A preliminary analysis of the outcomes of students assisted by VET FEE-HELP

National Centre for
Vocational Education Research

Australian Government
Department of Education and Training

NCVER

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📝 Executive summary

VET FEE-HELP is an income-contingent loan scheme that assists eligible students undertaking certain vocational education and training (VET) courses (diploma, advanced diploma, graduate certificate and graduate diploma) with an approved provider by paying for all or part of their tuition costs. The tuition costs are paid directly to the provider. Students' tuition costs (and a loan fee) are repaid to the Australian Taxation Office (ATO) progressively once the student reaches a certain income level. VET FEE-HELP has been available to eligible students since 2009, with data on student enrolments and completions submitted annually to the Department of Education and Training by approved VET FEE-HELP providers.

NCVER undertook analyses of the VET FEE-HELP Data Collection to investigate:

- the characteristics of VET FEE-HELP assisted students
- which students are likely to access VET FEE-HELP
- whether the proportions of assisted students completing their training vary by provider
- which students are likely to complete their training.

Characteristics of students assisted by VET FEE-HELP

There was a significant increase in VET FEE-HELP activity in 2013 and 2014 compared with earlier stages of the contingent loan scheme. Specifically, the number of approved VET FEE-HELP providers has doubled since 2012, to be just under 250 by 2014, with the number of VET FEE-HELP assisted students more than tripling over the same period, to nearly 160 000. Most of this growth has come from the private provider, full-fee-paying market, which constituted 76% of VET FEE-HELP assisted students in 2014 (compared with 54% in 2012).

Over this period, there has also been a change in the profile of students accessing VET FEE-HELP. Compared with assisted students who commenced their training between 2009 and 2012, a higher proportion of assisted students are now:

- training full-time (at 82% compared with 67%)
- attending externally (at 48% compared with 36%)
- undertaking training in management and commerce (at 46% compared with 31%)
- not employed (at 54% compared with 43%).

Likelihood of accessing VET FEE-HELP

To determine whether a range of personal and training characteristics affected a student's probability of accessing VET FEE-HELP, a regression model was used. The results showed that the students who are more likely to access VET FEE HELP include:

- 2013 and 2014 commencing students more so than those who commenced between 2009 and 2012
- females more than males
- those aged under 25 years more than those aged 35 and above
- those with a disability more than those without a disability

- those not employed more than those employed

- students attending externally more than those attending internally.

No differences were found between Indigenous and non-Indigenous students in terms of their likelihood to access the scheme.

Overall, the eligible students *most* likely to access VET FEE-HELP assistance are those who commenced their training between 2013 and 2014 and are not employed. These students have a 96% probability of accessing VET FEE-HELP.

Course completion

Overall, a lower proportion of VET FEE-HELP assisted students who commenced their training between 2009 and 2012 completed their course than did eligible non-assisted students. By 2014, 24% of assisted students had completed their course compared with 34% of non-assisted students.

The proportions of assisted students completing their training differ considerably by student characteristic, ranging from 6% for those attending externally, to 63% of those undertaking a VET graduate diploma. Considerable variation was also observed between providers.

Likelihood of completion

To determine whether VET FEE-HELP assisted students are more likely to complete their training than their non-assisted counterparts, two groups of students were identified from the VET FEE-HELP Student Data Collection. They were:

- *completers*: students who commenced a qualification between 2009 and 2012[1] and were awarded the qualification between 2009 and 2014[2]

- *non-completers*: students who commenced a qualification between 2009 and 2012 and had no record of being awarded the qualification between 2009 and 2014.

It is important to note that continuing students have not been removed from these calculations as they could not be identified. Furthermore, the data for the 2014 calendar year analysed in this report are preliminary. The data have not been validated by the Department of Education and Training, nor do they contain all 2014 completion records.

A regression model was used to determine whether receipt of VET FEE-HELP increases or decreases the likelihood of completion, after controlling for student background characteristics. The results show that students eligible to receive VET FEE-HELP who commenced their training between 2009 and 2012 have a 21% probability of completing their training. The results also show that the students less likely to complete their course are:

- VET FEE-HELP assisted students less than eligible non-assisted students

- males less than females

- younger students less than students aged 25 years and over

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[1] The completions analysis was restricted to those commencing in 2009—12, since sufficient time had passed for these students to have had an opportunity to complete their training.

[2] At the time of this analysis, some 2014 completions records had not been reported to the VET FEE-HELP Student Data Collection.

- Indigenous students less than non-Indigenous students
- those with a disability less than those without a disability
- students who are not employed less than those employed
- students attending externally less than those attending internally
- students undertaking courses at advanced diploma level less than those undertaking courses at diploma, VET graduate certificate and VET graduate diploma levels.

Overall, the eligible students *most* likely to complete their training are those attending internally (or via a mix of modes), are employed and are undertaking a course at diploma (or VET graduate diploma or VET graduate certificate) level. On average, they have a 43% probability of completing their course.

Conversely, those eligible students *least* likely to complete their qualification are essentially an opposite group of students. They are attending externally, are not employed and are undertaking a course at advanced diploma level. On average, they have an 8% probability of completing their course.

Likelihood of completion by provider

There is considerable variation in the likelihood of an eligible student completing their course across providers, ranging from 96% to 1%. The average probability of course completion for all eligible students is 21%. Just over a quarter of providers have a higher than average probability of their eligible students completing their course. Over half have a lower than average probability. This variation may reflect differences in the student body, the geographical location of the provider or other factors not investigated in this analysis.

Conclusions

The students most likely to access VET FEE-HELP in 2013—14 are those attending externally and who are not employed.

When looking at the probability of course completion for eligible students who commenced their training during the scheme's earlier years (between 2009 and 2012), those studying externally who are not employed have a particularly low predicted probability of completion (with a 10% probability of completing their training). This is compounded further should they be studying an advanced diploma (with an 8% probability of completing their training).

Given the substantial increase in recent years in the number of assisted students now attending externally who are not employed (increasing from 11 128 to 52 506 students between the two periods, an increase of about 370%), this may not bode well for future course completions of VET FEE-HELP assisted students.

Background

VET FEE-HELP

VET FEE-HELP has been available to eligible VET students since 2009 and is one of a number of income-contingent loans offered by the federal government under the umbrella of its Higher Education Loan Program (HELP). The VET FEE-HELP Assistance Scheme allows eligible students to take out a VET FEE-HELP loan to cover all or part of their tuition fees, up to the FEE-HELP limit set for the relevant year (Australian Government 2015a). It is usually only available to eligible students studying higher-level VET courses (diploma, advanced diploma, graduate certificate and graduate diploma) with a registered training organisation that has been approved to offer VET FEE-HELP. For a trial period, from 13 January 2014 to 31 December 2016, VET FEE-HELP income-contingent loans will also be available for a limited number of certificate IV qualifications. These certificate IV qualifications have been excluded from this analysis.

When students take out a VET FEE-HELP loan, the government pays the loan amount directly to the training provider. VET FEE-HELP debts are managed by the Australian Taxation Office. When a person's taxable income is above the compulsory repayment threshold set by the Australian Taxation Office, they begin repaying the loan gradually through the Australian tax system. The compulsory repayment threshold for the 2014—15 income year is $53 345 (Australian Government 2015a).

The repayment thresholds are adjusted each year to reflect any changes in average weekly earnings. The repayment rate is set as a percentage of a person's income, and varies from 4 to 8%, depending on total taxable income. Repayments can be made to the Australian Taxation Office at any time and for any amount. Interest is not charged on the VET FEE-HELP debt; however, it is indexed each year by adjusting it in line with changes in the cost of living (as measured by the Consumer Price Index [CPI]). Debts are not indexed until they are 11 months old. Students in full-fee-paying places (that is, who were not government-subsidised) are also required to pay a loan fee equivalent to 20% of the value of the VET FEE-HELP loan.

VET FEE-HELP was introduced to help remove the financial barrier associated with the upfront costs of higher-level VET study as well as to:

- improve equity of access to vocational education and training
- increase the options available to students and to support articulation between the VET and higher education sectors
- increase skills and qualifications
- support the productivity and skills agenda (Department of Industry, Innovation, Science, Research and Tertiary Education 2012).

VET FEE-HELP is available to eligible students, regardless of their age or financial position. A student is eligible to access VET FEE-HELP assistance if they meet the following eligibility criteria (Australian Government 2015a). They must:

- be an Australian citizen or permanent humanitarian visa holder (resident in Australia for the duration of the unit) AND

- have not exceeded the FEE-HELP limit (for 2014, the FEE-HELP limit is $120 002 for students undertaking medicine, dentistry and veterinary science courses (as defined in the *Higher Education Support Act 2003*) and $96 000 for all other students; AND

- meet course requirements as follows:
  - are a full-fee-paying/fee-for-service student studying a diploma, advanced diploma, graduate certificate or graduate diploma level course at an approved VET FEE-HELP provider; OR
  - are a student subsidised by a state or territory government (other than the Australian Capital Territory) studying a diploma or advanced diploma course; OR
  - are a student subsidised by the Victorian, South Australian, Queensland, Western Australian or New South Wales Government studying in a specified certificate IV course (nominated courses vary by state) as part of the Certificate IV Trial, which concludes in December 2016; AND
  - are enrolled with an approved provider in an eligible unit of study by the census date for that unit.

It is important to note that not all providers are approved to offer VET FEE-HELP loans (see Australian Government 2015b for a list of approved providers). Students can only access VET FEE-HELP at a provider that has been approved under *the Higher Education Support Act 2003* to offer VET FEE-HELP to eligible students. VET providers who are approved to offer VET FEE-HELP must report the relevant data on all eligible students to the Department of Education and Training. Data from this collection, the VET FEE-HELP Student Data Collection, were used in this study.

Recent developments

Over the last few years, there has been a significant increase in VET FEE-HELP activity, as the scheme has been expanded to include a broad range of training in most jurisdictions. The number of approved VET FEE-HELP providers almost doubled between 2012 and 2014 (from 128 to 244 approved providers; figure 1), with the number of VET FEE-HELP assisted students more than tripling over the same period (from 46 567 to just under 160 000; figure 2).

Figure 1   Providers approved to offer VET FEE-HELP loans to eligible students, by provider type, 2009–14
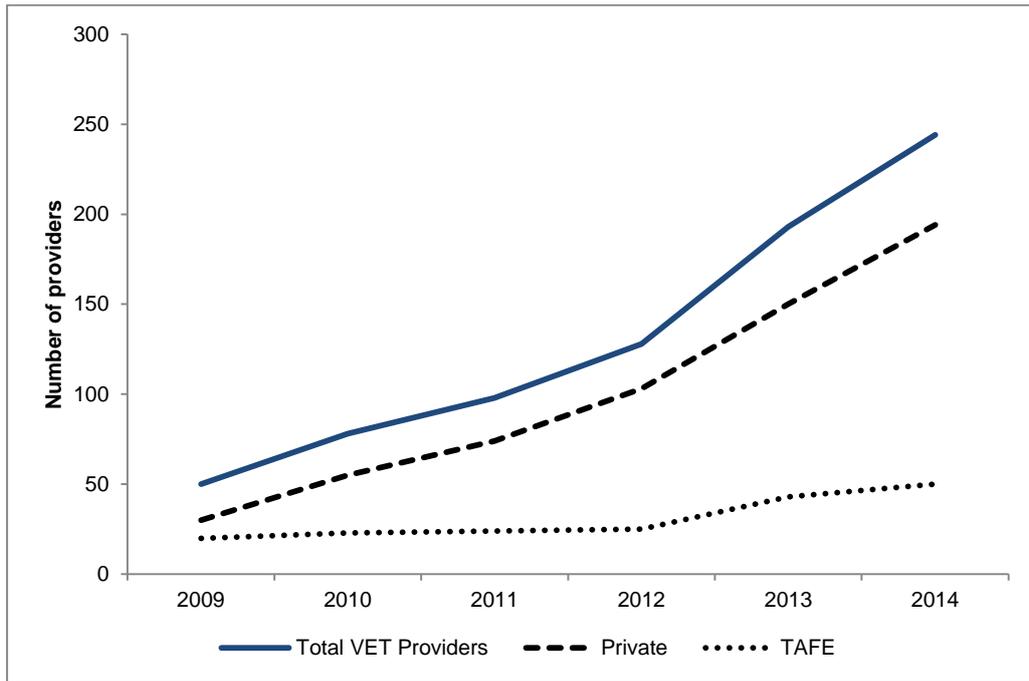
Figure 2   Students eligible to access VET FEE-HELP, by VET FEE-HELP status, 2009–14 commencements
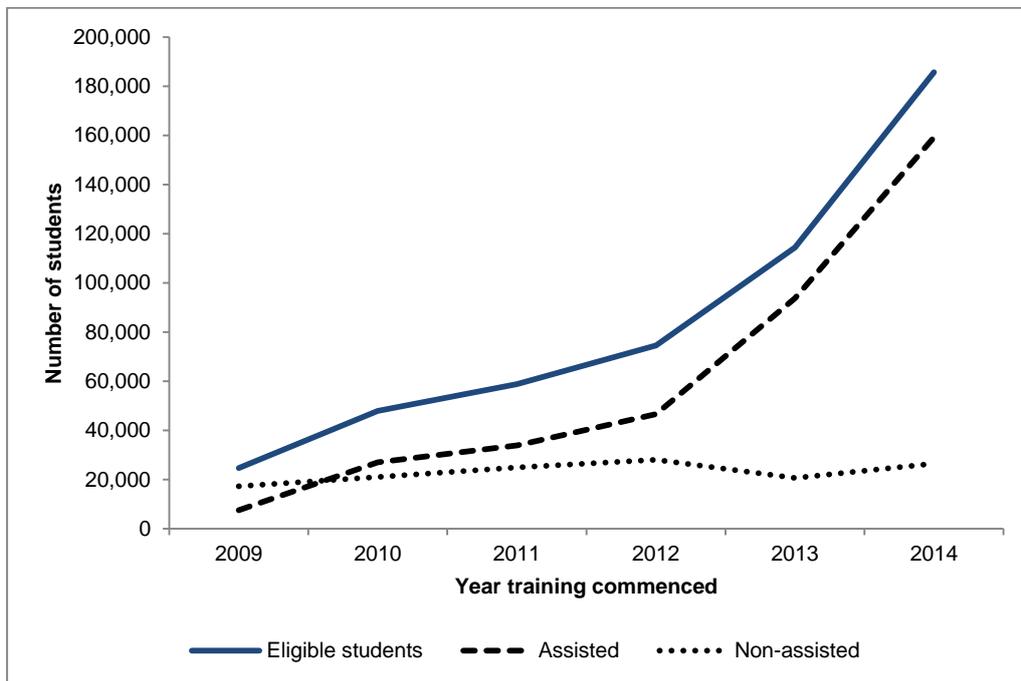
🖊 Methodology

Under the *Higher Education Support Act 2003* (HESA)*,* VET providers are required to report data on all students who are eligible for VET FEE-HELP assistance to the VET FEE-HELP Data Collection, which is managed by the Department of Education and Training.

For simplicity, students who accessed VET FEE-HELP for one or more units of study at any time during their training will be referred to as 'assisted' students, while those who were eligible but did not access VET FEE-HELP will be referred to as 'non-assisted' students. The data are reported according to the year the student commenced their training. A student's commencement year is determined using the unit data, and is the year in the date of commencement of a student's first unit. Appendix A provides a description of the terms and definitions used in this report.

It is important to note that the data relating to the 2014 calendar year analysed in this report are preliminary (earlier years have been validated). The data have not been validated by the Department of Education and Training, nor do they contain the records of all students who completed their training in 2014.

Characteristics of VET FEE-HELP assisted and eligible non-assisted students

Statistical summaries were prepared comparing the characteristics of VET FEE-HELP assisted students with non-assisted students who were eligible to access the contingent loan scheme. Records from the VET FEE-HELP Student Data Collection over the period 2009—14 were used to compare key demographic and training characteristics for those who accessed VET FEE-HELP with those who did not. These background variables included gender, Indigenous status, disability status, employment status, language spoken at home, field of education, and mode and type of attendance.

Likelihood of accessing VET FEE-HELP

To investigate which individual characteristics are significant in determining whether or not an eligible student will access VET FEE-HELP, a generalised logistic mixed regression model was fitted to data from the VET FEE-HELP Student Data Collection. A further analysis was then conducted using Chi-square Automatic Interaction Detection (CHAID) to determine which of these characteristics are most important in predicting this take-up of VET FEE-HELP.

The effect of provider on the likelihood of accessing VET FEE-HELP was also investigated by including provider in the regression as a random effect. For this analysis, all providers with fewer than 50 eligible students were grouped into a single provider.

Proportion of courses completed by VET FEE-HELP assisted students

Statistical summaries were prepared comparing the proportion of courses completed for a range of personal and training characteristics as well as for the 20 most common VET FEE-HELP assisted courses and by provider. The proportion of courses completed was calculated by dividing the number of courses completed to date by the number of courses commenced between 2009 and 2012. For the purpose of this analysis, we have assumed that a diploma course generally runs for up to two years. We therefore need to wait for two years before calculating completions in order to allow students enough time to complete their course.

VET FEE-HELP assisted students' likelihood of completing a VET qualification

To determine whether VET FEE-HELP assisted students are more likely to complete their training than their eligible non-assisted counterparts, two groups of students were identified from the VET FEE-HELP Student Data Collection. These were:

- completers: students who commenced a qualification between 2009 and 2012[3] and were awarded the qualification between 2009 and 2014[4]

- non-completers: students who commenced a qualification between 2009 and 2012 and had no record of being awarded the qualification between 2009 and 2014.

It is important to note that, at the time of this analysis, the records for some 2014 completions had not been reported to the VET FEE-HELP Student Data Collection, nor had data been validated by the Department of Education and Training.

To determine whether receipt of VET FEE-HELP increases or decreases the likelihood of completion, a generalised logistic mixed regression model was used, one that considered students' personal and training characteristics (described in more detail in the Research findings section). A further analysis was then conducted using Chi-square Automatic Interaction Detection to determine which of these characteristics are most important in predicting course completion.

The effect of provider on the likelihood of completing a VET qualification was also investigated by including provider in the regression as a random effect. Again, all providers with fewer than 50 eligible students were grouped together into a single provider.

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[3] The completions analysis was restricted to those commencing in 2009—12, since sufficient time had passed for these students to have had an opportunity to complete their training.

[4] At the time of this analysis, some 2014 completions records had not been reported to the VET FEE-HELP Student Data Collection.

Research findings

Characteristics of VET FEE-HELP assisted and eligible non-assisted students

> Between 2012 and 2014, the number of providers approved to offer VET FEE-HELP doubled, with the number of VET FEE-HELP assisted students more than tripling over the same period. Most of this growth has come from the private provider, full-fee-paying market.

Number of providers approved to offer VET FEE-HELP

In 2009, when the loan scheme was first introduced, 50 providers were approved to offer VET FEE-HELP loans to eligible students (figure 1). Of these, 39 providers reported data to the VET FEE-HELP Student Data Collection (figure 3). By 2014, the number of providers approved to offer VET FEE-HELP loans to eligible students had increased to 244, with 220 reporting data to the collection.

Figure 3   Providers reporting data to the VET FEE-HELP Data Collection, by provider type, 2009—14
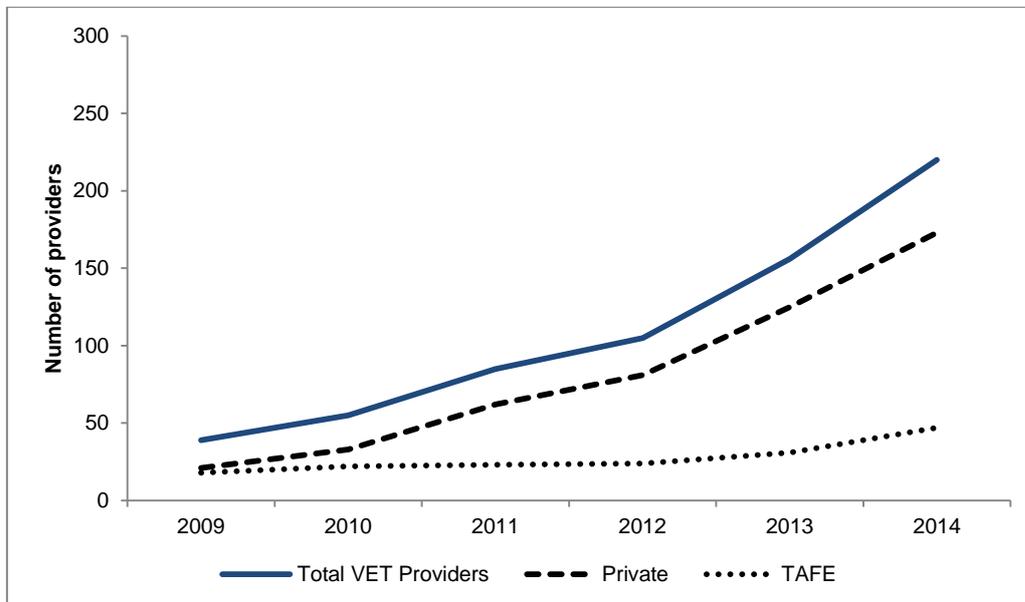
Between 2009 and 2014, considerable growth occurred in the number of private providers approved to offer VET FEE-HELP and the number delivering training to assisted students. The number of TAFE (technical and further education) institutes approved to offer VET FEE-HELP has remained largely unchanged between 2009 and 2012, with some increase observed from 2013 (figure 1).

Number of students accessing VET FEE-HELP

In 2009, 24 617 commencing students were eligible to access VET FEE-HELP, with around 30% accessing the loan scheme during their training (figure 2). By 2014, the number of commencing students eligible to access VET FEE-HELP had increased to 185 665, with around 86% accessing the loan scheme. This increase has been driven largely by increases in full-fee-paying students training with private providers (figure 4).

Figure 4   VET FEE-HELP assisted students, by provider type and funding type, 2009–14 commencements
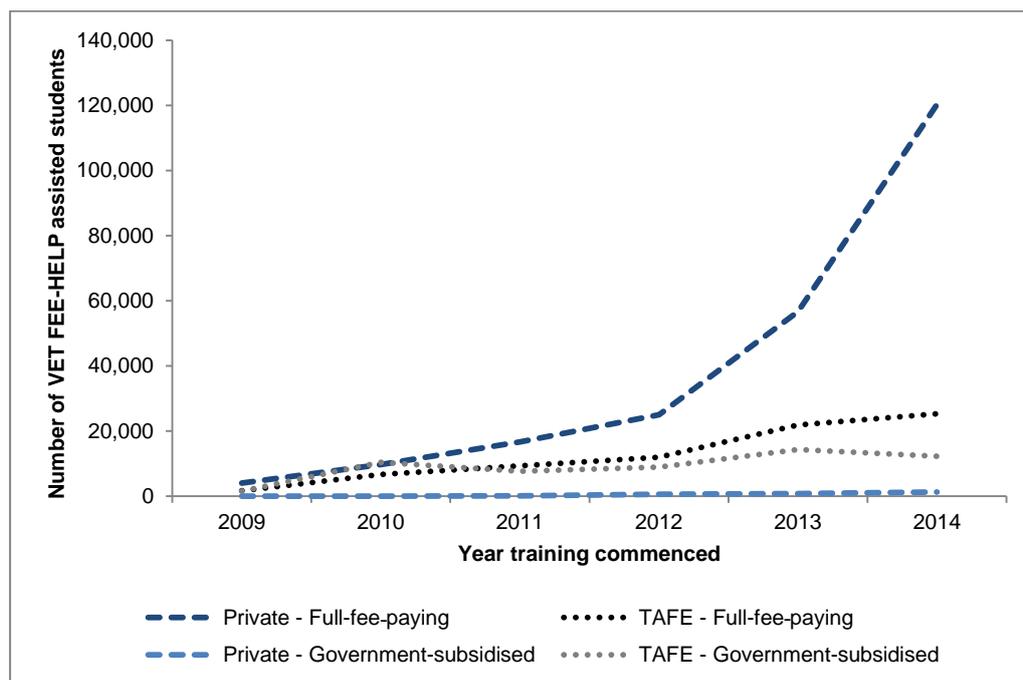
Student characteristics

> Compared with earlier recipients of VET FEE-HELP assistance (that is, those who commenced their training between 2009 and 2012), a higher proportion of 2013 and 2014 commencing students are:
>
> - not employed
>
> - studying full-time
>
> - studying externally
>
> - training in management and commerce.

Given the substantial growth in both the number of providers approved to offer VET FEE-HELP and the number of students accessing the loan scheme between 2012 and 2013, the characteristics of students who commenced their training between 2009 and 2012 are presented separately from those commencing between 2013 and 2014 (tables 1 and 2).

Compared with eligible non-assisted students, a higher proportion of assisted students in both commencing periods are:

- female

- not employed

- full-fee-paying

- training with a private provider institution

- attending externally

- attending full-time (tables 1 and 2).

Table 1   Personal characteristics of students eligible to access VET FEE-HELP, by VET FEE-HELP status and commencing period (%)

Characteristic		2009–12 commencements			2013–14 commencements			2009–14 commencements		
		Assisted	Non-assisted	All eligible students	Assisted	Non-assisted	All eligible students	Assisted	Non-assisted	All eligible students
Gender	Female	68.0	55.0	62.3	66.1	59.4	65.0	66.7	56.5	63.9
	Male	32.0	45.0	37.7	33.9	40.6	35.0	33.3	43.5	36.1
Age group	Under 25 years	47.7	47.0	47.4	47.0	41.9	46.2	47.3	45.2	46.7
	25–34 years	25.3	18.7	22.4	24.7	22.6	24.4	24.9	20.0	23.6
	35–44 years	15.5	17.0	16.2	15.4	18.2	15.8	15.4	17.4	16.0
	45 years and over	11.5	17.3	14.1	12.8	17.2	13.5	12.4	17.3	13.7
Indigenous status	Indigenous	2.0	0.9	1.5	5.9	2.2	5.3	4.7	1.4	3.8
	Non-Indigenous	98.0	99.1	98.5	94.1	97.8	94.7	95.3	98.6	96.2
Disability status	Disabled	5.1	6.1	5.5	6.9	4.9	6.6	6.3	5.7	6.1
	Not disabled	94.9	93.9	94.5	93.1	95.1	93.4	93.7	94.3	93.9
Language spoken at home	English	87.9	85.0	86.6	90.8	90.4	90.8	89.9	86.8	89.1
	Language other than English	12.1	15.0	13.4	9.2	9.6	9.2	10.1	13.2	10.9
Labour force status	Employed	57.3	75.9	66.0	45.9	72.7	50.3	49.3	74.8	56.6
	Not employed	42.7	24.1	34.0	54.1	27.3	49.7	50.7	25.2	43.4

Note: Not stated and no information responses excluded from analysis.

Table 2 Training characteristics of students eligible to access VET FEE-HELP, by VET FEE-HELP status and commencing period (%)

Characteristic		2009–12 commencements			2013–14 commencements			2009–14 commencements		
		Assisted	Non-assisted	All eligible students	Assisted	Non-assisted	All eligible students	Assisted	Non-assisted	All eligible students
Provider type	Private provider	49.1	6.7	30.3	70.8	12.9	61.7	64.0	8.8	48.9
	TAFE	50.9	93.3	69.7	29.2	87.1	38.3	36.0	91.2	51.1
Funding type	Full-fee-paying student	74.3	32.2	55.7	88.6	73.4	86.2	84.1	46.2	73.8
	Government-subsidised student	25.7	67.8	44.3	11.4	26.6	13.8	15.9	53.8	26.2
Mode of attendance	Internal	56.0	76.1	64.9	45.6	59.0	47.7	48.8	70.3	54.7
	External	36.4	8.4	24.1	48.0	22.5	44.0	44.4	13.2	35.9
	Employer-based	0.2	3.8	1.7	0.3	2.1	0.5	0.2	3.2	1.0
	Multimodal	7.4	11.7	9.3	6.1	16.4	7.7	6.5	13.3	8.4
Type of attendance	Full-time	67.2	46.1	57.8	82.3	48.2	77.4	77.5	46.7	69.2
	Part-time	32.8	53.9	42.2	17.7	51.8	22.6	22.5	53.3	30.8
Field of education	Natural and physical sciences	0.7	0.8	0.7	0.1	0.7	0.2	0.3	0.7	0.4
	Information technology	2.3	3.5	2.8	5.9	3.0	5.4	4.8	3.3	4.4
	Engineering and related technologies	3.1	9.0	5.8	1.2	9.0	2.5	1.8	9.0	3.8
	Architecture and building	3.0	5.0	3.9	2.8	5.6	3.3	2.9	5.2	3.5
	Agriculture, environmental and related studies	0.8	3.8	2.1	0.4	2.5	0.8	0.5	3.3	1.3
	Health	18.6	11.4	15.4	10.0	19.2	11.4	12.7	14.0	13.0
	Education	1.1	1.8	1.4	1.1	4.0	1.6	1.1	2.6	1.5
	Management and commerce	30.7	35.3	32.8	46.1	26.2	43.0	41.3	32.2	38.8
	Society and culture	18.1	15.6	17.0	18.0	16.9	17.8	18.1	16.1	17.5
	Creative arts	14.1	10.3	12.4	7.5	9.7	7.9	9.6	10.1	9.7
	Food, hospitality and personal services	7.1	2.5	5.1	6.7	2.7	6.0	6.8	2.6	5.6
	Mixed field programmes	0.3	0.9	0.6	0.0	0.4	0.1	0.1	0.8	0.3

Note: Not stated and no information responses excluded from analysis.

One of the most striking differences between the assisted and eligible non-assisted students who commenced their course between 2009 and 2012 is that assisted students are predominantly full-fee-paying (74%), while non-assisted students are predominantly government-subsidised (68%; table 2). For students who commenced their course between 2013 and 2014, both assisted and non-assisted students are predominantly full-fee-paying (at 89 and 73% respectively).

A higher proportion of assisted than eligible non-assisted students in both commencing periods are training at a private provider. About 49% of assisted students who commenced their courses between 2009 and 2012 are training with private providers, compared with fewer than 7% of non-assisted students (table 2). For students who commenced their course between 2013 and 2014, the proportion of assisted students training with private providers has increased to 71% compared with 13% of non-assisted students.

In terms of course choices, the most popular study areas for both assisted and non-assisted students are courses in management and commerce (at 46 and 26% respectively for 2013—14 commencements and 31 and 35% respectively for 2009—12 commencements), followed by society and culture and health (table 2).

When we compare the characteristics of assisted students who commenced their training recently (that is, between 2013 and 2014) with those of earlier recipients of VET FEE-HELP assistance (that is, those who commenced their training between 2009 and 2012), we find that a higher proportion of 2013 and 2014 commencing assisted students are:

- not employed

- studying full-time

- studying externally

- training in management and commerce.

What do VET FEE-HELP assisted students study?

> **Over 30% of students recently receiving assistance (that is, between 2013 and 2014) are undertaking training in one of two main courses: the Diploma of Business and the Diploma of Management. Only 10% of assisted students were training in these courses between 2009 and 2012.**

Table 3 lists the 20 most common courses studied by assisted students. Business, management, beauty therapy, community services work, counselling and nursing are popular among VET FEE-HELP assisted students.

Table 3   The 20 most common courses studied, by VET FEE-HELP assisted students, for 2009–12 and 2013–14 commencements

	2009–12 commencements				2013–14 commencements		
	Course name	No.	%		Course name	No.	%
1	Diploma of Nursing (Enrolled-Division 2 Nursing) (HLT51612)	6 804	5.9	1	Diploma of Business (BSB50207)	44 466	17.6
2	Diploma of Business (BSB50207)	5 876	5.1	2	Diploma of Management (BSB51107)	33 556	13.3
3	Diploma of Beauty Therapy (SIB50110)	5 716	5.0	3	Diploma of Beauty Therapy (SIB50110)	11 925	4.7
4	Diploma of Management (BSB51107)	5 631	4.9	4	Diploma of Community Services Work (CHC50612)	11 856	4.7
5	Diploma of Community Services Work (CHC50612)	5 184	4.5	5	Diploma of Counselling (CHC51712)	11 375	4.5
6	Diploma of Accounting (FNS50210)	4 906	4.3	6	Diploma of Nursing (Enrolled-Division 2 Nursing) (HLT51612)	10 354	4.1
7	Diploma of Early Childhood Education and Care (CHC50113)	4 241	3.7	7	Diploma of Early Childhood Education and Care (CHC50113)	8 822	3.5
8	Advanced Diploma of Naturopathy (HLT60512)	4 003	3.5	8	Diploma of Business Administration (BSB50407)	7 942	3.1
9	Diploma of Counselling (CHC51712)	3 907	3.4	9	Diploma of Digital and Interactive Games (ICA50211)	5 952	2.4
10	Advanced Diploma of Nutritional Medicine (HLT61012)	3 432	3.0	10	Diploma of Community Services (Case Management) (CHC52008)	4 609	1.8
11	Diploma of Work Health and Safety (BSB51312)	3 383	2.9	11	Diploma of Events (SIT50212)	4 322	1.7
12	Diploma of Commercial Arts (Graphic Design) (30675QLD)	2 940	2.6	12	Diploma of Human Resources Management (BSB50613)	4 297	1.7
13	Diploma of Commercial Arts (Interior Decoration And Design) (30700QLD)	2 683	2.3	13	Diploma of Youth Work (CHC50413)	3 890	1.5
14	Diploma of Business Administration (BSB50407)	2 466	2.1	14	Diploma of Accounting (FNS50210)	3 494	1.4
15	Diploma of Human Resources Management (BSB50613)	2 044	1.8	15	Diploma of Graphic Design (CUV50311)	3 238	1.3
16	Diploma of Tourism (SIT50107)	1 930	1.7	16	Diploma of Building and Construction (Building) (CPC50210)	3 173	1.3
17	Diploma of Remedial Massage (HLT50307)	1 748	1.5	17	Advanced Diploma of Nutritional Medicine (HLT61012)	3 170	1.3
18	Advanced Diploma of Accounting (FNS60210)	1 629	1.4	18	Diploma of Project Management (BSB51413)	3 149	1.2
19	Diploma of Community Services (Case Management) (CHC52008)	1 426	1.2	19	Diploma of Salon Management (SIB50210)	2 909	1.1
20	Diploma of Marketing (BSB51207)	1 280	1.1	20	Diploma of Interior Design and Decoration (MSF50213)	2 695	1.1
	Total 20 most common courses	**71 229**	**62.1**		**Total 20 most common courses**	**185 194**	**73.2**

Which students are more likely to access VET FEE-HELP?

Which students are more likely to access VET FEE-HELP?

- **females more than males**

- **those aged under 25 years more than those aged 35 and above**

- **those with a disability more than those without a disability**

- **those not employed more than those employed**

- **students attending externally more than those attending internally**

- **2013 and 2014 commencing students more than those who commenced in previous years (that is, between 2009 and 2012).**

In this section, we investigate which individual characteristics are most important in determining whether or not a student will access VET FEE-HELP. To do this, we first fit a generalised logistic mixed regression model to data from the VET FEE-HELP Student Data Collection. The results from this regression appear in table 4. This table shows the predicted probability of accessing VET FEE-HELP for an 'average student' where only one characteristic differs. For example, the predicted probability of a VET FEE-HELP eligible female student who commenced her course between 2009 and 2012 accessing the scheme is 0.79. The variables that are statistically significant in predicting whether a student will access VET FEE-HELP assistance are shaded.

The regression results show that, all other factors being equal, the students more likely to access VET FEE HELP include:

- females more than males

- students aged 34 years or younger relative to those aged 35 and above

- students with a disability more than those without a disability

- students who are not employed more than those employed

- students attending externally more than those attending internally

- students who commenced their training between 2013 and 2014 more than those commencing between 2009 and 2012 (table 4).

The results showed no statistical significance between Indigenous and non-Indigenous students.

Raw output from the regression analysis is contained in appendix B.

Table 4 Predicted probability of accessing VET FEE-HELP, by year of commencement for eligible students

Characteristic	Level	2009–12 commencements	2013–14 commencements	2009–14 commencements	
Gender	Female	0.79	0.92	0.87	Statistically *more* likely than males
	Male	0.76	0.91	0.85	
Indigenous status	Indigenous	0.77	0.91	0.86	
	Non-Indigenous	0.78	0.92	0.86	
Age group	Under 25 years	0.81	0.93	0.89	
	25–34 years	0.82	0.93	0.89	
	35–44 years	0.76	0.91	0.85	Statistically *less* likely than those under 25 years
	45 years and over	0.71	0.88	0.81	Statistically *less* likely than those under 25 years
Disability status	Disabled	0.80	0.93	0.88	Statistically *more* likely than those not disabled
	Not disabled	0.75	0.90	0.84	
Language Spoken at home	Language other than English	0.80	0.93	0.88	Statistically *more* likely than those speaking English
	English	0.77	0.91	0.86	
Employment status	Not employed	0.85	0.95	0.91	Statistically *more* likely than those employed
	Employed	0.75	0.90	0.84	
Funding	Full-fee-paying student	0.75	0.91	0.85	
	Government-subsidised student	0.80	0.93	0.88	Statistically *more* likely than full-fee-paying students
Mode of attendance	Internal	0.82	0.94	0.89	
	External	0.88	0.96	0.93	Statistically *more* likely than those attending internally
	Employer-based	0.47	0.74	0.62	Statistically *less* likely than those attending internally
	Multimodal	0.82	0.94	0.89	
Commencing period	2009–12	0.78	-	-	
	2013–14	-	0.92	-	Statistically *more* likely than those commencing between 2009 and 2012

Notes: Grey shading indicates significant at the 95% level.

> **Eligible students who are *most* likely to access VET FEE-HELP assistance are those who:**
>
> ▪ **commenced their training between 2013 and 2014, AND**
>
> ▪ **are not employed.**
>
> **These students have a 96% probability of accessing VET FEE-HELP.**

To gain a clearer picture of which predictors are *most* important in predicting VET FEE-HELP take-up, the regression results are presented in a tree diagram (figure 5). The variables at the top of the tree are the most important in predicting the take-up of VET FEE-HELP, with importance decreasing as we move down the tree. The tree diagram also puts the regression results in context by including the probabilities of accessing VET FEE-HELP for each sub-group.

Figure 5 shows the tree diagram for eligible students' likelihood of accessing VET FEE-HELP. The top node of the tree diagram represents the outcome variable, accessing VET FEE-HELP. The associated probability, 0.90, indicates that the probability of an eligible student accessing VET FEE-HELP is 90%. The lower-level nodes display influential predictors of accessing VET FEE-HELP in descending order of magnitude. For the purpose of visual clarity, the tree diagram is limited to three levels beneath the outcome variable. As a result, not all of the significant predictors identified in the regression models appear in the truncated versions of the tree diagram. This does not mean that the remaining statistically significant predictors are not meaningful; rather, it means that their relative impact on accessing VET FEE-HELP is weaker and thus occurs at lower levels in the diagram.

The tree diagram shows that year of commencement has the strongest impact on a student's likelihood of accessing VET FEE-HELP. Students commencing their training between 2013 and 2014 have a 95% probability of accessing VET FEE-HELP, compared with an 83% probability for those who commenced between 2009 and 2012.

The next most important factor is mode of attendance, with employer-based students much less likely to access VET FEE-HELP, particularly those who commenced between 2009 and 2012, than other modes of attendance. For those students attending their training internally, externally or by a combination of both, the next most important factor is that of employment status, with those who are not employed more likely to access VET FEE-HELP than those who are employed. For those attending through an employer, the next most important factor is age grouping, with the younger cohorts more likely to access VET FEE-HELP.

By following the branches of the diagram down to the lowest node on the far right, it can be seen that those who are *most* likely to access VET FEE-HELP are students who commenced their training between 2013 and 2014 and are not employed. These students have a 96% probability of accessing VET FEE-HELP. Conversely, those least likely to access VET FEE-HELP are those who commenced between 2009 and 2012, are employer-based and are aged 45 years and over. They have a 32% probability of accessing the scheme.

Figure 5   Tree diagram for the probability of accessing VET FEE-HELP for students eligible to receive VET FEE-HELP, 2009–14 commencements
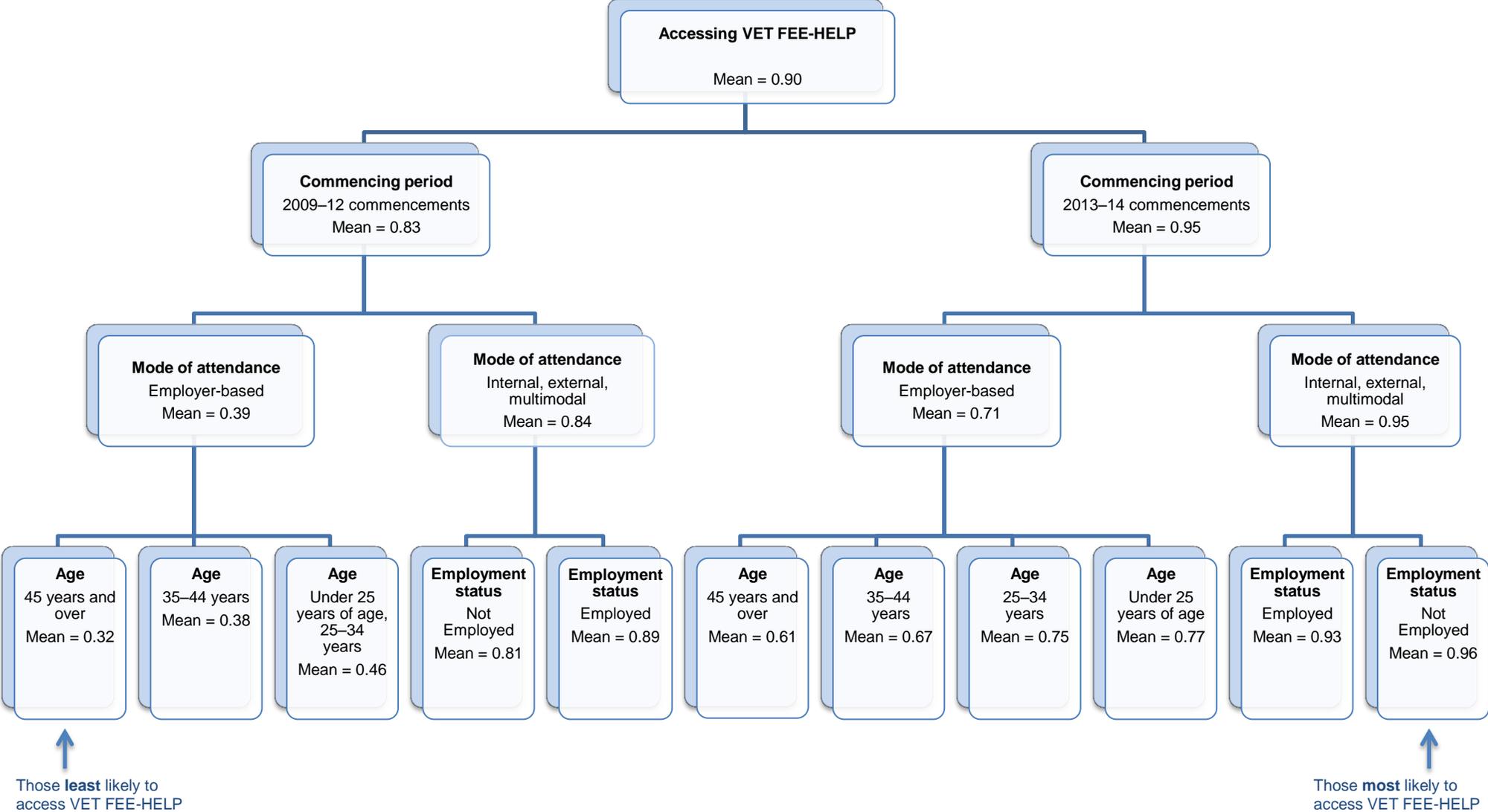
Note: The data that feed into this chart excludes 'No information / Not stated' cases.

Likelihood of accessing VET FEE-HELP by provider

Which providers are most likely to have VET FEE-HELP assisted students?

For providers with 50 or more eligible students commencing training between 2013 and 2014:

- **63% had a significantly higher likelihood than average of their students accessing the loan scheme.**

- **9% were equivalent to the average.**

- **29% had a significantly lower likelihood than average.**

The likelihood of an eligible student accessing VET FEE-HELP by provider is presented in figure 6. For each commencing period, the predicted probabilities have been centred about the mean (that is, about a 0 predicted probability of accessing VET FEE-HELP). Providers are plotted in descending order, with those whose students have the highest probabilities of accessing VET FEE-HELP shown on the left. Because of this ordering, providers may not be in the same position in each panel of the figure. The figure includes the confidence intervals for each provider. If these confidence intervals cross the 0 line, then these providers are not significantly different from the overall average.

There were 187 providers with 50 or more eligible students who commenced their training between 2009 and 2014. For 2009—12 commencing students:

- 96 providers had a significantly higher likelihood than average of their eligible students accessing the loan scheme (51%).

- 28 providers were equivalent to the average (15%).

- 63 providers had a significantly lower likelihood than average (34%).

For 2013—14 commencing students:

- 117 providers had a significantly higher likelihood than average of their students accessing the loan scheme (63%).

- 16 providers were equivalent to the average (9%).

- 54 providers had a significantly lower likelihood than average (29%).

When interpreting these results, it is important to note that the probability of accessing VET FEE-HELP could be driven by the course mix or the student demographics associated with each provider rather than by the direct actions of the individual providers.

Figure 6   The likelihood of an eligible student accessing VET FEE-HELP, by provider, 2009–12 and 2013–14 commencing students
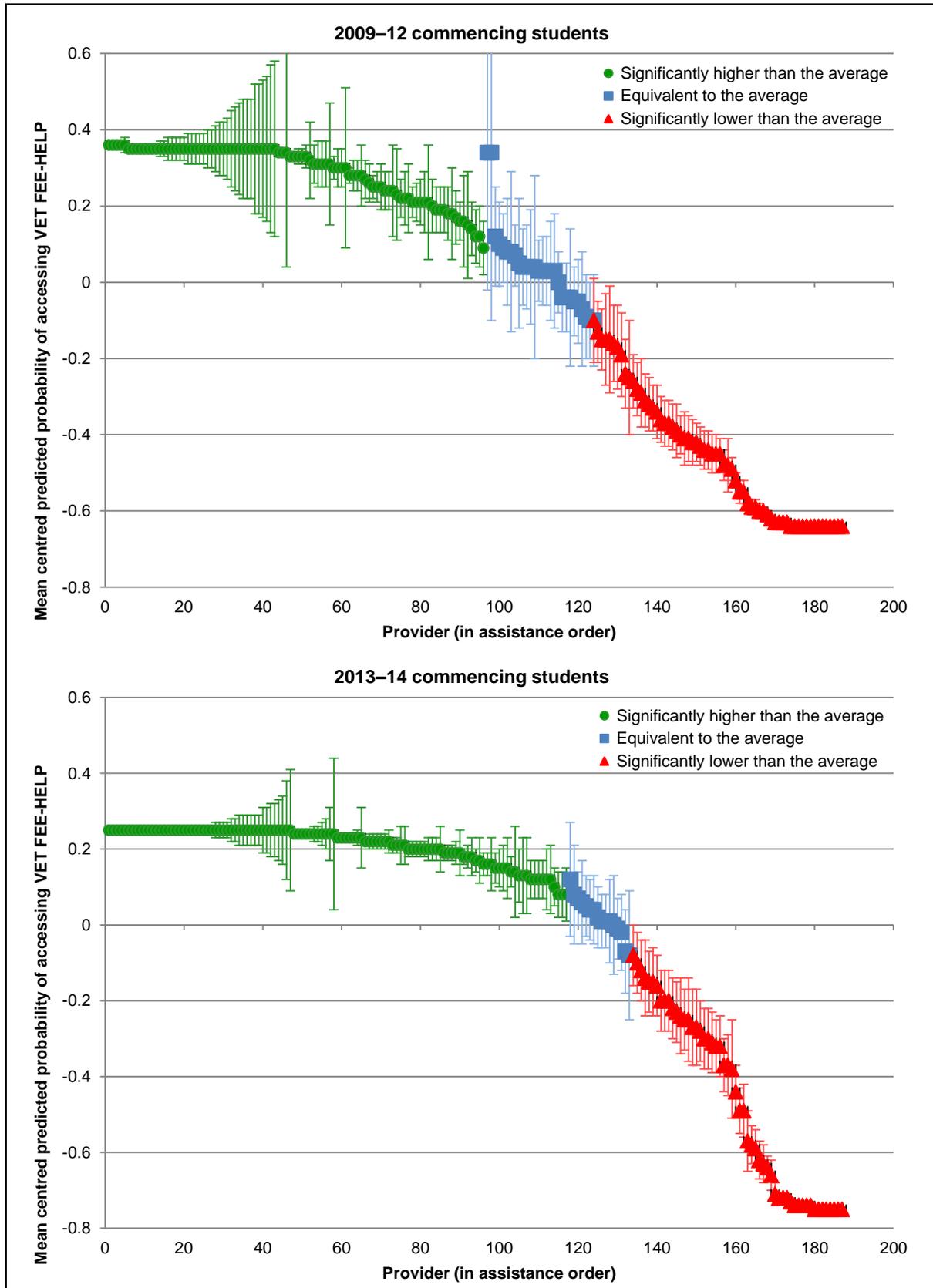
Note: Providers are plotted in descending order, with those whose students have the highest probabilities of accessing VET FEE-HELP shown on the left.

Effect of VET FEE-HELP assistance on course completion

Does receipt of VET FEE-HELP affect a student's likelihood of completing their course? To answer this question, we again used the VET FEE-HELP Student Data Collection. The approach here is twofold. In the first approach we simply calculate the proportions of assisted and eligible non-assisted students who completed their courses. In the second approach, we fit a logistic regression model to investigate whether the probability of course completion is related to whether or not an individual accessed VET FEE-HELP. For the purpose of this analysis, we have assumed that a diploma course generally runs for up to two years. We have therefore calculated completions based on students commencing between 2009 and 2012 to allow them enough time to complete the course by 2014.

Proportions of students who completed their courses

> **Overall, a lower proportion of VET FEE-HELP assisted students who commenced their training between 2009 and 2012 completed their course than eligible non-assisted students. By 2014:**
>
> ▪ **24% of assisted students had completed their course.**
>
> ▪ **34% of eligible non-assisted students had completed their course.**

Overall, a lower proportion of VET FEE-HELP assisted students who commenced their training between 2009 and 2012 completed their course by 2014 compared with eligible non-assisted students (at 24 and 34% respectively; table 5). This trend is apparent for all but one of the 20 most common courses studied by VET FEE-HELP assisted students (table 6). The only exception was the Diploma of Nursing, for which the proportions of assisted and non-assisted students completing their course were similar (at 26 and 25% respectively).

The proportions of assisted students completing their training differ considerably by student background characteristic (table 5). For example, the proportions of courses completed by 2014 for 2009—12 commencing students who received VET FEE-HELP ranged from 6% for those attending externally, to 63% of those undertaking a VET graduate diploma.

Table 5   Courses completed by students who commenced their training between 2009 and 2012, by VET FEE-HELP status and student characteristics

Characteristic		Assisted students		Non-assisted students		All eligible students	
		Number of courses commenced	% completed by 2014	Number of courses commenced	% completed by 2014	Number of courses commenced	% completed by 2014
Gender	Female	78 105	22.9	50 028	35.9	128 133	28.0
	Male	36 672	25.7	40 956	32.6	77 628	29.3
Age group	Under 25 years	54 788	29.1	42 718	33.1	97 506	30.8
	25–34 years	28 991	18.8	17 014	33.2	46 005	24.1
	35–44 years	17 781	18.4	15 502	36.1	33 283	26.7
	45 years and over	13 217	19.8	15 750	37.7	28 967	29.6
Indigenous status	Indigenous	2 124	15.3	807	26.6	2 931	18.4
	Non-Indigenous	106 127	24.3	88 855	34.5	194 982	28.9
Disability status	Disabled	5 860	22.9	5 537	31.2	11 397	26.9
	Not disabled	108 917	23.8	85 447	34.6	194 364	28.6
Language spoken at home	English	98 214	22.7	75 791	34.8	174 005	28.0
	Language other than English	13 537	30.8	13 404	32.1	26 941	31.4
Labour force status	Employed	51 455	24.1	60 040	37.5	111 495	31.3
	Not employed	38 367	23.7	19 028	31.8	57 395	26.4
Provider type	Private provider	56 338	24.8	6 083	35.9	62 421	25.9
	TAFE	58 439	22.8	84 901	34.3	143 340	29.6
Funding type	Full-fee-paying student	85 279	20.8	29 258	33.2	114 537	24.0
	Government-subsidised student	29 498	32.4	61 726	35.0	91 224	34.2
Mode of attendance	Internal	64 256	34.7	69 232	36.0	133 488	35.4
	External	41 819	5.7	7 671	21.0	49 490	8.1
	Employer-based	174	26.4	3 414	16.1	3 588	16.6
	Multimodal	8 528	30.0	10 667	39.8	19 195	35.4
Type of attendance	Full-time	75 423	27.9	41 497	43.1	116 920	33.3
	Part-time	36 838	15.9	48 607	27.3	85 445	22.4

Table 5   Courses completed by students who commenced their training between 2009 and 2012, by VET FEE-HELP status and student characteristics (cont.)

Characteristic		Assisted students		Non-assisted students		All eligible students	
		Number of courses commenced	% completed by 2014	Number of courses commenced	% completed by 2014	Number of courses commenced	% completed by 2014
Qualification level	Advanced diploma	23 722	21.1	22 359	32.0	46 081	26.4
	Diploma	89 990	24.5	67 584	35.2	157 574	29.0
	VET graduate certificate	905	20.0	948	38.7	1 853	29.6
	VET graduate diploma	160	63.1	93	36.6	253	53.4
Field of education	Natural and physical sciences	809	12.7	695	28.1	1 504	19.8
	Information technology	2 610	29.1	3 160	23.9	5 770	26.3
	Engineering and related technologies	3 608	18.5	8 233	21.4	11 841	20.5
	Architecture and building	3 441	21.3	4 543	27.2	7 984	24.7
	Agriculture, environmental and related studies	911	20.6	3 421	30.0	4 332	28.0
	Health	21 311	17.4	10 350	31.7	31 661	22.0
	Education	1 260	61.0	1 645	66.2	2 905	63.9
	Management and commerce	35 276	22.0	32 152	38.7	67 428	30.0
	Society and culture	20 820	24.2	14 229	35.6	35 049	28.8
	Creative arts	16 189	31.0	9 415	36.4	25 604	33.0
	Food, hospitality and personal services	8 157	30.4	2 281	37.7	10 438	32.0
	Mixed field programmes	384	19.8	860	24.2	1 244	22.8
Total	**All courses**	**114 777**	**23.8**	**90 984**	**34.4**	**205 761**	**28.5**

Table 6   Courses completed by students who commenced their training between 2009 and 2012 for the 20 most common courses studied by VET FEE-HELP assisted students

	Course	Assisted students		Non-assisted students		All eligible students	
		Number of courses commenced	% completed by 2014	Number of courses commenced	% completed by 2014	Number of courses commenced	% completed by 2014
1	Diploma of Nursing (Enrolled-Division 2 Nursing) (HLT51612)	6 804	26.4	4 591	24.8	11 395	25.7
2	Diploma of Business (BSB50207)	5 876	20.9	676	36.5	6 552	22.5
3	Diploma of Beauty Therapy (SIB50110)	5 716	33.7	1 425	38.0	7 141	34.6
4	Diploma of Management (BSB51107)	5 631	17.7	6 281	48.3	11 912	33.8
5	Diploma of Community Services Work (CHC50612)	5 184	15.5	1 644	32.8	6 828	19.7
6	Diploma of Accounting (FNS50210)	4 906	11.1	2 879	30.2	7 785	18.2
7	Diploma of Early Childhood Education and Care (CHC50113)	4 241	31.1	5 020	35.9	9 261	33.7
8	Advanced Diploma of Naturopathy (HLT60512)	4 003	3.3	572	15.7	4 575	4.9
9	Diploma of Counselling (CHC51712)	3 907	18.2	159	30.8	4 066	18.7
10	Advanced Diploma of Nutritional Medicine (HLT61012)	3 432	4.3	502	10.6	3 934	5.1
11	Diploma of Work Health and Safety (BSB51312)	3 383	16.8	1 624	45.2	5 007	26.0
12	Diploma of Commercial Arts (Graphic Design) (30675QLD)	2 940	23.8	200	42.0	3 140	25.0
13	Diploma of Commercial Arts (Interior Decoration and Design) (30700QLD)	2 683	20.1	202	44.6	2 885	21.8
14	Diploma of Business Administration (BSB50407)	2 466	23.8	1 226	48.5	3 692	32.0
15	Diploma of Human Resources Management (BSB50613)	2 044	13.6	1 465	40.1	3 509	24.6
16	Diploma of Tourism (SIT50107)	1 930	23.6	625	43.5	2 555	28.5
17	Diploma of Remedial Massage (HLT50307)	1 748	31.1	980	43.0	2 728	35.3
18	Advanced Diploma of Accounting (FNS60210)	1 629	19.3	1 330	36.8	2 959	27.2
19	Diploma of Community Services (Case Management) (CHC52008)	1 426	21.9	205	43.4	1 631	24.6
20	Diploma of Marketing (BSB51207)	1 280	35.8	1 138	46.4	2 418	40.8
Total	**All courses**	**114 777**	**23.8**	**90 984**	**34.4**	**205 761**	**28.5**

The variation in the proportion of courses completed by 2009—12 commencing students is more readily observed in a graphical format. Figure 7 presents the proportion of courses completed for the 20 most common courses undertaken by VET FEE-HELP assisted students. The size of each bubble represents the number of students who commenced the course between 2009 and 2012.

Figures 8 to 13 show the variation among providers in the proportion of 2009—12 commencing students who completed their course, by qualification level and mode of attendance. Here, the size of each bubble represents the number of students who commenced the course between 2009 and 2012 at that qualification level and by that mode of attendance.

Figure 7   Courses completed by students who commenced their training between 2009 and 2012 in the 20 most common courses undertaken by VET FEE-HELP assisted students (%)
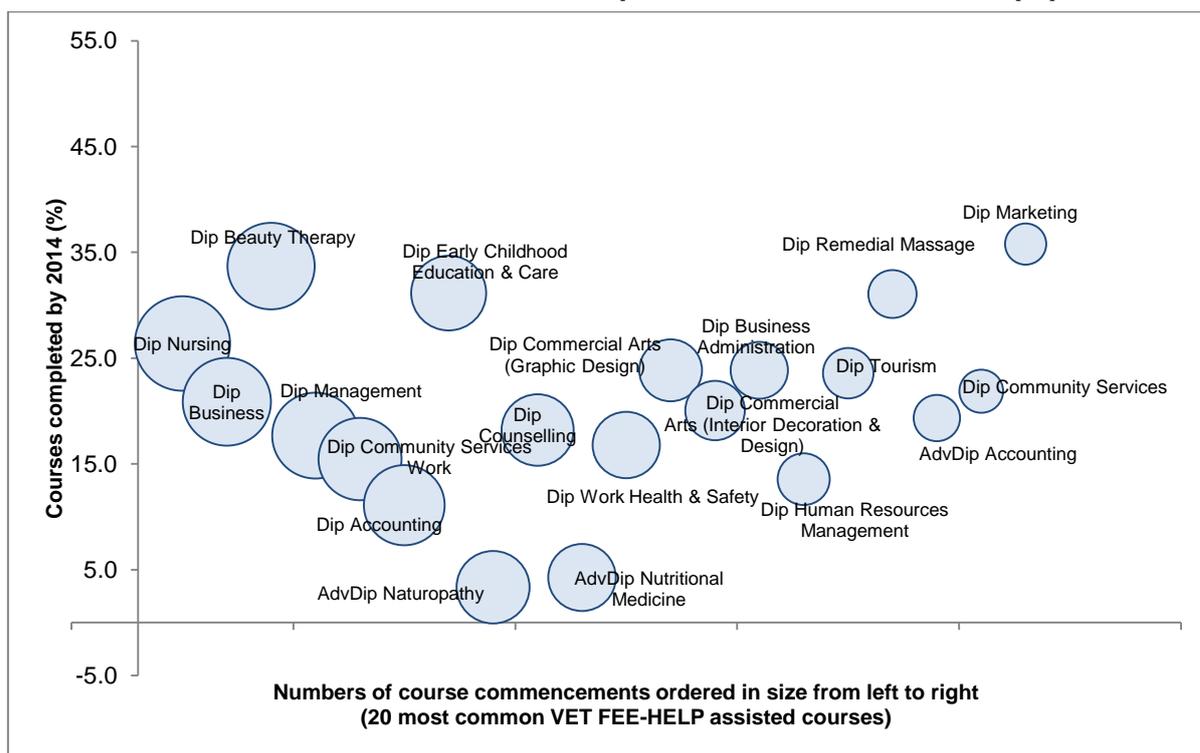
Note: The size of each bubble represents the number of students who commenced the course between 2009 and 2012.

Figure 8   Courses completed at diploma level by internal attendance for students who commenced their training between 2009 and 2012, by provider (%)
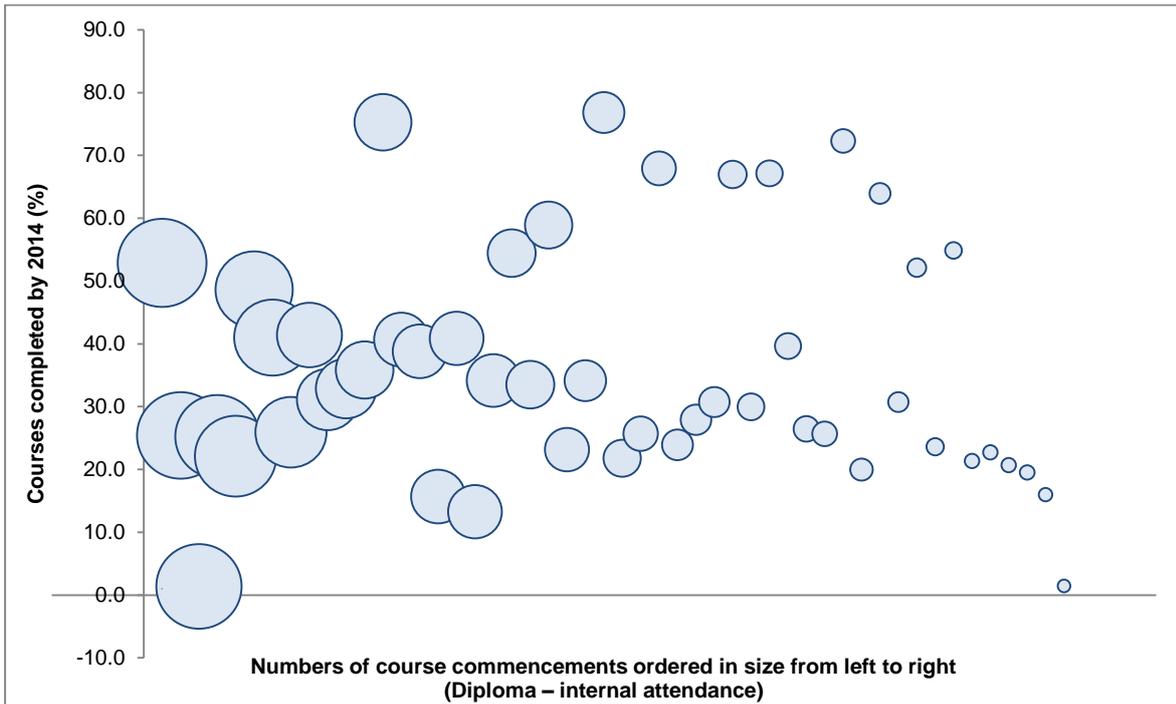
Note: The size of each bubble represents the number of students who commenced internally at diploma level between 2009 and 2012 at that provider.

Figure 9   Courses completed at diploma level by external attendance for students who commenced their training between 2009 and 2012, by provider (%)
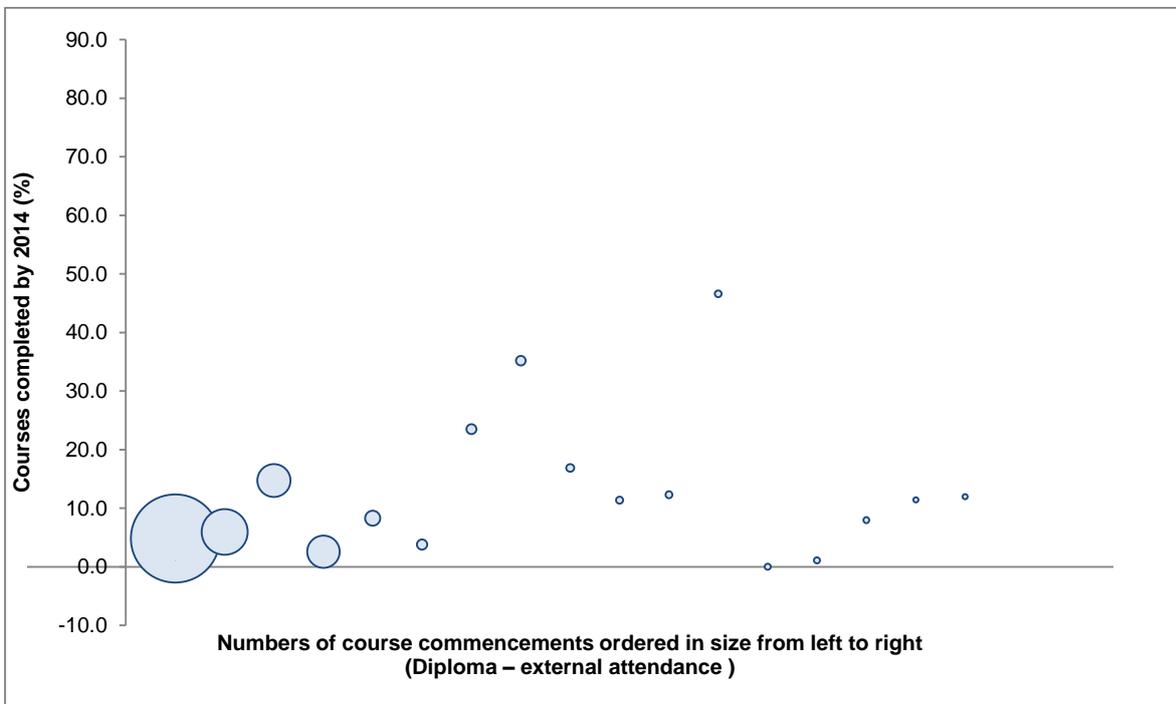
Note: The size of each bubble represents the number of students who commenced externally at diploma level between 2009 and 2012 at that provider.

Figure 10 Courses completed at diploma level by multimodal attendance for students who commenced their training between 2009 and 2012, by provider (%)
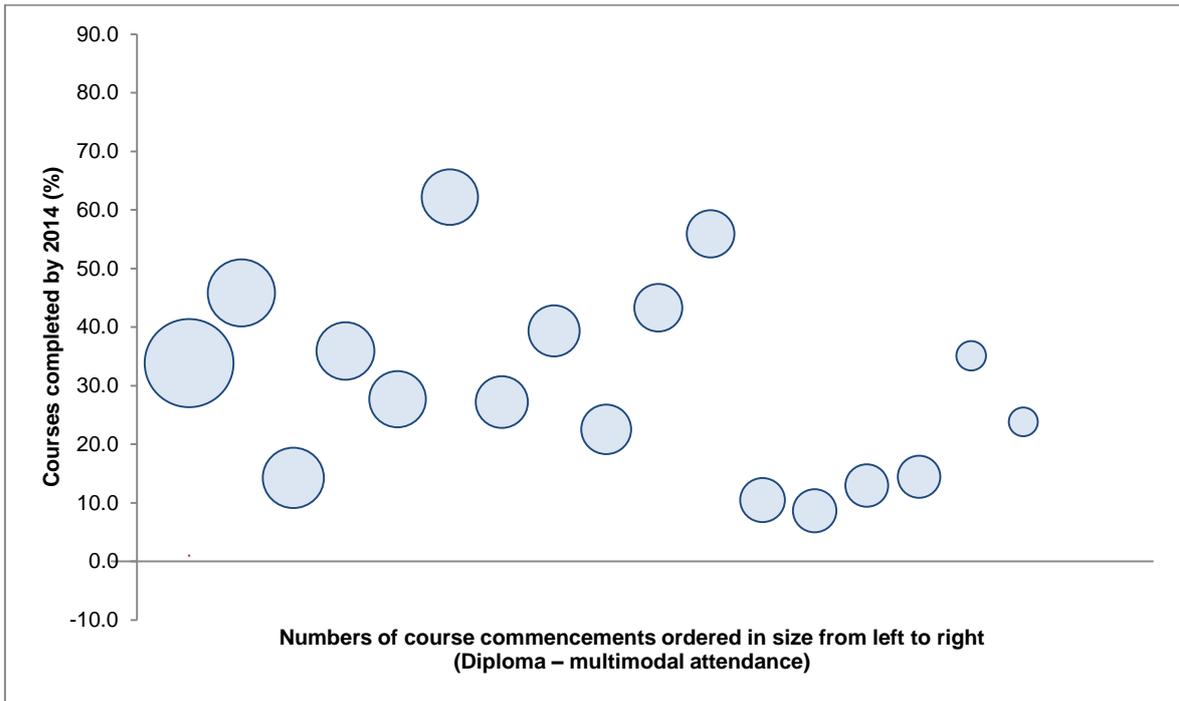
Note: The size of each bubble represents the number of students who commenced at diploma level via multiple modes between 2009 and 2012 at that provider.

Figure 11 Courses completed at advanced diploma level by internal attendance for students who commenced their training between 2009 and 2012, by provider (%)
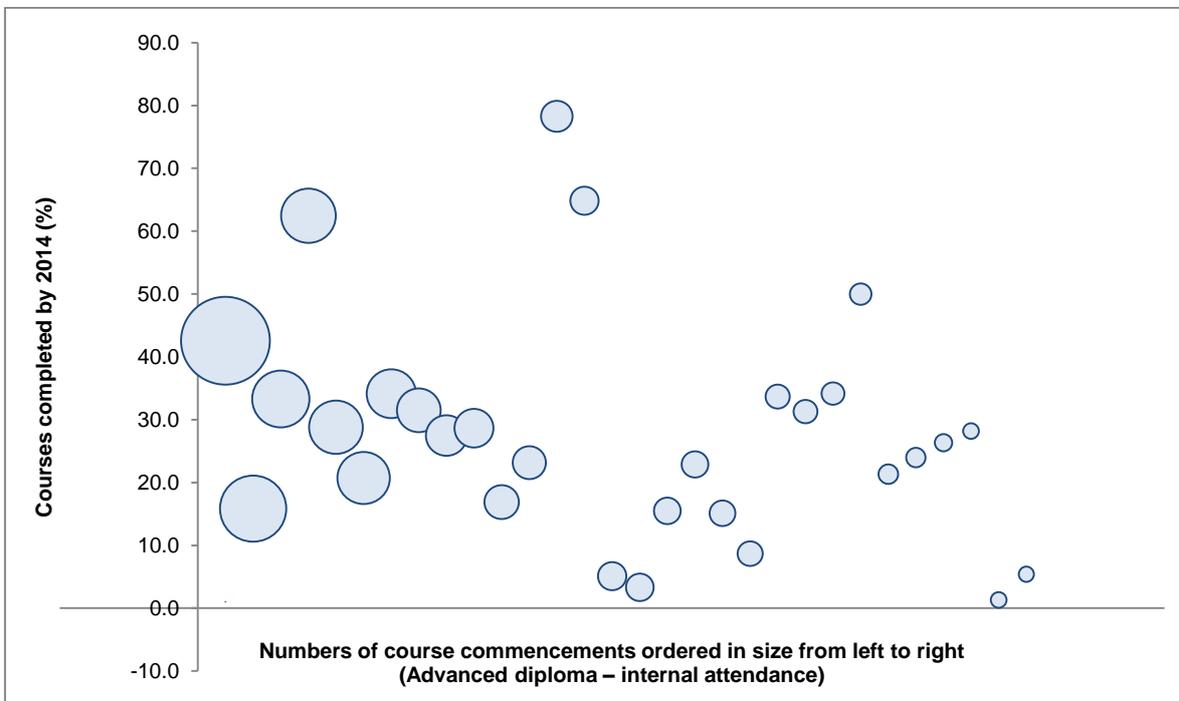
Note: The size of each bubble represents the number of students who commenced internally at advanced diploma level between 2009 and 2012 at that provider.

Figure 12 Courses completed at advanced diploma level by external attendance for students who commenced their training between 2009 and 2012, by provider (%)
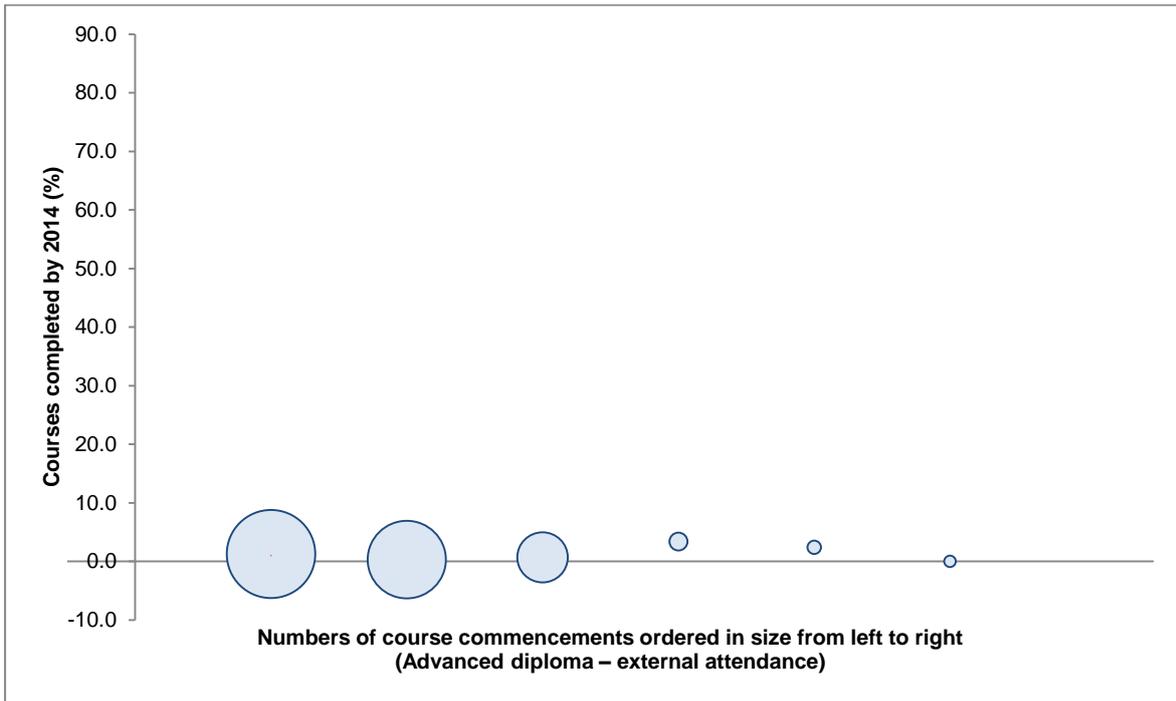
Note: The size of each bubble represents the number of students who commenced externally at advanced diploma level between 2009 and 2012 at that provider.

Figure 13 Courses completed at advanced diploma level by multimodal attendance for students who commenced their training between 2009 and 2012, by provider (%)
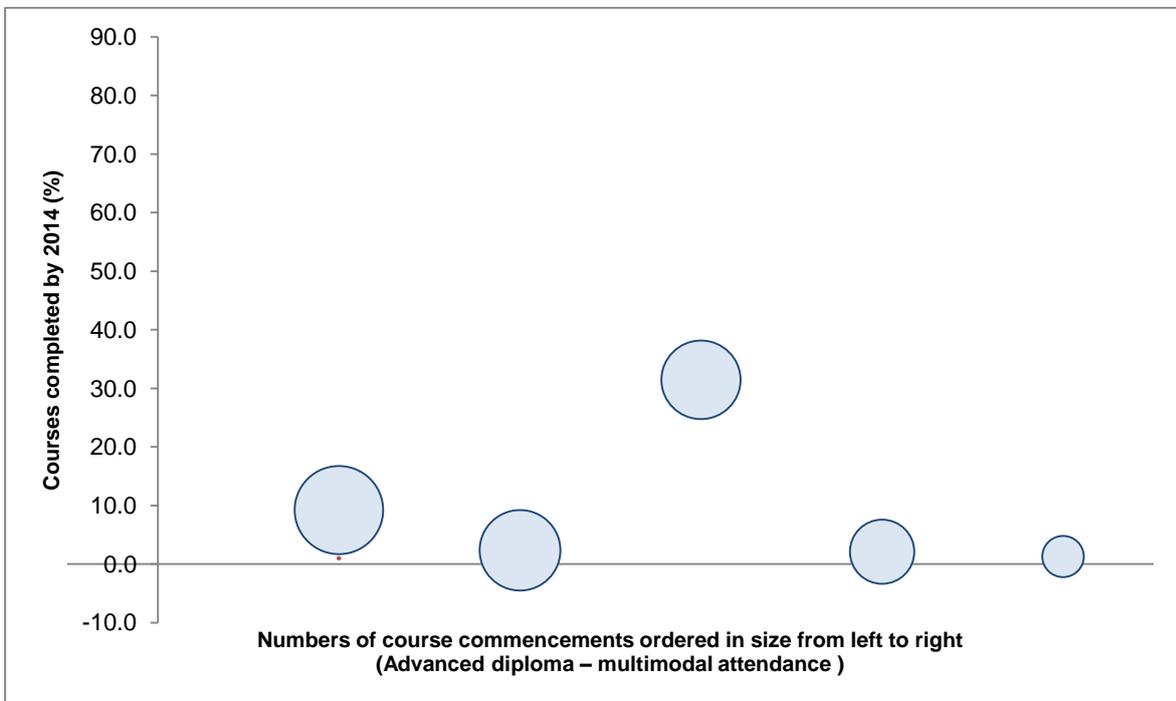

Note: The size of each bubble represents the number of students who commenced at advanced diploma level via multiple modes between 2009 and 2012 at that provider.

Probability of course completion

Students eligible to receive VET FEE-HELP who commenced their training between 2009 and 2012 have a 21% probability of completing their training.

Students *less* likely to complete their course are:

- **VET FEE-HELP assisted students less than eligible non-assisted students**

- **males less than females**

- **younger students less than students aged 25 years and over**

- **Indigenous students less than non-Indigenous students**

- **those with a disability less than those without a disability**

- **students who are not employed less than those employed**

- **students attending externally less than those attending internally**

- **students undertaking courses at advanced diploma level less than those undertaking courses at diploma, VET graduate certificate and VET graduate diploma levels.**

One drawback of looking only at the proportion of students completing their training is that differences between students beyond the single factor being considered cannot be taken into account. Each factor is considered individually: we cannot easily control for more than one factor at a time in order to make the groups more comparable. For example, to compare 'apples with apples' we should compare, say, students who were the same gender, in the same age group, and studying the same field of education. One way to simultaneously control for multiple background characteristics and isolate the effect of each variable separately is to fit a regression model.

It is important to note that it was not possible to identify and remove continuing students from the analysis. Another consideration is whether a student is attending on a full- or part-time basis. Part-time students need a longer period to finish their course, and that length can vary widely. The regression analysis has not separated the impact of full- or part-time status and hence the results should be interpreted accordingly. All providers with fewer than 50 eligible students have been collapsed into a single provider.

Here, we investigate which individual characteristics are the most important in determining whether or not a student will complete their training. To do this, we first fit a generalised logistic mixed regression model to the data from the VET FEE-HELP Student Data Collection. The results from this regression appear in table 7. This table shows the predicted probability of an 'average student' completing their training where only one characteristic differs. For example, the predicted probability of a VET FEE-HELP eligible female student who commenced her course between 2009 and 2012 completing her training by 2014 is 0.22. The variables that are statistically significant in predicting whether a student will complete their training are shaded.

The results from the logistic regression show that, given a common set of background characteristics, assisted students are *less* likely to complete their course than eligible non-assisted students (table 7). However, this does not mean that VET FEE-HELP assistance was of no benefit; for example, it may be the case that, without VET FEE-HELP, those students in the assisted group may not have enrolled in the course at all.

In addition, the regression model results tell us that:

- The overall probability of completion is 0.21.

- Males are *less* likely to complete their training than females.

- Younger students are *less* likely to complete their training than students aged 25 years and over.

- Indigenous students are *less* likely to complete their training than non-Indigenous students.

- Students with a disability are *less* likely to complete their training than those without a disability.

- Students who are not employed are *less* likely to complete their training than those employed.

- Students attending externally are *less* likely to complete their training than those attending internally.

- Students undertaking courses at advanced diploma level are *less* likely to complete their training than those undertaking courses at diploma, VET graduate certificate and VET graduate diploma levels (table 7).

Overall, the findings from the regression analysis are consistent with the proportions presented in table 7. Raw output from the regression analysis is provided in appendix C.

Which students are *least* likely to complete their training?

- **Students attending externally, who are not employed and who are undertaking a course at advanced diploma level. On average, they have an 8% probability of completing their course.**

Which students are *most* likely to complete their training?

- **Students attending internally (or via a mix of modes), who are employed and who are undertaking a course at diploma (or VET graduate diploma or VET graduate certificate) level. On average, they have a 43% probability of completing their course.**

Again, a tree diagram has been used to show which variables are *most* important in predicting course completion for students eligible to access VET FEE-HELP (figure 14). The regression tree shows that mode of attendance is the most important variable in predicting course completion (figure 14). Those who studied externally have an 11% probability of completing their course compared with internal or multimodal students, who have a 39% probability of completion.

The next strongest predictor of completion is students' employment status, with those who are employed more likely to complete compared with those who are not working. Finally, the third most important predictor is dependent upon mode and employment status. For those who are external students and employed, then the age of the student influences completion, with the older students more likely to complete when compared with those aged 34 years and under.

For the remaining groups, the qualification level becomes important, with those who are undertaking advanced diploma level courses less likely to complete their qualification compared with the other three qualifications. From the tree diagram, we can see that those students who are studying an advanced diploma, who are not working and who are undertaking their study externally have the lowest chance of completing (8%), whereas internal (or mixed mode) students who are employed and in a diploma, VET graduate diploma or VET graduate certificate have the highest chance of completing (43%).

Table 7   Predicted probability of course completion for students eligible to access VET FEE-HELP, 2009–12 commencements

Characteristics	Level	Predicted probability of course completion	Probability of course completion
VET FEE-HELP status	Non-assisted student	0.23	Statistically higher probability of completion than assisted students
	Assisted student	0.20	
Gender	Female	0.22	Statistically higher probability of completion than males
	Male	0.20	
Indigenous status	Indigenous	0.17	Statistically lower probability of completion than non-Indigenous students
	Non-Indigenous	0.24	
Age group	Under 25 years	0.19	
	25–34 years	0.20	Statistically higher probability of completion than those aged under 25 years
	35–44 years	0.22	Statistically higher probability of completion than those aged under 25 years
	45 years and over	0.24	Statistically higher probability of completion than those aged under 25 years
Disability status	Disabled	0.20	Statistically lower probability of completion than students who are not disabled
	Not disabled	0.23	
Language spoken at home	English	0.20	
	Language other than English	0.19	Statistically lower probability of completion than those speaking English
Employment status	Not employed	0.22	Statistically lower probability of completion than those employed
	Employed	0.25	
Funding type	Full-fee-paying student	0.23	
	Government-subsidised student	0.20	
Mode of attendance	Internal	0.34	
	External	0.09	Statistically lower probability of completion than those attending internally
	Employer-based	0.17	Statistically lower probability of completion than those attending internally
	Multimodal	0.34	
Qualification level	Advanced diploma	0.17	Statistically lower probability of completion than those undertaking a VET graduate diploma
	Diploma	0.21	
	VET graduate certificate	0.21	
	VET graduate diploma	0.27	
Overall predicted probability of completion		**0.21**	

Notes:

Grey shading indicates significant at the 5% confidence level.

The analysis was restricted to students who commenced their training between 2009 and 2012.

Figure 14 Tree diagram for the probability of completing a course for students eligible to receive VET FEE-HELP, 2009–12 commencements

```
                            ┌─────────────────────┐
                            │  Completed course   │
                            │    Mean = 0.33      │
                            └─────────────────────┘
```

Mode of attendance	Mode of attendance
External	Internal, multimodal, employer based
Mean = 0.11	Mean = 0.39

Employment status	Employment status	Employment status	Employment status
Not employed	Employed	Not employed	Employed
Mean = 0.10	Mean = 0.12	Mean = 0.35	Mean = 0.41

Qualification level	Qualification level	Age	Age	Qualification level	Qualification level	Qualification level	Qualification level
Advanced diploma	Diploma, VET graduate diploma, VET graduate certificate	Under 25 years of age, 25–34 years	35–44 years, 45 years and over	Advanced diploma	Diploma, VET graduate diploma, VET graduate certificate	Advanced diploma	Diploma, VET graduate diploma, VET graduate certificate
Mean = 0.08	Mean = 0.10	Mean = 0.11	Mean = 0.13	Mean = 0.29	Mean = 0.36	Mean = 0.36	Mean = 0.43

↑ Those **least** likely to complete their course

↑ Those **most** likely to complete their course

Note: The data that feed into this chart exclude 'No information / Not stated' cases.

Likelihood of completion by provider

Which providers are most likely to have students completing their training?

▪ **There is considerable variation in the likelihood of an eligible student completing their course across providers, ranging from 96% to 1%. The average probability of course completion for all eligible students is 21%.**

For providers with 50 or more eligible students who commenced their training between 2009 and 2012:

▪ **28% had a significantly higher likelihood than average of their students completing their training.**

▪ **18% were equivalent to the average.**

▪ **54% had a significantly lower likelihood than average.**

This variation may reflect differences in the student body, the geographical location of the provider or other factors not investigated in this analysis.

The likelihood of an eligible student completing their course by provider is presented in figure 15. The predicted probabilities have been centred about the mean (that is, about a 0 predicted probability of completion). Providers are plotted in descending order, with those whose students have the highest probabilities of completing shown on the left. The figure includes the confidence intervals for each provider. If these confidence intervals cross the 0 line, then these providers are not significantly different from the overall average.

There is considerable variation in the likelihood of an eligible student completing their course across providers, ranging from 96% to 1%. The average probability of course completion for all eligible students is 21%. A total of 90 providers had 50 or more eligible students who commenced their training between 2009 and 2012. Of these:

▪ 25 providers had a significantly higher likelihood than average of their students completing their training (28%).

▪ 16 providers were equivalent to the average (18%).

▪ 49 providers had a significantly lower likelihood than average of their students completing their training (54%).

Again, it is important to note that when interpreting these results the probability of completion could relate to the course mix or the student demographics associated with each provider rather than to the direct actions of individual providers.

Figure 15 Predicted probabilities of course completion for eligible students by provider, 2009–12 commencements
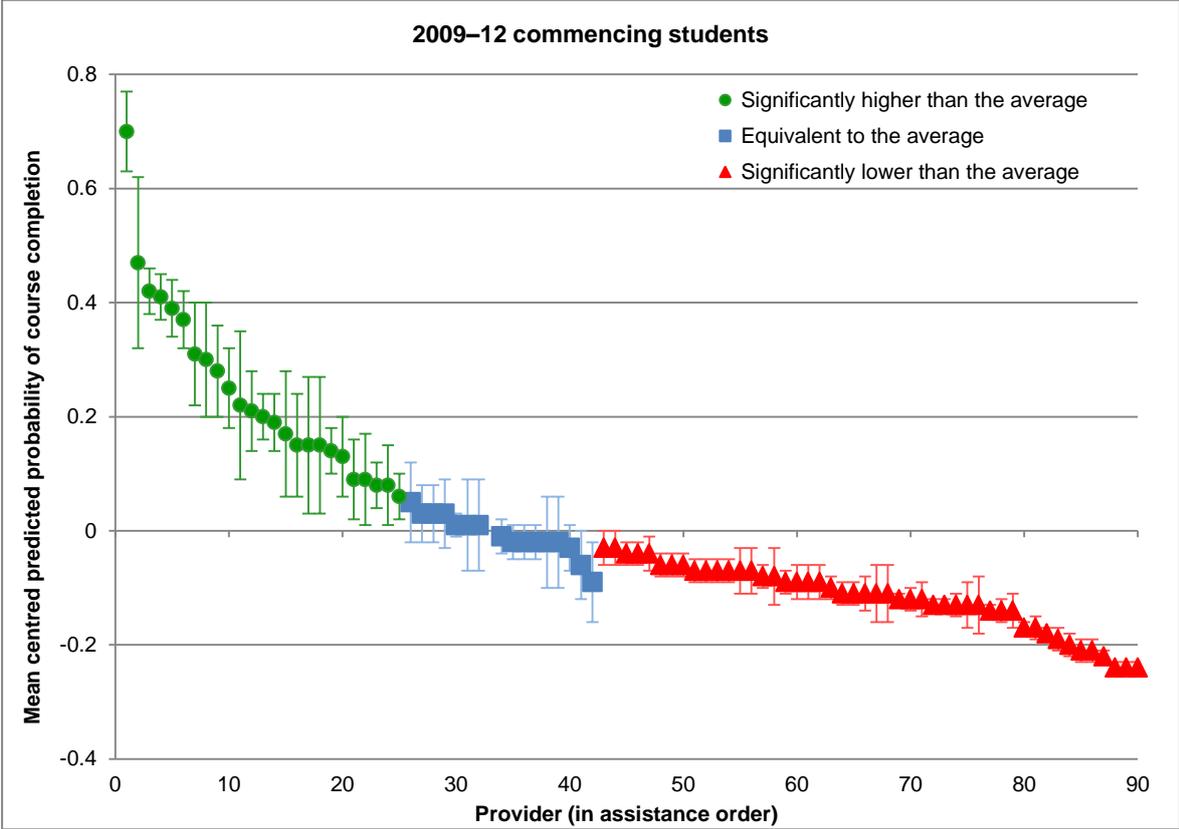
Next steps

The analyses presented here are preliminary and display a number of limitations that affect how the results can be interpreted and the conclusions drawn. To build on the work presented here, a number of short- and longer-term research options could be explored, which are described below.

Short-term options

Further examination of completion

One of the limitations of the completion analyses undertaken in this paper is the inability to determine from the data those students continuing in their studies. The data associated with course completion that are currently captured relate to whether the course has been completed or not. There is no indication of whether those who haven't completed are still continuing their course or have actually dropped out. There may be scope in the future to extrapolate unit record completion information to the course level to enable the identification of the courses from which students have withdrawn or failed, as opposed to where training is ongoing. Continuing students could then be removed from the completion analysis to provide more accurate information. NCVER would need to assess the feasibility of extrapolating the data; however, this could be a relatively simple exercise and a quick way to build upon the work undertaken so far.

Interaction effects

A number of additional analyses could also be undertaken quite quickly and could include the interaction effects between student characteristics, provider characteristics and course characteristics. The analysis undertaken in the report has provided information on course completion by each of these three broad dimensions; however, more complex analyses could be undertaken to examine the combined and distinct effect of these. This would give greater context to completion information, particularly by provider. Potentially deeper conclusions could be drawn about completions at a provider level, by taking into account the provider's mix of students and courses relative to others.

Longer-term options

External students

The following hypothesis is one explanation of lower completions for external students. Undertaking (and completing) a diploma or higher-level course externally may be 'a bridge too far' for marginalised students, such as those not employed or with limited prior education. There is some evidence in the literature to suggest that prior education is important to course completion, particularly for students studying online. 'Highest educational participation prior to commencement' is available in the VET FEE-HELP Data Collection but is incomplete and problematic. A student's highest prior educational attainment could be sourced from NCVER's VET Provider Collection from 2015 onwards or sought in a student survey and linked to information from the VET FEE-HELP data collection to further explore this hypothesis. Such information (and the subsequent analysis) could inform the discussion on the types of courses for which VET FEE-HELP assistance is available and any prerequisites and modes of delivery that need to be considered for higher-level courses.

VET FEE-HELP assisted student survey

To provide greater context to the findings in this report, NCVER could undertake a survey of assisted students to examine their:

- awareness and understanding of the details of the scheme and loan fee

- satisfaction with the training provided

- employment and further study outcomes after training.

Should there be an interest in capturing this information, it could be done quite quickly and incorporated into a similar methodology and timing as NCVER's 2016 Student Outcomes Survey (SOS). The SOS asks graduates from the previous year about their outcomes and satisfaction with their training. An additional survey could build on this platform and be expanded to include not only graduates from VET FEE-HELP assisted courses but continuing students and those who may have dropped out of their training. It would be a relatively straightforward exercise to gather the contact details of assisted students from the Department of Education and Training for survey purposes and take advantage of the timing of mailing list preparation, fieldwork and the respondent incentive structure of the Student Outcomes Survey.

VET FEE-HELP eligible student survey

An alternative to an assisted student survey would be a survey of VET FEE-HELP eligible students; that is, not only those who received assistance but those who were eligible but did not. Undertaking a survey of this nature would enable an analysis of issues such as those mentioned for the assisted survey but would also allow a comparison of the outcomes *between* eligible assisted and non-assisted students. Further issues could be explored specifically with non-assisted students, such as whether they were aware of the option to take up VET FEE-HELP and why they may have chosen not to. In this way, the barriers to VET FEE-HELP uptake could be explored at the same time as the enablers.

In order to survey eligible non-assisted students, contact details would need to be sourced differently, as the Department of Education and Training does not keep contact details for these students. NCVER can examine the feasibility of this in conjunction with the department should there be an interest in conducting this sort of survey. Data from a survey such as this could be quite powerful, in terms of being able to analyse the effects of VET FEE-HELP across a main and a control group.

Comparison with an administrative control group

With the introduction of Total VET Activity (TVA) in 2014, there is potential to investigate the differences in course completion between VET FEE-HELP assisted students and a more robust control group selected from the TVA collection; this would be an opportunity to undertake one-to-one matching between assisted students and a larger control group of non-assisted students. Such a process may allow more definitive conclusions to be drawn about the 'effect' of VET FEE-HELP upon completion.

References

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Appendix A – Terms and definitions

Age

Age refers to age in years at 1 January of the year the course commenced.

Australian Qualifications Framework (AQF)

The Australian Qualifications Framework is a unified system of national qualifications in schools, vocational education and training (TAFE institutes and private providers) and the higher education sector (mainly universities). AQF levels are an indication of the relative complexity and/or depth of achievement and the autonomy required to demonstrate that achievement. AQF level 1 has the lowest complexity and AQF level 10 has the highest complexity.

- Level 1 — Certificate I
- Level 2 — Certificate II
- Level 3 — Certificate III
- Level 4 — Certificate IV
- Level 5 — Diploma
- Level 6 — Advanced diploma, associate degree
- Level 7 — Bachelor degree
- Level 8 — Bachelor honours degree, graduate certificate, graduate diploma
- Level 9 — Master's degree
- Level 10 — Doctoral degree

Course code and course name

The 40 most common course codes in each commencing year were examined on <Training.gov.au>. Where a course code was found to have been superseded by another, it was updated with the course code and name of the current course.

Full-fee-paying student

Full-fee-paying student refers to a student who was not government-subsidised for any unit of study.

Funding type

Students were classified as either full-fee-paying or government-subsidised.

Government-subsidised

Government-subsidised refers to a student who was subsidised by a state or territory government for at least one unit of study undertaken between 2009 and 2014.

Industry skills council

Data are reported using industry skills council codes, which were updated using a NCVER-maintained classification table.

Labour force status

Labour force status was derived as defined in table A1.

Table A1 Derivation of labour force status using Data element: 576 labour force status identifier

Code	Meaning	Derived labour force status
Employed		
01	Full-time employee	Employed – Employed full-time
02	Part-time employee	Employed – Employed part-time
03	Self-employed – not employing others	Employed – Employed other
04	Employer	Employed – Employed other
05	Employed – unpaid worker in a family business	Employed – Employed other
Unemployed		
06	Unemployed – seeking full-time work	Not employed – Unemployed
07	Unemployed – seeking part-time work	Not employed – Unemployed
Not in the labour force		
08	Not employed – not seeking employment	Not employed – Not in the labour force
99	No information provided	No information

Source: HEIMSHELP — 2014 VET FEE-HELP Data Collection, data elements.

Mode of attendance

Mode of attendance refers to the manner in which a student undertook their course. In this report:

- Internal mode of attendance refers to attendance at an on-shore or off-shore campus (includes classroom-based).

- External mode of attendance refers to attendance at an on-shore or off-shore campus (includes electronic-based, online and correspondence).

Mode of attendance for a course is defined as follows:

- Where all units associated with a course have a Mode of attendance = Internal, Mode of attendance for the course = Internal

- Where all units associated with a course have a Mode of attendance = External, Mode of attendance for the course = External

- Where all units associated with a course have a Mode of attendance = Employer based, Mode of attendance for the course = Employer-based

- For any other combination of mode of attendance for the units associated with a course, mode of attendance for the course = Multimodal.

VET FEE-HELP status

Students were classified as either VET FEE-HELP assisted or non-assisted. An assisted student refers to a student who accessed VET FEE-HELP at some point during their training.

Year commenced

Year commenced refers to the year the student first commenced a particular course.

Appendix B – Raw regression output for accessing VET FEE-HELP

In the logistic regression analysis, each background characteristic has one of its levels denoted as the 'reference level', or 'base case'. For example, disability status has two levels: 'Disabled' and 'Not disabled'. In this study, 'Not disabled' is taken as the reference level, and the effect of varying disability status from not disabled to disabled is then estimated. The reference levels for the other predictors are denoted by [R]. A significant explanatory variable from the regression means that the characteristic is statistically important in predicting the probability of being an assisted student. The variables that are statistically significant in predicting whether a student will access VET FEE-HELP assistance are bolded.

Table B1 Characteristics of students eligible to access VET FEE-HELP that affect the likelihood of accessing the loan scheme for 2009–14 commencements – results for the logistic regression model where the outcome is 'Accessed VET FEE-HELP = Yes'

Parameter	Level	β	S.E.	Odds ratio#	Pr > |t|
Gender	Female	0.08	0.48	1.09	0.863
	Male	-0.09	0.48	0.92	0.858
	Not stated [R]				
Indigenous status	Indigenous	-0.05	0.05	0.95	0.291
	Non-Indigenous	0.01	0.03	1.01	0.673
	No information [R]				
Age group	25–34 years	0.01	0.01	1.01	0.3069
	35–44 years	**-0.33**	**0.01**	**0.72**	**<.0001**
	45 years and over	**-0.60**	**0.01**	**0.55**	**<.0001**
	Under 25 years [R]				
Disability status	**Disabled**	**0.30**	**0.02**	**1.35**	**<.0001**
	Not disabled [R]				
Language spoken at home	**Language other than English**	**0.09**	**0.03**	**1.09**	**<.0001**
	English	**0.26**	**0.04**	**1.29**	**0.010**
	No information [R]				
Employment status	**Not employed**	**0.79**	**0.02**	**2.20**	**<.0001**
	Employed	**0.16**	**0.02**	**1.17**	**<.0001**
	No information [R]				
Funding	**Full-fee-paying student**	**-0.26**	**0.02**	**0.77**	**<.0001**
	Government-subsidised student [R]				
Mode of attendance	Internal	0.01	0.02	1.01	0.732
	External	**0.47**	**0.02**	**1.60**	**<.0001**
	Employer-based	**-1.65**	**0.06**	**0.19**	**<.0001**
	Multimodal [R]				
Regression year	**2009–12**	**-1.16**	**0.01**	**0.31**	**<.0001**
	2013–14[R]				
Constant		2.49			
observations	505 760				

Notes:

Bold   significant at 5%.

[R]   denotes the reference level of a predictor.

\#   For dichotomous outcome variables such as 'accessed VET FEE-HELP' (yes/no), ß-coefficients from logistic regression cannot be interpreted directly and are therefore commonly converted to odds ratios. For instance, in the case of accessing VET FEE-HELP, the odds ratio for females represents the probability that female students access VET FEE-HELP relative to the odds of male students, who are chosen as the reference category. If the probabilities are equal for both female and male students, the odds ratio will be 1. If the probability of accessing VET FEE-HELP is greater for female students, the odds ratio will be greater than 1. Likewise, if the probability is greater for male students, the odds ratio will be less than 1.

Appendix C – Raw regression output for course completion

In the logistic regression analysis, each background characteristic has one of its levels denoted as the 'reference level', or 'base case'. For example, gender status has two levels: 'Female' and 'Male'. In this study, 'Male' is taken as the reference level, and the effect of varying gender from male to female is then estimated. The reference levels for the other predictors are denoted by [R]. A significant explanatory variable from the regression means that the characteristic is statistically important in predicting the probability of completing the course. The variables that are statistically significant in predicting whether a student will complete the course are shaded.

Table C1 Characteristics of students eligible to access VET FEE-HELP that affect the likelihood of course completion for 2009–12 commencements – results for the logistic regression model where the outcome is 'Completed course = Yes'

Parameter	Level	B	S.E.	Odds ratio#	Pr > |t|
VET Fee-HELP status	Non-assisted student	0.20	0.01	1.22	<.0001
	Assisted student [R]				
Gender	Female	0.10	0.01	1.11	<.0001
	Male [R]				
Indigenous status	Indigenous	-0.33	0.06	0.72	<.0001
	Non-Indigenous	0.09	0.03	1.09	0.012
	No information [R]				
Age group	25–34	0.06	0.01	1.06	0.0001
	35–44	0.18	0.02	1.19	<.0001
	45+	0.26	0.02	1.29	<.0001
	Under 25 [R]				
Disability status	Disabled	-0.17	0.02	0.85	<.0001
	Not disabled [R]				
Language spoken at home	English	-0.29	0.04	0.75	<.0001
	Language other than English	-0.32	0.04	0.72	<.0001
	Not stated [R]				
Employment status	Not employed	0.28	0.02	1.33	<.0001
	Employed	0.50	0.02	1.64	<.0001
	No information [R]				
Funding	Full-fee-paying only	0.01	0.02	1.02	0.450
	Subsidised				
Delivery mode	Employer-based	-0.91	0.05	0.40	<.0001
	External	-1.64	0.03	0.19	<.0001
	Internal	0.03	0.02	1.03	0.090
	Multimodal [R]				
Qualification level	Advanced diploma	-0.63	0.22	0.53	0.003
	Diploma	-0.33	0.22	0.72	0.125
	VET graduate certificate	-0.37	0.22	0.69	0.096
	VET graduate diploma [R]				

Parameter	Level		B	S.E.	Odds ratio#	Pr > |t|
Constant			-0.52			
Observations	205 761					

Notes:

Grey shading indicates significant at 5%.

[R]   denotes the reference level of a predictor.

\#   For dichotomous outcome variables such as 'accessed VET FEE-HELP' (yes/no), ß-coefficients from logistic regression cannot be interpreted directly and are therefore commonly converted to odds ratios. For instance, in the case of completing the course, the odds ratio for females represents the probability that female students complete the course relative to the odds of male students, who are chosen as the reference category. If the probabilities are equal for both female and male students, the odds ratio will be 1. If the probability of completing the course is greater for female students, the odds ratio will be greater than 1. Likewise, if the probability is greater for male students, the odds ratio will be less than 1.