

Reflections on the tertiary education sector in Australia

TOM KARMEL

NATIONAL CENTRE FOR VOCATIONAL EDUCATION RESEARCH

Paper presented to the LH Martin Institute for Higher Education Leadership and Management: Charting new terrain: Creating and maintaining a diversified tertiary education sector in Australia conference, 27–28 November 2008, Langham Hotel, Melbourne.

The views and opinions expressed in this document are those of the author.

© National Centre for Vocational Education Research, 2009

This work has been produced and published by the National Centre for Vocational Education Research (NCVER). Apart from any use permitted under the *Copyright Act 1968*, no part of this publication may be reproduced by any process without written permission. Requests should be made to NCVER.

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 which are 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.

TD/TNC 95.13

Published by NCVER ABN 87 007 967 311

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

ph +61 8 8230 8400 fax +61 8 8212 3436 email ncver@ncver.edu.au http://www.ncver.edu.au http://www.ncver.edu.au/publications/2115.html

About the research



Reflections on the tertiary education sector in Australia Tom Karmel, NCVER

The split between higher education and vocational education and training (VET) in Australia is not clean, with the majority of universities registered to provide VET courses and a number of technical and further education (TAFE) institutes offering degrees.

This paper discusses a number of aspects of this education sector: the Australian Qualifications Framework (AQF), which describes the qualifications offered by the three education sectors (schools, higher education and VET); the student characteristics of the higher education and VET sectors; a characterisation of higher education and VET providers; and student movement between the two sectors.

Key messages

- ♦ Many education providers operate in both the higher education and VET sectors and many have links with providers in the other sector.
- ♦ There are clear differences between the two sectors in terms of approach (competency-based for VET, skills and underpinning knowledge for higher education), and accreditation, governance and funding arrangements.
- → Higher education and VET differ in terms of student characteristics. The higher education sector is more concentrated among school leavers, while VET is a sector for all ages and has much better coverage of rural and regional areas, and of equity groups.
- ♦ The numbers of students transferring between the two sectors are substantial but are relatively small compared with the numbers following traditional pathways of school to TAFE or higher education.

In contemplating closer integration between higher education and VET, I sound some words of warning. First, it would be a mistake to let the university way of doing things take over. The VET sector has many advantages, especially for those who have poor educational backgrounds. Second, bigger is not necessarily better. Finally, any integration needs to build on the VET sector not weaken it. For example, it would be unwise to integrate diplomas with higher education and leave only certificates to the VET sector. It would be better to make use of VET's wide coverage to teach diplomas and the early years of some degrees.

Tom Karmel Managing Director, NCVER

Contents

Tal	ble	S	(
Re	flec	ctions on the tertiary education sector in Australia	7
	Int	roduction	7
	Th	e Australian Qualifications Framework	7
	A	comparison of higher education and VET	8
	A	characterisation of providers	11
	Th	e extent of movement between the sectors	11
	Fir	nal remarks	10
Re	fere	ences	18
Ар	pei	ndices	
	Α	Number of domestic students in TAFE institutes in 2007	19
	В	Number of domestic and overseas students in higher education	
		in 2007	21
	C	Actual student load for overseas and domestic students in higher	
		education in 2007	27
	D	Three examples of articulation between TAFE and higher	
		education in Australia	33
	Е	Higher education provider data by basis of admission	34
	F	Student outcomes data	38

Tables

1	Level of education of current study by type of institution, 2005	9
2	Estimated EFTSL for all students in higher education and VET in 2007	9
3	All students by gender, 2007	9
4	All students by age group, 2007	10
5	All students by citizenship, 2007	10
6	Load by field of education, 2007	10
7	Students by equity group characteristics, 2007	11
8	Number of VET students by highest previous qualification, 2002–07	12
9	Number of VET award completions by highest previous qualification, 2002–07	13
10	Number of VET students by qualification level and highest previous qualification, 2007	13
11	Number of domestic students commencing a higher education course at bachelor level or below by state and highest previous qualification attained, 2004	14
12	Number of domestic students commencing a higher education course at bachelor level or below by state and basis for admission, 2006	14
13	Proportion of VET graduates later studying at university by field of education, age and qualification level, 2007	15
A1	Domestic vocational students by TAFE institutes, 2007	19
B1	All domestic students by state, higher education provider and course type, full year 2007	21
B2	All overseas students by state, higher education provider and course type, full year 2007	24
C1	Actual student load (EFTSL) for all domestic students by state, higher education provider and course type, full year 2007	27
C2	Actual student load (EFTSL) for all overseas students by state, higher education provider and course type, full year 2007	30
E1	Number of domestic students commencing a higher education course at bachelor level or below by higher education provider and basis for admission, 2006	34
F1	Proportion of VET module completers later studying at university by field of education, age and qualification level, 2007	38

Reflections on the tertiary education sector in Australia¹

Introduction

Australia's tertiary education can be described in a couple of ways. It can be described in terms of the providers—universities, technical and further education (TAFE) institutes and other providers—or in terms of the qualifications issued; that is, higher education qualifications and vocational education and training (VET) qualifications, both of which are components of the Australian Qualifications Framework (AQF). The split between higher education and vocational education and training is not clean, with the majority of universities registered to provide VET courses and a number of TAFE institutes offering degrees. Similarly, the statistical standard for the VET sector² defines the coverage of the students and courses publication as including the activity of public (VET) providers, as well as the government-funded provision of private providers. However, the activity of the public providers covers some degrees plus a good deal of non-accredited courses and even some secondary schooling.

What I do in this paper is discuss a number of aspects of this rather complicated story. I first look at the AQF. I then compare the VET and higher education sectors (here I mean defined by providers), followed by a brief attempt to characterise the sectors in terms of the providers. This is followed by an analysis of movements between the sectors. I conclude with some final remarks.³

The Australian Qualifications Framework

The AQF describes the qualifications offered by the three education sectors: schools, higher education and VET. Box 1 contains the various qualifications.

Box 1 The Australian qualification framework

School sector	Vocational education and training sector	Higher education sector
Secondary certificate	Graduate vocational diplomas	Doctoral degree
	Graduate vocational certificates	Master's degree
	Advanced diplomas	Graduate diploma
	Diplomas	Graduate certificate
	Certificate IV	Bachelor's degree
	Certificate III	Associate degree
	Certificate II	Advanced diploma
	Certificate I	Diploma

¹ I wish to thank Davinia Blomberg and Peter Mlotkowski for their technical assistance on this presentation.

² AVETMISS—Australian Vocational Education and Training Management Information Statistical Standard—part of the VET statistics series.

³ There are a number of other aspects that could be compared, such as accreditation arrangements, funding arrangements, and fees paid by students. These are left for others.

The linchpin of the VET sector is the certificate III, which is the qualification received by a tradesperson. This typically takes around one year equivalent of full-time study for an apprenticeship, which lasts for between three and four years. Similarly, the bachelor's degree is the main higher education qualification, taking either three or four years of full-time study.

Within each sector there is an implied ordering, such that an individual can move upwards, although the sectors have been a little free and easy with the usage of some of the qualifications. For example, an advanced diploma or a diploma in VET is typically two years full-time study after Year 12, but there are examples in which training lasts for a matter of weeks rather than years.⁴ Similarly, there is a large degree of variation in the amount of training embedded within various certificates across different fields of study (more so than in higher education). In higher education some master's degrees are clearly of an undergraduate standard, and it is possible to undertake a graduate certificate or diploma without an undergraduate degree.

Comparison between sectors is frowned upon by the AQF. The only common qualification is the diploma, which exists in both the higher education and VET sectors. This was the standard qualification at colleges of advanced education and was supplanted by the three-year degree. A further difficulty in making comparisons, and in effecting pathways between the sectors, is that the VET qualifications are competency-based, while the higher education qualifications stress underpinning knowledge. In my more adventurous moods I have equated the senior secondary certificate to the certificate III, but this has been contested.

The associate degree and the graduate vocational certificates and diplomas are relatively new qualifications. The former is designed as a two-year, early exit point from a bachelor's degree, and is aimed at the overseas student market, for whom the diploma did not have the same cachet as the associated degree. The graduate vocational certificates and diplomas are designed to be advanced vocational qualifications, but have seen little uptake to date.

A comparison of higher education and VET

It is not as straightforward as one would think even to get an idea of the relative sizes of the higher education and VET sectors. Administrative data clearly show that over a year many more students attend VET (around 1.7 million in the publicly funded sector alone). However, a point-in-time estimate, such as provided by the Australian Bureau of Statistics (ABS) Survey of Education and Training, indicates that the higher education sector has the largest number of students (table 1). In higher education most students are doing bachelor degrees, while in VET the certificate III/IV is the modal course.

8

⁴ Matters are more complicated because the VET qualifications are competency-based rather than time studied. That said, very short diplomas do bring into question the integrity of the AQF.

Table 1 Level of education of current study by type of institution, 2005

	University or other higher education	TAFE or technical college	Other organisation
	'000	'000	'000
Postgraduate degree	162.1	2.6	8.1
Graduate diploma/graduate certificate	59.9	2.8	19.9
Bachelor degree	632.8	5.4	19.8
Advanced diploma/diploma	33.8	128.3	71.7
Certificate III/IV	16.8	341.4	159.8
Certificate I/II	8.9	74.5	46.1
Certificate nfd	10.1	74.6	86.9
Level not determined	26.3	20.9	47.4
Total	950.7	650.6	459.7

Source: ABS (2005).

In table 2 we make an estimate of the relative sizes in terms of full-time equivalents. Using this measure, the VET sector is around three-quarters of the size of the higher education sector. The study intensity is quite different between the two sectors.

Table 2 Estimated EFTSL for all students in higher education and VET in 2007

	EFTSL	Total students	Students divided by EFTSL
	'000	'000	
Higher education	725.9	1 029.8	1.4
VET	541.8 ^(a)	1 665.0	3.1

Notes: (a) This is total hours in 2007, divided by 720. EFTSL = equivalent full-time student load

Source: NCVER VET Provider Collection (2007); Department of Employment, Education and Workplace Relations, Higher Education Statistics (2007).

Tables 3 to 7 provide comparisons by various characteristics. Higher education has slightly more females than males, while VET has more males than females (but by a lesser amount). The higher education sector is more concentrated among school leavers, while VET is a sector for all ages. Higher education has taken hold of the overseas students market, while VET is largely domestic. Both sectors cover the full gamut of fields of study, with management and commerce the largest field for VET, and society and culture the largest for higher education. VET is weak in education and the basic sciences; higher education is not represented in the field of food, hospitality and personal services. VET has much better coverage of rural and regional areas and has better coverage of equity groups, such as Indigenous. It is rightly characterised as the 'second chance' sector (see Karmel & Woods 2008).

Table 3 All students by gender, 2007

	Higher education	VET ^(a)
	%	%
Male	45.0	52.2
Female	55.0	47.8
Total	100.0	100.0

Note: (a) Unknowns were distributed on a pro-rata basis.

Source: NCVER VET Provider Collection (2007); Department of Employment, Education and Workplace Relations, Higher Education Statistics (2007).

Table 4 All students by age group, 2007

	Higher education	VET ^(a)
	%	%
24 years and under	62.1	43.8
25–39 years	27.6	27.5
40 and above years	10.3	28.7
Total	100.0	100.0

Notes: (a) Unknowns were distributed on a pro-rata basis.

Source: NCVER VET Provider Collection (2007); Department of Employment, Education and Workplace Relations, Higher Education Statistics (2007).

Table 5 All students by citizenship, 2007

	Higher education	VET
	%	%
Non-overseas	73.5	97.8
Overseas	26.5	2.2
Total	100.0	100.0

Source: NCVER VET Provider Collection (2007); Department of Employment, Education and Workplace Relations, Higher Education Statistics (2007).

Table 6 Load by field of education, 2007

	Higher education, EFTSL	VET hours
	%	%
01 - Natural and physical sciences	11.8	2.3
02 - Information technology	5.2	2.5
03 - Engineering and related technologies	5.8	15.5
04 - Architecture and building	2.1	5.5
05 - Agriculture, environmental and related studies	1.2	2.7
06 - Health	11.2	7.4
07 - Education	8.1	1.9
08 - Management and commerce	20.7	22.5
09 - Society and culture	26.4	11.6
10 - Creative arts	7.3	5.0
11 - Food, hospitality and personal services	0.0	5.9
12 - Mixed field programs	0.2	17.2
Total	100.0	100.0

Source: NCVER VET Provider Collection (2007); Department of Employment, Education and Workplace Relations, Higher Education Statistics (2007).

Table 7 Students by equity group characteristics, 2007

	Higher education ^(a)	VET
	%	%
Indigenous	1.3	4.3
Non-English ^(b)	3.7	13.7
With a disability	4.0	6.1
Regional ^(c)	17.8	-
Remote ^(c)	1.1	-
Inner regional and outer regional ^(d)	-	38.0
Remote and very remote ^(d)	-	4.9

Notes: (a) Higher education statistics based on domestic students only.

- (b) Based on country of birth.
- (c) For higher education data: regional and remote categories are derived from MCEETYA classifications, which replace the old rural and isolated categories.
- (d) For VET data: student remoteness categories are based on Accessibility/Remoteness Index (ARIA)+.

Source: NCVER, VET Provider Collection, (2007); Department of Employment, Education and Workplace Relations, Higher Education Statistics (2007).

A characterisation of providers

The higher education sector is made up of 106 institutions, of which 38 have the title 'university' (based on membership to Universities Australia). The other institutions tend to be small and often with a very limited scope of provision and include a number of TAFE institutes which offer higher education awards (for example, Box Hill). The VET sector is much larger, with some 59 TAFE institutes (or 61 if we count TAFESA as three institutes), with students ranging up to 84 735 (TAFESA, counted as one institute) and nearly 3000 other providers, most of which are quite small. Five of the universities (RMIT, Swinburne, Ballarat, Victoria, and Charles Darwin) are included in the list of TAFE institutes.⁵

In addition to the five universities officially considered to be dual-sector universities⁶, there is considerable cross-over in provision. Twenty-one are VET registered training organisations, while at least five TAFE institutes⁷ have higher education students (Box Hill, Gordon, Holmesglen, North Melbourne and TAFESA). Four out of the GO8 research-intensive universities fall in the registered provider category (Queensland, Monash, Melbourne and Adelaide).

The VET and higher education sectors covered by the official statistical collections are listed in appendices A and B. Appendix C shows the EFTSL (equivalent full-time student load) for overseas and domestic students by state and higher education provider.

The extent of movement between the sectors

There is growing interest in student transfer between VET and higher education. Most attention continues to be on facilitating VET to university (upward) transfer.8 For example, in 2005 the Ministerial Council on Education, Employment, Education, Training and Youth Affairs

NCVER 11

٠

⁵ The University of Melbourne, through its Faculty of Land and Food Resources, is also on the list of TAFE institutes, although its involvement in VET is being wound down.

⁶ The Australian Maritime College and the Batchelor Institute of Indigenous Tertiary Education are also dual-sector institutions with footprints firmly in both sectors.

⁷ By TAFE I am referring to the large state and territory VET providers. Most, but not all, have TAFE in their title.

⁸ In a study of existing research on student transfer, Moodie (2005) concluded that upward transfer was somewhere between half and double the rate of reverse (university to VET) transfer, depending on the data sources used to estimate transfer.

(MCEETYA) commissioned a national investigation of ways of improving credit transfer and articulation from VET to higher education (PhillipsKPA 2006).

The former Australian Vice-Chancellors' Committee developed national credit transfer arrangements for holders of TAFE qualifications in 13 broad fields of study. Currently, 32 universities in Australia offer credit for TAFE study, although arrangements vary. Some universities grant status for previous study according to individual cases, while others have formal articulation agreements with TAFE institutes. The formal agreements include block credit or specified credit for students who have completed a VET qualification (in most cases an advanced diploma or diploma) and integrated course structures (PhillipsKPA 2006). Another model is where a student simultaneously undertakes a degree and a VET qualification.

Three examples of articulation arrangements between VET and higher education in Australia are found at appendix D. The examples cover a range of articulation arrangements, including a guarantee of a place, credit transfer arrangements, and dual awards. Articulation can be end-on-end (one qualification followed by another) or concurrent (undertaking two qualifications at the same time).

Assessing the extent of student transfer is impeded by some data-quality issues. Many students move between the sectors without seeking formal credit for previous study, whether they completed the qualification or not (Golding & Vallence 2000). Using higher education statistics on the basis of admission to courses, VET to university transfer, in particular, is likely to be underestimated. Some, especially mature-age applicants, may have combinations of school and post-school qualifications that may be complete or incomplete. Some of these individuals may be admitted on the basis of their school results, despite also having VET experience.

Imperfect as they are, the data seem to suggest that the numbers of students transferring between VET and higher education are of some substance, but they are relatively small compared with the numbers following traditional pathways, such as school to TAFE and school to higher education.

In 2007, 101 400 VET students had a higher education degree as their highest previous qualification, representing 6.1% of all students (table 8). This was up from 88 300 students (5.2% of all students) with a higher education degree in 2002. The number of VET awards completed by students with a higher education degree has not grown since 2002 (table 9). Both tables reveal another data-quality issue: the large number of unknown values for prior education—around 20% for students in 2007.

Table 8 Number of VET students by highest previous qualification, 2002-07

	2002	2003	2004	2005	2006	2007
Bachelor degree/higher degree level	88 339	87 855	87 640	94 207	93 398	101 397
TAFE ^(a)	233 726	239 091	243 228	262 039	282 978	302 326
Year 12	383 538	388 483	362 376	366 681	360 967	364 797
Year 11 and below ^(b)	559 102	539 928	493 052	496 021	562 470	575 830
Unknown	430 718	472 211	420 068	431 812	376 151	320 668
Total students	1 695 423	1 727 568	1 606 364	1 650 760	1 675 964	1 665 018
Proportion with higher ed. degree	5.2	5.1	5.5	5.7	5.6	6.1

Notes: (a) Includes advanced diplomas/associate degrees and miscellaneous education.

(b) Includes those who did not go to school.

Source: NCVER VET Provider Collection (2002-07).

Table 9 Number of VET award completions by highest previous qualification, 2002-07

	2002	2003	2004	2005	2006	2007
Bachelor degree/higher degree level	18 520	17 522	17 310	19 601	18 420	17 779
TAFE ^(a)	51 887	53 925	55 552	64 193	67 494	62 080
Year 12	83 959	80 417	77 995	78 866	75 669	67 791
Year 11 and below ^(b)	86 917	83 704	76 746	79 648	79 922	91 499
Unknown	48 595	49 655	47 237	57 344	53 140	43 418
Total award completions	289 878	285 223	274 840	299 652	294 645	282 567
Proportion with higher ed. degree	6.4	6.1	6.3	6.5	6.3	6.3

Notes: 2007 data are preliminary.

(a) Includes advanced diplomas/associate degrees and miscellaneous education.

(b) Includes those who did not go to school.

Source: NCVER VET Provider Collection (2002-07).

Looking at 2007, students with a higher education degree were slightly less likely to undertake a diploma and above VET qualification than those who already had a TAFE award (15.0% compared with 17.7%) (table 10). By contrast, those with a higher education degree were more likely to do non-AQF programs (32.8% compared with 26.2% for those who already had a TAFE award).

In any case the interpretation of the higher education to VET movement is difficult. Proselytisers for VET often argue that it is driven by university graduates needing some 'real world vocational training' to make them more marketable. My view is that there are a number of motivations: graduates wishing to top up with some specific vocational skills and not necessarily wanting a full VET qualification; graduates with poor or non-marketable degrees such that they need an alternative qualification to get a job⁹; and graduates who want to do a VET course for reasons quite unrelated to their higher education degree.

Table 10 Number of VET students by qualification level and highest previous qualification, 2007

	Diploma and above	Cert. III/IV	Cert. I/II	Non-AQF programs	Total
Bachelor degree/higher degree level	15 252	37 986	14 919	33 240	101 397
TAFE ^(a)	53 535	128 829	40 885	79 077	302 326
Year 12	56 211	191 393	52 826	64 367	364 797
Year 11 and below ^(b)	17 279	218 464	214 443	125 644	575 830
Unknown	23 688	88 778	58 601	149 601	320 668
Total	165 965	665 450	381 674	451 929	1 665 018

Notes: (a) Includes advanced diplomas/associate degrees and miscellaneous education.

(b) Includes those who did not go to school.

Source: NCVER VET Provider Collection (2007).

Higher education data from the Department of Education, Employment and Workplace Relations provide an estimate of the extent of upward student transfer. In 2004, the majority of commencing university students had completed secondary school and held no other qualification (table 11). The number of students who had completed a VET qualification was 29 000, representing 16.1% of all commencing university students.

⁹ My evidence for this is that university graduates who complete a VET qualification earn, on average, less than those who do not complete one (Karmel & Nguyen 2005).

Table 11 Number of domestic students commencing a higher education course at bachelor level or below by state and highest previous qualification attained, 2004

	Uni. qual.	VET qual. ^(a)	Secondary school & other qual.	Secondary school & no other qual.	Other qual., no secondary school	No qual.	Total
New South Wales	6 432	10 595	5 330	29 219	1 106	2 459	55 141
Victoria	4 376	6 130	854	26 586	127	1 520	39 593
Queensland	4 355	5 435	5 040	21 268	1 257	2 005	39 360
Western Australia	1 034	2 612	1 498	10 333	1 037	1 185	17 699
South Australia	1 615	2 003	1 018	7 307	445	218	12 606
Tasmania	519	670	102	3 294	121	1 007	5 713
Northern Territory	282	416	143	653	75	674	2 243
Australian Capital Territory	618	697	477	3 292	80	177	5 341
Multi-state	302	482	381	1 671	67	54	2 957
Total	19 533	29 040	14 843	103 623	4 315	9 299	180 653
Total 2003	18 843	29 833	13 983	105 554	4 165	11 014	183 392

Notes: Bachelor degree or below includes bachelor's graduate entry, bachelor's honours, bachelor's pass, associate degree, advanced diploma (AQF), diploma (AQF), other award courses, enabling course and non-award course.

(a) Includes advanced diploma and diploma.

Source: Department of Education, Science and Training, Higher Education Statistics (now DEEWR) (2004).

In 2006, 18 800 commencing students were admitted to university on the basis of their TAFE study, representing 9.7% of all commencing students (table 12). By comparison, 84 800 students were admitted on the basis of their school results, representing 43.7% of all students.

Table 12 Number of domestic students commencing a higher education course at bachelor level or below by state and basis for admission, 2006

	Secondary school	Higher ed.	Mature age	TAFE award	Profess. qual.	Other basis	Not stated	Total
New South Wales	25 302	12 824	6 737	7 548	338	8 841	821	62 411
Victoria	22 283	10 088	791	4 787	297	2 793	467	41 506
Queensland	18 189	9 845	530	2 765	760	8 329	589	41 007
Western Australia	5 971	4 095	1 532	1 371	70	6 621	438	20 098
South Australia	7 951	2 582	1 228	752	199	1 122	112	13 946
Tasmania	1 391	1 336	443	521	17	1 002	69	4 779
Northern Territory	389	480	460	270	16	567	23	2 205
Australian Capital Territory	1 865	1 370	143	318	9	902	84	4 691
Multi-state	1 491	920	403	437	25	223	14	3 513
Total	84 832	43 540	12 267	18 769	1 731	30 400	2 617	194 156
Total 2005	79 211	47 688	11 710	18 820	1 873	29 503	4	188 809

Notes: Bachelor degree or below includes bachelor's graduate entry, bachelor's honours, bachelor's pass, associate degree, advanced diploma (AQF), diploma (AQF), other award courses, enabling course and non-award course.

Source: Department of Education, Science and Training, Higher Education Statistics (2006).

Appendix table E1 breaks down the data by higher education provider. Charles Sturt University (not a dual-sector institution) admitted more students on the basis of their TAFE study than any other university in Australia in 2006. In fact, Charles Sturt University admitted more students on the basis of their TAFE study than on any other basis, including secondary school results. Other universities that recognise TAFE study in large numbers are the University of Western Sydney and RMIT University.

The final way we are able to estimate the number of students moving from VET to higher education is through the Student Outcomes Survey (SOS). Table 13 shows the proportion of VET graduates who go on to study at university shortly after completing their course.¹⁰ Overall, 6.3% of VET graduates go on to study at university. By age and qualification level the proportion varies significantly: 27.9% of 15 to 24-year-olds graduating from a diploma qualification go on to university. By contrast, only 2.7% of older VET students who complete a certificate qualification go on to university. VET graduates in natural and physical sciences are most likely to articulate, with nearly half of the young diploma graduates in this field going on to university.

Table 13 Proportion of VET graduates later studying at university by field of education, age and qualification level, 2007

	15–24 years		25 yea	ars and a	above	Total			
	Dip+	Cert. 1–IV	Total	Dip.+	Cert. 1–IV	Total	Dip.+	Cert. 1–IV	Total
Natural and physical sciences	45.2	27.8	33.5	13.0*	**	8.0*	24.6	14.5	18.2
Information technology	28.4	8.5	13.5	9.0	3.9*	4.9	20.7	6.3	9.5
Engineering and related technologies	27.2	1.7	3.0	6.0	1.2	1.5	13.1	1.4	2.0
Architecture and building	15.2	0.7*	1.7	9.4*	1.8*	3.0*	12.0	1.1*	2.2
Agriculture, environmental and related studies	18.0*	4.5	5.3	5.6*	1.0	1.3	8.7*	2.0	2.4
Health	18.0	16.3	16.6	8.2	5.4	6.1	11.0	9.3	9.7
Education	0.0*	17.4	17.3	12.1*	7.0	7.2	11.9*	7.6	7.8
Management and commerce	31.7	10.2	14.3	10.4	2.2	4.1	19.1	6.0	8.7
Society and culture	35.9	11.2	16.0	9.1	3.8	4.7	19.1	6.1	8.4
Creative arts	15.3	8.1	10.8	10.6	6.0*	7.8	13.6	7.3	9.7
Food, hospitality and personal services	**	8.9	8.9	**	1.6	1.6	8.4*	6.2	6.2
Mixed field programs	45.6*	7.9	8.8	**	6.0	6.1	35.7*	6.7	7.2
Total	27.9	7.3	9.9	9.3	2.7	3.6	17.0	4.7	6.3

* Relative standard error greater than 2070, common ** Estimate not presented due to too few numbers in sample cell. Relative standard error greater than 25%; estimate should be used with caution.

Source: NCVER Student Outcomes Survey (2007).

Appendix table F1 provides the Student Outcomes Survey data for VET students who do not complete their qualification. Overall, the proportions going on to university are lower, although the patterns by age, qualification level and field of education are similar.

¹⁰ The Student Outcomes Survey is conducted six months after students finish their VET studies.

Final remarks

While a former colleague of mine contrasted 'higher education' with 'lower education' suggesting that university education had some lofty role, my view is that both sectors are largely instrumental in nature. Their role is to provide skills and knowledge that are useful, particularly in a labour market context. Both deliver large amounts of vocational skills: what could be more vocational than medicine, engineering or accounting? Both deliver skills that are more generic in nature; the theoretical and general disciplines in higher education, and business and management skills, for example, in VET.¹¹ Both deliver courses in the creative arts that are largely unsaleable in the labour market. The main difference seems to be that university graduates aspire to professional and management jobs, while VET graduates aim for technical and associate professional, trades and other occupations. However, this distinction is not really robust, as we see more degree holders having to take jobs outside the management and professional occupations. (In fact, the VET diploma holders struggle in competing with degree holders in some associate professional areas, see Foster et al. 2007.)

Thus, perhaps historical distinctions between the sectors are breaking down. On the other hand, while there is considerable movement between the sectors—in both directions—they operate quite distinctly.

In institutional terms the landscape is more impressionistic than anything else, as can be seen from a perusal of the provider level data in the appendix. There are some large institutions—universities and the large TAFE institutes—and a host of smaller providers. Many providers are operating in both sectors and many providers have links with providers in a different sector. There is no clear divide between the sectors here. Where there are clear differences, these are in terms of approach (competency-based for VET, skills and underpinning knowledge for higher education), accreditation arrangements, governance arrangements (the independence of the universities, in particular), and funding arrangements.

As can be seen, the one thing the Australian tertiary education system could not be accused of is being coherent. It is not surprising therefore that we are having this conference and are examining various new models. Some have talked about networked institutions. Perhaps one could posit a new 'unified' tertiary system.

If we were talking about a unified tertiary system, what would it mean? In my view there are three areas in particular that would have to be addressed:

- ♦ a rethink of competency so that VET and higher education fit closer together (this is not arguing for a rejection of the competency-based approach within VET)
- ♦ governance reform, so that the large TAFE institutes have the same degree of independence as universities
- ❖ reform of funding arrangements, which currently appear to have been developed on completely different planets. One way of effecting this would be to institute student entitlement funding—an extension of the approach being developed in Victoria for the VET sector. There would also have to be common income-contingent loan arrangements, so that all students have access to this facility if cash-constrained.

However, I do not think that total integration is possible. I cannot contemplate an AQF with only one list of qualifications under a heading of 'tertiary education qualifications'. Universities will never give up their self-accrediting powers, and industry would not give up its training packages (crudely thought of as national curricula). That is not to say that closer integration or greater coherence is not possible. For one, VET has much higher social and regional coverage, and perhaps this could

-

¹¹ Karmel, Mlotkowski and Awodeyi (2008) show that the match between the courses completed and jobs obtained is generally quite low in VET apart from the trades and personal carer courses. However, much of the training is still relevant and thus needs to be thought of as being more generic in nature.

be built on to provide greater access to higher education. Should we begin to think more of a community college model offering both VET and early higher education?

In contemplating closer integration, I sound some words of warning. First, it would be a mistake to let the university way of doing things take over. 12 The VET sector has many advantages, especially for those who have a poor educational background. Second, bigger is not necessarily better. In work I did on characteristics of universities some years ago, two universities stood out—the Australian National University and Monash University, the former for its research intensity and Monash for being the largest university and closest to the system average. Is this an advantage? Finally, any integration needs to build on the VET sector, not emasculate it. For example, it would be a mistake to integrate diplomas with higher education and leave only certificates to the VET sector. It would be better to make use of VET's wide coverage to teach diplomas and the early years of some degrees.

¹² One of the mistakes in the abolition of technical high schools in the 1970s was that many fine educational features were lost and buried by the traditional academic approach (see Goozee 2001 or Jolly 2001).

References

- ABS (Australian Bureau of Statistics) 2005, Survey of Education and Training, cat.no.6278.0, ABS, Canberra.
- Foster, S, Delaney, B, Bateman, A & Dyson, C 2007, Higher-level vocational education and training qualifications: Their importance in today's training market, NCVER, Adelaide.
- Golding, B & Vallence, K 2000, 'The university-VET transition', paper presented at the 3rd National Australian Vocational Education and Training Research Association Conference, Canberra.
- Goozee, G 2001, The development of TAFE in Australia, NCVER, Adelaide.
- Jolly, E 2001, 'A broader vision: Voices of vocational education in twentieth-century South Australia', Michael Deves Publishing, Adelaide.
- Karmel, T & Nguyen, N 2005, The value of completing a vocational education and training qualification, NCVER, Adelaide.
- Karmel, T, Mlotkowski, P & Awodeyi, T 2008, Is VET vocational? The relevance of training to the occupations of vocational education and training graduates, occasional paper, NCVER, Adelaide.
- Karmel, T & Woods, D 2008, Second-chance vocational education and training, occasional paper, Adelaide, NCVER. Moodie, G 2005, 'Student transfers', unpublished report, NCVER, Adelaide.
- PhillipsKPA 2006, Giving credit where credit is due: A national study to improve outcomes in credit transfer and articulation from vocational and technical education to higher education, DEST, Canberra.

Appendix A

This appendix shows the number of vocational students enrolled in TAFE institutes, other government providers, community education providers, and other registered providers in 2007.

Table A1 The number of vocational students by TAFE institutes and other provider types, 2007

	Number of students
TAFE institutes	
Barrier Reef Institute of TAFE	13 382
Batchelor Institute of Indigenous Tertiary Education	2 000
Bendigo Regional Institute of TAFE	9 420
Box Hill Institute of TAFE	22 380
Brisbane North Institute of TAFE ^(a)	38 518
Canberra Institute of Technology	18 510
Central Gippsland Institute of TAFE	13 256
Central Queensland Institute of TAFE	25 461
Central TAFE	24 941
Central West TAFE	5 569
Challenger TAFE	18 530
Charles Darwin University	14 637
Chisholm Institute of TAFE	33 106
CY O'Connor College of TAFE	5 045
Driver Education Centre of Australia Limited	12 463
East Gippsland Institute of TAFE	11 821
Faculty of Land And Food Resources, University of Melbourne	144
Gold Coast Institute of TAFE	13 764
Gordon Institute of TAFE	14 673
Goulburn Ovens Institute of TAFE	15 985
Great Southern TAFE	6 155
Holmesglen Institute of TAFE	37 297
Kangan Batman Institute of TAFE	26 173
Kimberley TAFE	4 400
Metropolitan South Institute of TAFE ^(b)	18 137
Mount Isa Institute of TAFE	2 234
Northern Melbourne Institute of TAFE (NMIT)	25 065
Pilbara TAFE	5 367
Royal Melbourne Institute of Technology (RMIT) (TAFE Division)	17 923
Skillstech Australia ^(c)	17 543
South West Institute of TAFE	10 760
South West Regional College of TAFE	7 783
Southbank Institute of Technology	23 277
Southern Queensland Institute of TAFE	17 300
Sunraysia Institute of TAFE	5 259
Sunshine Coast Institute of TAFE	14 736

	Number of students
Swan TAFE	25 801
Swinburne University of Technology (TAFE Division)	29 732
TAFE NSW – Hunter Institute	41 961
TAFE NSW – Illawarra Institute	26 966
TAFE NSW – New England Institute	16 244
TAFE NSW – North Coast Institute	30 653
TAFE NSW – Northern Sydney Institute	36 028
TAFE NSW – Open Training & Education Network	25 890
TAFE NSW – Riverina Institute	25 501
TAFE NSW – South Western Sydney Institute	57 411
TAFE NSW – Sydney Institute	55 996
TAFE NSW – Western Institute	30 152
TAFE NSW – Western Sydney Institute	35 380
TAFE SA ^(d)	84 735
TAFE Tasmania	36 594
The Bremer Institute of TAFE	14 483
Tropical North Queensland Institute of TAFE	14 655
University of Ballarat (TAFE Division)	11 949
Victoria University	22 555
West Coast TAFE	11 323
Wide Bay Institute of TAFE	12 424
William Angliss Institute of TAFE	15 507
Wodonga Institute of TAFE	12 754
Students attending multiple TAFE institutes	27 267
Total TAFE	1 254 975
Other government providers ^(e)	57 861
Community education providers	164 735
Other registered providers	178 844
Students attending various providers	8 603
Total	1 665 018

- Notes: (a) Brisbane North includes Open Learning Institute of TAFE.

 (b) Metropolitan South Institute of TAFE presented as one institute.

 (c) Skillstech Australia includes students enrolled at the Trade and Technicians Skills Institute (YIT), which represents an institute that existing prior to the merges of Queensland TAFE institutes.

 (d) TAFESA presented as one institute.

 - (e) Other government providers includes the National Art School, the Department of Primary Industries, and other government providers.

Source: NCVER, VET Provider Collection, 2007.

Appendix B

This appendix shows the number of domestic and overseas students in higher education in 2007.

Table B1 All domestic students by state, higher education provider and course type, full year 2007

State/provider	Post- graduate research ^(a)	Post- graduate course work ^(b)	Under- graduate courses ^(c)	Other ^(d)	Total
New South Wales					
ACPE Limited	0	0	956	0	956
Australian College of Applied Psychology Pty Ltd	0	689	1 040	0	1 729
Australian Film, Television and Radio School	2	146	0	0	148
Avondale College	2	104	942	65	1 113
Billy Blue College	0	0	140	0	140
Blue Mountains International Hotel Management School	0	4	133	0	137
Campion Institute Limited	0	0	27	0	27
Charles Sturt University	367	6 823	20 432	1 304	28 926
East Coast Gestalt Training	0	98	0	0	98
Insearch	0	0	491	0	491
International College of Management, Sydney	0	0	83	0	83
Institute of Counselling	0	43	0	0	43
International Conservatorium of Music	0	0	25	0	25
JMC Academy	0	0	589	0	589
Jansen Newman Institute	0	176	114	0	290
Macleay College	0	0	194	0	194
Macquarie University	1 161	5 583	13 523	705	20 972
Moore Theological College	3	72	322	0	397
National Institute of Dramatic Art	0	11	157	0	168
Nature Care College	0	0	301	0	301
Raffles KVB Institute Pty Ltd	0	0	256	0	256
SAE Investments	0	0	186	0	186
Southern Cross University	429	1 375	9 163	382	11 349
Sydney College of Divinity	18	797	967	99	1 881
Sydney Institute of Business and Technology Pty Ltd	0	0	831	0	831
Tabor College (NSW) Incorporated	0	3	98	0	101
The Australian Institute of Music Limited	0	33	548	0	581
The College of Law Pty Ltd	0	1 902	0	0	1 902
The University of New England	625	4 112	11 407	125	16 269
The University of New South Wales	2 403	8 963	21 555	613	33 534
The University of Newcastle	895	2 938	16 180	1 926	21 939
The University of Sydney	3 345	7 041	25 496	623	36 505
University of Technology, Sydney	1 035	6 202	16 667	202	24 106
University of Western Sydney	588	3 303	24 663	530	29 084
University of Wollongong	923	1 629	10 769	403	13 724

State/provider	Post- graduate research ^(a)	Post- graduate course work ^(b)	Under- graduate courses ^(c)	Other ^(d)	Total
Wesley Institute	0	204	225	8	437
Wollongong College Australia	0	0	44	0	44
State sub-total	11 796	52 251	178 524	6 985	249 556
Victoria					
Australian Institute of Public Safety Pty Ltd	0	0	267	0	267
Box Hill Institute of Technical and Further Education	0	0	324	0	324
Cairnmillar Institute School of Counselling and Psychotherapy	0	42	0	0	42
Deakin University	799	5 930	20 542	234	27 505
Gordon Institute of TAFE	0	0	25	0	25
Harvest Bible College	0	8	155	0	163
Holmes Institute	0	0	93	0	93
Holmesglen Institute of TAFE	0	0	91	0	91
La Trobe University	1 160	3 984	17 355	137	22 636
Marcus Oldham College	0	0	157	0	157
Melbourne College of Divinity	196	521	559	0	1 276
Melbourne Institute for Experiential and Creative Arts Therapy	0	42	0	0	42
Melbourne Institute of Business and Technology Pty Ltd	0	0	236	0	236
Melbourne Institute of Technology	0	0	25	0	25
Monash College Group	0	0	229	2	231
Monash University	2 747	8 085	26 522	598	37 952
Northern Melbourne Institute of TAFE	0	0	89	0	89
Oceania Polytechnic Institute of Education Pty Ltd	0	0	41	0	41
RMIT University	1 255	5 338	16 808	23	23 424
Swinburne University of Technology	448	2 852	8 316	91	11 707
Tabor College – Victoria	0	72	281	0	353
The Australian Guild of Music Education	0	0	31	0	31
The Southern School of Natural Therapies Limited	0	0	324	0	324
The University of Melbourne	3 970	7 715	21 370	5	33 060
University of Ballarat	165	791	3 676	81	4 713
Victoria University	488	2 077	12 207	325	15 097
William Angliss Institute of TAFE	0	0	42	0	42
State sub-total	11 228	37 457	129 765	1 496	179 946
Queensland					
Australian College of Natural Medicine	0	0	2 824	0	2 824
Bond University	42	613	1 863	150	2 668
Brisbane College of Theology	0	105	127	6	238
Central Queensland University	265	1 467	8 415	1 108	11 255
Christian Heritage College	0	187	645	3	835
Gestalt Association of Queensland	0	28	0	0	28
Griffith University	1 163	3 400	22 549	391	27 503
James Cook University	494	1 412	9 627	155	11 688
Queensland Institute of Business and Technology Pty Ltd	0	0	167	0	167
Queensland University of Technology	1 304	5 801	26 280	532	33 917
Shafston Institute of Technology	0	0	115	0	115
The University of Queensland	2 933	4 137	23 756	137	30 963
University of Southern Queensland	203	3 225	11 471	1 814	16 713

State/provider	Post-	Post-	Under-	Other ^(d)	Total
·	graduate research ^(a)	graduate course work ^(b)	graduate courses ^(c)		
University of the Sunshine Coast	97	645	4 061	417	5 220
State sub-total	6 501	21 020	111 900	4 713	144 134
Western Australia	000.	0_0			
Curtin International College	0	0	89	20	109
Curtin University of Technology	1 255	4 520	17 436	508	23 719
Edith Cowan University	427	3 244	13 669	645	17 985
Murdoch University	766	1 567	9 477	162	11 972
Perth Bible College	0	1	44	0	45
Perth Institute of Business and Technology Pty Ltd	0	0	60	4	64
Swan TAFE	0	0	0	0	0
The University of Notre Dame Australia	42	596	4 676	370	5 684
The University of Western Australia	1 607	1 709	11 532	39	14 887
State sub-total	4 097	11 637	56 983	1 748	74 465
South Australia					
Adelaide College of Divinity	0	11	104	8	123
Australian Lutheran College	0	168	238	0	406
Bradford College	0	0	22	0	22
Carnegie Mellon University	0	57	0	0	57
International College of Hotel Management Inc.	0	0	0	0	0
South Australian Institute of Business and Technology Pty Ltd	0	0	205	0	205
Tabor College Adelaide	0	183	1 072	0	1 255
The Flinders University of South Australia	749	2 018	9 833	70	12 670
The University of Adelaide	1 567	1 898	11 128	116	14 709
University of South Australia	753	3 797	17 882	423	22 855
State sub-total	3 069	8 132	40 484	617	52 302
Tasmania					
Australian Maritime College	18	104	938	2	1 062
Tabor College Tasmania	0	10	84	0	94
University of Tasmania	1 104	1 330	11 152	345	13 931
State sub-total	1 122	1 444	12 174	347	15 087
Northern Territory					
Batchelor Institute of Indigenous Tertiary Education	8	23	426	269	726
Charles Darwin University	185	796	3 930	628	5 539
State sub-total	193	819	4 356	897	6 265
Australian Capital Territory					
The Australian National University	1 664	2 641	7 556	183	12 044
University of Canberra	242	1 726	6 382	48	8 398
State sub-total	1 906	4 367	13 938	231	20 442
Multi-state					
Australian Catholic University	318	3 097	8 532	167	12 114
Australian College of Theology Council Incorporated	37	1 070	1 329	0	2 436
State sub-total	355	4 167	9 861	167	14 550
Australia	40 267	141 294	557 985	17 201	756 747

Source: Department of Education, Employment and Workplace Relations, Higher Education Statistics (2007).

Notes: (a) Includes doctorate by research, and master's by research.
(b) Includes doctorate by coursework, master's by coursework, and other postgraduate.
(c) Includes bachelor degree, associate degree, and other undergraduate.
(d) Includes enabling courses and non-award courses.

Table B2 All overseas students by state, higher education provider and course type, full year 2007

State/provider	Post- graduate research ^(a)	Post- graduate course work ^(b)	Under- graduate courses ^(c)	Other ^(d)	Total
New South Wales					
ACPE Limited	0	0	5	0	5
Australian College of Applied Psychology Pty Ltd	0	28	16	0	44
Australian Film, Television and Radio School	0	0	0	0	0
Avondale College	0	56	107	7	170
Billy Blue College	0	0	8	0	8
Blue Mountains International Hotel Management School	0	26	225	0	251
Campion Institute Limited	0	0	2	0	2
Charles Sturt University	96	1 215	3 426	110	4 847
East Coast Gestalt Training	0	0	0	0	0
Insearch	0	0	1 509	0	1 509
International College of Management, Sydney	0	0	166	0	166
Institute of Counselling	0	0	0	0	0
International Conservatorium of Music	0	0	3	0	3
JMC Academy	0	0	31	0	31
Jansen Newman Institute	0	1	0	0	1
Macleay College	0	0	4	0	4
Macquarie University	430	4 547	4 983	1 248	11 208
Moore Theological College	0	0	12	0	12
National Institute of Dramatic Art	0	0	3	0	3
Nature Care College	0	0	25	0	25
Raffles KVB Institute Pty Ltd	0	0	118	0	118
SAE Investments	0	0	142	0	142
Southern Cross University	122	907	2 192	61	3 282
Sydney College of Divinity	1	50	174	15	240
Sydney Institute of Business and Technology Pty Ltd	0	0	3 199	0	3 199
Tabor College (NSW) Incorporated	0	0	0	0	0
The Australian Institute of Music Limited	0	10	53	0	63
The College of Law Pty Ltd.	0	23	0	0	23
The University of New England	117	407	520	81	1 125
The University of New South Wales	824	2 904	4 418	1 253	9 399
The University of Newcastle	165	1 856	2 554	442	5 017
The University of Sydney	614	4 566	4 564	685	10 429
University of Technology, Sydney	241	3 078	4 577	252	8 148
University of Western Sydney	64	1 665	1 924	74	3 727
University of Wollongong	275	4 080	3 534	693	8 582
Wesley Institute	0	13	39	62	114
Wollongong College Australia	0	0	121	0	121
State sub-total	2 949	25 432	38 654	4 983	72 018
Victoria					
Australian Institute of Public Safety Pty Ltd	0	0	0	0	0
Box Hill Institute of Technical and Further Education	0	0	68	0	68
Cairnmillar Institute School of Counselling and Psychotherapy	0	0	0	0	0
Deakin University	108	2 154	4 194	320	6 776
Gordon Institute of TAFE	0	0	0	0	0
Harvest Bible College	0	0	0	0	0

State/provider	Post- graduate research ^(a)	Post- graduate course work ^(b)	Under- graduate courses ^(c)	Other ^(d)	Total
Holmes Institute	0	0	965	0	965
Holmesglen Institute of TAFE	0	0	11	0	11
La Trobe University	214	2 599	3 221	14	6 048
Marcus Oldham College	0	0	0	0	0
Melbourne College of Divinity	24	30	48	0	102
Melbourne Institute for Experiential and Creative Arts Therapy	0	0	0	0	0
Melbourne Institute of Business and Technology Pty Ltd	0	0	1 326	0	1 326
Melbourne Institute of Technology	0	34	152	4	190
Monash College Group	0	0	2 203	6	2 209
Monash University	708	4 277	12 518	310	17 813
Northern Melbourne Institute of TAFE	0	0	3	0	3
Oceania Polytechnic Institute of Education Pty Ltd	0	0	0	0	0
RMIT University	337	3 138	16 132	220	19 827
Swinburne University of Technology	180	2 713	3 996	158	7 047
Tabor College – Victoria	0	1	3	0	4
The Australian Guild of Music Education	0	0	0	0	0
The Southern School of Natural Therapies Limited	0	0	0	0	0
The University of Melbourne	842	3 106	6 789	454	11 191
University of Ballarat	32	5 306	1 957	154	7 449
Victoria University	165	1 418	4 043	221	5 847
William Angliss Institute of TAFE	0	0	20	0	20
State sub-total	2 610	24 776	57 649	1 861	86 896
Queensland					
Australian College of Natural Medicine	0	0	62	0	62
Bond University	49	993	604	1 030	2 676
Brisbane College of Theology	0	2	5	0	7
Central Queensland University	23	5 968	3 709	97	9 797
Christian Heritage College	0	2	10	0	12
Gestalt Association of Queensland	0	0	0	0	0
Griffith University	210	2 754	5 082	801	8 847
James Cook University	205	1 385	1 775	522	3 887
Queensland Institute of Business and Technology Pty Ltd	0	0	1 375	0	1 375
Queensland University of Technology	306	1 590	3 497	49	5 442
Shafston Institute of Technology	0	0	31	0	31
The University of Queensland	733	2 130	3 422	702	6 987
University of Southern Queensland	66	3 797	3 166	626	7 655
University of the Sunshine Coast	18	708	212	412	1 350
State sub-total	1 610	19 329	22 950	4 239	48 128
Western Australia					
Curtin International College	0	0	1 173	259	1 432
Curtin University of Technology	488	2 770	12 587	810	16 655
Edith Cowan University	112	2 099	3 041	4	5 256
Murdoch University	137	317	2 647	247	3 348
Perth Bible College	0	1	18	0	19
Perth Institute of Business and Technology Pty Ltd	0	0	657	24	681

State/provider	Post- graduate research ^(a)	Post- graduate course work ^(b)	Under- graduate courses ^(c)	Other ^(d)	Total
Swan TAFE	0	0	8	0	8
The University of Notre Dame Australia	7	108	329	96	540
The University of Western Australia	400	757	2 602	4	3 763
State sub-total	1 144	6 052	23 062	1 444	31 702
South Australia					
Adelaide College of Divinity	0	0	1	0	1
Australian Lutheran College	0	1	3	0	4
Bradford College	0	0	11	0	11
Carnegie Mellon University	0	45	0	0	45
International College of Hotel Management Inc.	0	0	0	0	0
South Australian Institute of Business and Technology Pty Ltd	0	0	560	0	560
Tabor College Adelaide	0	0	0	0	0
The Flinders University of South Australia	109	1 449	1 416	71	3 045
The University of Adelaide	284	1 956	2 776	429	5 445
University of South Australia	331	4 087	6 865	253	11 536
State sub-total	724	7 538	11 632	753	20 647
Tasmania					
Australian Maritime College	9	63	189	6	267
Tabor College Tasmania	0	0	0	0	0
University of Tasmania	166	643	3 352	16	4 177
State sub-total	175	706	3 541	22	4 444
Northern Territory					
Batchelor Institute of Indigenous Tertiary Education	0	0	0	0	0
Charles Darwin University	20	113	185	16	334
State sub-total	20	113	185	16	334
Australian Capital Territory					
The Australian National University	582	1 140	1 493	157	3 372
University of Canberra	40	1 125	1 057	102	2 324
State sub-total	622	2 265	2 550	259	5 696
Multi-State					
Australian Catholic University	16	578	1 763	808	3 165
Australian College of Theology Council Incorporated	3	34	32	0	69
State sub-total	19	612	1 795	808	3 234
Australia	9 873	86 823	162 018	14 385	273 099

Source: Department of Education, Employment and Workplace Relations, Higher Education Statistics (2007).

Notes: (a) Includes doctorate by research, and master's by research.

(b) Includes doctorate by coursework, master's by coursework, and other postgraduate.

(c) Includes bachelor degree, associate degree, and other undergraduate.

(d) Includes enabling courses and non-award courses.

Appendix C

This appendix shows the actual student load (EFTSL) for overseas and domestic students in higher education in 2007.

Table C1 Actual student load (EFTSL) for all domestic students by state, higher education provider and course type, full year 2007

State/higher education provider	Post- graduate research ^(a)	Post- graduate course work ^(b)	Under- graduate courses ^(c)	Other ^(d)	Total
New South Wales					
ACPE Limited	0	0	869	0	869
Australian College of Applied Psychology Pty Ltd	0	192	483	0	675
Australian Film, Television and Radio School	2	117	0	0	118
Avondale College	1	37	844	9	892
Billy Blue College	0	0	115	0	115
Blue Mountains International Hotel Management School	0	2	105	0	107
Campion Institute Limited	0	0	26	0	26
Charles Sturt University	219	2 278	12 910	265	15 673
East Coast Gestalt Training	0	51	0	0	51
Insearch	0	0	354	0	354
International College of Management, Sydney	0	0	52	0	52
Institute of Counselling	0	8	0	0	8
International Conservatorium of Music	0	0	13	0	13
JMC Academy	0	0	506	0	507
Jansen Newman Institute	0	136	90	0	227
Macleay College	0	0	166	0	166
Macquarie University	731	2 183	10 413	254	13 579
Moore Theological College	1	21	310	0	331
National Institute of Dramatic Art	0	11	157	0	168
Nature Care College	0	0	123	0	123
Raffles KVB Institute Pty Ltd	0	0	197	0	197
SAE Investments	0	0	136	0	136
Southern Cross University	245	494	6 009	153	6 902
Sydney College of Divinity	10	247	503	26	785
Sydney Institute of Business and Technology Pty Ltd	0	0	561	0	561
Tabor College (NSW) Incorporated	0	1	50	0	51
The Australian Institute of Music Limited	0	20	361	0	380
The College of Law Pty Ltd.	0	946	0	0	946
The University of New England	320	1 400	6 549	37	8 305
The University of New South Wales	1 681	3 089	18 493	99	23 362
The University of Newcastle	579	1 170	13 022	950	15 720
The University of Sydney	2 486	2 894	22 879	140	28 399
University of Technology, Sydney	693	2 521	13 496	137	16 848
University of Western Sydney	384	1 953	18 799	318	21 454

State/higher education provider	Post- graduate research ^(a)	Post- graduate course work ^(b)	Under- graduate courses ^(c)	Other ^(d)	Total
University of Wollongong	612	819	8 939	205	10 576
Wesley Institute	0	89	195	2	286
Wollongong College Australia	0	0	41	0	41
State sub-total	7 964	20 677	137 767	2 597	169 004
Victoria					
Australian Institute of Public Safety Pty Ltd	0	0	245	0	245
Box Hill Institute of Technical and Further Education	0	0	253	0	253
Cairnmillar Institute School of Counselling and Psychotherapy	0	24	0	0	24
Deakin University	533	1 934	15 798	49	18 314
Gordon Institute of TAFE	0	0	21	0	21
Harvest Bible College	0	4	85	0	88
Holmes Institute	0	0	86	0	86
Holmesglen Institute of TAFE	0	0	67	0	67
La Trobe University	689	1 900	14 737	39	17 366
Marcus Oldham College	0	0	116	0	116
Melbourne College of Divinity	97	202	254	0	553
Melbourne Institute for Experiential and Creative Arts Therapy	0	10	0	0	10
Melbourne Institute of Business and Technology Pty Ltd	0	0	151	0	151
Melbourne Institute of Technology	0	0	21	0	21
Monash College Group	0	0	199	0	200
Monash University	1 743	3 521	21 894	137	27 294
Northern Melbourne Institute of TAFE	0	0	77	0	77
Oceania Polytechnic Institute of Education Pty Ltd	0	0	37	0	37
RMIT University	781	2 427	14 348	5	17 562
Swinburne University of Technology	315	995	6 687	18	8 014
Tabor College – Victoria	0	22	118	0	140
The Australian Guild of Music Education	0	0	22	0	22
The Southern School of Natural Therapies Limited	0	0	227	0	227
The University of Melbourne	2 504	3 696	19 107	1	25 307
University of Ballarat	113	386	3 202	46	3 747
Victoria University	289	958	9 595	225	11 068
William Angliss Institute of TAFE	0	0	21	0	21
State sub-total	7 063	16 078	107 366	521	131 029
Queensland					
Australian College of Natural Medicine	0	0	1 545	0	1 545
Bond University	29	460	1 979	44	2 511
Brisbane College of Theology	0	28	60	1	89
Central Queensland University	157	582	5 432	561	6 732
Christian Heritage College	0	53	398	1	452
Gestalt Association of Queensland	0	13	0	0	13
Griffith University	780	1 478	17 884	83	20 226
James Cook University	339	566	7 469	60	8 433
Queensland Institute of Business and Technology Pty Ltd	0	0	98	0	98
Queensland University of Technology	879	2 303	21 067	102	24 351
Shafston Institute of Technology	0	0	85	0	85
The University of Queensland	2 183	1 847	19 742	27	23 800

State/higher education provider	Post- graduate research ^(a)	Post- graduate course work ^(b)	Under- graduate courses ^(c)	Other ^(d)	Total
University of Southern Queensland	121	1 012	6 744	520	8 396
University of the Sunshine Coast	64	283	2 831	256	3 434
State sub-total	4 552	8 626	85 334	1 654	100 165
Western Australia					
Curtin International College	0	0	51	14	64
Curtin University of Technology	673	1 711	13 480	221	16 086
Edith Cowan University	251	1 274	9 607	319	11 450
Murdoch University	546	737	6 820	72	8 175
Perth Bible College	0	1	25	0	25
Perth Institute of Business and Technology Pty Ltd	0	0	31	3	33
Swan TAFE	0	0	0	0	0
The University of Notre Dame Australia	26	233	3 974	175	4 407
The University of Western Australia	1 170	861	10 254	50	12 335
State sub-total	2 666	4 820	44 241	852	52 578
South Australia					
Adelaide College of Divinity	0	5	34	1	40
Australian Lutheran College	0	39	81	0	120
Bradford College	0	0	13	0	13
Carnegie Mellon University	0	23	0	0	23
International College of Hotel Management Inc.	0	0	0	0	0
South Australian Institute of Business and Technology Pty Ltd	0	0	143	0	143
Tabor College Adelaide	0	47	400	0	447
The Flinders University of South Australia	474	780	7 960	17	9 232
The University of Adelaide	1 081	855	9 674	45	11 654
University of South Australia	495	1 373	13 596	203	15 664
State sub-total	2 048	3 120	31 903	265	37 336
Tasmania					
Australian Maritime College	12	31	550	0	592
Tabor College Tasmania	0	4	35	0	38
University of Tasmania	700	569	8 838	365	10 472
State sub-total	711	603	9 422	365	11 102
Northern Territory					
Batchelor Institute of Indigenous Tertiary Education	3	15	279	161	458
Charles Darwin University	129	313	2 456	301	3 199
State sub-total	132	328	2 735	462	3 657
Australian Capital Territory					
The Australian National University	1 181	1 126	6 220	39	8 566
University of Canberra	145	780	4 780	13	5 716
State sub-total	1 325	1 905	10 999	52	14 282
Multi-State					
Australian Catholic University	168	1 168	7 314	50	8 700
Australian College of Theology Council Incorporated	19	469	677	0	1 164
State sub-total	186	1 638	7 990	50	9 864
Australia	26 647	57 795	437 756	6 818	529 016

Source: Department of Education, Employment and Workplace Relations, Higher Education Statistics (2007).

Notes: (a) Includes doctorate by research, and master's by research.

(b) Includes doctorate by coursework, master's by coursework, and other postgraduate.

(c) Includes bachelor degree, associate degree, and other undergraduate.

(d) Includes enabling courses and non-award courses.

Table C2 Actual student load (EFTSL) for all overseas students by state, higher education provider and course type, full year 2007

State/higher education provider	Post- graduate research ^(a)	Post- graduate course work ^(b)	Under- graduate courses ^(c)	Other ^(d)	Total
New South Wales					
ACPE Limited	0	0	4	0	4
Australian College of Applied Psychology Pty Ltd	0	17	8	0	25
Australian Film, Television and Radio School	0	0	0	0	0
Avondale College	0	16	89	1	105
Billy Blue College	0	0	4	0	4
Blue Mountains International Hotel Management School	0	12	193	0	205
Campion Institute Limited	0	0	2	0	2
Charles Sturt University	57	473	2 160	35	2 724
East Coast Gestalt Training	0	0	0	0	0
Insearch	0	0	911	0	911
International College of Management, Sydney	0	0	108	0	108
Institute of Counselling	0	0	0	0	0
International Conservatorium of Music	0	0	2	0	2
JMC Academy	0	0	26	0	24
Jansen Newman Institute	0	1	0	0	0
Macleay College	0	0	4	0	4
Macquarie University	296	2 847	4 061	623	7 829
Moore Theological College	0	0	11	0	12
National Institute of Dramatic Art	0	0	3	0	3
Nature Care College	0	0	17	0	17
Raffles KVB Institute Pty Ltd	0	0	53	0	53
SAE Investments	0	0	116	0	116
Southern Cross University	72	531	1 492	11	2 103
Sydney College of Divinity	0	23	135	6	165
Sydney Institute of Business and Technology Pty Ltd	0	0	2 362	0	2 362
Tabor College (NSW) Incorporated	0	0	0	0	0
The Australian Institute of Music Limited	0	7	37	0	46
The College of Law Pty Ltd.	0	11	0	0	11
The University of New England	76	214	326	19	635
The University of New South Wales	693	1 859	3 925	566	7 042
The University of Newcastle	143	1 027	1 687	204	3 059
The University of Sydney	520	3 022	3 891	301	7 733
University of Technology, Sydney	182	1 987	3 669	116	5 952
University of Western Sydney	54	1 014	1 429	23	2 520
University of Wollongong	235	2 355	2 822	364	5 775
Wesley Institute	0	8	29	23	59
Wollongong College Australia	0	0	83	0	83
State sub-total ^(a)	2 324	15 421	29 655	2 290	49 692
Victoria					
Australian Institute of Public Safety Pty Ltd	0	0	0	0	0
Box Hill Institute of Technical and Further Education	0	0	51	0	51
Cairnmillar Institute School of Counselling and Psychotherapy	0	0	0	0	0
Deakin University	82	1 390	3 304	134	4 909
Gordon Institute of TAFE	0	0	0	0	0

State/higher education provider	Post- graduate research ^(a)	Post- graduate course work ^(b)	Under- graduate courses ^(c)	Other ^(d)	Total
Harvest Bible College	0	0	0	0	0
Holmes Institute	0	0	786	0	786
Holmesglen Institute of TAFE	0	0	9	0	9
La Trobe University	152	1 939	2 493	4	4 587
Marcus Oldham College	0	0	0	0	0
Melbourne College of Divinity	19	18	32	0	69
Melbourne Institute for Experiential and Creative Arts Therapy	0	0	0	0	0
Melbourne Institute of Business and Technology Pty Ltd	0	0	833	0	833
Melbourne Institute of Technology	0	23	91	1	115
Monash College Group	0	0	1 837	2	1 838
Monash University	536	3 001	10 652	183	14 371
Northern Melbourne Institute of TAFE	0	0	2	0	2
Oceania Polytechnic Institute of Education Pty Ltd	0	0	0	0	0
RMIT University	283	2 172	11 873	113	14 439
Swinburne University of Technology	161	1 707	3 064	66	4 998
Tabor College – Victoria	0	1	2	0	2
The Australian Guild of Music Education	0	0	0	0	0
The Southern School of Natural Therapies Limited	0	0	0	0	0
The University of Melbourne	634	2 258	6 269	227	9 389
University of Ballarat	28	4 038	1 457	60	5 582
Victoria University	130	901	2 882	83	3 995
William Angliss Institute of TAFE	0	0	10	0	10
State sub-total	2 024	17 447	45 645	871	65 987
Queensland					
Australian College of Natural Medicine	0	0	53	0	53
Bond University	43	738	597	534	1 911
Brisbane College of Theology	0	2	5	0	6
Central Queensland University	19	4 763	2 885	35	7 701
Christian Heritage College	0	1	9	0	10
Gestalt Association of Queensland	0	0	0	0	0
Griffith University	176	1 944	3 945	403	6 467
James Cook University	169	988	1 400	259	2 816
Queensland Institute of Business and Technology Pty Ltd	0	0	892	0	892
Queensland University of Technology	250	1 089	2 846	16	4 200
Shafston Institute of Technology	0	0	20	0	20
The University of Queensland	635	1 566	2 990	349	5 539
University of Southern Queensland	43	1 641	1 891	155	3 730
University of the Sunshine Coast	12	325	156	178	670
State sub-total	1 346	13 053	17 686	1 929	34 014
Western Australia					
Curtin International College	0	0	716	163	879
Curtin University of Technology	326	1 759	9 599	315	11 998
Edith Cowan University	84	1 196	2 133	1	3 415
Murdoch University	109	268	2 020	110	2 507
Perth Bible College	0	0	11	0	13

State/higher education provider	Post- graduate research ^(a)	Post- graduate course work ^(b)	Under- graduate courses ^(c)	Other ^(d)	Total
Perth Institute of Business and Technology Pty Ltd	0	0	371	13	385
Swan TAFE	0	0	4	0	4
The University of Notre Dame Australia	5	68	262	54	388
The University of Western Australia	308	509	2 177	1	2 995
State sub-total	833	3 796	17 293	659	22 581
South Australia					
Adelaide College of Divinity	0	0	0	0	1
Australian Lutheran College	0	1	3	0	3
Bradford College	0	0	7	0	7
Carnegie Mellon University	0	38	0	0	38
International College of Hotel Management Inc.	0	0	0	0	0
South Australian Institute of Business and Technology Pty Ltd	0	0	328	0	328
Tabor College Adelaide	0	0	0	0	0
The Flinders University of South Australia	83	843	1 281	29	2 234
The University of Adelaide	212	1 371	2 489	285	4 358
University of South Australia	248	2 565	4 701	121	7 637
State sub-total	545	4 820	8 808	435	14 608
Tasmania					
Australian Maritime College	7	23	149	0	181
Tabor College Tasmania	0	0	0	0	0
University of Tasmania	123	479	2 378	4	2 985
State sub-total	130	503	2 528	4	3 166
Northern Territory					
Batchelor Institute of Indigenous Tertiary Education	0	0	0	0	0
Charles Darwin University	16	82	145	10	252
State sub-total	17	82	146	10	252
Australian Capital Territory					
The Australian National University	470	810	1 314	151	2 746
University of Canberra	32	736	795	45	1 609
State sub-total	502	1 546	2 111	196	4 355
Multi-State					
Australian Catholic University	12	457	1 411	293	2 174
Australian College of Theology Council Incorporated	2	25	20	0	48
State sub-total	15	481	1 433	293	2 222
Australia	7 737	57 145	125 306	6 688	196 876

Source: Department of Education, Employment and Workplace Relations, Higher Education Statistics (2007).

Notes: (a) Includes doctorate by research, and master's by research.

(b) Includes doctorate by coursework, master's by coursework, and other postgraduate.

(c) Includes bachelor degree, associate degree, and other undergraduate.

(d) Includes enabling courses and non-award courses.

Appendix D: Three examples of articulation between TAFE and higher education in Australia

University of Canberra (UC)

- ❖ Articulation arrangement is in place with Canberra Institute of Technology (CIT).
- ♦ Students guaranteed an offer of a place in an undergraduate degree at University of Canberra upon completing a diploma or advanced diploma course at Canberra Institute of Technology.
- ♦ Over 150 credit transfer arrangements exist:
 - <http://www.canberra.edu.au/cit-pathways/>
- ♦ Students receive credit points for specific subjects studied at TAFE.

Queensland University of Technology (QUT)

- ❖ Articulation arrangement is in place with TAFE Queensland.
- ❖ Upon successful completion of a diploma/advanced diploma course at TAFE Queensland students are eligible to articulate to a bachelor degree at Queensland University of Technology.
- ♦ Credit transfer is guaranteed.
- ♦ 12 'dual awards' offered in four study areas (business, health, IT, science):
 - <http://www.go.qut.edu.au/entry/dual_awards.jsp>
- ❖ Articulation may be end-to-end (that is, only once you complete the TAFE award do you move directly onto the degree component of the dual award), or it may be concurrent (that is, while you are enrolled in the final period of TAFE studies, you are also enrolled in the first one or two units of the degree):
 - http://www.studentservices.qut.edu.au/apply/ug/prior/dualawards/articulate/index.jsp.

University of South Australia (UniSA)

- ❖ The completion of a certificate IV, diploma or advanced diploma from TAFE SA (or other registered training providers) makes students eligible to apply for entry into University of South Australia programs, although the TAFE qualification does not guarantee selection, as is the case in the above examples.
- ♦ That is, no formal articulation arrangements exist where TAFE graduates are guaranteed admission into UniSA.
- ♦ Amount of credit transferred depends on how closely the TAFE qualification aligns with the degree:
 - <http://www.unisa.edu.au/future/tafe/default.asp>.

Appendix E: Higher education provider data by basis of admission

Table E1 Number of domestic students commencing a higher education course at bachelor level or below by higher education provider and basis for admission, 2006

	Second.	Higher	Mature	TAFE F	Profess.	Other	Not	Total
	school	ed.	age	award	qual.	basis	stated	
New South Wales								
ACPE Limited	273	37	17	4	1	14	2	348
Australian College of Applied Psychology Pty Ltd	95	8	413	0	0	11	3	530
Avondale College	213	75	3	20	0	43	31	385
Blue Mountains International Hotel Management School	24	2	0	0	0	2	0	28
Campion Institute Limited	1	0	1	0	0	14	0	16
Charles Sturt University	1 239	2 105	764	2 117	83	2 079	172	8 559
Jansen Newman Institute	0	0	11	0	0	4	1	16
KvB Visual Concepts Pty Ltd	58	7	4	2	6	10	0	87
Macquarie University	1 909	896	246	303	8	946	93	4 401
Moore Theological College	8	182	13	5	2	2	0	212
National Institute of Dramatic Art	0	0	0	0	0	52	0	52
Raffles KVB Institute Pty Ltd	54	6	3	4	5	15	0	87
Southern Cross University	684	848	632	381	28	985	12	3 570
Sydney College of Divinity	71	121	148	77	6	17	4	444
Sydney Institute of Business and Technology Pty Ltd	240	52	18	9	0	48	9	376
Tabor College (NSW) Incorporated	0	0	0	0	0	0	0	0
The Australian Institute of Music Limited	26	1	0	0	0	166	0	193
The University of New England	348	1 569	787	527	159	210	27	3 627
The University of New South Wales	3 946	1 127	243	296	1	725	111	6 449
The University of Newcastle	2 149	1 186	2 528	632	23	471	30	7 019
The University of Sydney	5 788	1 416	112	84	5	714	44	8 163
University of Technology, Sydney	2 744	948	92	765	1	620	20	5 190
University of Western Sydney	3 660	1 412	529	1 933	10	1 440	237	9 221
University of Wollongong	1 728	820	169	387	0	253	25	3 382
Wesley Institute	44	6	4	2	0	0	0	56

	Second. school	Higher ed.	Mature age	TAFE F award	Profess. qual.	Other basis	Not stated	Total
State sub-total	25 302	12 824	6 737	7 548	338	8 841	821	62 411
Victoria								
Australian Institute of Public Safety Pty Ltd	66	0	0	0	0	0	0	66
Box Hill Institute of Technical and Further Education	69	3	14	12	3	0	1	102
Deakin University	3 496	1 428	196	797	0	484	5	6 406
Gordon Institute of TAFE	0	0	3	1	0	0	0	4
Harvest Bible College	0	0	41	0	0	0	0	41
Holmes Institute	0	4	1	7	0	18	0	30
La Trobe University	3 467	1 400	27	799	9	94	287	6 083
Marcus Oldham College	43	0	0	0	0	0	0	43
Melbourne College of Divinity	17	20	24	2	0	32	0	95
Melbourne Institute of Business and Technology Pty Ltd	87	9	4	3	0	1	0	104
Melbourne Institute of Technology	5	0	0	0	0	0	0	5
Monash College Group	79	1	0	1	0	1	2	84
Monash University	4 719	2 333	24	676	146	356	68	8 322
Northern Melbourne Institute of TAFE	1	0	16	0	0	0	0	17
Oceania Polytechnic Institute of Education Pty Ltd	0	0	0	0	0	20	0	20
RMIT University	3 341	1 160	43	1 216	0	6	10	5 776
Swinburne University of Technology	1 379	534	3	724	2	135	30	2 807
Tabor College – Victoria	0	0	0	0	0	84	0	84
The Southern School of Natural Therapies Limited	0	0	0	0	0	91	0	91
The University of Melbourne	3 521	1 243	4	89	9	512	20	5 398
University of Ballarat	869	150	109	0	4	180	13	1 325
Victoria University	1 124	1 803	282	460	124	779	31	4 603
State sub-total	22 283	10 088	791	4 787	297	2 793	467	41 506
Queensland								
Australian College of Natural Medicine	0	0	0	0	0	1 122	2	1 124
Bond University	98	88	19	16	0	450	32	703
Central Queensland University	1 237	858	255	312	117	1 014	38	3 831
Christian Heritage College	67	86	50	42	0	9	4	258
Griffith University	4 119	2 005	52	665	96	1 284	111	8 332
James Cook University	1 903	571	0	184	126	74	45	2 903

	Second.	Higher	Mature	TAFE	Profess.	Other	Not	Total
	school	ed.	age	award	qual.	basis	stated	
Queensland Institute of Business and Technology Pty Ltd	26	1	0	3	0	37	1	68
Queensland University of Technology	4 195	2 940	0	784	254	1 071	111	9 355
Shafston Institute of Technology	0	20	0	0	0	0	0	20
The University of Queensland	4 478	1 993	2	179	41	953	141	7 787
University of Southern Queensland	1 212	1 089	144	455	93	1 848	61	4 902
University of the Sunshine Coast	854	194	8	125	33	467	43	1 724
State sub-total	18 189	9 845	530	2 765	760	8 329	589	41 007
Western Australia								
Curtin International College	9	1	0	0	0	3	0	13
Curtin University of Technology	240	1 027	20	207	7	4 586	128	6 215
Edith Cowan University	1 644	919	750	696	52	830	113	5 004
Murdoch University	1 203	886	619	405	7	104	68	3 292
Perth Bible College	0	0	14	0	0	9	0	23
Perth Institute of Business and Technology Pty Ltd	24	2	6	1	0	7	2	42
The University of Notre Dame Australia	671	129	113	56	3	912	51	1 935
The University of Western Australia	2 180	1 131	10	6	1	170	76	3 574
State sub-total	5 971	4 095	1 532	1 371	70	6 621	438	20 098
South Australia								
Adelaide College of Divinity	4	10	1	2	1	4	0	22
Australian Lutheran College	50	25	5	2	0	7	0	89
International College of Hotel Management Inc.	0	0	0	1	0	0	0	1
South Australian Institute of Business and Technology Pty Ltd	0	0	0	0	0	49	1	50
Tabor College Adelaide	0	0	0	0	0	231	1	232
The Flinders University of South Australia	1 754	978	383	254	31	180	41	3 621
The University of Adelaide	2 360	489	237	20	0	224	40	3 370
University of South Australia	3 783	1 080	602	473	167	427	29	6 561
State sub-total	7 951	2 582	1 228	752	199	1 122	112	13 946
Tasmania								
Australian Maritime College	69	16	46	81	15	267	11	505
Tabor College Tasmania	1	4	23	0	0	2	0	30
University of Tasmania	1 321	1 316	374	440	2	733	58	4 244
State sub-total	1 391	1 336	443	521	17	1 002	69	4 779
Northern Territory								

	Second.	Higher ed.	Mature age	TAFE F	Profess.	Other basis	Not stated	Total
Batchelor Institute of Indigenous Tertiary Education	4	0	349	3	3	44	5	408
Charles Darwin University	385	480	111	267	13	523	18	1 797
State sub-total	389	480	460	270	16	567	23	2 205
Australian Capital Territory								
Australian Defence Force Academy	70	222	0	7	0	218	6	523
Australian International Hotel School	0	0	0	0	0	0	0	0
The Australian National University	974	755	36	29	0	209	57	2 060
University of Canberra	821	393	107	282	9	475	21	2 108
State sub-total	1 865	1 370	143	318	9	902	84	4 691
Multi-State								
Australian Catholic University	1 380	872	50	432	24	219	13	2 990
Australian College of Theology Council Incorporated	111	48	353	5	1	4	1	523
State sub-total	1 491	920	403	437	25	223	14	3 513
Australia	84 832	43 540	12 267	18 769	1 731	30 400	2 617	194 156

Notes: Bachelor degree or below includes bachelor's graduate entry, bachelor's honours, bachelor's pass, associate degree, advanced diploma (AQF), diploma (AQF), other award courses, enabling course and non-award course.

Source: Department of Education, Science and Training, Higher Education Statistics (2006).

Appendix F: Student outcomes data

Table F1 Proportion of VET module completers later studying at university by field of education, age and qualification level, 2007

	15-24 years		25 an	d above	years	Total			
	Dip.+	Cert. IV–I	Total	Dip.+	Cert. IV–I	Total	Dip.+	Cert. IV–I	Total
Natural and physical sciences	**	**	20.7*	**	**	**	**	**	8.9*
Information technology	23.3*	5.5*	10.3*	**	2.5*	2.8*	16.5*	3.6*	4.8
Engineering and related technologies	8.3*	3.3*	3.5	2.8*	2.6*	1.3	4.6*	3.0	1.9
Architecture and building	31.2*	4.9*	5.1*	**	0.0	0.9*	11.1*	3.2*	1.8
Agriculture, environmental and related studies	**	4.7*	6.8*	0.0	1.2*	0.8*	**	2.3*	2.2
Health	**	24.3*	13.2	**	**	3.0	11.2*	11.4*	4.6
Education	0.0	**	6.0*	0.0	6.8*	4.1	0.0	7.1*	4.3
Management and commerce	12.2*	8.3	10.2	6.4*	2.2*	2.8	8.9	4.5	5.2
Society and culture	18.8*	15.1	15.1	4.8*	4.2	4.9	10.1	7.7	8.0
Creative arts	17.3*	8.8*	9.2	9.1*	6.9*	6.2	11.9*	7.6	7.3
Food, hospitality and personal services	0.0	8.1	12.6	0.0	2.8*	1.5*	0.0	6.0	6.2
Mixed field programs	**	**	8.4	0.0	3.4*	3.2	**	2.5*	4.5
Total	15.4	7.3	9.2	5.6	2.8	2.6	9.4	4.7	4.4

* Relative standard error greater than 25%; estimate should be used with caution. ** Estimate not presented due to too few numbers in sample cell.

Source: NCVER Student Outcomes Survey (2007).