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Australian Qualifications Framework lower-level qualifications: Outcomes for people over 25

John Stanwick
National Centre for Vocational Education Research

research

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Outcomes for people over 25

John Stanwick
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Key messages

This report investigates the outcomes of lower-level vocational qualifications (certificates I and II) for people aged 25–44 (prime-aged) and for those over 45 (mature-aged). Certificate I and II qualifications comprised about 30% of all nationally accredited course enrolments, and a little under a quarter of training hours, for people aged 25 years and over in 2002.

The findings indicate that there were no substantial vocational and further study outcomes for prime- and mature-aged people who had undertaken certificate I and II qualifications.

- Employment-related reasons were the main motivation for undertaking these courses. Very low proportions indicated further study as a motivation.
- Rates of completing courses at certificate I and II levels were low. It was projected that about a quarter of those who enrolled in certificate I courses will eventually complete a course, with between a quarter and 30% of those enrolled in certificate II courses completing. People who had undertaken preparatory courses were estimated to have even lower rates of completion. Interestingly, this is despite over a third of the prime-aged, and over one-third of the mature-aged already having a certificate III level or above as their highest prior level of education.
- There was no discernable difference between graduates and subjects-only completers of certificates I and II in terms of gaining employment.
- There were modest career advancement benefits from certificate I and II courses, with full-course completers or graduates more likely to realise these than subjects-only completers. However, the benefits for graduates were less than for the completion of a certificate III. There were also high proportions reporting no job-related benefit from the course. In particular, the large majority of subjects-only completers reported no job-related benefit from the course.
- Study pathways were not a major outcome of certificate I and II courses. Around 30% of graduates and less than 10% of subjects-only completers were estimated to have gone on to further study at a higher level. However, subjects-only completers were estimated to be the large majority of all students, meaning that, overall, only small proportions enrolled in further study at a higher level. Similarly, only small proportions of people who had undertaken preparatory courses enrolled in further study at a higher level.

Executive summary

This report investigates where lower-level qualifications (certificates I and II) lead people in the prime-aged group (25–44) and the mature-aged group (45 years and over). These qualifications provide basic skills that can lead to employment-related outcomes, or they can be used as pathways to further study; they can also provide preparatory skills (for example, job searching skills) which may lead to employment or further study at a later time.

Data were analysed from two of the national data collections held by the National Centre for Vocational Education Research (NCVER). The 2003 Student Outcomes Survey was used to investigate employment-related and further study outcomes as well as motivations for undertaking lower-level qualifications recognised by the Australian Qualifications Framework (AQF). NCVER's National Provider Collection (for 2002 and 2003) was used to gain a picture of where certificate I and II qualifications sit in terms of overall enrolments, and also to project rates of completion for these courses; that is, what proportion of students graduate.

Throughout the report, outcomes are analysed for both graduates (full-course completers) and non-graduates (subjects-only completers), for both certificate I and II level programs. Outcomes were also analysed for students who had enrolled in preparatory courses at certificate levels I and II. Where relevant, outcomes from certificate III courses are used to provide comparative 'benchmark' data, as this qualification level is considered to be the core of the VET system.

Findings

As context to an examination of the outcomes from certificate I and II courses, we investigated the motivations of prime- and mature-aged students undertaking the courses. Very low proportions (6% or less) stated further study as a motivation; the majority of people stated employment-related reasons, although significant proportions stated personal interest. Within this overall picture we found that full-course completers or graduates were more likely than subjects-only completers to report employment-related reasons for undertaking the course. Furthermore, we found that substantial proportions of graduates and subjects-only completers from these courses (generally over a third of 25 to 44-year-olds and over 40% of the 45-year-olds) already had a certificate III or above as their highest prior level of education.

When we looked at rates of completing courses for both age groups, we found that about a quarter of those who enrolled in certificate I courses are projected to complete. At certificate II level, about 30% in the prime-aged group are projected to complete, with about a quarter in the mature-aged group being projected to complete. This means that the large majority are non-completers (or subjects-only completers), a point to keep in mind when analysing outcomes from the courses.

In our investigation we examined three employment-related outcomes; namely, gaining employment, career advancement, and enrolling as a requirement of the job. Overall, employment-related outcomes from these courses were modest. Firstly, only about 9–10% of graduates not employed before the course were employed after the course. Similarly, small proportions of subjects-only completers not employed before the course gained employment after the course, although they fared no worse than graduates.

When we looked at career advancement (increased earnings, promotion and changed job), we found a modest proportion of graduates (less than 20%) reporting these benefits, with promotion more likely to be reported as a benefit. Only small proportions of subjects-only completers (about 10% or less) reported these benefits. Some students also reported that they had enrolled in the course as a requirement of their job. However, these proportions were not large, with about 12% of graduates and less than 10% of subjects-only completers reporting this reason.

Proportions who reported no job-related benefit from the course were high. About a half of certificate I graduates and over 40% of certificate II graduates reported no job-related benefit, while over 60% of subjects-only completers at both certificate levels reported no employment benefit.

Following our investigation of employment-related outcomes, we looked at the extent to which these courses were being used as pathways to further study. We found that overall about 30% of certificate I and II graduates enrolled in further study at a higher level. However, graduates were estimated to form only about a quarter of all prime- and mature-aged people who had undertaken the courses. By comparison, it was estimated that less than 10% of subjects-only completers enrolled in further study.

Our research also investigated further study outcomes from preparatory courses. These formed a significant proportion of enrolments at certificate I level—about 45%. They also comprised about 10% of all certificate II enrolments. We found that rates of completing these courses were very low, particularly at certificate I level, where only about 17% of students in both the prime- and mature-aged groups are projected to eventually complete a course. This needs to be kept in mind in interpreting further study outcomes.

There were reasonable proportions of graduates from preparatory courses enrolling in further study at a higher level, about a third at certificate I level, and about a quarter at certificate II level. However, it was estimated that, overall, only about 5% of subjects-only completers enrol in further study at a higher level. There were also students who had begun in certificate I and II preparatory courses in 2002 who were still enrolled at the same and/or lower-level courses at the end of 2003 (about 18% at certificate I level and 15% at certificate II level). Nevertheless, we need to keep in mind the nature of preparatory courses, and that there may be short-term benefits, such as increased self-esteem, which may translate into employment and/or further study outcomes at a later time.

Conclusions

Overall, there were no major employment-related or further study outcomes for prime- and mature-aged students who had undertaken certificate I and II courses. In addition, low proportions of students are projected to complete these courses, about a quarter at certificate I level and between a quarter and 30% at certificate II level.

Outcomes in terms of gaining full-time employment after the course for those not employed before the course were quite poor (about 10%). Other employment-related outcomes from the course, such as career advancement or as a requirement of the job, were not major, and this was reflected in the proportions of those who did not report a job-related benefit from the course. A minority of prime- and mature-aged people were estimated to enrol in further study at a higher level (not much more than 10%). Further study outcomes from those enrolled in preparatory-type courses were also not significant.

Introduction

Background and purpose

Lower-level Australian Qualifications Framework (AQF) qualifications (certificates I and II) were introduced with the aim of developing basic vocational skills and knowledge leading to employment-related outcomes (generally at lower-skill level positions), for facilitating access to preparatory courses, and also as pathways to further study. It is also acknowledged that some people undertake these courses for personal interest.

This paper examines outcomes from certificate I and II courses for two age groups:

- ✧ people aged 25–44 or prime-aged people
- ✧ people aged 45 years and over, or mature-aged people.

Another paper has examined outcomes for young people (aged 15–24) (see Stanwick 2005).

The reasons for people undertaking certificate I and II level courses in the prime-aged and mature-aged groups are not necessarily the same. For the former, undertaking qualifications is one strategy to gain employment. It may also be a strategy for re-entering the workforce adopted by females with family obligations. Given that a large proportion of people in this prime-aged group are already employed, undertaking a certificate I or II qualification may be part of the employment deal—either a requirement of the job or career advancement. In addition, some in this age group may embark on a certificate I or II as a pathway to further study, or they may undertake it out of personal interest.

Many people in the mature-aged group are in a period of transition, with some dropping out of the labour market. These people are unlikely to be undertaking the course for vocational reasons, and therefore it would be reasonable to expect that substantial proportions enrol in lower-level courses for personal interest. Nevertheless, there are some in this age group who undertake vocational courses to gain employment. Thomson et al. (2005) found evidence that undertaking training can lead to employment or increased wages for mature-aged people, although the evidence also suggests that this mainly applies to people undertaking certificate III or above level courses. As with the prime-aged group, there are people in the mature-aged group who enrol in courses as a requirement of their employment.

For both age groups, it is noticeable that substantial proportions, particularly at certificate I level, enrol in preparatory courses—courses aimed at providing basic skills (such as literacy and numeracy) which will facilitate acquisition of employment-related skills—or to pursue further studies. Our data show that about 45% of certificate I students in these age groups enrol in preparatory courses, while about 9–10% of students at certificate II level do so.

In relation to prime- and mature-aged people, the main questions to be addressed by this research are:

- ✧ To what extent do certificate I and II qualifications lead to employment?
- ✧ To what extent are certificate I and II qualifications being used as pathways to further study?
- ✧ To what extent do preparatory courses lead to further study outcomes?

To answer these questions, certificate I and II qualifications are contextualised in terms of total enrolment numbers and the anticipated hours of training for people in these two groups. We also provide information on their motivation for undertaking the course and identify the proportions who had a certificate III or above level qualification as their highest level of prior education.

Outputs from certificate I and II qualifications are then examined according to rates of completing courses, subjects and hours over the 2002–03 period. This is done to give an impression of what proportion of *all* students at certificate I and II levels complete. Note that, while this paper provides information on rates of completion, it does not include an analysis of the effect that student characteristics may have on the rates of completing courses.

The discussion that follows examines outcomes both for those who complete courses (graduates) and for those who don't (subjects-only completers). The discussion focuses on employment-related and further study outcomes. Where relevant, data relating to certificate III courses are also provided as 'benchmark' data. Certificate III courses are considered to constitute the core of the vocational education and training (VET) system in Australia. However, they are more often aimed at direct employment outcomes (for example, through apprenticeships in the trades) than certificate I or II qualifications.

Following the discussion on outcomes of certificate I and II courses for the two target groups, there is an examination of outcomes for students enrolled in preparatory-type courses. As mentioned earlier, there are substantial numbers of enrolments in these courses at lower AQF levels. The paper concludes with a summary of the outcomes of certificate I and II courses for prime- and mature-aged people.

Method

To determine the extent of employment-related and further study outcomes, we used data from the 2003 Survey of Student Outcomes conducted by the National Centre for Vocational Education Research (NCVER). This survey allowed us to examine, six months after the completion of the course, employment-related outcomes for both graduates and subjects-only completers. Information on further study undertaken by graduates is also available. In addition, this survey gives information on students' motivations for undertaking the course, and, for both graduates and subjects-only completers, the extent to which people reported no job-related benefits from the course. The survey is limited to students who undertook courses at technical and further education (TAFE) colleges.

In order to gain a picture of the proportion of students completing an award (graduates), data were used from NCVER's National Provider Collection. Using a starting cohort of students in 2002, and matching this to students' activity in 2003, we can get an impression of the extent to which students starting in 2002 had completed an award by the end of 2003, the extent to which they had completed subjects, and the proportion of anticipated hours actually used.[1] We can also examine the proportion of students who enrolled in higher-level study in 2003, as well as those who exited the system in 2003 with no award. NCVER's National Provider Collection was also used to provide basic information on enrolment patterns for certificate I and II students.

Enrolment numbers for prime- and mature-aged students

Tables 1 and 2, based on the 2002 National Provider Collection, provide a background of where certificate I and II qualifications sit overall for prime- and mature-aged students and summarise

[1] While the matching methodology is unlikely to be 100% accurate in terms of matching students across the two years, it should be robust enough for our purpose of estimating completion rates.

activity, firstly, by total student enrolments, and secondly, by hours associated with the course. The data collected cover the public VET system in Australia—TAFE (about 85%)—and other providers.

Table 1: Enrolments by qualification level for 2002 (number and proportion)

Qualification level	Advanced diploma	Diploma	Cert. IV	Cert. III	Cert. II	Cert. I	Other[(a)]	Total
25 to 44-year-olds								
Training package	4 639 1.5%	28 628 9.3%	62 273 20.3%	113 804 37.2%	80 429 26.2%	16 873 5.5%		**306 646 100%**
Nationally accredited	16 100 5.1%	41 683 3.2%	46 792 14.8%	38 865 12.3%	47 214 14.9%	33 481 10.6%	92 259 29.1%	**316 394 100%**
Sub-total	*20 739 3.3%*	*70 311 11.3%*	*109 065 17.5%*	*152 669 24.5%*	*127 643 20.5%*	*50 354 8.1%*	*92 259 14.8%*	**623 040 100%**
45 years and over								
Training package	989 0.8%	8 118 6.5%	28 879 23.2%	43 527 34.9%	34 050 27.3%	9 053 7.3%		**124 616 100%**
Nationally accredited	3 534 2.6%	12 389 9.1%	15 070 11.1%	13 141 9.7%	21 661 16.0%	16 777 12.4%	53 173 39.1%	**135 745 100%**
Sub-total	*4 523 1.7%*	*20 507 7.9%*	*43 949 16.9%*	*56 668 21.8%*	*55 711 21.4%*	*25 830 9.9%*	*53 173 20.4%*	**260 361 100%**

Note: (a) 'Other' refers to a variety of other levels of qualifications falling outside the certificate I to advanced diploma range. It includes graduate certificate and diploma, bachelor degrees, and school education. However, the largest proportion of these enrolments is defined as 'statement of attainment not identifiable by level'. In addition to the data in table 1, there were also 159 487 locally accredited enrolments for 25 to 44-year-olds and 100 478 for people aged 45 years and over. These enrolments are for non-AQF courses and are not nationally accredited.

Source: NCVER's National Provider Collection 2002

Table 2: Effort by total number of anticipated hours by qualification for 2002 (%)

Qualification level	Advanced diploma	Diploma	Cert. IV	Cert. III	Cert. II	Cert. I	Other	Total
25 to 44-year-olds								
Training package	2.6	15.2	21.0	39.2	19.8	2.2		**100**
Nationally accredited	8.1	19.7	18.7	15.0	13.6	9.9	15.0	**100**
Sub-total	*5.2*	*17.3*	*19.9*	*27.9*	*16.9*	*5.8*	*7.0*	**100**
45 years and over								
Training package	1.4	10.5	25.2	39.6	20.3	3.0		**100**
Nationally accredited	4.4	14.6	15.0	11.7	15.4	13.9	25.0	**100**
Sub-total	*2.9*	*12.5*	*20.3*	*26.1*	*17.9*	*8.3*	*12.0*	**100**

Source: NCVER's National Provider Collection 2002

We see that certificate I and II enrolments in 2002 accounted for about 29% of all enrolments for 25 to 44-year-olds and 31% of enrolments for those aged 45 years and over. Certificate Is and IIs accounted for less in terms of anticipated hours of training (23% for 25 to 44-year-olds and 27% for those aged 45 years and over). About two-thirds of enrolments at certificate I level fell outside training packages for both the 25 to 44 and 45 years and over age group. The majority of these enrolments outside training packages (about two-thirds) were for 'mixed field' (or preparatory) courses (not shown in the table).

Enrolments by students in the prime-aged group formed just over a third of all certificate I and II enrolments in 2002. In contrast to this, enrolments by students in the mature-aged group formed about 19% of all enrolments at certificate I level and 15% of all enrolments at certificate II level.

Outcomes

Context

Approximately 51% of enrolments in the prime-aged group at both certificate I and certificate II level were by males. By contrast, females formed the majority of enrolments for the mature-aged group at both certificate I (57% of enrolments) and certificate II (52%).

We also have data from NCVER's Survey of Student Outcomes on students' motivations for undertaking the course.[2] These data need to be kept in mind when analysing vocational outcomes from these courses.

Table 3: Motivations for students undertaking lower-level qualifications (%)

	Graduates				Subjects-only completers			
	Employment -related	Further study	Personal interest	**Total**	Employment-related	Further study	Personal interest	**Total**
Certificate I								
25–44 yrs	66	6	28	**100**	61	4*	35	**100**
45+ yrs	56	3	41	**100**	43	3*	54	**100**
Certificate II								
25–44 yrs	74	6	20	**100**	69	3	28	**100**
45+ yrs	70	3	27	**100**	60	0*	40	**100**
Certificate III								
25–44 yrs	81	5	14	**100**	77	5	19	**100**
45+ yrs	77	4	19	**100**	68	2	30	**100**

Source: NCVER's Survey of Student Outcomes 2003

Hardly anyone in any of the categories shown in the table reported further study as a motivation—the highest being 6% for 25 to 44-year-olds at both certificate I and II levels. As expected, people aged 45 years and over were more likely to report personal interest as a motivation for undertaking the course, as were subjects-only completers. People undertaking courses at the benchmark certificate III level were considerably more likely to be undertaking the course for vocational reasons. We also see (refer table 20 in appendix 1) that males enrolling in certificate I and II courses were more likely than females to report employment-related reasons as their motivation for undertaking the course, or conversely less likely to report personal interest.

We also have data on the highest level of prior education for those people who responded to NCVER's Survey of Student Outcomes.

We see from the table that substantial proportions had certificate III or above as their highest prior level of education. This was more so for those aged 45 years and over. The table also shows that there was no substantial difference between graduates and subjects-only completers. When we compare this by gender (see table 21, appendix 1), we see that apart from certificate I subjects-only

[2] Note that this information is gathered six months after the course (that is, post-hoc).

completers, males were considerably more likely to have a certificate III level or above as their highest level of prior education.

Table 4: Proportions with highest level of prior education of certificate III or above (%)

	25 to 44-year-olds	45 years and over
Certificate I		
Graduates	35	43
Subjects-only completers	29	42
Certificate II		
Graduates	39	42
Subjects-only completers	43	45

Source: NCVER's Survey of Student Outcomes 2003

Rates of completion

Table 5 shows the extent to which students who commenced a certificate I or II qualification in 2002 had completed an award by the end of 2003. This provides an estimate of the proportion of students who completed a course, albeit only over a two-year period. The table also provides information on students still enrolled at the end of 2003.

Table 5: For students commencing in 2002, enrolment status end 2003 (%)

	Certificate I		Certificate II	
	25–44 yrs	45+ yrs	25–44 yrs	45+ yrs
Completed an award	19.8	19.2	24.4	20.4
Were doing a higher-level qualification in 2003, no award	7.0	5.0	4.5	3.7
Still enrolled in certificate I (II) in 2003, no award	8.5	9.2	9.8	8.5
Enrolled in below certificate I (II) 2003, no award	3.1	4.1	3.5	4.7
Not enrolled in 2003 and no award received	61.6	62.5	57.8	62.7
Total	**100.0**	**100.0**	**100.0**	**100.0**

Source: NCVER's National Provider Collection 2002–03

We see from the table that few people from either age group completed a course, with the majority exiting the system without an award. When this is extrapolated to the longer term[3] (see tables below) to calculate numbers of people still in the system at the end of 2003 (continuing students), it is projected that less than 30% of students in each age and qualification category were likely to complete a course[4] (an explanation of this process is contained in appendix 3). Mature-aged students undertaking certificate I courses were the least likely to complete a course. This may be partly related to the high proportions of this category of students reporting personal interest as a motivation for undertaking the course. When we look at longer-term completions by gender (see

[3] This analysis predicts, using Markov chain analysis, 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. Note that this does not account for people not enrolled in 2003 who re-enter the system at a later time. This procedure also 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.

[4] Some of these may be at a higher level than the course originally enrolled in (that is, 2002).

table 22, appendix 1), we see that females were much more likely to complete a course than males, particularly at certificate I level.

Table 6: Estimated rates of completing courses in the longer term (%)

	25 to 44-year-olds		45 years and over	
	Cert. I	Cert. II	Cert. I	Cert. II
Completed a course	24.3	29.8	23.5	24.5
Did not complete a course	75.7	70.2	76.5	75.5
Total	**100.0**	**100.0**	**100.0**	**100.0**

Source: Derived from NCVER's National Provider Collection 2002–03

While low completion rates are not necessarily problematic, they need to be kept in mind when interpreting the following data on outcomes. These data estimate that over 70% of all students for these age groups will be subjects-only completers.

It is also useful to examine rates of completion in terms of overall effort, that is, anticipated course hours. These data provide an estimate of the relative amounts of time expended for completers and non-completers.

Table 7: Rates of completing courses by anticipated hours of training for 2002–03 (%)

	25 to 44-year-olds		45 years and over	
	Cert. I	Cert. II	Cert. I	Cert. II
Completed an award	36.0	43.6	34.0	40.1
Still enrolled	34.0	24.1	32.7	25.0
Exited with no award	30.0	32.3	33.3	34.9

Source: NCVER's National Provider Collection 2002–03

We see that students who completed an award accounted for a higher proportion of hours than those who exited without an award across all the categories shown in the table. This contrasts with the data on rates of completing courses, demonstrating that numbers of students exiting without an award can be three times as many as those who complete an award.

This is further supported by data on rates of completing subjects shown in table 8. This shows that students completing an award are much more likely to complete subjects than who exit without an award.

Table 8: Rates of completing subjects over 2002–03 (%)

	25 to 44-year-olds		45 years and over	
	Cert. I	Cert. II	Cert. I	Cert. II
Completed an award during 2002–03	90.0	93.1	91.6	94.0
No award and not enrolled in 2003	59.9	66.7	61.0	72.7

Source: NCVER's National Provider Collection 2002–03

Outcomes of courses

We have examined data on the motivations of students for undertaking certificate I and II courses, and also the rate at which students complete these courses. We now focus on the outcomes of these courses for prime- and mature-aged students.

Gaining employment

Table 9 presents information on gaining employment for those not employed before the course. For people not employed before the course, the table presents data on the proportion employed (full-time and part-time) six months after the course. Full-time employment is seen as the primary employment outcome, although it is recognised that, for some people, part-time employment is more desirable. The table also presents data on people who report that they 'got a job' as a benefit of the course. Throughout, certificate III course data are used as benchmark data.

Table 9: Employment outcomes from certificate I and II courses (%)

	25 to 44-year-olds			45 years and over		
	Cert. I	Cert. II	Cert. III	Cert. I	Cert. II	Cert. III
Not employed before course but employed after						
Graduates						
Employed full-time	10	10	13	8	9	8
Employed part-time	12	16	28	11	14	25
Subjects-only completers						
Employed full-time	12[a]	12	11	12[a]	5[a]	9[a]
Employed part-time	12	17	19	[b]	7[a]	18
Stated 'got a job' as a benefit of the course						
Graduates	18	19	25	18	17	23
Subjects-only completers	10[a]	15	8	6[a]	4[a]	9

Notes: a Figures should be treated with caution as the relative standard error is greater than 25%.
b Data not reported as fewer than five responses in this cell.

Source: NCVER's Survey of Student Outcomes 2003

The table shows that only small proportions of graduates not employed before the course gained full-time employment after the course. This applies particularly to the mature-aged group of graduates. However, full-time employment outcomes were no better for certificate III graduates. The table also shows that subjects-only completers not employed before the course were about as likely as graduates to gain full-time employment after the course.

When we compare males and females (see tables 23 and 24 in appendix 1), we see that male graduates were somewhat more likely to gain full-time employment after the course than females, while females were more likely to gain part-time employment. It may be that some females are seeking part-time employment due to family commitments. The data for subjects-only completers are too sparse to analyse by gender. Overall, we can say that gaining employment is not a significant outcome for prime- and mature-aged students.

Career advancement

For those already employed before undertaking the course there may be some career advancement benefits (table 10). NCVER's Survey of Student Outcomes contains data on proportions of graduates and subjects-only completers who reported gaining 'increased earnings' and 'promotion' as a result of the course. The table also includes data on proportions who reported a changed job as a benefit of the course.

A modest proportion of certificate I and II graduates reported career advancement benefits, although considerably less so than certificate III graduates, particularly in the prime-aged group. The exception to this was that the proportion of mature-aged graduates reporting promotion as a benefit was equal to their certificate III counterparts. Table 10 also indicates that graduates in the prime-aged group were somewhat more likely to report increased earnings and changed job as a

benefit than mature-aged graduates. Only small proportions of subjects-only completers reported career advancement benefits. This was also the case at the benchmark certificate III level.

When we compare career advancement benefits by gender (see table 25 in appendix 1), we see that that the main difference is that male graduates were more likely than their female counterparts to report promotion as a benefit, while female graduates were more likely to report changed job as a benefit. Little can be said on gender comparisons for subjects-only completers due to the sparseness of the data.

Table 10: Career advancement benefits from the training course (%)

	25 to 44-year-olds			45 years and over		
	Cert. I	Cert. II	Cert. III	Cert. I	Cert. II	Cert. III
Graduates						
Increased earnings	13	16	28	9	10	15
Promotion	15	17	23	17	19	19
Changed job	10	17	22	5*	9	14
Subjects-only completers						
Increased earnings	9[a]	10	10	[b]	4[a]	7
Promotion	9[a]	10	9	11[a]	3	10
Changed job	[b]	9	12	0[a]	4[a]	8

Notes: a These figures need to be treated with caution as they have relative standard errors of greater than 25%.
b Data not reported as fewer than five responses in this cell.
Source: NCVER's Survey of Student Outcomes 2003

Enrolled as a requirement of the job

Some students are enrolled in courses as a requirement of their job. This could be for reasons of induction, occupational licensing (which is on the increase), state regulations or similar reasons. Table 11 from NCVER's Survey of Student Outcomes shows proportions of students who reported that they enrolled in courses as a requirement of their job.

Table 11: Proportion of students reporting enrolled as a requirement of the job in 2003 (%)

	25 to 44-year-olds			45 years and over		
	Cert. I	Cert. II	Cert. III	Cert. I	Cert. II	Cert. III
Graduates	11	12	13	10	13	11
Subjects-only completers	9[a]	6	8	6[a]	4[a]	6

Note: a These figures need to be treated with caution as they have relative standard errors of greater than 25%.
Source: NCVER's Survey of Student Outcomes 2003

Modest proportions of graduates and even lower proportions of subjects-only completers reported that they enrolled in the course as a requirement of their job. Males were more likely to report this motivation to do the course than females (see table 26 in appendix 1). In addition, for the prime-aged group, graduates and subjects-only completers with highest prior education of certificate III level or above were more likely to report this motivation to do the course than those with highest prior education of certificate II or below (see table 26 in appendix 2). The reverse was the case for graduates in the mature-aged group (the sample of subjects-only completers in the survey was not large enough to enable comment for this breakdown of data).

In addition to the proportions reporting undertaking the course as a requirement of their job, we can also look at examples from NCVER's National Provider Collection where this may be occurring in training package enrolments (see data in table 30, appendix 2). Note that this list is not meant to be exhaustive, but merely highlights a selection of packages. For the purposes of discussion, we will briefly examine three packages.

Firstly, for the forest and forest products industry (certificate I and II levels) and black coal (certificate II level) packages we see that high proportions of students were already employed full-time before the course. Coupled with this we see very low rates of completing these courses, and furthermore, very high rates of completing subjects. This picture suggests that employees are undertaking elements of these courses; for example, occupational health and safety and equipment handling as a requirement of their job, probably for induction purposes.

The other example is the National Public Services Training Package (at certificate II level). Here we see, in addition to high proportions of students employed full-time before the course, very high rates of completing courses and subjects. There are also substantial proportions of students (just under 40%) enrolling in this package who have already completed a certificate III or above level qualification (about a third already had a diploma-level qualification). The high rates of completion, together with the proportions of students who had already completed higher-level qualifications suggest that many students may well be enrolling in this package as a requirement of their job.

No job-related benefits from the course

We have seen limited employment and career advancement outcomes from certificate I and II courses. We can determine whether this is reflected in the proportion of people who report no job-related benefit from the course six months after training. Certificate III is used as a comparison, although we do not have projected proportions completing courses for these.

Table 12: Proportions reporting that they received no job-related benefit from the course (%)

	25 to 44-year-olds			45 years and over		
	Cert. I	Cert. II	Cert. III	Cert. I	Cert. II	Cert. III
Graduates						
Projected proportion of graduates[a]	24.3	29.8	N/A[c]	23.5	24.5	N/A
Proportions reporting no job-related benefit	50	41	30	52	48	39
Graduates reporting no job-related benefit as a proportion of all students[b]	*12.2*	*12.2*	*N/A*	*12.2*	*11.8*	*N/A*
Subjects-only completers						
Projected proportions of subjects-only completers[a]	75.7	70.2	N/A	76.5	75.5	N/A
Proportions reporting no job-related benefit	64	61	57	62	64	63
Subjects-only completers reporting no job-related benefit as a proportion of all students	*48.4*	*42.1*	*N/A*	*47.4*	*48.3*	*N/A*
Estimated proportion of all reporting no job-related benefits[b]	**60.6**	**54.3**	**N/A**	**59.6**	**60.1**	**N/A**

Notes: a This proportion is taken from table 6, which estimates the proportion of students who complete a qualification in the longer term.
b This row is the product of the previous two rows.
c Data not available.

Source: NCVER's Survey of Student Outcomes 2003

Table 12 shows that the majority of students in both age groups and at both certificate levels reported no job-related benefit from the course. This finding is consistent with our discussion above of vocational outcomes. Subjects-only completers were more likely than graduates to report no job-related benefit from the course. Table 27 in appendix 1 breaks down these data by gender. However, there is no clear picture as to whether males or females are more likely to report no job-related benefits from the course.

Pathways to further study

There are data from NCVER's Survey of Student Outcomes on further study for graduates six months after the initial training. The survey also gives information on students who had not completed a course but who were enrolled in a higher-level course at the end of 2003.

Table 13: Estimated proportions going on to further study at a higher level six months after initial training (%)

	25 to 44-year-olds		45 years and over	
	Cert. I	Cert. II	Cert. I	Cert. II
Graduates				
Projected percentage of graduates as a proportion of all students[a]	24.3	29.8	23.5	24.5
Percentage of graduates who went on to further study at a higher level	33.1	31.1	22.1	29.9
Graduates going on to study at a higher level as a proportion of all students[b]	*8.0*	*9.3*	*5.2*	*7.3*
Subjects-only completers				
Projected percentage of subjects-only completers as a proportion of all students[b]	75.7	70.2	76.5	75.5
Had not completed a course by end 2003 but enrolled at a higher level	8.7	6.0	6.1	4.7
Subjects-only completers going on to study at a higher level as a proportion of all students[b]	*6.6*	*4.2*	*4.7*	*3.5*
Estimated percentage of all students enrolling in further study at a higher level	**14.6**	**13.5**	**9.9**	**10.8**

Notes: a This proportion is taken from table 6 which estimates the proportion of students who complete a qualification in the longer term.
b This row is the product of the previous two rows.

Source: NCVER's Survey of Student Outcomes 2003; National Provider Collection 2002–03

We can see from table 13 that, overall, only small proportions of students enrol in further study at a higher level, meaning that the qualifications are not being used as pathways to further study to any extent. Graduates and subjects-only completers in the prime-aged group were somewhat more likely to go on to further study at a higher level than their mature-aged counterparts.

When we compare by gender (see table 28 in appendix 1), we see that female graduates were more likely than males to go on to further study (the samples in the survey were not large enough to compare males and females going on to further study at a higher level). For those who had not completed an award by the end of 2003, females were slightly more likely to have enrolled in a higher-level course.

People undertaking preparatory courses

Significant proportions of prime- and mature-aged students enrol in preparatory-type courses, particularly at certificate I level. In this section we examine the outcomes of students enrolled in these courses using the 'mixed field' field of education as a proxy for preparatory courses.[5]

Mixed field enrolments accounted for about 45% of enrolments at certificate I and for 10% at certificate II level. Females formed the majority of enrolments for both age groups, although more so for the mature-aged group of students. To provide further context on these courses, we have data on the motivations of students for undertaking these courses.

Table 14: Motivations for mixed field students undertaking lower-level qualifications (%)

	Graduates				Subjects-only completers			
	Employ-ment-related	Further study	Personal interest	**Total**	Employ-ment-related	Further study	Personal interest	**Total**
Certificate I								
25–44 yrs	55	10	35	**100**	54	10a	37	**100**
45+ yrs	60	3[a]	37	**100**	39	[b]	59	**100**
Certificate II								
25–44 yrs	63	15	22	**100**	43	[b]	45	**100**
45+ yrs	55	11	35	**100**	43	0[a]	57	**100**

Notes: a These figures need to be treated with caution as they have relative standard errors of greater than 25%.
b Data not reported as fewer than five responses in this cell.

Source: NCVER's Survey of Student Outcomes 2003

The table shows that the majority of graduates reported employment-related reasons as their motivation for study. Subjects-only completers were more likely to report personal interest. In contrast to certificate I and II graduates overall (table 3), mixed field graduates and subjects-only completers were more likely to report personal interest as a motivation. The proportion of mixed field graduates reporting further study as a motivation was also higher than for all certificate I and II graduates.

Rates of completion

We can also get an indication of the outputs of people who enrolled in 'mixed field' studies in terms of whether they had completed an award or gone on to higher-level courses.

The most apparent feature of this table is that hardly anyone had completed a certificate I qualification. Indeed, there were more students still enrolled in certificate I courses at the end of 2003 than had completed them, particularly for the 45 years and over age group. Phan and Ball (2001), in a study of students who enrol in enabling courses, also found that many students in these

[5] Mixed field courses are defined as those that develop basic skills such as literacy and numeracy and develop an understanding of key competencies needed for job searching, employment and personal survival (see ABS 2001, p.193).

courses re-enrol at the same level the next year, although they also note that some of these diversified into different areas of learning.

Table 15: Mixed field students commencing in 2002 by their enrolment status end 2003 (%)

	25 to 44-year-olds		45 years and over	
	Cert. I	Cert. II	Cert. I	Cert. II
Completed an award	13.1	25.7	12.0	22.8
Were doing a higher-level qualification in 2003, no award	8.1	5.0	6.5	6.0
Still enrolled in certificate I (II) in 2003, no award	13.9	9.6	16.7	10.9
Enrolled in below certificate I (II) 2003, no award	2.8	4.5	3.6	6.1
Not enrolled in 2003 and no award received	62.1	55.0	61.2	54.3
Total	**100.0**	**100.0**	**100.0**	**100.0**

Source: NCVER's National Provider Collection 2002–03

We can also project rates of completing these courses in the longer term, using the same estimation procedures as were used in table 6.

Table 16: Projected completion rates in longer term for mixed field students (%)

	25 to 44-year-olds		45 years and over	
	Cert. I	Cert. II	Cert. I	Cert. II
Completed a course	17.4	31.8	16.4	29.6
Did not complete a course	82.6	68.2	83.6	70.4
Total	**100.0**	**100.0**	**100.0**	**100.0**

Source: Derived from NCVER's National Provider Collection 2002–03

Even in the longer term, it is estimated that only small proportions of certificate I mixed field students complete, certainly fewer than certificate I students overall (see table 5). Substantially higher proportions of certificate II students are estimated to have completed a course, even more so than certificate II students overall.

We have seen that relatively few mixed field students completed courses over the 2002–03 period. There are also data which show the rate at which these students completed subjects, as shown in table 17.

Table 17: Rates of completing subjects for mixed field students (%)

	25 to 44-year-olds		45 years and over	
	Cert. I	Cert. II	Cert. I	Cert. II
Completed an award during 2002–03	86.2	83.7	88.1	85.2
No award and not enrolled in 2003	58.4	47.7	65.2	53.9

Source: NCVER National Provider Collection 2002–03

One thing that stands out in this table is the low rate of completing subjects for certificate II students exiting the system without an award. Subject completion rates were better for certificate I students. However, at both certificate I and II levels they were not as good as for certificate I and II students overall.

Outcomes from mixed field courses

In our analyses of preparatory courses we will focus mainly on further study outcomes. There are no substantial employment outcomes from these courses, even though substantial proportions reported employment-related reasons as a motivation for enrolling in the course. Our data indicated that less than 10% of preparatory graduates in the prime- and mature-aged groups not employed before the course were employed full-time after the course. The sample in the Student Outcomes Survey was not large enough to allow us to comment on employment outcomes for subjects-only completers. However, the majority of subjects-only completers reported no job-related benefit from the course.

We can get estimates of the proportions of mixed field graduates and subjects-only completers going on to further study at a higher level. These data are shown in table 18.

Table 18: Estimated proportions of mixed field students going on to further study at a higher level six months after initial training (%)

	25 to 44-year-olds		45 years and over	
	Cert. I	Cert. II	Cert. I	Cert. II
Graduates				
Projected percentage of graduates as a proportion of all students[a]	17.4	31.8	16.4	29.6
Percentage of graduates who went on to further study at a higher level	40.0	31.5	16.3	34.2
Graduates going on to study at a higher level as a proportion of all students[b]	*7.0*	*10.0*	*2.7*	*10.1*
Subjects-only completers				
Projected percentage of subjects-only completers as a proportion of all students[b]	82.6	68.2	83.6	70.4
Had not completed a course by end 2003 but enrolled at a higher level	9.4	6.9	7.3	7.6
Subjects-only completers going on to study at a higher level as a proportion of all students[b]	*7.8*	*4.7*	*6.1*	*5.4*
Estimated percentage of all students enrolling in further study at a higher level	**14.8**	**14.7**	**8.8**	**15.5**

Notes: a This proportion is taken from table 6, which estimates the proportion of students who complete a qualification in the longer term.
b This row is the product of the previous two rows.

Source: NCVER's Survey of Student Outcomes 2003; National Provider Collection 2002–03

Overall, small proportions who had undertaken mixed field courses went on to further study at a higher level, particularly mature-aged people at certificate I level, where fewer than 10% enrolled in study at a higher level. However, those who had undertaken mixed field courses at certificate II level were more likely than all certificate II students to enrol in further study at a higher level.

Summary and conclusions

In this paper we have analysed employment-related and further study outcomes for prime- and mature-aged people who had undertaken certificate I and II qualifications. In doing so we have also analysed data on students' motivations for undertaking the course, as well as the extent to which students reported receiving no job-related benefit from the course. We also estimated rates of completing courses for these groups of students. The main points from our analyses are summarised in table 19.

Table 19: Main points relating to outcomes of lower-level courses

	Graduates	Subjects-only completers
Motivation to do course	The majority reported employment-related reasons, although less than those at certificate III. Employment-related reasons were more likely for the 25–44 year age group and at certificate II level. Very low proportions reported further study as a motivation.	More likely to report personal interest than graduates, particularly at certificate I level and considerably more likely than their certificate III counterparts. Negligible proportion reported further study as a motivation.
Rates of completing courses	About a quarter are projected to complete a course apart from 25 to 44-year-olds at certificate II level, where about 30% are projected to complete. Females are a lot more likely to complete.	About three-quarters are estimated to be non-completers. Males are a lot more likely to be non-completers.
Employment-related outcomes		
✧ Gaining employment	Very low proportions at both certificate I and II levels not employed before the course gained full-time employment after the course, although not much different from their certificate III equivalents. Males were considerably more likely to obtain full-time employment.	Not any less likely than certificate I and II graduates to gain employment after the course. Also not less likely than certificate III subjects-only completers to gain employment.
✧ Career advancement	Low proportions reported career advancement as a benefit. Both certificate I and II graduates were less likely than certificate III graduates to report these benefits.	Very low proportions reported career advancement benefits although not any worse than certificate III subjects-only completers.
✧ Undertook course as a requirement of job	Low proportions (a little over 10%) reported this as a reason for doing the course, although equal to the benchmark certificate III level. Males were somewhat more likely to report this as a reason for undertaking the course.	Very low proportions reported this as a reason for doing the course, particularly at certificate II level. Males were more likely to report this as a reason.
✧ No job-related benefits	About a half at certificate I level, and over 40% at certificate II level reported no job-related benefit. These are much higher proportions than at the benchmark certificate III level.	Over 60% at certificate I and II levels reported no job-related benefit. However, this is not much different from the benchmark certificate III level. Needs to be kept in mind that subjects-only completers form over 70% of all students, meaning that the majority of all students reported no job-related benefit from the course.
Further study	A little over 30% at certificate I level but fewer than 30% at certificate II level enrolled in higher-level courses. However graduates only formed a small proportion of all students (no more than 30%). Females were more likely to go on to further study.	Fewer than 10% of the cohort who had not completed had enrolled in higher-level courses. These are the majority of students, so the overall picture is only small proportions of all certificate I and II students enrolling in higher-level study.

Relatively low proportions gained employment-related benefits after the course for both age groups. However, those in the prime-aged group (25–44 years of age) were more likely to gain these benefits than those in the mature-aged group (45 years and over). In saying this it needs to be kept in mind that those in the mature-aged group were considerably more likely to state personal interest as a motivation for undertaking the course. In addition, quite low proportions in both age groups went on to further study at a higher level.

Comparing graduates and subjects-only completers, we see that, while graduates obtained better career advancement benefits, there was no substantial difference between the two groups regarding gaining employment. Graduates were more likely to enrol in further study. We also saw earlier that subjects-only completers were estimated to form the large majority of students in lower-level courses, particularly so at certificate I level.

We can also examine differences in outcomes by certificate level. Firstly, certificate I students were less likely to report potential employment benefits as a motivation for undertaking the course than their certificate II counterparts. They were also estimated to be less likely to complete courses. In terms of employment outcomes, there is no substantial difference between certificate I and II level courses, although those who had undertaken certificate II courses appear to have slightly better outcomes. However, we do see that people who had undertaken certificate I courses were more likely to enrol in further study at a higher level.

In this paper we also examined further study outcomes of people enrolled in preparatory-type courses. These formed a substantial proportion of enrolments at certificate I level (about 45%), although less so at certificate II level (10%). We found that relatively small proportions enrolled in study at a higher level. In addition, at certificate I level there were very low rates of completing courses (less than 20%), and there were more students still enrolled at certificate I level courses or below at the end of 2003 than had completed a course.

On balance, we did not find substantial employment and further study outcomes for prime- and mature-aged people who had undertaken certificate I and II courses. We have seen low rates of completing courses, especially at certificate I level. We have also seen that there were no major employment-related outcomes from these courses. This is reflected in the high proportions who did not report any job-related benefit from the course. Relatively small proportions went on to enrol in further study at a higher level.

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Appendix 1: Gender breakdowns

Motivation for undertaking study

Table 20: Motivations for students undertaking lower-level qualifications (%)

	Graduates				Subjects-only completers			
	Employment-related	Further study	Personal interest	**Total**	Employment-related	Further study	Personal interest	**Total**
Males								
Certificate I								
25–44 yrs	76	3[a]	21	**100**	62	6[a]	32	**100**
45+ yrs	60	2[a]	38	**100**	49	7[a]	44	**100**
Certificate II								
25–44 yrs	79	4	17	**100**	75	2	23	**100**
45+ yrs	75	4	21	**100**	60	0[a]	40	**100**
Certificate III								
25–44 yrs	83	4	13	**100**	76	4[a]	19	**100**
45+ yrs	77	4	19	**100**	66	2[a]	33	**100**
Females								
Certificate I								
25–44 yrs	57	9	34	**100**	60	2[a]	38	**100**
45+ yrs	54	4	42	**100**	37	0[a]	63	**100**
Certificate II								
25–44 yrs	71	7	23	**100**	64	4[a]	32	**100**
45+ yrs	66	3	31	**100**	59	0	40	**100**
Certificate III								
25–44 yrs	80	5	15	**100**	77	5	19	**100**
45+ yrs	77	3	20	**100**	70	2[a]	28	**100**

Note: a These figures need to be treated with caution as they have relative standard errors of greater than 25%.
Source: NCVER's Survey of Student Outcomes 2003

Highest level of prior education

Table 21: Proportions with highest level of prior education of certificate III or above (%)

	25 to 44-year-olds		45 years and over	
	Males	Females	Males	Females
Certificate I				
Graduates	38	33	47	41
Subjects-only completers	27	31	38	47
Certificate II				
Graduates	42	37	48	37
Subjects-only completers	49	38	56	37

Source: NCVER's Survey of Student Outcomes 2003

Longer-term rates of completing courses

Table 22: Projected rates of completing courses in the longer term (%)

	25 to 44-year-olds		45 years and over	
	Cert. I	Cert. II	Cert. I	Cert. II
Males				
Completed a course	17.8	26.0	16.6	21.8
Did not complete a course	82.2	74.0	83.4	78.2
Females				
Completed a course	30.8	33.7	29.4	27.5
Did not complete a course	69.2	66.3	70.6	72.5
Total	**100.0**	**100.0**	**100.0**	**100.0**

Source: Derived from NCVER's National Provider Collection 2002–03

Employment outcomes

Table 23: Male students gaining employment after the course (%)

	25 to 44-year-olds			45 years and over		
	Cert. I	Cert. II	Cert. III	Cert. I	Cert. II	Cert. III
Not employed before course but employed after						
Graduates						
Employed full-time	25	14	17	16	12	9
Employed part-time	3[a]	12	18	5[a]	13	13
Subjects-only completers						
Employed full-time	28*	21	20[a]	19[a]	[b]	16[a]
Employed part-time	[b]	8[a]	[b]	[b]	[b]	12[a]
Reported 'got a job' as a benefit of the course						
Graduates	19	16	19	22	15	16
Subjects-only completers	9[a]	15	5[a]	[b]	[b]	9[a]

Notes: a These figures need to be treated with caution as they have relative standard errors of greater than 25%.
b Data not reported as fewer than five responses in this cell.

Source: NCVER's Survey of Student Outcomes 2003

Table 24: Female students gaining employment after the course (%)

	25 to 44-year-olds			45 years and over		
	Cert. I	Cert. II	Cert. III	Cert. I	Cert. II	Cert. III
Not employed before course but employed after						
Graduates						
Employed full-time	4[a]	7	11	3[a]	8	8
Employed part-time	15	19	32	16	14	30
Subjects-only completers						
Employed full-time	[b]	6[a]	8	[b]	[b]	5[a]
Employed part-time	16[a]	24	24	[b]	8[a]	22
Reported 'got a job' as a benefit of the course						
Graduates	18	22	30	15	20	26
Subjects-only completers	11[a]	14	11	[b]	2[a]	9[a]

Notes: a These figures need to be treated with caution as they have relative standard errors of greater than 25%.
b Data not reported as fewer than five responses in this cell.

Source: NCVER's Survey of Student Outcomes 2003

Career advancement benefits

Table 25: Career advancement benefits by gender from the training course (%)

	25 to 44-year-olds						45 years and over					
	Cert. I		Cert. II		Cert. III		Cert. I		Cert. II		Cert. III	
	M	*F*	*M*	*F*	*M*	*F*	*M*	*F*	*M*	*F*	*M*	*F*
Graduates												
Increased earnings	12	14	17	15	35	21	10[a]	8	11	9	16	15
Promotion	19	11	19	15	29	18	20	15	21	17	20	19
Changed job	7[a]	12	16	19	20	23	9[a]	3[a]	7	12	12	16
Subjects-only completers												
Increased earnings	[b]	13[a]	16	5[a]	13	8	0	[b]	[b]	3[a]	13[a]	3[a]
Promotion	[b]	[b]	10[a]	10	10	8	[b]	[b]	9[a]	13	14	6[a]
Changed job	[b]	[b]	10[a]	8	8	16	0[a]	[b]	[b]	4[a]	11[a]	6[a]

Notes: M = Male, F = Female.
a These figures need to be treated with caution as they have relative standard errors of greater than 25%.
b Data not reported as fewer than five responses in this cell.

Source: NCVER's Survey of Student Outcomes 2003

Undertook course as a requirement of the job

Table 26: Proportion of students reporting enrolled as a requirement of the job in 2003 (%)

	25 to 44-year-olds			45 years and over		
	Cert. I	Cert. II	Cert. III	Cert. I	Cert. II	Cert. III
Males						
Graduates	14	17	19	12	19	12
Subjects-only completers	10[a]	10	12	9[a]	6[a]	9[a]
Females						
Graduates	9	9	8	9	9	11
Subjects-only completers	8[a]	3[a]	5	[b]	3[a]	4[a]

Notes: a These figures need to be treated with caution as they have relative standard errors of greater than 25%.
b Data not reported as fewer than five responses in this cell.

Source: NCVER's Survey of Student Outcomes 2003

No work-related benefits from the course

Table 27: Proportions reporting that they received no job-related benefit from the course (%)

	25 to 44-year-olds						45 years and over					
	Cert. I		Cert. II		Cert. III		Cert. I		Cert. II		Cert. III	
	M	*F*	*M*	*F*	*M*	*F*	*M*	*F*	*M*	*F*	*M*	*F*
Graduates												
Projected proportion of graduates[a]	17.8	30.8	26.0	33.7	N/A	N/A	16.6	29.4	21.8	29.7	N/A	N/A
Proportions reporting no job-related benefit	48.0	52.0	42.0	41.0	28.0	32.0	41.0	59.0	47.0	48.0	43.0	37.0
Graduates reporting no job-related benefit as a proportion of all students[b]	*8.5*	*16.0*	*10.9*	*13.8*	*N/A*	*N/A*	*6.8*	*17.3*	*10.2*	*14.3*	*N/A*	*N/A*
Subjects-only completers												
Projected proportions of subjects-only completers[a]	82.2	69.2	74.0	66.3	N/A	N/A	83.4	70.6	78.2	70.3	N/A	N/A
Proportions reporting no job-related benefit	66.0	61.0	59.0	64.0	58.0	56.0	63.0	60.0	67.0	62.0	56.0	68.0
Subjects-only completers reporting no job-related benefit as a proportion of all students	*54.3*	*42.2*	*43.7*	*42.4*	*N/A*	*N/A*	*52.5*	*42.4*	*52.4*	*43.6*	*N/A*	*N/A*
Estimated proportion of all reporting no job-related benefits[b]	**62.8**	**58.2**	**54.6**	**56.2**	**N/A**	**N/A**	**59.3**	**59.7**	**62.6**	**57.9**	**N/A**	**N/A**

Notes: a This proportion is taken from table 6, which estimates the proportion of students who complete a qualification in the longer term.
b This row is the product of the previous two rows.

Source: NCVER's Survey of Student Outcomes 2003

Further study outcomes

Table 28: Estimated proportions going on to further study six months after initial training (%)

	25 to 44-year-olds				45 years and over			
	Cert. I		Cert. II		Cert. I		Cert. II	
	M	*F*	*M*	*F*	*M*	*F*	*M*	*F*
Graduates								
Projected percentage of graduates as a proportion of all students[a]	17.8	30.8	26.0	33.7	16.6	29.4	21.8	29.7
Percentage of graduates who went on to further study	42.0	44.0	44.0	46.0	30.0	36.0	40.0	47.0
Graduates going on to study as a proportion of all students[b]	*7.5*	*13.6*	*11.4*	*15.5*	*5.0*	*10.6*	*8.7*	*14.0*
Subjects-only completers								
Projected percentage of subjects-only completers as a proportion of all students[b]	82.2	69.2	74.0	66.3	83.4	70.6	78.2	70.3
Had not completed a course by end 2003 but enrolled at a higher level	8.6	8.9	5.6	6.6	5.2	6.9	4.6	4.7
Subjects-only completers going on to study at a higher level as a proportion of all students[b]	*7.1*	*6.2*	*4.1*	*4.4*	*4.3*	*4.9*	*3.6*	*3.3*

Notes: a This proportion is taken from table 6, which estimates the proportion of students who complete a qualification in the longer term.
b This row is the product of the previous two rows.

Source: NCVER's Survey of Student Outcomes 2003; National Provider Collection 2002–03

Appendix 2 : Further data on students who did the course as a requirement of their job

Table 29: Proportion of students reporting enrolled as a requirement of the job by highest level of prior education (%)

	25 to 44-year-olds			45 years and over		
	Cert. I	Cert. II	Cert. III	Cert. I	Cert. II	Cert. III
Graduates						
Cert. III and above	15	14	11	8	12	9
Cert. II and below	10	12	14	12	14	12
Subjects-only completers						
Cert. III an above	13[a]	7[a]	8	[b]	5[a]	[b]
Cert. II and below	8[a]	5[a]	8	[b]	3[a]	9

Notes: a These figures need to be treated with caution as they have relative standard errors of greater than 25%.
b Data not reported as fewer than five responses in this cell.

Source: NCVER's Survey of Student Outcomes 2003

Table 30: Examples by training package where students may have enrolled in course as a requirement of their job (%)

Certificate I	Proportion employed		Highest prior education	Course completion	Subject completion
	FT	PT	Cert. III +		
25 to 44-year-olds					
Forest and forest products industry (FPI)	41.3	1.7	17.2	0.2	99.7
Plastics, rubber and cablemaking (PMB)	42.0	1.3	12.9	57.3	91.2
Manufactured mineral products (PMC)	63.3	0.0	1.9	3.3	99.5
Agriculture (RUA)	64.2	9.2	1.7	6.4	92.4
Transport and distribution (TDT)	65.3	7.3	33.7	3.1	92.9
Average	*22.2*	*10.4*	*16.9*	*19.8*	*72.9*
45 years and over					
Forest and forest products industry (FPI)	36.7	1.0	12.8	0.3	99.8
Textiles, clothing and footwear (LMT)	41.4	10.3	21.4	44.8	86.1
Plastics, rubber and cablemaking (PMB)	60.4	0.0	16.3	47.2	93.0
Agriculture (RUA)	43.6	3.9	0.5	4.5	95.1
Transport and distribution (TDT)	69.2	10.7	37.8	2.5	96.0
Average	*19.2*	*9.8*	*16.9*	*19.2*	*73.9*

Table 30: Examples by training package where students may have enrolled in course as a requirement of their job (%) (continued)

Certificate II	Proportion employed		Highest prior education	Course completion	Subject completion
	FT	PT	Cert. III +		
25 to 44-year-olds					
Forest and forest products industry (FPI)	61.0	6.5	20.1	8.3	94.7
Pulp and paper manufacturing industries (FPP)	53.7	0.0	26.7	18.5	83.9
Black coal (MNC)	70.2	1.7	27.3	0.8	94.7
Extractive industry (MNQ)	66.1	12.9	16.9	0.6	96.0
National public services (PSP)	84.5	14.7	37.7	80.2	99.9
Veterinary nursing (RUV)	38.4	41.1	29.2	46.6	79.7
Electrotechnology industry (UTE)	51.9	5.8	34.2	38.5	86.0
Water industry (UTW)	82.9	1.9	48.4	15.2	81.2
Average	*32.4*	*14.8*	*20.4*	*24.4*	*80.2*
45 years and over					
Forest and forest products industry (FPI)	52.6	5.7	17.3	7.0	97.1
Black coal (MNC)	76.9	1.4	18.3	0.0	97.1
Metalliferous mining (MNM)	93.5	2.8	24.9	19.4	86.5
Extractive industry (MNQ)	72.3	6.9	22.1	5.9	95.6
Australian meat industry (MTM)	56.7	8.3	8.1	39.0	88.7
Plastics, rubber and cablemaking (PMB)	76.6	7.8	27.4	25.0	88.4
National public services (PSP)	92.2	7.8	39.4	88.3	99.8
Transport and distribution (TDT)	49.5	9.8	18.4	16.8	88.6
Caravan industry (THC)	42.1	15.8	27.3	42.1	93.4
Average	*25.8*	*13.9*	*21.7*	*20.4*	*82.4*

Source: NCVER's National Provider Collection 2002–03

Appendix 3: Projected longer-term rates of completing courses

To project longer-term rates of completing courses, we used a fairly simple Markov chain approach. This approach makes the assumption that completers and non-completers have the same characteristics. It also does not account for students dropping out of the system and reappearing at a later date. In addition, some will complete a course at a higher level than that in which they were originally enrolled in 2002. For the purposes of this exercise, we are assuming that the current patterns remain the same in the future. However, the intention of this analysis is to gain some idea on rates of completing courses, rather than exact measurements.

Using data on the status of students at the end of 2003 contained in tables 4 (for all certificate I and II students) and 13 (for mixed field students), three possible states were derived. These were completed a course, continuing, and not completed and no longer enrolled. We used this as the starting point. We can then derive a 3×3 matrix showing all possible states at time t and time t+1. As an example, the initial matrix derived from certificate I 25 to 44-year-olds in table 4 is shown figure 1. Each row of the matrix must add to 1 as each row covers all possible states.

Figure 1: Example of an initial matrix in a Markov chain

	Completed	Continuing	Not completed	**(t+1)**
Completed	1	0	0	
Continuing	0.198	0.186	0.616	
Not completed	0	0	1	
(t)				

The matrix is interpreted as follows. Students who had completed receive a value of 1 for completed at time t+1 and 0 for continuing and not completed; students who had completed by end 2003 will still have the state of completed in future time periods. For students who have not completed, they receive a value of 1 for not completed at time period t+1. Here we are assuming that students who had exited the course without completing at time t do not reappear at future time periods. The continuing row is the one we particularly want to focus on for this estimation procedure. What this row is saying is that, of students who are continuing at time t (0.186 of the students), 0.198 will have completed at time t+1, 0.616 will have exited, and a further 0.186 are still continuing. These proportions are distributed to those already completed and those who have left the system without completing. Hence at time t+1 we have 0.235 completed, 0.035 still continuing and 0.730 exiting the system without completing. We can then undertake the same procedure to project those who have completed, are continuing, or have exited the system at time t+2.

In the longer term, all continuing students either complete or exit without completing; that is, the proportion of continuing students approaches 0. For the purposes of our exercise, we stopped at time t+6 as the proportion of continuing students at time t+6 was very close to 0. More generally, if we label the matrix above as P**,** we can derive longer-term states by calculating P^n**.** In our exercise, we derived P^6. This gave a longer-term proportion of 0.243 completed and 0.757 exiting without completing for certificate I 25 to 44-year-olds.



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