

VET in Schools students: characteristics and post-school employment and training experiences – support document

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# Appendix C: Supplementary analysis

In this support document we present the variables used and the findings of our supplementary analysis in the linked data set study.

The following are used as points of comparison in our regression analyses which look at differences between groups more closely.

- Demographics
  - Sex (male, female)
  - Age (15, 16, 17, 18, 19 years)
  - Indigenous status (Indigenous, non-Indigenous)<sup>1</sup>
  - Language mainly spoken in the home (English, language other than English)<sup>2</sup>
  - Remoteness area (location of usual residence) (Major City, Inner Regional, Outer Regional, Remote and Very Remote)
- Level of qualification undertaken (Certificate I/II, Certificate III/IV, Diploma and above)
- Involvement in school-based apprenticeship or traineeship (Apprenticeship/traineeship, not apprenticeship/traineeship)
- School affiliation (government, catholic, independent, other government providers<sup>3</sup>).

The outcomes we are interested in and the variables we use as dependent variables (in the regression analyses) comprise:

- Employment outcomes (whether employed or not employed)
- Uptake of trade occupation (whether trade or non-trade)
- Income (whether above \$52000, below \$52000)
- Year 12 attainment (yes, no)
- Further studies completed or being undertaken (Highest non-school qualification completed or undertaken (certificates I/II; III/IV; VET diploma; bachelor degree or higher, or currently engaged in further studies).

The formula used for the regression analysis is presented in Appendix C, tables identifying predicted probabilities for different comparison groups, and discussion of results of the analysis are presented in Appendix D.

<sup>1</sup> Indigenous status characteristics are derived fr4om the 2011 Census because these are more complete. This indicates that 96.1% and 3.9% of our sample are Indigenous.

<sup>2</sup> Language mainly spoken at home has also been derived from the 2011 Census.

<sup>3</sup> The category 'other government' in the 'school type' data element includes TAFE institutes, community education providers, private training providers and students enrolled in mixed school types.

### Steps for determining the probabilities used in the regression analysis

The following summarises the definition of each output measure:

B - Estimated beta coefficient for the logistic regression equation for predicting the dependent variable from the independent variables. The prediction equation is:

$$\log (p / 1-p) = B_0 + B_1 x_1 + ... + B_n x_n$$

Where p is the probability of the dependent variable matching the chosen outcome.

Standard error - These are the standard errors associated with the coefficients.

Wald chi-square statistic - Based on the ratio of the estimate to the standard error to test the null hypothesis that the estimate is equal to zero.

P-value - The p-value associated with the coefficient. Values less than  $\alpha$ =0.05 indicate that the coefficient is statistically significantly different to zero.

# Appendix D: Results of supplementary analysis

We did some logistic regressions to establish statistical significance and differences between different demographic and educational background groups. Excepting where specified the predictive probabilities in the regressions (in our supplementary analysis) are calculated assuming the following characteristics: female, 16 years old, not Indigenous, English speaking background, born in Australia, certificate I/II study, not in an apprenticeship, government school, and major city.

## Probability of getting a job

The results from our statistical modelling which analyse employment outcomes just for those in work and those looking for work (rather than for all students) indicate that whether or not 2006 VETiS students in the labour force find themselves in employment five years down the track is associated with a range of personal and school background characteristics. In most of these cases differences although statistically significant are minimal, and so do not have much practical explanatory value.

- Females in the labour force do slightly better than males in finding employment.
- Those who undertake a school-based apprenticeship or traineeship in their VETiS programs are also more likely to be employed than those who have not done such a program. However, we would expect this from those who are employed in a company during their VETiS programs.
- More likely to be employed are students from Catholic and Independent schools in comparison with students from government schools who are in turn more likely to be employed than those from other government providers.
- One of the contradictory findings relates to location. Here the results of the statistical modelling techniques we have followed indicate that VETiS students from outer regional and remote and very remote areas are more likely to be employed than those from the major cities, however the statistical and practical differences are minimal.

		Predicted probability		Predicated Probability
Sex			Level of VETiS study	
	Male	0.90	Certificate I/II	0.92 not sig
	Female	0.92	Certificate III/IV	0.92
Age (in	2006)		Diploma and above	0.96 not sig
	15 years old	0.92 not sig	Apprenticeship & traineeship status	
	16 years old	0.92	Apprenticeship or traineeship	0.93
	17 years old	0.93	Not apprenticeship or traineeship	0.92
	18 years old	0.93 not sig	School type	
	19 years old	0.89	Government	0.92
Indiger	ious status		Catholic	0.94
	Non-Indigenous	0.92	Independent	0.94
	Indigenous	0.83	Other government	0.89
Langua	ige spoken at home			
	English speaking background	0.92	Remoteness	
	Non-English speaking background	0.88	Major city	0.92
			Inner regional	0.92 not sig
			Outer regional	0.93
			Remote and very remote	0.94

# Table D1 Predicted probability of 2006 VETiS students in the labour force being in employment in 2011 by student background characteristics \*

Note: The regression estimates (apart from 15 years, 18 years, Cert. I or II, inner regional and diploma and above) are statistically significant. Predicted probabilities are calculated assuming the following characteristics (except where specified): female, 16 years old, not Indigenous, English speaking background, born in Australia, certificate I/II study, not in an apprenticeship, government school, and major city.

Variable	Value	Estimate	Standard error	Wald chi- square	p-value
Intercept		2.6402	0.0726	1321.4986	<.0001
Age (on 30 June 2006)	15 years	-0.0559	0.0409	1.8719	0.1713
Age (on 30 June 2006)	17 years	0.1506	0.0314	22.9936	<.0001*
Age (on 30 June 2006)	18 years	0.0748	0.0587	1.6256	0.2023
Age (on 30 June 2006)	19 years	-0.3836	0.149	6.6295	0.01*
Sex	Male	-0.2174	0.0275	62.3325	<.0001
Major course, level of study	Cert I or II	0.0172	0.0406	0.1799	0.6714
Major course, level of study	Diploma and above	0.6669	0.39	2.9232	0.0873
Apprentice/trainee status	Not an apprenticeship	-0.1931	0.0641	9.0683	0.0026*
Language spoken at home	Other than English	-0.4553	0.039	136.5011	<.0001*
Indigenous status	Indigenous	-0.8877	0.0627	200.5262	<.0001*
School type	Catholic	0.2724	0.0371	53.949	<.0001*
School type	Independent	0.3192	0.0502	40.4831	<.0001*
School type	Other	-0.3638	0.1441	6.3773	0.0116*
Remoteness area	Inner regional	0.0206	0.0349	0.3494	0.5544
Remoteness area	Outer regional	0.1322	0.0474	7.7762	0.0053*
Remoteness area	Remote and very remote	0.2467	0.1023	5.8148	0.0159*

Table D2: The likelihood of 2006 VETiS students being in employment than not in employment in 2011 by	/
characteristics of students	

Source: 2006 National VET-in-Schools Collection/2011 ABS Census of Population and Housing.

Note: 'Cert III or IV' and 'Apprenticeship' were selected as the reference groups when computing the regression. However the

reference categories were changed when calculating predicted probabilities as they were the more common categories.

## Probability of getting a good job

In our statistical model we denote a good wage as being above \$52000. We find that earning incomes of \$52 000 and above is rare and variability low, Predicted probabilities hover around the 10%, 11% and 12% mark with few instances above this level. Nevertheless, the likelihood that 2006 VETiS students would find themselves in a job with an income of \$52000 and above five years down the track of their VETiS studies is greater for males than females, 18 and 19 year-olds in comparison with 16 year-olds, and apprentices and trainees in comparison with non-apprentices or trainees.

In comparison with students in the major cities a high income of this sort was earned by those in outer regional and remote or very remote locations (0.10, 0.12% and .22 respectively). This could be explained by the availability of more generous incomes paid for jobs in the mining sector. The likelihood of earning such an income was also greater for those who mainly spoke English in the home compared to those who did not. However differences in probabilities for many groups although statistically significant were slight and would have little explanatory value in a practical sense.

Other factors in the model (school type, level of VETiS study, Indigenous status) seemed to have little effect.

T

	Predicted probability		Predicated Probability
Sex		Level of VETiS study	
Male	0.19	Certificate I/II	0.10
Female	0.10	Certificate III/IV	0.11
Age (in 2006)		Diploma and above	0.08 not sig
15 years old	0.09	Apprenticeship & traineeship status	
16 years old	0.10	Apprenticeship or traineeship	0.11
17 years old	0.14	Not apprenticeship or traineeship	0.10
18 years old	0.15	School type	
19 years old	0.19	Government	0.10
Indigenous status		Catholic	0.11
Non-Indigenous	0.10 not sig	Independent	0.12
Indigenous	0.09	Other government	0.11 not sig
Language spoken at home			
English speaking background	0.10	Remoteness	
Non-English speaking background	0.07	Major city	0.10
		Inner regional	0.10
		Outer regional	0.12
		Remote and very remote	0.22

# Table D3: Predicted probability of 2006 VETiS students having an income of over \$52000 income in 2011 by demographic characteristics of students

Note: The regression estimates (apart from diploma and above, Indigenous and other government schools) are statistically significant. Predicted probabilities are calculated assuming the following characteristics (except where specified): female, 16 years old, not Indigenous, English speaking background, born in Australia, certificate I/II study, not in an apprenticeship, government school, at least Year 12 attainment and major city.

Variable	Value	Estimate	Standard error	Wald chi- square	p-value
Intercept		-1.9791	0.0626	998.2317	<.0001
Age (on 30 June 2006)	15 years	-0.1219	0.0451	7.2896	0.0069*
Age (on 30 June 2006)	17 years	0.3932	0.0291	182.0753	<.0001*
Age (on 30 June 2006)	18 years	0.4987	0.0525	90.0916	<.0001*
Age (on 30 June 2006)	19 years	0.8025	0.1674	22.9742	<.0001*
Sex	Male	0.7455	0.028	708.3366	<.0001*
Major course, level of study	Cert I or II	-0.0815	0.0381	4.5699	0.0325*
Major course, level of study	Diploma and above	-0.3662	0.3189	1.3189	0.2508
Apprentice/trainee status	Not an apprenticeship	-0.1637	0.0522	9.8252	0.0017*
Language spoken at home	Other than English	-0.3391	0.0505	45.0538	<.0001*
Indigenous status	Indigenous	-0.1221	0.0843	2.0957	0.1477
School type	Catholic	0.1326	0.0331	16.0244	<.0001*
School type	Independent	0.2324	0.0441	27.8204	<.0001*
School type	Other	0.0905	0.1649	0.3012	0.5832
Remoteness area	Inner regional	0.0664	0.0325	4.163	0.0413*
Remoteness area	Outer regional	0.2775	0.0404	47.1264	<.0001*
Remoteness area	Remote and very remote	0.9485	0.0742	163.1831	<.0001*

Source: 2006 National VET-in-Schools Collection/2011 ABS Census of Population and Housing integrated dataset.

Note: 'Cert III or IV' and 'Apprenticeship' were selected as the reference groups when computing the regression. However the reference categories were changed when calculating predicted probabilities as they were the more common categories.

## Probability of getting a trade job

In 2011 the great proportion of VETiS students (between 73% and 94%) from all groups, apart from males (where it was 61%) were not employed in a trade in 2011. This was also the case for those who had undertaken an apprenticeship program; here almost three-quarters had not entered a trade occupation.

The four groups that in 2011 recorded the highest proportions of trade workers were students from remote and very remote areas (30%) followed by those from inner regional areas (27%), outer regional areas (26%) and apprenticeship programs (26%). What is surprising, however, is that just slightly higher proportions of those who had not done an apprenticeship in comparison with those who had done so had also entered a trade in 2011 (23% and 21% respectively. Indigenous status did not make a difference and equal proportions of Indigenous and non-Indigenous students had entered a trade in 2011.

Not surprisingly the greatest disparity between the groups, however, was between males and females, where about 40% of males compared to 6% of females had entered a trade. For Indigenous students the percentage split is similar (35.1% for males compared to 7.5% for females). In all other cases the percentage split between groups of students who had entered a trade was far closer. For example, between 15% and 25% of 15 to 19-year old VETiS students from 2006 were in a trade occupation in 2011, with the highest proportion being found among the youngest age group.

The proportions entering a trade occupation were also greatest for those who had undertaken Certificate I and II qualifications followed by those in Certificate III and Certificate IV qualifications. Understandably it was the lowest for those with diploma or higher qualifications. Just under a quarter of students whose primary language in the home was English had entered a trade, while for their non-English speaking counterparts it was considerably lower. Students from independent schools recorded the lowest proportion of trade workers amongst school type. In table D5 we present the percentages of those entering a trade in 2011 by different student characteristics.

Zoos student characteristics           Sex         %           Males         39           Females         6           Age         25           15 years         24           17 years         22           18 years         21           19 years         21           19 years         21           19 years         21           Cert I/I         24           Cert I/I/V         20           Diploma & above         12           Apprenticeship status         24           Apprenticeship status         24           Not apprenticeship         26           Not apprenticeship         23           Language other than English         24           Catholic         23           Independent         24           Catholic         23           Independent         23           Independent         23           Independent         23           Independent         23           Independent         23           Independent         23           Indigenous         23           Indigenous         23		
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Females         6           Age         15           15 years         25           16 years         24           17 years         22           18 years         21           19 years         21           19 years         21           Cert I/I         24           Cert I/I         24           Cert I/I/V         20           Diploma & above         12           Apprenticeship status         26           Apprenticeship status         26           Not apprenticeship         26           Not apprenticeship         23           English         24           Catholic         23           Independent         23           Independent         23           Indigenous Status (a)         23           Indigenous Status (a)         23           Indigenous Status (a)         23           Indigenous Status (a)         23           Indigenous (a)         24           Ino		
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16 years       24         17 years       22         18 years       21         19 years       15         Level of VETIS study       24         Cert I/I       24         Cert I/I/V       20         Diploma & above       12         Apprenticeship status       26         Not apprenticeship       26         Not apprenticeship       23         Language mainly spoken in the home       24         English       24         Language other than English       17         School type       23         Government       23         Independent       18         Other government       23         Indigenous Status (a)       23         Non-Indigenous Status (a)       23         Indigenous Status (a)       23         Indigenous Status (a)       23         Indigenous       23         Indigenous       23         Location       23         Major city       21         Inner regional       26         Outer regional       27         Remote and very remote       30		
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Indigenous23Location21Major city21Inner regional26Outer regional27Remote and very remote30	Indigenous Status (a)	
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Major city21Inner regional26Outer regional27Remote and very remote30	Indigenous	23
Inner regional26Outer regional27Remote and very remote30	Location	
Outer regional27Remote and very remote30	Major city	21
Remote and very remote 30	Inner regional	26
	Outer regional	27
Total number 170011	Remote and very remote	30
	Total number	170011

Table D5: Percentage of 2006 VETiS students in a trade occupation in 2011 by student background characteristics \*

Note: Weighted data

(a) 35.1% of males and 7.5% of females from Indigenous backgrounds were in a trade.

Results from our statistical modelling reveal that for all groups (apart from males) the predicted probabilities are low and range between .04 and 1.0; the differences between the groups are often minimal, even if statistically significant. For males the predicted probability for being in a trade (at 0.40) was more than six times greater than it was for females. There are minimal differences according to age groups (ranging from .04 to .07), with 15 year olds being slightly more likely than 16

year olds to be in a trade. Once again the 19 year-olds and 18 year olds perform less well than the reference group.

There is a greater likelihood that those who have undertaken a school-based apprenticeship or traineeship will be found in a trade occupation than those who have not done so. However, here too the differences between these two groups although statistically significant are slight. For a range of other groups (including, students from indigenous backgrounds, those who mainly speak a language other than English at home, and those from independent schools) the predicted probabilities of being in a trade are lower than those of their corresponding counterparts. Students from the major cities also trail those from remote and very remote and regional areas.

The likelihood of being in a trade was also greater for those who have undertaken Certificate I or II qualifications than higher level Certificate III or IV qualifications. It is also lower for those who have undertaken diploma or higher qualifications in comparison with those who have undertaken Certificate III or IV qualifications but in these cases the differences were not statistically significant. Students from government schools are also more likely to be in a trade than either those from independent schools or catholic schools but the differences in probabilities between catholic and government schools were not statistically significant. Although students from other non-government schools were equally as likely as those from government schools to be in a trade occupation these results were also not statistically significant.

These results tell us that apart from sex there are few other student background characteristics that will explain to any great extent the likelihood of ending up in a trade occupation. This is partly due to the relatively small proportion of students who end up in a trade occupation. This leads us to believe that there are other factors at work, including, student motivation, family and friendship networks and labour market environment.

		Predicted probability		Predicated Probability
Sex			Level of VETiS study	
	Male	0.40	Certificate I/II	0.06
	Female	0.06	Certificate III/IV	0.05
Age (ir	n 2006)		Diploma and above	0.04 not sig
	15 years old	0.07	Apprenticeship & traineeship status	
	16 years old	0.06	Apprenticeship or traineeship	0.09
	17 years old	0.06	Not apprenticeship or traineeship	0.06
	18 years old	0.05	School type	
	19 years old	0.04	Government	0.06
Indige	nous status		Catholic	0.07 not sig
	Non-Indigenous	0.06	Independent	0.05
	Indigenous	0.05	Other government	0.06 not sig
Langu	age spoken at home		Remoteness	
	English speaking background	0.06	Major city	0.06
	Non-English speaking background	0.04	Inner regional	0.08
			Outer regional	0.08
			Remote and very remote	0.10

Table D6: Predicted probability of 2006 VETiS students being in a trade occupation by student background characteristics \*

Note: The regression estimates (apart from diploma and above and Catholic and other government schools) are statistically significant. Predicted probabilities are calculated assuming the following characteristics (except where specified): female, 16 years old, not Indigenous, English speaking background, born in Australia, certificate I/II study, not in an apprenticeship, government school, at least Year 12 attainment and major city.

Variable	Value	Estimate	Standard error	Wald chi- square	p-value
Intercept		-2.6295	0.0534	2420.7883	<.0001
Age (on 30 June 2006)	15 years	0.0812	0.0312	6.7772	0.0092*
Age (on 30 June 2006)	17 years	-0.0887	0.0233	14.4973	0.0001*
Age (on 30 June 2006)	18 years	-0.257	0.0449	32.7519	<.0001*
Age (on 30 June 2006)	19 years	-0.5626	0.1646	11.6793	0.0006*
Sex	Male	2.284	0.0259	7778.7426	<.0001*
Major course, level of study	Cert I or II	0.3059	0.031	97.2796	<.0001*
Major course, level of study	Diploma and above	-0.2007	0.2706	0.5502	0.4582
Apprentice/trainee status	Not an apprenticeship	-0.3727	0.0435	73.5574	<.0001*
Language spoken at home	Other than English	-0.4175	0.0366	130.127	<.0001*
Indigenous status	Indigenous	-0.2507	0.0661	14.384	0.0001*
School type	Catholic	0.0493	0.0262	3.5381	0.06
School type	Independent	-0.2572	0.0362	50.571	<.0001*
School type	Other	0.0137	0.1362	0.0102	0.9197
Remoteness area	Inner regional	0.2054	0.0254	65.2365	<.0001*
Remoteness area	Outer regional	0.2743	0.0331	68.5127	<.0001*
Remoteness area	Remote and very remote	0.4477	0.0697	41.2123	<.0001*

 Table D7: The likelihood of 2006 VETiS students being in a trade occupation than a non-trade occupation in 2011 by characteristics of students

Source: 2006 National VET-in-Schools Collection/2011 ABS Census of Population and Housing integrated dataset.

Note: 'Cert III or IV' and 'Apprenticeship' were selected as the reference groups when computing the regression. However the reference categories were changed when calculating predicted probabilities as they were the more common categories.

### Probability of achieving a Year 12 or higher qualifications

Results from our statistical modelling indicate that the likelihood of achieving a Year 12 or higher qualification is associated with sex, age, indigenous status, level of VETiS study, apprenticeship status, school type and remoteness. In all cases (excepting for the 16 and 19 year-old age groups, diploma and higher level studies, and whether or not students mainly speak English in the home) observed differences are statistically significant. However in all cases excepting for Indigenous status, remote and very remote location, and attendance at government and other government schools, the differences are generally minimal.

Having obtained Year 12 or equivalent or higher qualifications was more likely for females than males, 17 and 18 year-olds than 16 year-olds, and students in Certificate III/IV level programs in comparison with those in both lower Certificate and diploma level programs. In addition, students from non-Indigenous background, apprenticeship programs, and private schools (Catholic and Independent schools) are more likely than their relative Indigenous, non-apprentice, and government school counterparts to have attained Year 12 qualification or equivalent or higher. The exception relates to students from 'other government' VETiS providers<sup>4</sup> who are substantially less likely to have achieved these qualifications than students from government schools. Where students live when they undertake their VETiS programs also makes a difference as to whether or not they achieve at these

<sup>4</sup> Other school types comprise TAFEs, community education providers, Australian Technical Colleges and mixed providers (mixed providers refer to students attending a number of different providers).

qualification levels. Students from rural and very remote locations are less likely than their counterparts in major cities and outer and inner regional areas to achieve at these levels.

	Predicted probability		Predicated Probability
Sex	Ар	prenticeship status	
Male	0.82	Apprenticeship	0.88
Female	0.86	Not an apprenticeship	0.86
Age (in 2006)	Sc	hool type	
15 years old	0.85	Government	0.86
16 years old	0.86	Catholic	0.91
17 years old	0.90	Independent	0.93
18 years old	0.89	Other	0.74
19 years old	0.83 not sig		
Indigenous status	Re	moteness	
Non-Indigenous	0.86	Major city	0.86
Indigenous	0.72	Inner regional	0.85
Language spoken at home		Outer regional	0.87
English	0.86	Remote and very remote	0.81
Other than English	0.86 not sig		
Level of VETiS study			
Certificate I/II	0.86		
Certificate III/IV	0.89		
Diploma and above	0.87 not sig		

Table D8: Predicted probability of 2006 VETiS students having attained a Year 12 qualification or higher in
2011 by student background characteristics*

Note: The regression estimates (apart from 19 years, diploma and above and other than English) are statistically significant. Predicted probabilities are calculated assuming the following characteristics (except where specified): female, 16 years old, not Indigenous, English speaking background, born in Australia, certificate I/II study, not in an apprenticeship, government school, at least Year 12 attainment and major city.

Variable	Value	Estimate	Standard error	Wald chi- square	p-value
Intercept		2.3068	0.0579	1585.4965	<.0001
Age (on 30 June 2006)	15 years	-0.1247	0.0302	17.0717	<.0001*
Age (on 30 June 2006)	17 years	0.3731	0.0248	225.3637	<.0001*
Age (on 30 June 2006)	18 years	0.2474	0.0461	28.8226	<.0001*
Age (on 30 June 2006)	19 years	-0.2179	0.1158	3.5398	0.0599
Sex	Male	-0.2851	0.0212	181.2641	<.0001*
Major course, level of study	Cert I or II	-0.304	0.0347	76.675	<.0001*
Major course, level of study	Diploma and above	-0.2544	0.2371	1.1507	0.2834
Apprentice/trainee status	Not an apprenticeship	-0.1792	0.0498	12.9392	0.0003*
Language spoken at home	Other than English	0.0334	0.0332	1.0136	0.314
Indigenous status	Indigenous	-0.8705	0.046	358.3251	<.0001*
School type	Catholic	0.5493	0.0307	319.727	<.0001*
School type	Independent	0.7099	0.0433	269.0626	<.0001*
School type	Other	-0.7735	0.0988	61.2654	<.0001*
Remoteness area	Inner regional	-0.0833	0.0261	10.194	0.0014*
Remoteness area	Outer regional	0.0882	0.0355	6.1651	0.013*
Remoteness area	Remote and very remote	-0.3501	0.0635	30.4184	<.0001*

Table D9: The likelihood of 2006 VETiS students having attained at least a Year 12 qualification by 2011 by
characteristics of students

Source: 2006 National VET-in-Schools Collection/2011 ABS Census of Population and Housing integrated dataset.

Note: 'Cert III or IV' and 'Apprenticeship' were selected as the reference groups when computing the regression. However the reference categories were changed when calculating predicted probabilities as they were the more common categories.

# Probability of obtaining a non-school qualification and continuing engagement in further studies

The predicted probabilities of 2006 VETiS students having completed a non-school qualification or continuing on in education five years down the track indicate that female 2006 VETiS students were more likely than their male counterparts to have either completed a non-school qualification or be engaged in further studies.

The likelihood of doing so was also greater for non-indigenous students in comparison with Indigenous students and students from non-English-speaking backgrounds in comparison with students from English speaking backgrounds. However, in comparison with students from the major cities students living in remote or very remote areas were the least likely to have completed a non-school qualification or be engaged in further studies.

We also find that VETiS students who had undertaken a certificate III or IV qualification in comparison with those who had undertaken a certificate I or II qualification or a diploma and above qualification in 2006 were much more likely by 2011 to have attained a non-school qualification or be engaged in further studies.

Not surprisingly those who had undertaken an apprenticeship or traineeship as part of their VETiS programs compared to those who had not done so were also more likely to have completed a non-school qualification or to be engaged in further studies five years down the track.

Students who had attended a government school were considerably less likely to have completed a non-school qualification or be engaged in further studies than were students who had attended a catholic or independent school.<sup>5</sup>

		Predicted probability		Predicated Probability
Sex			Level of VETiS study	
	Male	0.54	Certificate I/II	0.59
	Female	0.59	Certificate III/IV	0.65
			Diploma and above	0.55
Age (in	2006)			
	15 years old	0.58 not sig	Apprenticeship & traineeship status	
	16 years old	0.59	Apprenticeship or traineeship	0.62
	17 years old	0.61	Not apprenticeship or traineeship	0.59
	18 years old	0.58 not sig	School type	
	19 years old	0.56 not sig	Government	0.59
Indigen	ous status		Catholic	0.69
	Non-Indigenous	0.59	Independent	0.74
	Indigenous	0.40	Other	0.60 not sig
Langua	ge spoken at home		Remoteness	
	English speaking background	0.59	Major city	0.59
	Non-English speaking background	0.66	Inner regional	0.58
			Outer regional	0.56
			Remote and very remote	0.48

#### Table D10: Predicted probability of 2006 VETiS students having attained a non-school qualification or being currently engaged in further studies in 2011 by background characteristics\*

Note: The regression estimates (apart from 15, 18 and 19 years and other government schools) are statistically significant. Predicted probabilities are calculated assuming the following characteristics (except where specified): female, 16 years old, not Indigenous, English speaking background, born in Australia, certificate I/II study, not in an apprenticeship, government school, at least Year 12 attainment and major city.

<sup>5</sup> Findings were not statistically significant for students from 'other' school types' when compared to government school students, or for those from outer-regional areas when compared to those from major cities.

Variable	Value	Estimate	Standard error	Wald chi- square	p-value
Intercept		0.7379	0.0373	390.5754	<.0001
Age (on 30 June 2006)	15 years	-0.0297	0.0221	1.8065	0.1789
Age (on 30 June 2006)	17 years	0.1	0.0164	37.0627	<.0001*
Age (on 30 June 2006)	18 years	-0.0357	0.0306	1.3557	0.2443
Age (on 30 June 2006)	19 years	-0.092	0.0908	1.0259	0.3111
Sex	Male	-0.2062	0.0145	202.8923	<.0001*
Major course, level of study	Cert I or II	-0.2556	0.0221	134.0875	<.0001*
Major course, level of study	Diploma and above	-0.3882	0.1562	6.1742	0.013*
Apprentice/trainee status	Not an apprenticeship	-0.1356	0.0324	17.486	<.0001*
Language spoken at home	Other than English	0.3283	0.0231	202.4086	<.0001*
Indigenous status	Indigenous	-0.7466	0.0408	335.2701	<.0001*
School type	Catholic	0.4535	0.0192	559.6546	<.0001*
School type	Independent	0.6837	0.0262	682.8119	<.0001*
School type	Other	0.0645	0.0868	0.5514	0.4577
Remoteness area	Inner regional	-0.0363	0.0182	3.9786	0.0461*
Remoteness area	Outer regional	-0.0899	0.0239	14.1479	0.0002*
Remoteness area	Remote and very remote	-0.4259	0.0502	71.8944	<.0001*

Table D11: Probability of having completed a non-school qualification or currently studying by student characteristics

Source: 2006 National VET-in-Schools Collection/2011 ABS Census of Population and Housing integrated dataset.

Note: 'Cert III or IV' and 'Apprenticeship' were selected as the reference groups when computing the regression. However the reference categories were changed when calculating predicted probabilities as they were the more common.