

School-based apprenticeships and traineeships

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RESEARCH

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978 1 921412 67 7 web edition

TD/TNC 94.03

Published by NCVER

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About the research



School-based apprenticeships and traineeships

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Vocational education and training (VET) has been seen to be an important element of school education for some time now. More recently, school-based apprentices and trainees have been given more prominence as an element of VET in Schools, partly as a response to skill shortages in a wide range of areas. The purpose of this short paper is to provide data on school-based apprentices and trainees to enable a judgement to be made about how this policy push is unfolding.

Key messages

- ✧ The number of school-based apprentices and trainees is still small compared with all young apprentices and trainees.
- ✧ The number of school-based apprentices and trainees is growing rapidly. Numbers vary considerably by state, with Queensland and Victoria leading the way.
- ✧ School-based apprenticeships and traineeships are concentrated in the retail and hospitality training packages and are more likely to be at certificates I and II level than at certificate III and above level.
- ✧ Completion rates for school-based apprentices and trainees are a little higher than for their non-school peers at the certificates I and II level, but lower for certificate III level. The lowest certificate III completion rates for the school-based apprentices and trainees are in the trades.
- ✧ Early attrition is low among school-based apprentices and trainees, suggesting that drop-out after completing school is relatively high.

Tom Karmel
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School-based apprenticeships and traineeships

Vocational education and training (VET) has been seen to be an important element of school education for some time now. More recently, school-based apprentices and trainees have been given more prominence as an element of VET in Schools, partly as a response to skill shortages in a wide range of areas. The purpose of this short paper is to provide data on school-based apprentices and trainees to enable a judgement to be made about how this policy push is unfolding.

After providing some context on the policy environment relevant to school-based apprenticeships and traineeships, this paper provides data on how many and what areas are covered, and then goes on to look at attrition and completion rates. To provide a comparison group, data on apprenticeships and traineeships among young people are also given, noting that they form a very important entry point into the labour market for a large proportion of young people.

Policy context

Government policy has promoted school-based apprenticeships and traineeships, partly in response to skills shortages¹

Government policy has been active in the area of school-based apprenticeships and traineeships, partly because of the widely held view that skill shortages are a problem in many occupations. A key policy development has been the introduction of the Australian Technical College Program. The program aims to establish technical colleges in regions around Australia identified as having reported skill needs, a high youth population and a strong industry base. The colleges cater for Years 11 and 12 students who wish to study for their Year 12 certificate and start a school-based apprenticeship in one of five traditional trades: metals and engineering, automotive trades, building and construction, electro-technology, and commercial cookery. Five colleges were initially opened in 2006. Currently, there are 24 Australian Technical Colleges, spread across all states and territories.

With the advent of a new Commonwealth Government, Australian Technical Colleges are being wound back into the state and territory education systems. However, the promotion of school-based apprenticeships and traineeships continues, with the creation of trade training centres in secondary schools. Under this new proposal, all secondary schools in Australia are eligible to apply for Commonwealth funding of between \$500 000 and \$1.5 million to build or upgrade trade workshops, computer laboratories and other training facilities. In addition, the cost to families of students undertaking VET in Schools programs, including school-based

¹ Government policy described in this section was sourced from the following websites: <www.australianapprenticeships.gov.au>, <www.australiantechnicalcolleges.gov.au> and <www.alp.org.au>.

apprenticeships and traineeships, will be offset by a 50% tax refund on expenditures related to education and training.

Finally, school-based apprenticeships and traineeships have also been incorporated into the incentives of the Australian Apprentices Program. In addition to the standard commencement and completion incentives of up to \$1500 and \$2500, respectively, employers may now be eligible to receive a \$750 commencement incentive for employing a young person in an endorsed school-based apprenticeship at certificate II and above level, plus \$750 for continuing to employ the young person after he or she has completed Year 12.

How many and what areas are covered?

Numbers are small

Despite recent government policy initiatives, the number of school-based apprentices and trainees is still small compared with all young apprentices and trainees. In 2007, all commencing apprentices and trainees aged 19 years and under numbered 114 800, while school-based apprentice and trainee commencements numbered 19 100. The majority of school-based apprentices and trainees were aged 15 and 16 years, and there were roughly equal numbers of males and females. It is also worth noting that 5200 apprentices and trainees were attending school, although their apprenticeships and traineeships were not school-based.

Table 1 Number of school-based and other apprentice and trainee commencements by sex and age, 2007

	School-based	Others at school	Others aged 19 years and under	All apprentices and trainees aged 19 years and under
Male				
Age 15 & under	3 995	956	3 592	8 543
Age 16	4 106	664	10 645	15 415
Age 17	1 302	491	15 384	17 177
Age 18	137	137	17 419	17 693
Age 19	18	8	11 189	11 215
Total	9 558	2 255	58 227	70 040
Female				
Age 15 & under	4 386	1 327	1 269	6 982
Age 16	3 778	841	3 608	8 227
Age 17	1 243	604	7 445	9 292
Age 18	112	145	11 671	11 928
Age 19	8	14	8 309	8 331
Total	9 527	2 931	32 302	44 760

Notes: Data are the sum of the first revisions of each quarterly estimate of school-based apprenticeships and traineeships.

Others at school represent apprentices and trainees who were still attending school but whose apprenticeships and traineeships were not classified as school-based.

Source: NCVET, National Apprentice and Trainee Collection, various collections (using the first revision).

Growth in school-based apprenticeships and traineeships has been uneven across the states and territories

- ✧ Although small compared with all young apprentices and trainees, the number of school-based apprentice and trainee commencements has been growing rapidly in recent years, from 10 400 in 2002 to 19 100 in 2007. Numbers vary considerably by state, with Queensland and Victoria leading the way.

Table 2 Number of school-based apprentice and trainee commencements by state and territory, 2002–07

	2002	2003	2004	2005	2006	2007
New South Wales	255	759	869	911	773	1 404
Victoria	4 063	3 562	2 696	5 109	5 206	6 497
Queensland	4 722	5 293	6 044	6 419	6 956	7 973
South Australia	763	1 029	1 537	1 602	1 926	1 336
Western Australia	300	961	1 121	1 156	1 397	1 166
Tasmania	2	13	81	102	96	242
Northern Territory	15	147	141	114	179	155
Australian Capital Territory	292	465	363	369	326	335
Australia	10 411	12 230	12 853	15 782	16 861	19 110

Notes: Data are the sum of the first revisions of each quarterly estimate of school-based apprenticeships and traineeships.

School-based information introduced 1 January 2002.

Source: NCVER, National Apprentice and Trainee Collection, various collections (using the first revision).

School-based apprenticeships and traineeships in retail training packages are most popular

School-based apprenticeships and traineeships in retail and hospitality training packages were most popular in 2007, with 6000 and 2900 commencements, respectively. This result was mirrored among all young apprentices and trainees, where commencements in retail and hospitality training packages in 2007 numbered 19 300 and 11 900, respectively. The numbers in the trades are quite small when compared with the numbers of all young trade apprentices.

Table 3 Number of school-based and other apprentice and trainee commencements by training package, 2007

	School-based	Others at school	Others aged 19 years and under	All apprentices and trainees aged 19 years and under
Retail	5 988	3 650	9 623	19 261
Hospitality	2 915	880	8 121	11 916
Business Services	1 646	83	8 379	10 108
Automotive Industry Retail, Service and Repair	1 206	67	8 487	9 760
General Construction	1 067	71	9 283	10 421
Metal and Engineering	946	45	6 858	7 849
Hairdressing	611	39	4 503	5 153
Community Services	511	29	3 006	3 546
Rural Production	415	27	767	1 209
Information and Communications Technology	289	5	594	888
Total training packages	18 752	5 202	88 507	112 461
Non-training packages	358	2	1 979	2 339
Total	19 110	5 204	90 486	114 800

Notes: Data are the sum of the first revisions of each quarterly estimate of school-based apprenticeships and traineeships.

Others at school represent apprentices and trainees who were still attending school but whose apprenticeships and traineeships were not classified as school-based.

Source: NCVET, National Apprentice and Trainee Collection, various collections (using the first revision).

At what level is the training?

The majority of school-based apprenticeships and traineeships are at the certificates I and II level

Commencements of school-based apprenticeships and traineeships are more likely to be at the certificates I and II level than at the certificate III and above level. In 2007, school-based commencements in the lower certificates numbered 10 600, compared with 8500 commencements at the certificate III and above level. By contrast, the vast majority of apprenticeships and traineeships undertaken by all young people are at the certificate III and above level.

Table 4 Number of school-based and all young apprentice and trainee commencements by qualification and training package, 2007

	School-based		All apprentices and trainees aged 19 years and under	
	Cert. I/II	Cert. III and above	Cert. I/II	Cert. III and above
Retail	4 358	1 630	11 061	8 199
Hospitality	1 452	1 464	3 209	8 707
Business Services	947	700	2 147	7 962
Automotive Industry Retail, Service and Repair	682	525	1 326	8 433
Metal and Engineering	357	588	714	7 135
Rural Production	338	77	686	524
Hairdressing	247	364	292	4 861
Amenity Horticulture	225	27	631	1 249
General Construction	205	862	345	10 075
Outdoor Recreation Industry	180	85	265	544
Total training packages	10 337	8 413	25 942	86 519
Non-training packages	302	56	381	1957
Total	10 638	8 471	26 323	88 477

Notes: Data are the sum of the first revisions of each quarterly estimate of school-based apprenticeships and traineeships.

Source: NCVET, National Apprentice and Trainee Collection, various collections (using the first revision).

What proportion completes training?

Completion rates for school-based apprentices and trainees are lowest in the trades

We now turn to a consideration of completion rates among school-based apprentices and trainees. Overall, 47.8% of school-based contracts at the certificates I and II level are completed, compared with 46.1% for all young apprentices and trainees. By contrast, 41.8% of school-based contracts at the certificate III and above level are completed, compared with 47.0% for all young apprentices and trainees.

School-based contract completion rates are lowest in the trades. Only 4.8% of school-based contracts in hairdressing training packages at the certificate III and above level are completed, while the completion rates for automotive and metal training packages are 19.5% and 24.4%, respectively. By contrast, completion rates for school-based contracts at the certificate III and above level are highest in the information technology and business services training packages (65.8% and 65.6%, respectively).

Table 5 Contract completion rates by qualification and training package, school-based and all young apprentices and trainees, 2002 commencements

	School-based		All apprentices and trainees aged 19 years and under	
	Cert. I/II %	Cert. III+ %	Cert. I/II %	Cert. III+ %
Retail	47.1	40.8	39.3	40.7
Hairdressing	63.0	4.8	58.1	36.9
Hospitality	52.2	45.0	42.1	28.4
Horticulture	50.3	*	53.5	47.9
Agriculture	57.7	*	54.9	57.0
Metal and Engineering Industry	38.9	24.4	51.3	60.7
Information and Communications Technology	59.9	65.8	61.4	60.9
Business Services	51.3	65.6	58.8	62.8
Administration	66.7	*	66.1	69.6
Automotive Industry Retail, Service and Repair	28.3	19.5	44.1	48.9
Total training packages	48.0	41.8	45.8	46.7
Non-training packages	31.7	41.5	55.0	49.9
Total	47.8	41.8	46.1	47.0

Notes: * Completion rate not reported due to the number of commencements in the cell being too small. Readers interested in the sample sizes used in the calculation of completion rates are referred to appendix table A1. Completion rates calculated by tracking contracts from the collection in which they first appeared, in 2002, to the current collection.

Source: Derived from NCVET, National Apprentice and Trainee Collection, various collections.

What is the level of attrition?

Attrition is lower among school-based apprentices and trainees than among all young apprentices and trainees

Table 6 indicates that attrition is lower among school-based than all young apprentices and trainees, both within the first six months and year, and at both certificate I/II and certificate III and above levels. However, completion rates at the certificate III and above level are also lower for school-based than all young apprentices and trainees (table 5). So, whereas fewer school-based apprentices and trainees cancel or withdraw from training within the first year, fewer also go on to complete their training. This may be because school-based apprentices and trainees often finish school part way through their training (this is particularly true of certificates III and above), and the loss of school pastoral care may account for the lower completion rates.

Looking at the first year, attrition is highest in the trades at certificates I and II level. The automotive, metal, hairdressing and construction training packages for both school-based and all young apprentices and trainees have attrition rates in excess of 40% at this level. By contrast, only 17.6% of school-based apprentices and trainees cancel or withdraw from training within the first year in outdoor recreation training packages at the certificates I and II level.

Overall, attrition is lower at the certificate III and above level than at the certificates I and II level for both school-based and all young apprentices and trainees.

Table 6 Cancellations/withdrawals within first 6 months and year by qualification and training package, school-based and all young apprentices and trainees commencing in 2005

	Cancellations/withdrawals within first 6 months				Cancellations/withdrawals within first year			
	School-based		All apprentices and trainees aged 19 years and under		School-based		All apprentices and trainees aged 19 years and under	
	Cert. I/II %	Cert. III+ %	Cert. I/II %	Cert. III+ %	Cert. I/II %	Cert. III+ %	Cert. I/II %	Cert. III+ %
Retail	15.1	14.3	24.4	24.8	27.4	25.4	38.5	39.2
Hospitality	19.1	13.6	29.5	27.4	33.9	23.9	42.9	43.9
Automotive Industry Retail, Service and Repair	18.4	12.7	25.6	15.2	44.8	29.2	44.8	25.9
Business Services	15.4	10.6	20.0	20.9	26.7	20.4	29.7	29.9
Metal and Engineering Industry	19.1	10.0	23.7	12.2	44.4	21.5	42.9	20.1
Hairdressing	26.1	19.2	27.0	24.1	41.5	37.9	42.1	38.3
General Construction	24.0	9.9	27.4	17.7	45.4	22.8	45.0	29.1
Rural Production	9.9	6.6	18.6	17.1	20.7	18.4	30.9	28.4
Amenity Horticulture	14.6	*	22.1	17.4	33.7	*	36.4	30.2
Outdoor Recreation Industry	7.1	*	12.9	8.9	17.6	*	22.4	19.1
Total training packages	16.0	12.1	25.6	19.1	30.6	24.3	39.2	30.7
Non-training packages	40.0	*	39.0	14.1	48.6	*	47.8	24.0
Total	16.7	12.1	25.8	18.9	31.1	24.2	39.3	30.4

Notes: * Attrition rates not reported due to the number of commencements in the cell being too small. Readers interested in the sample sizes used in the calculation of attrition rates are referred to appendix tables A2 and A3.
Attrition rates are calculated by tracking contracts from the collection in which they first appeared, in 2005, to the current collection.

Source: Derived from NCVER, National Apprentice and Trainee Collection, various collections.

In conclusion

Numbers of school-based apprenticeships and traineeships are small and highly concentrated

Despite a concerted policy push, the number of school-based apprentices and trainees is small and highly concentrated in Queensland and Victoria, among retail and hospitality training packages, and at the certificates I and II level. Attrition is lower among school-based than all young apprentices and trainees, both within the first six months and year, and at both certificate I/II and certificate III and above levels. With regard to the proportion completing their training, completion rates for certificates I and II are higher for school-based contracts than for all young apprentices and trainees, but substantially lower for certificates III and above. Completion rates in hairdressing, metal and engineering, and automotive certificates III and above are particularly low among school-based apprentices and trainees.

Appendix

Table A1 Number of school-based and all young apprentice and trainee commencements by qualification and training package, 2002

	School-based		All apprentices and trainees aged 19 years and under	
	Cert. I/II	Cert. III+	Cert. I/II	Cert. III+
Retail	4 226	976	17 465	6 534
Hairdressing	54	42	86	4 013
Hospitality	1 079	249	4 348	6 700
Horticulture	159	7	1 158	1 233
Agriculture	246	8	963	554
Metal and Engineering Industry	203	37	1 117	4 753
Information and Communications Technology	137	76	342	746
Business Services	668	64	3 943	4 552
Administration	72	9	1 111	1 387
Automotive Industry Retail, Service and Repair	448	36	1 784	6 951
Total training packages	7 799	1 783	39 256	59 634
Non-training packages	126	106	1 527	7 007
Total	7 925	1 889	40 783	66 641

Notes: These data represent the denominators used in the calculation of completion rates in table 5. The methodology used to calculate completion rates is different from that used to count the number of school-based commencements in table 2. Hence, the number of school-based commencements for 2002 may be different between the tables.

Source: Derived from NCVET, National Apprentice and Trainee Collection, various collections.

Table A2 Number of school-based and all young apprentices and trainees cancelling or withdrawing by qualification and training package, commencements in 2005

	Cancellations/withdrawals within first 6 months				Cancellations/withdrawals within first year			
	School-based		All apprentices and trainees aged 19 years and under		School-based		All apprentices and trainees aged 19 years and under	
	<i>Cert. I/II</i>	<i>Cert. III+</i>	<i>Cert. I/II</i>	<i>Cert. III+</i>	<i>Cert. I/II</i>	<i>Cert. III+</i>	<i>Cert. I/II</i>	<i>Cert. III+</i>
Retail	777	133	3 105	1 894	1 413	236	4 899	2 992
Hospitality	311	104	1 138	2 450	551	183	1 656	3 926
Automotive Industry Retail, Service and Repair	148	34	450	1 403	361	78	787	2 391
Business Services	147	41	532	1 612	254	79	793	2 309
Metal and Engineering Industry	82	26	225	888	191	56	407	1 462
Hairdressing	63	38	68	1 412	100	75	106	2 243
General Construction	44	49	90	1 709	83	113	148	2 809
Rural Production	40	5	163	126	84	14	270	209
Amenity Horticulture	30		183	244	69	4	302	424
Outdoor Recreation Industry	25	1	65	35	62	4	113	75
Total training packages	1 803	567	7 795	16 029	3 455	1 134	11 931	25 783
Non-training packages	147		173	481	179	3	212	823
Total	1 950	567	7 968	16 510	3 634	1 137	12 143	26 606

Notes: These data represent the numerators used in the calculation of attrition rates in table 6.

Source: Derived from NCVET, National Apprentice and Trainee Collection, various collections.

Table A3 Number of school-based and all young apprentices and trainees by qualification and training package, commencements in 2005

	School-based		All apprentices and trainees aged 19 years and under	
	Cert. I/II	Cert. III+	Cert. I/II	Cert. III+
Retail	5 157	928	12 717	7 640
Hospitality	1 627	766	3 857	8 936
Automotive Industry Retail, Service and Repair	805	267	1 758	9 216
Business Services	953	388	2 667	7 733
Metal and Engineering Industry	430	261	949	7 285
Hairdressing	241	198	252	5 850
General Construction	183	495	329	9 669
Rural Production	406	76	875	736
Amenity Horticulture	205	28	829	1 402
Outdoor Recreation Industry	353	11	504	393
Total training packages	11 302	4 676	30 454	84 130
Non-training packages	368	18	444	3 423
Total	11 670	4 694	30 898	87 553

Notes: These data represent the denominators used in the calculation of attrition rates in table 6. The methodology used to derive attrition rates is different from that used to count the number of school-based commencements in table 2. Hence, the number of school-based commencements for 2005 may be different between the tables.

Source: Derived from NCVET, National Apprentice and Trainee Collection, various collections.