	79	85
	<i>Full-time</i>	36	56	64
	<i>Part-time</i>	34	22	20
	Unemployed	15	11	6
	Not in the labour force	13	9	9
	Total	100	100	100

Source: Down the Track survey, 2004, NCVET, Student Outcomes Survey, 2002, NCVET

To look at what students are doing in 2004 compared to immediately after training we looked at labour force status in 2004 by the labour force status in 2002. While it is not clear if changes in labour force status are a direct result of the training, we see that around two-thirds of those unemployed in May 2002 and over half of those not in the labour force (not working and not actively looking for work) in May 2002 are employed in September 2004. Around 9 in 10 who were employed in May 2002 are also employed in September 2004. This was similar for 15-19 year olds and 20-24 year olds.

Table 2 looks at the changes in labour force status between 2002 and 2004 for graduates by employed full-time and part-time. Of the 15-24 year olds employed full-time at May 2002, 83% are also employed full-time in September 2004. Around one in ten moved to part-time employment. Of those who were employed part-time in May 2002, 44% moved to full-time employment with 45% remaining in part-time employment.

Differences between male and female graduates are also evident when looking at full-time and part-time employment. Table 2 shows of those employed full-time in 2002, 90% of males are employed full-time in 2004, compared to 72% of females. Five percent of males employed full-time in 2004 moved into part-time employment, compared to 1 in 5 females.

Of those employed part-time in 2002 males are more likely than females to have moved into full-time employment, whereas females are more likely to have remained in part-time work. This is consistent with the previous findings that females are more likely than males to be employed part-time, and lends support to the notion of females playing a larger role in child rearing than males.

Table 2: Change in employment status between 2002 and 2004, by sex

Labour force status - May 2002		Labour force status - September 2004				Total
		Employed full time	Employed part time	Unemployed	Not in the labour force	
Male	Employed full time (%)	90	5	1*	3	100
	Employed part time (%)	50	37	8	5*	100
	Unemployed (looking for full-time) (%)	44	15	37	4*	100
	Unemployed (looking for part-time) (%)	15*	64	13*	8*	100
	Not in labour force (%)	45	22	16	14	100
Female	Employed full time (%)	72	19	3*	7	100
	Employed part time (%)	41	49	3	6	100
	Unemployed (looking for full-time) (%)	30	33	22	14	100
	Unemployed (looking for part-time) (%)	33	42	5*	20	100
	Not in labour force (%)	15	27	14	44	100
Total	Employed full time	83	10	2	4	100
	Employed part time	44	45	5	6	100
	Unemployed (looking for full-time)	35	27	27	11	100
	Unemployed (looking for part-time)	27	49	8*	16	100
	Not in labour force	32	24	15	27	100

Source: Down the Track survey, 2004, NCVET, Student Outcomes Survey, 2002, NCVET

Of the graduates unemployed and looking for full-time work in 2002, males are more likely than females to be working full-time in 2004 (44% compared to 30%). A third of these females are working part-time in 2004 compared to 15% of males. Of those unemployed and looking for part-time work in 2002, again males are more likely than females to be employed part-time in 2004 (64% compared to 42%). Differences are evident between the sexes for graduates not in the labour force in 2002. By September 2004, 44% of the females who were not in the labour force in 2002 remained out of the labour force, compared to 14% of males. Two-thirds of the males not in the labour force in 2002 had moved into employment (45% full-time, 22% part-time), compared to less than half of females (15% full-time and 27% part-time).

In summary we have seen positive changes in the labour force status from before training to 2002 and from 2002 to 2004. There was a high proportion of those who were not employed in 2002 employed in 2004, along with movements from part-time employment to full-time employment. Due to their lower starting positions, the labour market entrant group of 15-19 year olds are the most likely to see large changes in employment status from before training to 2004.

Change in wages

We have seen that there have been substantial improvements in employment outcomes over time. We can also see whether there has been an improvement in wages over this period.

For full-time workers, wages of TAFE graduates increased substantially from 2002 to 2004 (Table 3). The 20-24 year olds have higher wages than 15-19 year olds in 2004, more likely due to their being in the labour market longer. Due to lower starting salaries, wages increased to a larger extent for 15-19 year olds than 20-24 year olds. Table 3 shows the wages for graduates employed full-time in 2004, compared to 2002 and highlights the percent growth between these years.

Table 3: Average annual income of graduates employed full-time at 2002 and 2004, and percent growth

	2002 (\$)	2004 (\$)	Percent growth (%)
15-24 years	27577	36479	32.3
Male	28606	39496	38.1
Female	25633	31820	24.1
15-19 years	21495	31082	44.6
Male	22375	32314	44.4
Female	20189	29761	47.4
20-24 years	30410	40500	33.2
Male	31155	43600	39.9
Female	28824	34091	18.3

Source: Down the Track survey, 2004, NCVET, Student Outcomes Survey, 2002, NCVET

Males have higher wages than females in 2004 and for 20-24 year olds the increase in wages from 2002 to 2004 is higher for males than females. Although it is not suggested that completing of training directly led to the increase in wages, this pattern is consistent with Ryan's (2002) findings that VET qualifications provide better wage outcomes for males than females. The difference in wages between males and females may also be able to be explained by the areas of study chosen by each gender. Females were more likely to undertake training in areas such as services, hospitality and transportation; business administration and health and community services. These areas may lead to jobs in industries such as accommodation, cafes and restaurants (average weekly earnings \$694.70) (ABS, 2004), retail trade (average weekly earnings \$698.90) and health and community services (average weekly earnings \$879.50). Males were more likely to chose training areas like in architecture and building and engineering and surveying which may lead to jobs in industries such as mining (average weekly earnings \$1527.50) and construction (average weekly earnings (\$1084.30).

We have seen the proportion of graduates employed increases over time and now that of those employed full-time wages increase from 2002 to 2004.

Change in occupation and skill level

Whilst an increase in employment and an increase in wages is a positive outcome, a large proportion of students are already employed prior to training. For these students training is not about getting into the labour market, but about improving their position

in the labour market, such as changing occupations. To complete the picture on employment outcomes we looked at changes in occupation and skill level².

Movements to higher skill levels can be seen immediately after training, and then to a lesser extent approximately 2 1/2 years after their training (Table 4). Whilst many factors affect these outcomes such as further study, by September 2004 nearly half the graduates had moved to a higher skill level, compared to prior to training.

Table 4: Change in skill from before training to May 2002 and from before training to September 2004, by age

Age	Change in skill	Before training – 2002 (%)	Before training – 2004 (%)
15-24 years	Movement to a higher skill level	34	48
	Movement to a lower skill level	8	13
	No change in skill level	59	38
	Total	100	100
15-19 years	Movement to a higher skill level	32	52
	Movement to a lower skill level	8	11
	No change in skill level	60	37
	Total	100	100
20-24 years	Movement to a higher skill level	34	46
	Movement to a lower skill level	8	15
	No change in skill level	58	39
	Total	100	100

Source: Down the Track survey, 2004, NCVER, Student Outcomes Survey, 2002, NCVER

The upward mobility for TAFE graduates is confirmed by Figure 1, which summarises the occupational distribution at September 2004 and 6 months prior to training for employed graduates. It is evident there are large movements from lower skilled to higher skilled occupations.

The pattern of ‘upskilling’ is more distinct for 15-19 year olds, who were more likely to have lower skilled jobs prior to training, possibly due to part-time employment while completing school. Of 15-19 year old students employed prior to training, 59% were working in labouring or elementary service jobs. This decreased to 26% after training. For 20-24 year olds 41% were working in labouring or elementary service jobs prior to training with this decreasing to 14% after training.

To complete the picture on employment outcomes we have seen increases in occupation levels held by graduates in 2004 compared to prior to training. This indicates that as well as training enabling students to move into the labour market, training can provide employment benefits for those already in the labour market, namely in upskilling.

² Skill level has been defined based on five categories of skill as outlined in the Australian Standard Classification of Occupations. Each ‘major’ occupational grouping is assigned a skill level based on the ‘formal education and/or training and previous experience usually required to gain entry into the occupation’ (Australian Bureau of Statistics, 1997). Change in skill has been classified by either a movement to a higher, lower or no change in skill level.

Figure 1: Occupation at September 2004 and 6 months prior to training (%)



Further study outcomes

We have seen outcomes for graduates going into the labour force, but to what extent are graduates going onto further study and training down the track? By September 2004, 76% of all graduates have undertaken some form of further study or training that may or may not have led to a completed qualification. This consisted of training at university, TAFE, provided by an employer or training outside of work as shown in Table 5 below. The further study led to a completed qualification for 43% of all graduates.

There has been upward movement in the level of qualifications completed as shown by Figure 2. Figure 2 summarises the highest qualification completed for graduates at May 2002 and again at September 2004. By 2004 a larger proportion of graduates report their highest qualifications as Diplomas and Certificate IVs compared to 2002, with a lower proportion reporting Certificate Is or IIs.

Table 5: Type of further study/training undertaken by 2004

	15-24 years (%)	15-19 years (%)	20-24 years (%)
Further education undertaken	76	76	75
<i>Studied at University</i>	17	15	18
<i>Studied at a TAFE Institute or similar</i>	39	41	38
<i>Done one or more training courses provided by your employer</i>	28	28	28
<i>Done one or more training courses outside of work</i>	13	17	11
No further study/training	24	24	25

Source: Down the Track survey, 2004, NCVER

Figure 2: Highest qualification completed at May 2002 and September 2004

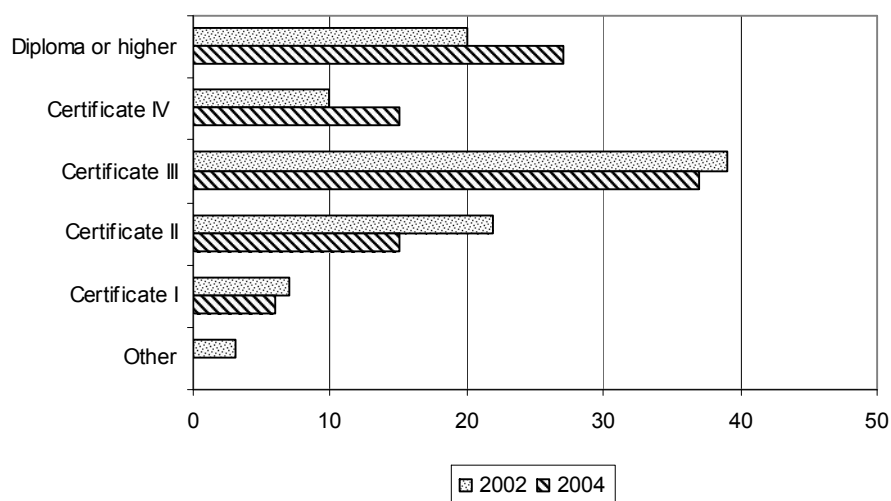


Table 6 shows the proportion who completed qualifications at a higher level than that completed in 2001. Of all graduates, 21% completed a qualification at a higher level than the training completed in 2001. When looking within qualification completed in 2001 we see those who completed lower level qualifications were more likely to complete a qualification at a higher level. Eighteen percent of those who completed a Certificate I in 2001 and 37% of those who completed a Certificate II had completed a qualification at a higher level by September 2004.

Table 6: Proportion who completed an additional qualification at a higher level than that completed in 2001

Base = all graduates

			Qualification completed in 2001					
			Total (%)	Diploma or associate diploma (%)	Certificate IV (%)	Certificate III (%)	Certificate II (%)	Certificate I (%)
Age	15-19	Proportion who completed a qualification at a higher level	22	3	11	11	43	13
	20-24		21	13	21	21	28	33
Total			21	11	18	18	37	18

Source: Down the Track survey, 2004, NCVET, Student Outcomes Survey, 2002, NCVET

Summary and conclusions

This paper has looked at outcomes from training over time in relation to labour force status, wages, skill level and further study. We conclude from our analysis that outcomes do improve over time and students do go onto further training down the track. We acknowledge that improvements in outcomes may be due to a multitude of factors, with the initial TAFE training being just one reason.

Borland (2005) in discussing labour market programs suggests positive effects of training should be more evident over time. This can be seen for TAFE training, where we found steady increases in employment from before training to 6 months after training and again to 2 1/2 years after training. This effect is strongest for full-time

employment. We also see large shifts have been made both within the labour market and from not being employed to employed.

Whilst increases in the proportion of students employed is important, many students are already employed prior to training. For these students the training is not necessarily about getting a job and other measures of success are needed. Such measures are changes in wages and occupation and getting into further study. Students receive substantial increases in wages from 2002 to 2004 and there are considerable upward movements from before training to 2004 with more graduates employed in higher skilled occupations in 2004.

Caution needs to be taken in explaining the changes in outcomes as being directly caused by the training completed in 2001. Without data on a control group (for example those who did not undertake post-school training) there is no way of knowing if the changes in employment status, wages and occupation are any larger than what would have occurred had the student not undertaking any training.

In looking at if students go onto further study down the track we find the majority went on to some kind of further training and just under half went on to complete an additional qualification. A large proportion of graduates who completed a qualification did so at a higher level, especially those with lower level qualifications to begin with.

Due in part to lifecycle factors, many of which are not explored in this paper, differences are evident between 15-19 and 20-24 year olds. The largest improvements in employment outcomes from before training to 2004 are seen for 15-19 year olds, mainly due to this group being labour-market entrants. By 2004, employment levels for 15-19 year olds are very similar to those for 20-24 year olds as were the types of occupations held. Employment benefits for both sexes are also evident.

In conclusion, 15-24 year olds are a group of young people in transition to the workforce. This paper has shown that outcomes relating to employment and further study improve for TAFE graduates down the track.

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