NCVER National Centre for Vocational Education Research

Outcomes from higher-level vocational education and training qualifications

John Stanwick
National Centre for
Vocational Education Research

research

Informing **policy** and **practice**
in Australia's **training system**

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The National Centre for Vocational Education Research is an independent body responsible for collecting, managing and analysing, evaluating and communicating research and statistics about vocational education and training (VET).

NCVER's inhouse research and evaluation program undertakes projects strategic to the VET sector. These projects are developed and conducted by NCVER's research staff and are funded by NCVER. This research aims to improve policy and practice in the VET sector.

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Foreword

This research was undertaken as part of the National Centre for Vocational Education Research's (NCVER) inhouse research program. The project is linked to Australia's national strategy for VET 2004–2010, *Shaping our future*—Objective 1: Industry will have a highly skilled workforce to support strong performance in the global economy.

This report investigates outcomes from higher-level vocational education and training (VET) courses. In particular, it examines whether students are gaining employment from these courses as associate professionals, professionals or managers, and the extent to which they are being used as a pathway to university-level studies.

This report will be of interest to policy-makers concerned with the outcomes of VET courses and those involved in the design of higher-level VET courses. Industry groups that have skill needs for occupations at associate professional or professional level will also find this report of interest.

Tom Karmel
Managing Director

Readers interested in the outcomes of VET qualifications are referred to other projects in this area.

- Cully, M 2005, *What it's worth: Establishing the value of vocational qualifications to employers*, NCVER, Adelaide.
- Stanwick, J 2005, *Australian Qualifications Framework lower-level qualifications: Pathways to where for young people?*, NCVER, Adelaide.
- Stanwick, J 2006, *Australian Qualifications Framework lower-level qualifications: Outcomes for people over 25,* NCVER, Adelaide.

When searching VOCED (the UNESCO/NCVER international database for technical and VET research <http://www.voced.edu.au>), the following keywords will help you find other material of interest: qualifications; outcomes of education; higher vocational education; further education; employment.

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Key messages

This report investigates outcomes from diploma and advanced diploma courses undertaken in vocational education and training (VET). The particular focus of the research was whether diplomas and advanced diplomas lead to employment at levels of associate professional or above and also whether these qualifications are a viable pathway to university-level studies.

- There are three main groups of students undertaking these courses. Firstly, there are young students (15–24 years) with Year 12 qualifications either seeking employment or anticipating going on to university. The second group comprises those students aged 25 and over undertaking the course for employment-related reasons, such as increased wages or promotion. The final group comprises those aged 25 and over who have not completed school and who are 'catching up' on qualifications.
- These courses offer positive employment outcomes to many of the graduates from the courses. However, many are employed at an occupational level below that of associate professional. Twenty-seven per cent of employed young graduates were employed as associate professionals or higher, although this increases to about half within 30 months after the course. By comparison, 56% of graduates aged 25 and over were employed as associate professionals or higher. About a quarter of all graduates were employed in intermediate service and clerical occupations.[1]
- There are variations in employment outcomes by field of education. Graduates in architecture and building, and health have the best employment outcomes overall, while those in information technology and creative arts do not fare as well. In human welfare studies, about 40% of graduates claimed increased earnings as a benefit of the course.
- Thirty-two per cent of young graduates and 14% of graduates aged 25 years and over went on to university-level study. In some minor fields, such as accountancy, and banking and finance, over half of the graduates aged 15 to 24 went on to university-level study.

[1] Information obtained from NCVER's Student Outcomes Survey, 2003.

Executive summary

The purpose of this project was to examine where diploma- and advanced diploma-level vocational education and training (VET) qualifications lead. In particular, do they lead to employment in associate professional or professional occupations, and are they used as a pathway to university-level studies?

Most qualifications at diploma and advanced diploma level are expected to lead to employment at associate professional or professional level. These areas of the labour market have experienced considerable growth in the past few years, and are expected to enjoy further growth in the medium-term future. However, Australian Bureau of Statistics (ABS) information indicates that significant proportions of graduates from these courses are employed at levels below that of associate professional, with about 20% employed in intermediate service and clerical positions. This would suggest that there is considerable opportunity for diploma and advanced diploma qualifications to be more prominent in professional and associate professional occupations than is currently the case.

Diplomas and advanced diplomas also have an important role as pathways to university study. It is from this level, more than any other, that VET students seek to move on to university studies. While there is no national system of credit transfer, most universities have some kind of credit transfer arrangement for students with VET qualifications, with the Australian Vice Chancellors' Committee recommending that diploma/advanced diplomas be granted credit for one year of a bachelor's degree.

Diplomas and advanced diplomas accounted for about 14% of enrolments, and 23% of all training hours (course hours) in the public VET system in 2002. Therefore they are significant in terms of overall VET effort. The enrolment data for diplomas and advanced diplomas suggest three main groups of students undertaking these courses. The first group comprises a large contingent of young students with Year 12 qualifications entering tertiary education for the first time, either with a view to gaining employment, or using the course as a stepping stone to university studies. The second group comprises people aged 25 and over enrolling in the course for reasons related to employment; for example, for increased wages or for promotion, while the final group consists of people aged 25 and over who have not completed Year 12 and are 'catching up' on their education.

An investigation of outcomes from these courses shows that many young people are gaining employment after completing their course. However, the majority are employed at a level below that of associate professional. Our data indicate that 73% of employed young graduates are employed at an occupational level below that of associate professional, with intermediary service and clerical, and elementary service and clerical being the two most popular occupational groupings for young people. However, we also see that, within 30 months after the course, about half of the employed young graduates were employed as associate professionals or higher. Counterbalancing this, we found that about a third of young graduates had gone on to university studies. Clearly, diplomas and advanced diplomas are a significant further study pathway for young graduates.

For people aged 25 and over, there was a variety of employment outcomes, with significant proportions of graduates claiming benefits such as increased earnings, promotion or changed job as a result of the course. Overall, 74% of graduates aged 25 and over stated at least one job-related benefit from the course. Graduates aged 25 and over were also employed at higher occupational levels than their younger counterparts, although this is not surprising. Overall, 56% of employed

graduates in this age group were employed as associate professionals or higher, although there was still a significant proportion (20%) employed in intermediate service and clerical occupations. While further study is not a major goal for graduates aged 25 and over, our data nevertheless indicate that about 14% of this group went on to university study following the course.

In our analysis, we also investigated outcomes by field of education. This revealed that graduates from architecture and building along with their counterparts from health obtained the best overall employment outcomes from the course. High proportions of graduates from these courses were employed in associate professional occupations or higher—even young graduates. Our data indicate that 69% of employed young graduates in architecture and building, and 70% in health were employed as associate professionals or higher. For some fields, there were also other significant employment-related benefits. For example, for the minor field of human welfare studies, 83% of graduates claimed an employment-related benefit from the course, with about 40% of these graduates stating increased earnings in particular as a benefit of the course.

By contrast, graduates in the fields of information technology and creative arts did not enjoy such good employment outcomes, with 52% of young graduates in information technology, and 59% in creative arts stating at least one job-related benefit from the course. It is worth noting, however, that at least a quarter of creative arts graduates stated personal interest as a motivation for undertaking the course.

When we investigated further study outcomes for graduates by field of education, we found that, in some fields, high proportions of young graduates went on to university study. We found that 37% of young information technology graduates went on to university studies, a progression which to some extent offsets their poorer employment outcomes. For a couple of the minor fields we examined, namely accountancy, and banking and finance, over half of young graduates and close to a quarter of those aged 25 and over went on to university studies. This is a substantial outcome.

The overall picture is that, undertaking diploma and advanced courses in VET leads to employment outcomes for many students. However, the research also demonstrated that many, particularly younger people, are employed at an occupational level below that intended by the course. There are significant further study outcomes from these courses, with about a third of young graduates going on to university studies. There are also variations in outcomes by field of education, with graduates in architecture and building, and also health having the best employment outcomes. However, we find high proportions of young graduates in minor fields, such as accountancy, and banking and finance, going on to university study following the course.

Introduction

Purpose and background

The purpose of this project was to examine where diploma and advanced diploma qualifications in vocational education and training (VET) lead. Diplomas and advanced diplomas have two primary purposes: direct labour market outcomes and as a pathway to further study (although undoubtedly some students will undertake these qualifications for reasons of personal interest). In relation to labour market outcomes, the Australian Qualifications Framework (AQF) states that:

> Diplomas and Advanced Diplomas prepare candidates for self-directed application of skills and knowledge based on fundamental principles and/or complex techniques. These qualifications recognise capacity for initiative and judgement across a broad range of technical and/or management functions. (Australian Qualifications Framework)

Advanced diplomas are more specialised than diplomas and involve skills and knowledge of greater complexity, as well as greater personal accountability in job roles.

Diplomas and advanced diplomas have received attention recently in terms of their place in the labour market. For example, Robinson (2003) and the Queensland Department of Employment and Training (2005) have argued that there was an undersupply of high-level VET to meet the demand for the fast-growing, high-level professional, technical and conceptual occupations. Robinson particularly highlighted the associate professional occupational grouping as being 'underdone' (receiving too little attention) by high-level VET. In addition, the Office of Training and Further Education (1999), argued that vocational education and training needed to meet the expectations of employers and students with middle-level qualifications more adequately and effectively. They further argued that a growth in occupations requiring higher-level conceptual work would mean an increased demand for qualifications at this level.

As noted, diplomas and advanced diplomas can also be used as pathways to further study, with many qualifications at this level articulating into degree-level qualifications in the higher education sector. Diplomas and advanced diplomas are sometimes referred to as middle-level qualifications, sitting as they do above certificate-level qualifications, but below degree-level qualifications (see table 1).

Table 1: AQF qualifications by sector of accreditation

Schools sector accreditation	VET sector accreditation	Higher education sector accreditation
		Doctoral degree
		Master's degree
	Vocational graduate diploma	Graduate diploma
	Vocational graduate certificate	Graduate certificate
		Bachelor degree
	Advanced diploma	Advanced diploma, associate degree
	Diploma	Diploma
Senior Secondary Certificate of Education	Certificate IV	
	Certificate III	
	Certificate II	
	Certificate I	

Source: Australian Qualifications Framework

The following are main research questions underpinning this report.

- ✧ Are these qualifications leading to the rewards expected; that is, employment in associate professional or professional positions?
- ✧ Are they stepping stones to university-level study?

These questions will be primarily addressed using data from the National VET Provider Collection and the Student Outcomes Survey, both of which are maintained by the National Centre for Vocational Education Research (NCVER). Further information on data sources is contained in appendix 1.

The starting point for this research is an examination of the role of diplomas in the labour market. Is there scope for them to play a more important role in occupations with higher skill levels? In addition, we consider their role as a pathway to university study. Next, the report explores background data on diplomas, with a view to identifying students' main intentions for undertaking these courses; we also identify enrolment patterns among students. Following this contextual analysis, we explore the outcomes from students who have undertaken diplomas/advanced diplomas by field of education. In particular, we investigate whether they obtain employment outcomes from these courses at associate professional or professional levels. We also investigate the degree to which they are used by graduates as pathways to university study.

Context to diplomas and advanced diplomas

Diplomas in the labour market

Diplomas and advanced diplomas are largely aimed at employment in occupations at the professional and associate professional occupational level[2], as shown in table 2. The intended occupation for a course is derived in NCVER's National VET Provider Collection by a consideration of the core competencies, skill level and tasks involved in the course.

Table 2: Intended occupational level of diploma and advanced diploma courses, weighted by student enrolment numbers in 2002 (%)

	Managers	Professionals	Assoc. profs	Other[a]	Total
Diploma					
Training package	5.6	26.2	67.4	0.8	**100**
Nationally accredited	13.8	33.2	44.2	8.8	**100**
Total	**10.2**	**30.1**	**54.4**	**5.3**	**100**
Advanced diploma					
Training package	4.2	72.5	23.2	0.1	**100**
Nationally accredited	10.5	37.6	29.8	22.1	**100**
Total	**9.1**	**45.4**	**28.3**	**17.2**	**100**

Note: (a) These are mainly Australian Standard Classification of Occupations (ASCO) levels below associate professional; however, this also includes some enrolments not coded to any ASCO level.

Source: NCVER National VET Provider Collection 2002

We can get a better idea of the aim of the qualifications by examining the intended occupation of the most popular training packages at diploma and advanced diploma level.

[2] These are classifications based on the Australian Standard Classification of Occupations (see ABS 1997, 2nd edition). Associate professionals and professionals are the second and third highest major occupational categories (after managers and administrators) on a scale of nine major occupational groupings.

Table 3: Intended occupational level of most popular training package courses, weighted by student enrolment numbers in 2002 (%)

Training package	No. of enrolments	Managers	Professionals	Assoc. profs	Other[a]	Total
Diploma						
Community services	18 983	0.0	0.6	99.4	0.0	**100**
Business services[b]	12 983	10.2	0.0	89.7	0.1	**100**
Information technology	11 214	0.0	100.0	0.0	0.0	**100**
Financial services	6 116	0.0	99.6	0.0	0.4	**100**
Hospitality	5 965	0.0	0.0	100.0	0.0	**100**
Advanced diploma						
Financial services	5 998	0.0	100.0	0.0	0.0	**100**
Electrotechnology	2 651	0.0	78.2	21.8	0.0	**100**

Note: (a) These are mainly Australian Standard Classification of Occupations (ASCO) levels below associate professional; however, this also includes some enrolments not coded to any ASCO level.
(b) Enrolment numbers in Business services also include enrolments in the now superseded Administration package.

Source: NCVER National VET Provider Collection 2002

We see from table 3 that three of these packages are aimed at jobs at professional level occupations—information technology, financial services and electrotechnology. These could be areas where there is competition with universities, as there are university-level qualifications in these areas. However, they are also potential areas of cooperation with universities in terms of articulation and credit arrangements or dual sector awards.

Having established that diplomas and advanced diplomas are aimed at the higher occupational levels, we can also get an impression of the potential demand for these qualifications in the labour market.

Table 4: Change in proportion of workers, 1996–2002, and projected growth, 2000–01 to 2008–09

Occupation	% change 1996–2002	Projected growth (%)
Managers and administrators	10.1	10.9
Professionals	27.3	20.3
Associate professionals	24.3	14.1
Tradespersons	2.7	3.5
Advanced service and clerical	-3.7	-1.3
Intermediate service and clerical	14.0	15.3
Intermediate production	-0.5	6.2
Elementary service and clerical	8.9	5.0
Labourers	7.4	5.7
Total	**12.0**	**10.8**

Source: Unpublished data from the Australian Labour Force Survey and Centre for Policy Studies, Monash University[3], cited in Stanwick & Saunders (2004, p.15)

Table 4 shows that professional- and associate professional-level occupations have been the fastest growing section of the labour market, with further growth predicted in the future. In addition to this changing occupational profile, the associate professional and professional occupational groups had the highest annual rate of job openings for new entrants for the period 1997–98 to 2001–02. The rate was 4.2% for all occupations, while for associate professionals the rate was 6.0%, and for professionals it was 5.3% (ANTA 2003). As such, there is potentially a demand for diplomas and advanced diplomas in the labour market.

[3] The Centre for Policy Studies derived the projected growth data using the MONASH model, which essentially produces forecasts of employment by occupation group.

Given this potential demand, we might expect the qualifications profile of the professional and associate professional occupational groups to include substantial proportions of people with diplomas or advanced diplomas (table 5).

Table 5: Level of highest non-school educational qualification by occupation for employed persons, May 2004 (%)

Occupation	Bachelor+	Diploma/ adv. dip.	Cert. III–IV	Cert. I/II	Cert. nfd	School	Total
Managers and administrators	33.5	8.8	16.7	5.7	1.0	34.3	**100**
Professionals	69.6	13.0	4.8	1.8	0.6	10.2	**100**
Associate professional	21.2	13.3	18.1	6.6	2.2	38.6	**100**
Tradespersons	2.7	3.9	57.4	3.7	1.2	31.1	**100**
Advanced clerical	11.4	10.7	10.1	14.1	2.1	51.6	**100**
Intermediate clerical	10.1	9.3	14.3	9.5	3.0	53.8	**100**
Intermediate production	4.1	3.2	19.4	4.5	1.5	67.3	**100**
Elementary clerical	6.1	4.9	7.4	6.4	2.0	73.2	**100**
Labourers	3.9	3.4	11.9	6.8	1.8	72.2	**100**
Total	**21.6**	**8.3**	**18.1**	**5.9**	**1.7**	**44.4**	**100**

Notes: nfd = not further defined.
Table excludes level not determined.

Source: ABS (2003)

What we see from this table is that most professionals have university-level qualifications, with only a small proportion having diplomas. Furthermore, the qualification profile for associate professionals is mixed, with over a third having school-only qualifications. If diplomas are not playing a significant role at these higher occupational levels, then what is the occupational profile of diplomas, and how does this compare with the profile of university qualifications?

Table 6: Occupational level of employment for employed people with bachelor or higher degrees or diplomas/advanced diplomas as their highest level of non-school education

ASCO	Bachelor or higher	Diploma/advanced diploma
Managers and administrators	10.5	7.2
Professionals	59.3	28.8
Associate professionals	12.2	19.8
Tradespersons	1.6	6.2
Advanced service and clerical	2.1	5.2
Intermediate service and clerical	8.1	19.6
Intermediate production	1.7	3.4
Elementary service and clerical	2.9	6.1
Labourers	1.6	3.7
Total	**100.0**	**100.0**

Note: ASCO = Australian Standard Classification of Occupations

Source: ABS (2003)

We see that, while over a half (56%) of employed diploma or advanced diploma holders are employed at the higher occupational levels, there is also a significant proportion employed at the intermediate service and clerical level. By contrast, about 82% of employed university qualification holders are employed at the higher occupational levels. The information in this table is worth bearing in mind when we look at the immediate employment outcomes of students who finished (either fully or in part) diploma and advanced diploma courses in 2003.

In conclusion, there is plenty of scope for diplomas and advanced diplomas to play a more important role in occupations requiring higher skill levels. At the moment, they are not a major skill source for professional and associate professional occupations, with degrees being the main qualification source at professional level, and diplomas/advanced diplomas being less important than degrees and certificates III or IV at the associate professional level.

Interface with higher education

One of the intended roles of diplomas and advanced diplomas is to act as a stepping stone to university-level studies. While some diploma courses can be articulated into degree programs, there are still questions about the ability of students to progress smoothly from the VET sector to the higher education sector. For example, the Department of Education, Science and Training released a discussion paper in 2002 titled *Varieties of learning* in which the relationship between the two sectors was discussed. Among issues discussed in the paper were credit transfer arrangements between the sectors, noting that there is no national system of credit transfer. However, there are credit transfer arrangements in most universities for people who have VET qualifications and who wish to go on to university. To this end, the Australian Vice Chancellors' Committee has released guidelines on how much credit students can gain for a VET diploma. By way of example, students can obtain a 33% credit for a VET diploma in a related three-year undergraduate course (typically a bachelor's degree) in participating universities (Australian Vice Chancellors' Committee 2005).

While it is not in the scope of this report to discuss in detail underlying differences between the sectors and the difficulties in moving between them, it is important to note that the most direct interface between VET and higher education is at the diploma level. It is from this qualification, more than any other that VET students seek to undertake further study in the higher education sector. Table 7 shows numbers of students commencing in higher education with VET diploma and advanced diploma qualifications as their highest level of qualification.

Table 7: Highest prior level of education for commencing bachelor degree students in 2003

Highest prior education	15–24	25 and over	Total	Per cent
Bachelor degree or above from higher education	6 245	8 184	14 429	9.0
Advanced diploma or associate degree from higher education	1 477	2 327	3 804	2.4
TAFE diploma, advanced diploma	11 086	10 885	21 971	13.8
Miscellaneous education	9 739	6 170	15 909	10.0
Year 12 or below	91 890	5 693	97 583	61.2
Unknown	3 052	2 716	5 768	3.6
Grand total	**123 489**	**35 975**	**159 464**	**100.0**

Source: Unpublished data from the Department of Education, Science and Training's higher education statistics 2003

From this table we see that, for students commencing in higher education bachelor degrees in 2003, about 14% of commencing higher education students had a technical and further education (TAFE) diploma or advanced diploma as their highest level of prior qualification. While not major, this is still a significant proportion of all commencing students. However, we also have information on students who were admitted to higher education on the basis of their TAFE studies.

Table 8: Basis for admission to higher education courses in 2003 for students with VET diploma/ advanced diploma qualifications

Basis for admission	15–24	25 and over	Total
Advanced diploma			
Completed TAFE	267	398	**665**
Incomplete TAFE	32	33	**65**
Sub-total	*299*	*431*	***730***
Diploma			
Completed TAFE	6 067	5 793	**11 860**
Incomplete TAFE	407	418	**825**
Sub-total	*6 474*	*6 211*	***12 685***
Total	**6 773**	**6 642**	**13 415**

Source: Unpublished data from the Department of Education, Science and Training's higher education statistics 2003

We see that few students were admitted to higher education on the basis of holding an advanced diploma, while over 12 000 students were admitted on the basis of holding a diploma or a part thereof. Of these, 28% of diploma and 32% of advanced diploma students had undertaken their studies in the field of management and commerce.

New qualifications in the Australian Qualifications Framework

New qualifications introduced into the AQF have the potential to impact on the demand for diploma qualifications. Firstly, the associate degree was introduced into the higher education sector in 2003. This is also a middle-level qualification that fits into the same level of the AQF as advanced diplomas. According to Allen Business Services (2002), the associate degree is intended to expand learning pathways under the AQF. However, they believe that the degree was introduced more as a learning pathway for the burgeoning international market as opposed to the domestic market.

The associate degree is a two-year course at sub-degree level, which can be standalone or be fully articulated into a three-year bachelor degree. It differs from the advanced diploma in that it focuses more on the foundation academic and research-based skills and on generic employment-based skills (Australian Qualifications Framework 2005). While having a vocational focus, this qualification has less emphasis on industry-specific competencies than the equivalent VET competencies (Allen Business Services 2002). In 2004, there was a total of only 1954 students enrolled in associate degree courses. It is too early too assess what, if any, effect these qualifications will have on VET diplomas and advanced diplomas.

An even more recent development in the AQF has been the inclusion of vocational graduate certificates and diplomas. These were introduced in 2005, purportedly to address skill needs in the economy, and were intended to sit in the VET sector opposite higher education graduate certificates and diplomas. These qualifications are aimed at providing high-level employment-related skills and knowledge. They could be used, for example, by tradespeople wishing to upgrade their skills, or by professionals with university qualifications wanting to obtain VET skills (Queensland Department of Employment and Training 2005). Entry points for these new qualifications include a relevant diploma/advanced diploma, a relevant certificate III or IV with vocational experience, extensive vocational experience without formal qualifications, or a higher education qualification, often with relevant vocational experience (Australian Qualifications Framework 2005).

The Community Services and Health Industry Skills Council has already identified these qualifications as a way of addressing skills shortages within the industry. As with associate degrees, it is still too early to know whether these new VET qualifications will have any impact on existing diploma/advanced diploma qualifications.

Background data on diplomas and advanced diplomas in VET

Diplomas and advanced diplomas, unlike other qualifications in the Australian Qualifications Framework, can be accredited either through the VET sector or the higher education sector. Historically, diplomas were offered in the higher education sector by colleges of advanced education. These colleges were created in 1965, mainly to achieve financial efficiencies, as part of a binary system of higher education which included colleges of advanced education and universities (Abbot & Doucouliagos 2003). However, in the late 1980s universities and colleges of advanced education were combined into a 'unified national system'. After the end of the binary system, higher education diplomas were increasingly converted into degrees and have now virtually disappeared. By contrast, VET diplomas steadily increased in numbers from 1991–2000, with a slight decrease in numbers since that time. We see from table 9 that in 2003 about 95% of enrolments in diploma-level courses were in VET (as opposed to 70% in 1991).[4]

Table 9: Enrolments in diploma and advanced diploma level courses, 1991–2003

Year	VET[a]	Higher education
1991	127 600	54 777
1994	184 500	16 415
1997	210 600	10 790
2000	222 600	9 555
2003	211 200	9 507

Note: (a) The comparison data between 1991 and 2003 can only be made with a high degree of approximation due to reclassification of qualification codes that occurred during this period.

Source: NCVER (2002); NCVER National VET Provider Collection 2002; Department of Education, Science and Training's higher education statistics (various)

Within the public VET system, diplomas and advanced diplomas accounted for about 14% of all training package and nationally accredited enrolments in VET in 2002, while they accounted for about 23% of all anticipated course hours (National VET Provider Collection 2002). Diplomas and advanced diplomas are therefore significant in terms of total VET effort, even if not in enrolment numbers. Appendix 2 provides more information on enrolment numbers and anticipated hours of training for diploma and advanced diploma courses.

Over time, diplomas and advanced diplomas have not become a more significant proportion of VET qualifications in terms of student numbers. If anything, there has been a slight decrease, with diplomas and advanced diplomas accounting for 13.1% of students in 1996, 12.3% in 1999 and 11.7% in 2002 (National VET Provider Collection).

[4] There has been some discussion over whether diplomas will be discontinued in the higher education sector. A rationale for this is that diplomas as AQF titles are predominantly in the VET sector, with the higher education sector often using them more as local awards. In addition, the associate degree is seen as a higher education alternative at sub-degree level. However, some universities and other higher education institutions may prefer to keep diplomas rather than offering associate degrees (personal communication, AQF Advisory Board February 2006).

Student characteristics

We can gain an impression of the types of students undertaking these courses by investigating their background characteristics. Are they students with Year 12 qualifications undertaking tertiary education for the first time, or are they older students who haven't finished Year 12 attempting to catch up?

Firstly, we can investigate the age profile of students undertaking these courses.

Table 10: Proportion of total enrolments by age for diploma and advanced diploma courses in 2002

Age	Diploma	Advanced diploma	Total
15–24	43.6	52.8	**45.9**
25 and over	55.8	46.8	**53.6**
Unknown	0.6	0.4	**0.5**
Total	**100.0**	**100.0**	**100.0**

Source: NCVER National VET Provider Collection 2002

We see from table 10 that advanced diplomas have a slightly younger age profile than diplomas. Examining enrolment data by gender (National VET Provider Collection 2002), we find that females formed a slight majority of enrolments at diploma level (53%), while males formed the slight majority of enrolments at advanced diploma level (57%).

We can get a further impression of the background of students by looking at their highest level of prior education. We use certificate III and above as a category in the table, as these can be considered substantively as post-school qualifications.

Table 11: Highest level of prior education of students enrolling in diploma/advanced diploma courses in 2002 (%)[a]

Prior education	Diploma		Advanced diploma		Total	
	Age 15–24	Age 25+	Age 15–24	Age 25+	**Age 15–24**	**Age 25+**
Certificate III or above	19.2	46.1	17.1	52.3	**18.6**	**47.4**
Year 12	68.8	27.7	74.5	30.2	**70.4**	**28.2**
Below Year 12[b]	12.0	26.2	8.4	17.5	**11.0**	**24.4**
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Notes: (a) The data in this table are based on enrolments with known highest prior educational status. There is a proportion of enrolments with unknown highest prior educational status (13% of enrolments at diploma level and 17% of enrolments at advanced diploma level).
(b) For the purposes of this discussion, below Year 12 also includes certificate I and II qualifications and 'miscellaneous education'.

Source: NCVER National VET Provider Collection 2002

We see from table 11 that the large majority of 15 to 24-year-olds have Year 12 as their highest level of prior education; that is, they are new entrants to tertiary education. Some proportion of these students may have preferred to go to university but could not gain entrance; however, we cannot determine this proportion from our data. By contrast, about half of the students aged 25 and over already have a certificate III or above qualification. There is also a residual proportion of students, more so for the 25 years and over age group, who have below Year 12 (or certificate I or IIs) as their highest level of prior education. For this group, diploma-level VET studies may well be 'catch up' studies.

When we examine the employment status of students, these trends are reflected for young people and employed people aged 25 and over.

Table 12: Employment status of students enrolling in diploma/advanced diploma courses in 2002 (%)[a]

Employment status	Diploma		Advanced diploma		Total	
	Age 15–24	Age 25+	Age 15–24	Age 25+	**Age 15–24**	**Age 25+**
Employed full-time	17.3	42.4	15.7	45.4	**16.8**	**43.0**
Employed part-time	40.1	18.9	39.6	15.2	**39.9**	**18.1**
Unemployed	25.0	17.2	24.5	18.1	**24.9**	**17.4**
Not in the labour force	15.7	11.8	18.3	13.0	**16.4**	**12.1**
Other[b]	1.9	9.7	1.9	8.3	**2.0**	**9.4**
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Notes: (a) The data in this table are based on enrolments with known employment status. There is a proportion of enrolments with unknown employment status (14% of enrolments at diploma level and 19% of enrolments at advanced diploma level).

(b) Other includes self-employed, employer and unpaid employment.

Source: NCVER National VET Provider Collection 2002

Once again we see a difference between the age groups. In particular, while less than 20% of the age group aged 15 to 24 years were employed full-time, over 40% of the 25 and over age group were. We can venture therefore that there were different reasons for the two groups undertaking the course. For many of the younger group, enrolment in these courses is a first foray into tertiary education, probably with a view to obtaining full-time employment or going on to university studies (perhaps for those missing out on university entrance from Year 12). For the older age group, this is less likely to be the case, with many already obtaining post-Year 12 qualifications or being employed full-time or self-employed or an employer. Here, we can surmise that they are doing the course for a variety of reasons, often related to an aspect of their employment.

The enrolment status of students shown in table 13 supports this reasoning. Those in the group aged 15 to 24 years were twice as likely to be enrolled in full-time study as their 25 and over counterparts. This suggests that, for a substantial proportion of 15 to 24-year-olds, gaining employment or going on to university studies is likely to be a reason for undertaking the course, while large proportions in the 25 and over age group are doing the course for reasons related to their employment.

Table 13: Enrolment status of diploma/advanced diploma courses in 2002 (%)

Prior education	Diploma		Advanced diploma		Total	
	Age 15–24	Age 25+	Age 15–24	Age 25+	**Age 15–24**	**Age 25+**
Enrolled full-time	49.6	24.5	53.7	24.5	**50.8**	**24.5**
Enrolled part-time	50.4	75.5	46.3	75.5	**49.2**	**75.5**
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Source: NCVER National VET Provider Collection 2002

NCVER's Student Outcomes Survey[5] provides information on the student's motivation to undertake the course. The responses are categorised as employment-related, further study or personal interest (see table 14).

[5] As the survey is conducted six months after training, the information on motivation is post-hoc.

Table 14: Motivation for undertaking diploma and above level course in 2003 (%)

	Employment-related	Further study	Personal interest[a]	Total
Graduates				
15–24	67	17	17	**100**
25 and over	85	3	12	**100**
Subjects-only completers				
15–24	65	13	22[a]	**100**
25 and over	80	3	17	**100**

Note: (a) Younger students indicating that they undertook the course for personal interest needs to be treated with some caution. In some cases, younger students may indicate personal interest because they are interested in the subject matter of the course, but they may also be interested in employment outcomes.

Source: NCVER Student Outcomes Survey 2003

We see from table 14 that the majority of students stated employment-related reasons for undertaking the course. However, for some young people, further study was also given as a motivation, indicating that some young people view diplomas as a pathway to university education. This motivation was almost non-existent for the 25 and over age group.

Fields of education and most popular training package enrolments

Table 15 shows the proportion of enrolments by field of education.[6] The data are not split by age group as there is no significant variation when we examine the data by age.

Table 15: Enrolments by fields of education for diploma and advanced diploma courses in 2002 (%)

Field of education	Diploma	Advanced diploma	All
Natural and physical sciences	1.7	0.0	**1.3**
Information technology	9.1	3.0	**7.6**
Engineering and related technologies	11.2	30.0	**15.8**
Architecture and building	5.5	2.3	**4.7**
Agriculture	4.1	0.7	**3.3**
Health	3.2	1.6	**2.8**
Education	0.9	0.0	**0.7**
Management and commerce	35.2	49.4	**38.7**
Society and culture	20.3	3.9	**16.2**
Creative arts	8.2	8.9	**8.4**
Food, hospitality and personal services	0.5	0.2	**0.4**
Mixed field programmes	0.1	0.0	**0.1**
Total	**100.0**	**100.0**	**100.0**

Source: NCVER National VET Provider Collection 2002

We see from table 15 that the most popular field of education for both diplomas and advanced diplomas by proportion of total enrolments was management and commerce. Society and culture, and engineering and related technologies were also popular fields of enrolment. For some fields; namely, natural and physical sciences; education; food, hospitality and personal services; and mixed field, there were very few enrolments.

[6] Fields of education are a component of the Australian Standard Classification of Education (ASCED [ABS 2001]). They are a classification of the various areas of study a student can undertake. The other component of ASCED is level of education e.g. diploma.

In addition to field of education, we provide information on the characteristics of students undertaking the most popular training packages at each qualification level. At diploma level the most popular training packages were community services (26.4% of enrolments); business services (18.1%); and information technology (15.3%), while at advanced diploma the most popular were financial services (49.5%) and electrotechnology (21.4%). Table 16 provides more information on these packages.

Table 16: Enrolment characteristics for most popular training packages in 2002

Training package	Age	Gender	Highest prior education level[a]	Employment status[ab]
Diploma				
Community services (human welfare studies— health and welfare associate professionals)	54% aged 25+	92% female	45% Year 12 30% cert. III+	29% full-time 40% part-time
Business services[c] (business and management—business and administration associate professionals)	56% aged 25+	62% female	48% Year 12 32% cert III+	44% full-time 23% part-time
Information technology (computer science and information systems—business and information professionals)	57% aged 15–24	81% male	51% Year 12 37% cert. III+	20% full-time 27% part-time
Advanced diploma				
Financial services (banking and finance—business and information professionals)	55% aged 25+	65% female	47% Year 12 41% cert. III+	32% full-time 21% part-time
Electrotechnology (electrical and electronic engineering, science—building and engineering professionals)	60% aged 15–24	94% male	59% Year 12 17% cert. III+	16% full-time 27% part-time

Note: (a) These are as a proportion of known totals.
(b) Employed full-time also includes self-employed, employer and employed—unpaid.
(c) Enrolment numbers in business services also include enrolments in the now superseded administration package.

Source: NCVER National VET Provider Collection 2002

Table 16 shows that there are different patterns of enrolment for these training packages. For example, we see that a large number of people enrolled in business services and financial services are existing workers and/or already have qualifications at certificate III or above level. This group of workers may well be enrolling for reasons such as to upgrade existing skills for career advancement or as a requirement by their employer.

Other packages such as electrotechnology and information technology are popular with new entrants. It is also worth noting that some of the packages, such as electrotechnology and financial services are in a highly regulated industry area. That is, people need the qualifications to be able to work in these areas.

Summary

The data presented in the tables above indicate three main groups of students, who can be characterised as:

- ✧ Year 12 completers undertaking the course for employment, or with a view to going on to university level studies
- ✧ people aged 25 and over doing the course for reasons related to their employment
- ✧ people aged 25 and over who have not completed Year 12 and are 'catching up' on qualifications.

Outcomes

Employment-related outcomes

Our discussion of employment outcomes focuses on the extent to which students gain employment after the course, the occupational destination of students, and other job-related benefits of the course. Outcomes are investigated by field of education. We will see that employment outcomes for architecture and building are better than for most other fields, while outcomes for information technology and creative arts are not as good. With the exception of architecture and building, diplomas, when compared with employment outcomes from bachelor degrees, generally do not fair as well.

Our investigation of employment outcomes begins with an examination of the overall picture as shown in tables 17 and 18.

Table 17: Overall employment benefits after the course for diplomas/advanced diplomas in 2003 (%)

	Graduates		Subjects-only completers	
	15–24	25 and over	15–24	25 and over
Employed full-time after the course	35	55	39	53
Stated at least one job-related benefit from the course	66	74	44	49
Employed full-time after the course as a proportion of those not employed before the course	24	22	23	19

Source: NCVER Student Outcomes Survey 2003

One of the main features of table 17 is that only about a quarter of those not employed before the course were employed full-time within six months after the course (although significant proportions also gained part-time employment). However, the majority of graduates claimed a job-related benefit of the course. (Further information on employment-related benefits is provided in appendix 7.) The table also shows that subjects-only completers were less likely to claim a job-related benefit from the course.

In the context of employment outcomes, it is also important to consider level of employment attained. As we saw in table 2, most courses at diploma and advanced diploma level are aimed at professional or associate professional employment.

Table 18: Occupational level of employment for graduates and subjects-only completers of diploma/advanced diploma courses in 2003 (%)

ASCO	Graduates			Subjects-only completers		
	15–24	25 and over	**All**	15–24	25 and over	**All**
Managers and administrators	5	12	**9**	3*	12	**8**
Professionals	13	27	**21**	6	20	**14**
Associate professionals	9	17	**14**	11	13	**12**
Tradespersons	6	9	**7**	6	13	**10**
Advanced service and clerical	2	5	**4**	3*	5	**4**
Intermediate service and clerical	31	20	**25**	29	20	**24**
Intermediate production	4	3	**3**	6	5	**5**
Elementary service and clerical	23	4	**12**	27	7	**15**
Labourers	7	3	**5**	9	5	**6**
Total	**100**	**100**	**100**	**100**	**100**	**100**

Note: ASCO = Australian Standard Classification of Occupations.
* Figure should be treated with caution as it has a relative standard error of greater than 25%.

Source: NCVER Student Outcomes Survey 2003

The table indicates that the large majority of employed young people, both graduates and subjects-only completers, are employed at an occupation level below that of associate professional. However, 56% of graduates and 45% of subjects-only completers aged 25 and over are employed at associate professional level or higher.

We can explore these data further by investigating the occupational level of young graduates 30 months after the course.[7] As most of these are new entrants to the full-time labour force, we would expect an increase in occupational level as they spend more time in the labour force.

Table 19: Occupation level after training at September 2004, for students aged 15–24, who undertook training in 2001 at diploma/advanced diploma level

	Graduates	Module completers
Managers and administrators	13	**
Professionals	17	8*
Technicians and associate professionals	19	13*
Tradespersons and related workers	7	9*
Advanced clerical and service workers	4	**
Intermediate clerical, sales and service workers	25	36
Intermediate production and transport workers	2*	13*
Elementary clerical, sales and service workers	13	**
Labourers and related workers	2*	**
Total	**100**	**100**

Notes: * Figure should be treated with caution as it has a relative standard error of greater than 25%.
** Percentage could not be reported as there is a cell count of fewer than five people.

Source: NCVER Down the Track Survey 2004

The table shows that, 30 months after training, about half of the young graduates were employed at associate professional-level occupations or higher. This contrasts with the 27% employed at these levels six months after training. There is a definite movement upward over time, although it should be noted that, in the intervening period, some of these graduates would have undertaken further study.

[7] Note that this is not the same cohort as that from the 2003 Student Outcomes Survey. However, there was only one Down the Track Survey conducted. Nevertheless, these data still provide very useful information on students' occupational levels in the longer term.

We can also further investigate the data for graduates aged 25 and over by comparing occupational level before the course with the occupational level after the course (table 20). We saw in table 12 that the majority of people aged 25 and over were already employed, so they may be undertaking the course for career advancement reasons. More detail is provided in appendix 5.

Table 20: Proportion of graduates employed as associate professionals or higher after the course by pre-course occupation level for students aged 25 and over

Occupation level	Associate professional or higher (%)
Managers and administrators	91
Professionals	92
Technicians and associate professionals	91
Tradespersons and related workers	22
Advanced clerical and service workers	26
Intermediate clerical, sales and service workers	28
Intermediate production and transport workers	**
Elementary clerical, sales and service workers	36
Labourers and related workers	**

Note: ** Percentage could not be reported as there is a cell count of fewer than five people.
Source: NCVER Student Outcomes Survey 2003

Of interest in table 20 is any movement upward for occupation levels below associate professionals. We do see movement upwards to associate professional levels or higher, the greatest movement being for those who were employed at the elementary clerical level before the course. We did not include subjects-only completers in this table as the data are too sparse to comment on.

Selected employment outcomes by field of education

The preceding discussion provides a broad picture of employment outcomes. However, these vary by field of education. In our analysis, we investigate outcomes for eight fields. There are insufficient data to make any useful comment on the other four fields. Where possible, data are also provided for three minor fields. Human welfare studies[8] was included, as it is the largest component of the very diverse society and culture field. Also included are accountancy, and banking and finance, as they are substantially different types of courses to general management, and sales and marketing courses. More detailed employment outcomes data by field of education is provided in appendix 7.

Table 21 shows that graduates in fields such as architecture and building, agriculture, and engineering are more likely to be employed full-time after the course than graduates from other fields, and conversely, graduates in creative arts and information technology less likely. We also notice, with the exception of creative arts, information technology, and possibly health, that graduates were more likely to be employed full-time after the course than subjects-only completers. For some fields, there were also large proportions employed part-time after the course, particularly in creative arts, and society and culture (appendix 7).

[8] Human welfare studies are focused on social interventions that help to maximise people's social and economic wellbeing and includes studies in children's services, youth work, care for the aged, and care for the disabled.

Table 21: Proportion of students employed full-time after the course

Field of education	Graduates		Subjects-only completers	
	15–24	25 and over	15–24	25 and over
Information technology	26	40	29	39
Engineering and related technologies	42	73	37	69
Architecture and building	58	72	37*	63
Agriculture	53	59	30*	54
Health	39	51	69	45
Management and commerce	37	63	47	59
Accountancy	*32*	*53*	*42**	*49*
Banking and finance	*35*	*31*	*72*	*42*
Society and culture	35	44	44	41
Human welfare studies	*41*	*42*	*36*	*31*
Creative arts	22	19	22	28

Notes: * Figure should be treated with caution as it has a relative standard error of greater than 25%.
Italicised words and figures on this table refer to narrow (or minor) fields of education and fall within the broad fields of education above them.

Source: NCVER Student Outcomes Survey 2003

Given that substantial proportions of students were already employed before the course, it would be useful to examine the employment outcomes for students not employed before the course. Table 22 shows proportions of students employed full-time after the course who were not employed before the course.

Table 22: For students not employed before the course, proportion employed full-time after the course

Field of education	Graduates		Subjects-only completers	
	15–24	25 and over	15–24	25 and over
Information technology	25	20	22*	**
Engineering and related technologies	34	38	20*	28*
Architecture and building	31*	39	0*	**
Agriculture	56	19*	**	0*
Health	**	**	0*	0*
Management and commerce	23	22	25	15*
Accountancy	*29**	*19*	**	**
Banking and finance	*25**	*18*	**	**
Society and culture	24	18	43	13
Human welfare studies	*29*	*20*	**	*18**
Creative arts	10	12	19*	11*

Notes: * Figure should be treated with caution as it has a relative standard error of greater than 25%.
** Percentage could not be reported as there is a cell count of fewer than five people.

Source: NCVER Student Outcomes Survey 2003

We see once again that graduates in agriculture; architecture and building; and engineering had better full-time employment outcomes[9], than graduates in other fields, with graduates in creative arts; information technology; management and commerce; and society and culture faring less well. The data for subjects-only completers are somewhat inconclusive. However, the table indicates that, for the fields of management and commerce; society and culture; and creative arts at least, graduates do not fare any better than subjects-only completers. It is worth noting that, for these three fields,

[9] Unfortunately, the data in the health field are not robust enough to enable a comment.

significant proportions of students not employed before the course gained part-time employment after the course (appendix 7). These are also the three fields where females comprise the majority of enrolments. In addition, significant proportions of graduates, and particularly subjects-only completers in the field of creative arts, stated personal interest as their motivation to undertake the course, rather than employment or further study-related reasons (appendix 3).

While gaining employment (particularly full-time employment) is seen as a good outcome, level of employment gained is also important, given that diploma courses are aimed at jobs at the professional and associate professional levels. These data are provided for graduates in table 23. The data for subjects-only completers were not robust enough to report the proportion employed after the course at associate professional level or above. However, information is given in appendix 4 on the most popular occupation levels after the course for both graduates and subjects-only completers.

Table 23: Graduates employed after training at associate professional level or higher (%)

Field of education	15–24	25 years and over
Information technology	33	60
Engineering and related technologies	38	46
Architecture and building	69	73
Agriculture	**	45
Health	70	80
Management and commerce	20	57
Society and culture	22	52
Creative arts	26	58
Overall	27	56

Note: ** Percentage could not be reported as there is a cell count of fewer than five people.
Source: NCVER Student Outcomes Survey 2003

Table 23 indicates that the best outcomes in terms of occupational level were for graduates in architecture and building, and health. While tables 21 and 22 show that graduates in engineering and agriculture obtain relatively good outcomes in terms of gaining employment, this needs to be tempered to some extent by the data in this table, which indicate many are employed (albeit six months after the course), at an occupational level below associate professional. The data in appendix 4 indicate that tradespersons was the most popular occupational category for graduates in engineering and agriculture. Conversely, over a half of graduates in creative arts employed after the course aged 25 and above were employed as professionals. This is a good outcome for those employed. However, we saw above that low proportions of graduates (and subjects-only completers) in this field were employed full-time.

Another feature of the table is that those aged over 25 tended to be employed at higher occupational levels than those aged 15 to 24 in all fields of education. The information on occupational level can also be presented in a different way. That is, for the major fields of education, we can derive the proportion of students who were employed at an occupational level the same or higher than that intended by the course. For example, if the intended occupation of the course was professionals, then we can calculate the proportion of students who were employed as professionals or higher after the course.

Table 24: Proportion of employed graduates and subjects-only completers in an occupational level the same or higher than that intended by the course in 2003 (%)

Field of education	Graduates		Subjects-only completers	
	15–24 year-olds	Aged 25 and over	15–24 year-olds	Aged 25 and over
Information technology	17.7	41.6	4.5*	40.1
Engineering and related technology	30.0	36.3	19.6	28.7
Architecture and building	65.6	57.5	33.6	58.2
Agriculture	6.1	27.0	15.0	31.6
Health	62.7	64.5	9.9*	40.6
Management and commerce	12.9	34.8	14.3	32.5
Society and culture	24.9	49.2	14.5	50.5
Creative arts	21.7	53.7	11.6	46.9
Total	**22.0**	**42.2**	**15.2**	**38.0**

Note: * Figure should be treated with caution as it has a relative standard error of greater than 25%.
Source: NCVER National VET Provider Collection 2002; NCVER Student Outcomes Survey 2003

The data in this table are consistent with the information presented in table 23, in that architecture and building, and health have the highest proportions employed at an occupational level the same as or higher than that intended by the course. We also see better outcomes for people aged 25, by comparison with 15 to 24-year-olds, and better outcomes for graduates by comparison with subjects-only completers generally across all fields.

We have examined proportions of students employed full-time after the course and also their level of employment. However, there are potential employment-related benefits from these courses in addition to gaining a job, including increased earnings, promotion, or changing jobs. Table 25 provides information on proportions of students who claimed at least one job-related benefit[10] from the course. More detailed information on job-related benefits by field of education is provided in appendix 7.

Table 25: Proportion of students stating at least one job-related benefit from the course

Field of education	Graduates		Subjects-only completers	
	15–24	25 and over	15–24	25 and over
Information technology	52	60	37	43
Engineering and related technologies	64	77	39	51
Architecture and building	81	71	28	50
Agriculture	60	73	61*	39
Health	83	83	28	39
Management and commerce	65	71	52	53
Accountancy	*66*	*78*	*52**	*58*
Banking and finance	*58*	*79*	*60*	*58*
Society and culture	74	82	40	53
Human welfare studies	*83*	*83*	*45**	*54*
Creative arts	59	68	22	39

Note: * Figure should be treated with caution as it has a relative standard error of greater than 25%.
Italicised words and figures on this table refer to narrow (or minor) fields of education and fall within the broad fields of education above them.
Source: NCVER Student Outcomes Survey 2003

[10] These benefits include got a job, increased earnings, promotion, changed jobs and set up own business.

Table 25 shows that high proportions of graduates in architecture and building (particularly 15 to 24-year-olds), and health stated at least one job-related benefit from the course. However, we also see that high proportions of graduates in society and culture, particularly in the minor field of human welfare studies, claimed a least one job-related benefit from the course. For example, the data in appendix 7 indicate that about 40% of graduates in human welfare studies claimed increased earnings as a benefit of the course. Several occupations associated with this field, such as childcare, are covered by licensing arrangements, so it is likely that some graduates undertook the course to meet licensing requirements, thereby gaining increased earnings or a promotion as a consequence of the course. Graduates in information technology and creative arts were less likely to claim an employment-related benefit.

Subjects-only completers were less likely to identify an employment-related benefit, although in some fields, particularly banking and finance, more than half of subjects-only completers claimed at least one job-related benefit. Banking and finance, like some of the occupations covered by human welfare studies, has become highly regulated.[11] It is likely that some students enrolled in banking and finance courses for the purpose of meeting licensing requirements in the industry.

Overall, our analysis of employment data indicates that graduates in architecture and building, and health had the best employment outcomes. For graduates in other areas, such as human welfare studies, there are significant other employment-related benefits, such as increased earnings or promotion, deriving from the course. Graduates in creative arts and information technology seem to fare less well than graduates from other fields. In general, graduates have better employment outcomes than subjects-only completers, while those aged 25 and over have better outcomes than young people.

Comparisons with bachelor graduates

Diplomas and advanced diplomas sit directly below bachelor degrees in the Australian Qualifications Framework. However, there is some level of comparability in terms of expected employment outcomes. These expected outcomes include employment at the higher occupational levels. Table 26 provides a broad comparison of bachelor degrees and diplomas in terms of occupational level employed after the course (for those employed). More detail on employment outcomes is given at appendix 5. The caveats attached to the appendix should be noted when reading this table.

We see from the table that, six months after the course, graduates from diploma courses are generally employed at lower occupational levels than their graduate counterparts. This is consistent with the data in table 6 derived from the Australian Bureau of Statistics (ABS) Survey of Education and Work that showed that 82% of employed people with bachelor degrees as their highest level of education were employed as associate professionals or higher, whereas only 56% with diplomas or advanced diplomas were. Overall, diploma graduates in architecture and building compared most favourably with their bachelor degree counterparts in terms of occupational level after the course.

[11] Many occupations in banking and finance are now covered by the *Financial Services Reform Act (2001)*, which brings financial services and products together under one licensing regime.

Table 26: Comparison of top three occupational levels of employment obtained by diploma/advanced diploma graduates by comparison with bachelor degree graduates

Field	Bachelor graduates	Diploma/advanced diploma graduates
Agricultural science	Professionals (30%)	Tradespersons (31%)
	Clerical, sales and service (16%)	Professionals (19%)
	Managers and administrators (16%)	Intermediate clerical, sales and service (11%)
Architecture and building	Professionals (70%)	Professionals (30%)
	Technical officers (14%)	Technicians and associate professionals (24%)
	Managers and administrators (3%)	Managers and administrators (17%)
Art and design	VPA-related (40%)	Professionals (31%)
	Clerical, sales and service (22%)	Elementary clerical, sales and service (22%)
	Professionals (16%)	Intermediate clerical, sales and service (14%)
Computer science	Professionals (63%)	Professionals (27%)
	Clerical, sales and service (14%)	Elementary clerical, sales and service (23%)
	Managers and administrators (8%)	Technicians and associate professionals (15%)
Engineering	Professionals (84%)	Tradespersons (31%)
	Technical officers (4%)	Professionals (23%)
		Technicians and associate professionals (16%)
Economics and business	Professionals (38%)	Intermediate clerical, sales and service (31%)
	Clerical, sales and service (30%)	Professionals (16%)
	Managers and administrators (21%)	Technicians and associate professionals (13%)
		Elementary clerical, sales and service (13%)

Note: VPA = visual and performing arts.
Source: NCVER Student Outcomes Survey 2003; Gradlink 2004 data

Further study

While the majority of people enrol in diploma- and advanced diploma-level courses for employment-related reasons, some also enrol as a pathway to further study. We saw from table 14 that 17% of graduates and 13% of subjects-only completers aged 15 to 24 indicated that their motivation for undertaking the course was further study. Table 27 provides information on graduates who went on to further study at bachelor degree-level or higher by field of education. These data are not available for subjects-only completers.

Table 27: Proportion of diploma graduates going on to further study at bachelor degree level or higher

Field of education	Proportion going on to further study at bachelor level or higher	
	15–24	25 and over
Information technology	37	13
Engineering and related technologies	33	9
Architecture and building	21	5*
Agriculture	29	18
Health	26	14
Management and commerce	39	15
Banking and finance	*54*	*22*
Accountancy	*53*	*23*
Society and culture	24	16
Human welfare studies	*27*	*20*
Creative arts	24	17
Total	**32**	**14**

Note: * Figure should be treated with caution and it has a relative standard error of greater than 25%.
Source: NCVER Student Outcomes Survey 2003

The table shows that overall about a third of graduates aged 15–24 went on to university study, while 14% of those aged 25 and above did so. This implies that the course was a pathway to further study for a significant proportion of young people. By field of education, we find that graduates in architecture and building were least likely to go on to university study (21% did so). This is perhaps not surprising, given the good employment outcomes they obtained from their course. In addition, most architecture and building students indicated employment-related reasons for undertaking the course, with low proportions indicating further study (appendix 3).

By contrast, young graduates in management and commerce, and information technology were most likely to go on to studies at bachelor and above level. In the minor fields, we see particularly high proportions of 15 to 24-year-old graduates in banking and finance, and accounting going on to university studies (over a half). The high proportions of young information technology graduates going on to university to some extent compensates for the poorer employment outcomes from this field.

It is noteworthy that the finance and information technology training packages were two of the packages listed in table 3 as having an intended occupation level of professional (as well as electrotechnology). It would appear that, for these courses, there may well be some relationship between the VET provider and a university. This could take the form of articulation and credit transfer arrangements. They could even involve dual-sector universities, such as Swinburne University of Technology, which offers dual awards in areas such as finance.

Conclusions

At the beginning of this report we stated that we would look at outcomes from high-level VET qualifications from two perspectives: firstly, what are the employment outcomes and are students obtaining employment in associate professional or higher occupations? And secondly, to what extent do students go on to further study at university?

We argued in the report that there is plenty of scope for higher-level VET to play an important role in occupations requiring higher skill levels, as well as to provide a stepping stone to university study. We also saw that these qualifications are serving different purposes for young people and those aged 25 and above. Young people are undertaking the course for either direct labour market outcomes or with a view to going on to university. Those aged 25 and over are mainly undertaking the course for employment-related reasons, with some embarking upon the course as 'catch up' for not finishing school. Within this, there are variations by field of education.

So what is the overall picture? Are diplomas and advanced diplomas meeting these needs? We found that for young people there are reasonable outcomes in terms of gaining employment. However, the majority are employed at occupational levels below that of associate professionals, although over a longer period there is a movement upward in occupational level. There were good further study outcomes for young people, with a about a third of graduates going on to university studies.

For people aged 25 and over, there were more employment-related benefits, such as increased earnings, promotion or changed job, than for young people. People aged over 25 are also employed at higher occupational levels than young people, which is to be expected, since they have been longer in the labour market. Nevertheless, there is still a significant proportion of employed people aged 25 and over who are employed at the intermediate service and clerical level (20%, as well as other levels below associate professional). For these people, the employment outcomes are not so good. While some graduates aged 25 and over went on to university studies, the proportion was not high (14%).

Another noticeable feature of the overall picture is that subjects-only completers do not have nearly as good employment outcomes as graduates—they are considerably less likely to state an employment-related benefit, and are more likely to be employed at an occupational level below that of associate professional.

Within the overall scenario, there was considerable variation in outcomes by field of education. Graduates in architecture and building have the best employment outcomes overall, while graduates in health also had good employment outcomes. Graduates in agriculture had good outcomes in terms of gaining employment and other employment benefits; however, the most popular occupation of employment after the course was tradespersons, rather than associate professionals or higher.

Conversely, students who had undertaken courses in creative arts and information technology obtained modest employment outcomes from the course. It is worth noting, however, that significant proportions of students in creative arts indicated that they had undertaken the course for personal interest reasons. A very broad brush comparison with employment outcomes from bachelor degrees indicated that, with the exception of architecture and building, graduates from

bachelor degrees tended to have better employment outcomes than graduates from diploma/ advanced diploma courses.

Further study outcomes also varied by field of education. For a couple of the minor fields, accountancy, and banking and finance, we saw that over a half of young graduates went on to university studies, which may well be a result of some relationship between the VET provider and the university. Quite high proportions of young graduates in information technology also went on to university studies (37%), to some extent compensating for their poorer employment outcomes. Graduates in architecture and building, where employment outcomes are good, were the least likely of any field to go on to university study.

In conclusion, we have found good employment outcomes for some graduates from diploma/ advanced diploma courses (particularly those in architecture and building). In a significant number of cases, however, we found that these courses are not providing people with employment as professionals or associate professionals. Diplomas/advanced diplomas are serving their purpose in assisting people to advance to university studies.

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Appendix 1: Data sources

NCVER's National VET Provider Collection was used to provide information on enrolment patterns for diploma and advanced diploma qualifications in 2002. To investigate employment and further study outcomes from diploma and advanced diploma courses, we used data from NCVER's 2003 Student Outcomes Survey. This survey provides information on employment outcomes six months after the course for both graduates and subjects-only completers. However, the survey only provides further study information for graduates from the course. The survey also provides information, post-hoc, on students'—both graduates and subjects-only completers—motivations for undertaking the course

Data from the National VET Provider Collection and Student Outcomes Survey were matched to obtain data on the extent to which students were employed after the course at the same or higher occupational level than that intended by the course. The Department of Education, Science and Training's higher education statistics collection was used to investigate the number of students commencing bachelor degrees who had VET diplomas or advanced diplomas as their highest level of prior education and also the numbers that were admitted on the basis of the diplomas or advanced diplomas. Finally, for some tables, data from ABS and other sources were used.

Appendix 2: Detailed enrolment characteristics

Tables 28 and 29 summarise enrolments and training hours respectively by qualification level for training package and other nationally accredited enrolments in 2002, and also the number of locally accredited courses.

Table 28: Enrolments by qualification level in 2002 (number and proportion)

Qualification level	Advanced diploma		Diploma		Cert. IV		Cert. III		Cert. II		Cert. I		Other*		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	**No.**	**%**
Training package	12 005	1.4	71 682	8.6	132 498	16.0	320 733	38.7	242 756	29.3	49 458	6.0	0		**829 132**	**100**
Nationally accredited	42 045	5.4	91 055	11.7	93 617	12.0	114 522	14.7	122 669	15.8	88 018	11.3	226 775	29.1	**778 701**	**100**
Total	**54 050**	**3.4**	**162 737**	**10.1**	**226 115**	**14.1**	**435 255**	**27.0**	**365 425**	**22.7**	**137 476**	**8.6**	**226 775**	**14.1**	**1 607 833**	**100**

Note: * 'Other' refers to a variety of other levels of qualification falling outside the certificate I to advanced diploma range. It includes graduate certificates and diplomas, bachelor degrees, and school education. However, the largest proportion of these enrolments (about 91%) is defined as 'statement of attainment not identifiable by level'. In addition, there were 372 513 enrolments for locally accredited enrolments.

Source: NCVER National VET Provider Collection 2002

Table 29: Effort in number of total hours by qualification in 2002 (%)

Qualification level	Advanced diploma	Diploma	Cert. IV	Cert. III	Cert. II	Cert. I	Other	Total
Training package	2.8	15.4	16.9	40.3	21.7	2.9	0.0	**100**
Nationally accredited	10.1	18.1	15.0	16.9	13.9	10.2	15.8	**100**
Total	**6.1**	**16.6**	**16.0**	**29.7**	**18.2**	**6.2**	**7.2**	**100**

Source: NCVER National VET Provider Collection 2002

Table 30: Enrolment characteristics by field of education

Field of education	Age	Gender	Highest prior education level[a]	Employment status[ab]	Total number of enrolments
Diploma					
Information technology	56% aged 15–24	79% male	50% Year 12 38% cert. III+	20% full-time 27% part-time	14 878
Engineering and related technologies	58% aged 25+	87% male	37% Year 12 41% cert. III+	53% full-time 18% part-time	18 216
Architecture and building	54% aged 25+	73% male	48% Year 12 39% cert. III+	47% full-time 26% part-time	8 981
Agriculture	68% aged 25+	59% male	37% Year 12 39% cert. III+	49% full-time 23% part-time	6 673
Health	73% aged 25+	59% female	38% Year 12 38% cert. III+	45% full-time 29% part-time	5 287
Management and commerce	55% aged 25+	60% female	49% Year 12 32% cert. III+	43% full-time 27% part-time	57 309
Society and culture	59% aged 25+	80% female	46% Year 12 31% cert. III+	30% full-time 36% part-time	32 956
Creative arts	52% aged 25+	62% female	47% Year 12 32% cert. III+	18% full-time 33% part-time	13 326
All[c]	**56% aged 25+**	**53% female**	**46% Year 12 34% cert. III+**	**38% full-time 28% part-time**	**162 737**
Advanced diploma					
Information technology	72% aged 15–24	78% male	69% Year 12 23% cert. III+	17% full-time 29% part-time	1 627
Engineering and related technologies	51% aged 15–24	94% male	50% Year 12 35% cert. III+	44% full-time 20% part-time	16 208
Architecture and building	50% aged 15–24	54% female	50% Year 12 42% cert. III+	32% full-time 37% part-time	1 254
Agriculture	66% aged 25+	57% male	39% Year 12 37% cert. III+	62% full-time 16% part-time	376
Health	55% aged 25+	66% female	50% Year 12 34% cert. III+	30% full-time 40% part-time	871
Management and commerce	54% aged 15–24	61% female	57% Year 12 31% cert. III+	33% full-time 30% part-time	26 712
Society and culture	56% aged 25+	69% female	50% Year 12 37% cert. III+	38% full-time 33% part-time	2 093
Creative arts	56% aged 15–24	58% female	45% Year 12 43% cert. III+	17% full-time 37% part-time	4 781
All[c]	**53% aged 15–24**	**57% male**	**54% Year 12 28% cert. III+**	**35% full-time 28% part-time**	**54 050**

Note: (a) These are as a proportion of known totals.
(b) Employed full-time also includes self-employed, employer and employed—unpaid.
(c) The summary for all includes all 12 fields of education, not only the eight summarised.

Source: NCVER National VET Provider Collection 2002

Appendix 3: Course motivation by field of education

Table 31: Motivation for undertaking course at diploma and above level by field of education in 2003 (%)

	Graduates			Subjects-only completers		
	Employ-ment-related	Further study	Personal interest	Employ-ment-related	Further study	Personal interest
Information technology						
15–24	74	18	8	81	**	6*
25 and over	89	3*	8	89	0*	11*
Engineering and related technologies						
15–24	71	16	13	66	12	23
25 and over	86	5	9	82	3*	14
Architecture and building						
15–24	81	9*	10*	75	**	**
25 and over	81	**	18	88	**	**
Agriculture						
15–24	70	8*	22	72	**	**
25 and over	85	**	13	87	**	11*
Health						
15–24	61	**	30	80	0*	**
25 and over	82	**	18	74	**	14*
Management and commerce						
15–24	66	19	15	72	7	20
25 and over	89	3	8	84	2*	13
Society and culture						
15–24	61	19	19	59	21	20
25 and over	84	3	14	80	3*	17
Creative arts						
15–24	66	10	24	34	21	45
25 and over	69	2*	30	49	**	50

Notes: * Figure should be treated with caution and it has a relative standard error of greater than 25%.
** Percentage could not be reported as there is a cell count of fewer than five people.

Source: NCVER Student Outcomes Survey 2003

Appendix 4: Most popular occupational levels by field of education

Table 32: Most popular occupational levels by field of education for graduates and subjects only completers, and proportion employed in these occupations

Field of education	Graduates		Subjects-only completers	
	15–24	25 and over	15–24	25 and over
Information technology	Elementary clerical (29%) Professionals (16%) Associate professionals/ intermediate clerical (14% each)	Professionals (37%) Elementary clerical (18%) Associate professionals (15%)	Elementary clerical (33%*) Intermediate clerical (19%*) Labourers (14%*)	Professionals (20%) Tradespersons (15%) Intermediate clerical (14%)
Engineering and related technologies	Tradespersons (22%) Professionals/ elementary clerical (20% each)	Tradespersons (38%) Professionals (24%) Associate professionals (17%)	Elementary clerical (22%) Professionals (14%) Associate professionals/ intermediate production (13%)	Tradespersons (36%) Professionals (21%) Associate professionals/ intermediate clerical (9%)
Architecture and building	Professionals (28%) Associate professionals (27%) Elementary clerical (16%)	Professionals (33%) Managers/ associate professionals (20% each)	N/A**	Associate professionals (31%*) Professionals (23%*) Tradespersons (15%*)
Agriculture	Tradespersons (27%) Intermediate clerical (21%*) Labourers (16%*)	Tradespersons (35%) Professionals (27%) Managers (12%*)	N/A**	Tradespersons (26%*) Managers (21%*) Professionals (16%*)
Health	Associate professionals (51%) Professionals/ intermediate clerical (19% each*)	Associate professionals (42%) Professionals (31%) Intermediate clerical (11%)	Elementary clerical (46%*)	Associate professionals (18%*)
Management and commerce	Intermediate clerical (42%) Elementary clerical (25%) Professionals (9%)	Intermediate clerical (23%) Professionals (21%) Managers/ associate professionals (18%)	Intermediate clerical (38%) Elementary clerical (26%) Associate professionals/ labourers (8%)	Intermediate clerical (24%) Managers/ professionals (18%)
Society and culture	Intermediate clerical (47%) Elementary clerical (19%) Professionals (10%)	Intermediate clerical (39%) Professionals (27%) Associate professionals (15%)	Intermediate clerical (41%) Elementary clerical (23%) Associate professionals (11%*)	Intermediate clerical (34%) Associate professionals (23%) Professionals (14%)
Creative arts	Elementary clerical (31%) Professionals (20%) Labourers (15%)	Professionals (51%) Intermediate clerical (14%) Tradespersons (8%)	Elementary clerical (38%) Intermediate clerical (21%*) Tradespersons (15%*)	Professionals (32%) Intermediate clerical (19%) Managers (11%)

Notes: * Indicates figure should be treated with caution as it has a relative standard error of greater than 25%.
** For some occupational breakdowns, there were too few students to be able to reliably report the information.

Source: NCVER Student Outcomes Survey 2003

Appendix 5: Comparison of outcomes from bachelor degrees and diploma courses

Table 33: Selected employment outcomes for graduates from bachelor degrees and diplomas/advanced diplomas for various fields of study/education in 2003[a]

Field	Bachelor degree			VET diploma/ advanced diploma		
	Estimated % employed full-time		Top three occupational levels (all)	Of all graduates, % employed full-time		Top three occupational levels (all)
	Under 25	*All*		*Under 25*	*25 and over*	
Agricultural science	49	50	Professionals (30%) Clerical, sales and service (16%) Managers and administrators (16%)	53	59	Tradespersons (31%) Professionals (19%) Intermediate clerical, sales and service (11%)
Architecture and building	60	60	Professionals (70%) Technical officers (14%) Managers and administrators (3%)	58	72	Professionals (30%) Technicians and associate professionals (24%) Managers and administrators (17%)
Art and design	38	N/A	VPA-related (40%) Clerical, sales and service (22%) Professionals (16%)	22	19	Professionals (31%) Elementary clerical, sales and service (22%) Intermediate clerical, sales and service (14%)
Computer science	46	47	Professionals (63%) Clerical, sales and service (14%) Managers and administrators (8%)	26	40	Professionals (27%) Elementary clerical, sales and service (23%) Technicians and associate professionals (15%)
Engineering	56	N/A	Professionals (84%) Technical officers (4%)	42	73	Tradespersons (31%) Professionals (23%) Technicians and associate professionals (16%)

Field	Bachelor degree			VET diploma/ advanced diploma		
	Estimated % employed full-time		Top three occupational levels (all)	Of all graduates, % employed full-time		Top three occupational levels (all)
	Under 25	*All*		*Under 25*	*25 and over*	
Economics and business	52	53	Professionals (38%) Clerical, sales and service (30%) Managers and administrators (21%)	37	63	Intermediate clerical, sales and service (31%) Professionals (16%) Technicians and associate professionals (13%) Elementary clerical, sales and service (13%)

Note: (a) There are several caveats associated with the interpretation of this table. Firstly, Gradlink provides information on full-time employment for graduates who were available for full-time employment. We know from Gradlink 2004 data, that 66.4% of all bachelor graduates were available for full-time employment. However, this information is not provided by field of education. While we are aware that the proportion available for full-time employment varies from field to field, we have nevertheless multiplied full-time employment data for each field by 0.664 to at least try to get a broad comparison base for the VET diploma data.

VPA = visual and performing arts; ASCO = Australian Standard Classification of Occupations

While we have tried to select fields broadly comparable between university and VET, they are not identical. For example, we have compared creative arts in VET to art and design in universities; management and commerce to economics and business; and information technology to computer science. There are also some slight variations in field within university studies by under 25 graduates and all graduates. So, for example, while architecture and building is a field for those aged under 25, for all graduates it is split into architecture, building and urban design. For the purposes of this comparison, we have used architecture as the comparison point for all graduates. Similarly, while there is economics and business for graduates aged under 25, this is split into a variety of fields for all bachelor students, so we have used business studies as a basis of comparison here. In addition, while there are fields for art and design, and engineering for bachelor graduates aged under 25, these fields are split into various subcomponents for all graduates. For these, the top three occupational levels refer to those for bachelor graduates under the age of 25.

There are some slight variations between VET and university in the way occupations are termed. While the university statistics have only one category for clerical, sales and service, in VET they are split in to either intermediate or elementary skill levels (according to the ASCO format). In addition, there is a category in the university statistics called technical officers, while the VET statistics use the ASCO category of technicians and associate professionals. Finally, the university statistics has a category known as VPA within arts and design field.

Source: NCVER Student Outcomes Survey 2003; Gradlink 2004 data

Appendix 6: Occupation before and after training for graduates 25 and over

Table 34: Occupation after training by occupation before training, for graduates aged 25 years and over in 2003 (%)

	Managers	Profs	Assoc. profs	Trades	Adv. clerical	Inter. clerical	Inter. prod-uction	Elem. clerical	Labourers and related workers	Total
Managers and administrators	9	1	1	0	*	0	*	*	0	**11**
Professionals	1	16	1	0	0	1	0	*	*	**19**
Technicians and associate professionals	1	1	12	0	0	1	*	*	*	**15**
Tradespersons and related workers	0	1	1	7	*	0	0	*	*	**11**
Advanced clerical and service workers	0	1	0	*	3	1	0	0	0	**5**
Intermediate clerical, sales and service workers	2	3	2	0	1	16	*	1	*	**24**
Intermediate production and transport workers	*	1	0	*	*	0	2	*	0	**4**
Elementary clerical, sales and service workers	1	1	1	*	0	1	*	2	*	**6**
Labourers and related workers	*	1	0	0	0	1	*	*	2	**5**
Total	**14**	**25**	**18**	**9**	**5**	**21**	**3**	**4**	**3**	**100**

Note: * Proportion could not be reported as there is a cell count of fewer than five people.

Source: NCVER Student Outcomes Survey 2003

Appendix 7: Detailed employment outcomes by field of education

Note: for all the tables that follow, * after a percentage indicates a relative standard error of greater than 25%, while ** in a cell indicates that percentage could not be shown as there is a cell count of fewer than five respondents. The source for all the data in this appendix is NCVER's Student Outcomes Survey 2003.

Overall

Table 35: Overall employment-related outcomes from diploma/advanced diploma courses in 2003 (%)

	Graduates		Subjects-only completers	
	15–24	25+	15–24	25+
Employed full-time				
Before course	16	55	22	55
After course	35	55	39	53
All employed				
Before course	66	79	69	77
After course	76	79	71	73
Of those not employed before the course, but employed after				
Employed full-time	24	22	23	19
All employed	52	45	44	35
Stated job-related benefits of the course				
Got a job	40	20	22	12
Increased earnings	22	27	14	13
Promotion	16	30	9	17
Changed job	17	26	13	14
Was able to set up own business	5	7	2*	3
No job-related benefit stated	34	26	56	51

Information technology

Table 36: Employment-related outcomes from diploma/advanced diploma courses in information technology in 2003 (%)

	Graduates		Subjects-only completers	
	15–24	25+	15–24	25+
Employed full-time				
Before course	6*	39	8*	43
After course	26	40	29	39
All employed				
Before course	45	59	49	76
After course	60	60	56	63
Of those not employed before the course, but employed after				
Employed full-time	25	20	22*	**
All employed	45	39	32*	24*
Stated job-related benefits of the course				
Got a job	36	26	31*	12*
Increased earnings	16	21	**	**
Promotion	4*	13	0*	12*
Changed job	11	20	**	10*
Was able to set up own business	5*	5*	**	**
No job-related benefit stated	48	40	63	57

Engineering and related technologies

Table 37: Employment-related outcomes from diploma/advanced diploma courses in engineering and related technologies in 2003 (%)

	Graduates		Subjects-only completers	
	15–24	25+	15–24	25+
Employed full-time				
Before course	20	67	19	72
After course	42	73	37	69
All employed				
Before course	58	79	64	82
After course	74	82	68	79
Of those not employed before the course, but employed after				
Employed full-time	34	38	20*	28*
All employed	54	52	38	38
Stated job-related benefits of the course				
Got a job	39	21	14*	12
Increased earnings	21	35	16	14
Promotion	15	36	12*	21
Changed job	11	23	22	13
Was able to set up own business	4*	5	0*	**
No job-related benefit stated	36	23	61	49

Architecture and building

Table 38: Employment-related outcomes from diploma/advanced diploma courses in architecture and building in 2003 (%)

	Graduates		Subjects-only completers	
	15–24	25+	15–24	25+
Employed full-time				
Before course	21	67	**	56
After course	58	72	37*	63
All employed				
Before course	73	82	79	71
After course	80	84	72	77
Of those not employed before the course, but employed after				
Employed full-time	31*	39	0*	**
All employed	55	65	**	43*
Stated job-related benefits of the course				
Got a job	70	18	**	**
Increased earnings	39	20	**	**
Promotion	14	19	0*	10*
Changed job	35	35	**	**
Was able to set up own business	10*	20	**	**
No job-related benefit stated	19	29	72	50

Agriculture and environmental studies

Table 39: Employment-related outcomes from diploma/advanced diploma courses in agriculture and environmental studies in 2003 (%)

	Graduates		Subjects-only completers	
	15–24	25+	15–24	25+
Employed full-time				
Before course	13*	58	**	60
After course	53	59	30*	54
All employed				
Before course	56	80	60	85
After course	84	81	63	68
Of those not employed before the course, but employed after				
Employed full-time	56	19*	**	0*
All employed	80	52	**	**
Stated job-related benefits of the course				
Got a job	38	14	**	14*
Increased earnings	21*	26	**	**
Promotion	10*	24	**	12*
Changed job	7*	23	**	**
Was able to set up own business	**	14	**	**
No job-related benefit stated	40	27	39*	61

Health

Table 40: Employment-related outcomes from diploma/advanced diploma courses in health in 2003 (%)

	Graduates		Subjects-only completers	
	15–24	25+	15–24	25+
Employed full-time				
Before course	11*	53	63	53
After course	39	51	69	45
All employed				
Before course	73	85	97	84
After course	88	89	88	82
Of those not employed before the course, but employed after				
Employed full-time	**	**	0*	0*
All employed	66	56	**	**
Stated job-related benefits of the course				
Got a job	56	21	**	**
Increased earnings	40	34	**	**
Promotion	28	22	**	**
Changed job	25	39	0*	21*
Was able to set up own business	9*	26	**	**
No job-related benefit stated	17	17	72	61

Management and commerce

Table 41: Employment-related outcomes from diploma/advanced diploma courses in management and commerce in 2003 (%)

	Graduates		Subjects-only completers	
	15–24	25+	15–24	25+
Employed full-time				
Before course	18	65	31	62
After course	37	63	47	59
All employed				
Before course	70	83	76	82
After course	79	82	79	80
Of those not employed before the course, but employed after				
Employed full-time	23	22	25	15*
All employed	54	39	58	34
Stated job-related benefits of the course				
Got a job	33	14	26	9
Increased earnings	17	26	16	16
Promotion	20	35	13	20
Changed job	18	24	16	16
Was able to set up own business	4	4	0*	4*
No job-related benefit stated	35	29	48	47

Table 42: Employment-related outcomes diploma/advanced diploma courses in banking, finance and related fields in 2003 (%)

	Graduates		Subjects-only completers	
	15–24	25+	15–24	25+
Employed full-time				
Before course	24	32	68	45
After course	35	31	72	42
All employed				
Before course	60	58	93	74
After course	73	57	83	66
Of those not employed before the course, but employed after				
Employed full-time	25*	18	**	**
All employed	52	31	**	24*
Stated job-related benefits of the course				
Got a job	38	29	20*	13*
Increased earnings	23	27	30*	12*
Promotion	16*	21	20*	19
Changed job	13*	23	14*	17*
Was able to set up own business	**	**	**	**
No job-related benefit stated	42	21	40	42

Table 43: Employment-related outcomes diploma/advanced diploma courses in accountancy in 2003 (%)

	Graduates		Subjects-only completers	
	15–24	25+	15–24	25+
Employed full-time				
Before course	14	56	38*	46
After course	32	53	42*	49
All employed				
Before course	66	75	59	78
After course	70	77	72	85
Of those not employed before the course, but employed after				
Employed full-time	29*	19	**	**
All employed	39	43	**	46
Stated job-related benefits of the course				
Got a job	42*	20	**	14*
Increased earnings	15*	34	**	20
Promotion	15*	34	**	22
Changed job	16*	32	**	14*
Was able to set up own business	**	6	**	**
No job-related benefit stated	34	22	48*	42

Society and culture

Table 44: Employment-related outcomes from diploma/advanced diploma courses in society and culture in 2003 (%)

	Graduates		Subjects-only completers	
	15–24	25+	15–24	25+
Employed full-time				
Before course	19	42	16	47
After course	35	44	44	41
All employed				
Before course	71	74	74	72
After course	81	81	77	65
Of those not employed before the course, but employed after				
Employed full-time	24	18	43	13*
All employed	59	55	65	33
Stated job-related benefits of the course				
Got a job	49	30	25	17
Increased earnings	33	34	17	14
Promotion	19	31	**	16
Changed job	17	27	9*	19
Was able to set up own business	3*	4	0*	**
No job-related benefit stated	26	18	60	47

Table 45: Employment-related outcomes diploma/advanced diploma courses in human welfare studies and services in 2003 (%)

	Graduates		Subjects-only completers	
	15–24	25+	15–24	25+
Employed full-time				
Before course	23	37	**	33
After course	41	42	36	31
All employed				
Before course	72	74	79	63
After course	84	81	74	61
Of those not employed before the course, but employed after				
Employed full-time	29	20	**	18*
All employed	69	58	52	36
Stated job-related benefits of the course				
Got a job	54	34	27*	20
Increased earnings	41	39	23*	14*
Promotion	25	29	**	12*
Changed job	18	29	**	22
Was able to set up own business	**	2*	0*	**
No job-related benefit stated	17	17	55*	46

Creative arts

Table 46: Employment-related outcomes from diploma/advanced diploma courses in creative arts in 2003 (%)

	Graduates		Subjects-only completers	
	15–24	25+	15–24	25+
Employed full-time				
Before course	10	25	15*	31
After course	22	19	22	28
All employed				
Before course	66	64	58	66
After course	71	56	58	64
Of those not employed before the course, but employed after				
Employed full-time	10	12	19*	11*
All employment	46	27	25*	31
Stated job-related benefits of the course				
Got a job	40	23	**	13*
Increased earnings	18	16	**	8*
Promotion	13	12	**	14*
Changed job	16	29	**	11*
Was able to set up own business	8	23	**	6*
No job-related benefit stated	41	32	78	61

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