

Journeying through VET: a case study of foundation skills learners

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About the research

Journeying through VET: a case study of foundation skills learners

Michelle Circelli, Michelle Hall, Zhenyuan Li, Adrian Ong, Patrick Lim, NCVET

Adult language, literacy, numeracy and digital skills (LLND), and employability skills (for example, collaboration, problem-solving and self-management) – often referred to as foundation skills – are key skills that: assist people to get a job and remain employed, look after their mental and physical health, and help them to participate in their community. The role of vocational education and training (VET) in assisting individuals to develop or improve these skills is of interest.

The aim of this exploratory research was to learn more about those who undertake nationally recognised foundation skills programs after school and to investigate their training and employment outcomes. A key aspect of this research involved using the unique student identifier to track learners' pathways through VET based on the learner's enrolment status in a defined list of LLND and employment skills programs between 2016 and 2019. In doing so, the research identified four distinct groups of foundation skills learners, with each having varying student, program and provider characteristics:

- 'foundation skills only' learners, who enrolled in an LLND or employment skills program in 2016 and only enrolled in LLND or employment skills programs subsequently
- 'foundation skills followed by other VET' learners, who enrolled in an LLND or employment skills program in 2016 and enrolled in other VET programs in subsequent years
- 'foundation skills and other VET concurrently' learners, who enrolled in an LLND or employment skills program and another VET program concurrently in 2016
- 'other VET followed by foundation skills' learners, who enrolled in a VET program in 2016 (not LLND or employment skills) and enrolled in an LLND or employment skills program in subsequent years.

Key messages

- Foundation skills learners often embark on complex journeys through the VET system, with these involving multiple enrolments in LLND or employment skills programs and, in many cases, other VET programs.
- Learners who enrol in foundation skills programs *in some combination* with other VET programs are more likely to complete *any* nationally recognised VET program than those who *only* enrol in foundation skills programs.
- Learners who complete a foundation skills qualification have poorer employment outcomes than their non-foundation skills qualification completer peers. This is not to say the training is not beneficial. For example, the foundation skills qualification completers who were employed after training were significantly more likely than their non-foundation skills peers to indicate that they found the training relevant to their current job.
- There are a broad range of reasons why learners enrol in foundation skills programs: understanding their underlying intention or motivation for enrolling must also be considered when gauging a program's success or otherwise.

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Executive summary

Adult language, literacy, numeracy and digital skills (LLND) and employability skills (for example, collaboration, problem-solving and self-management) – collectively often referred to as foundation skills¹ – are essential ingredients for greater social engagement, as well as for workforce participation and productivity (Skills Australia 2010). For some time national and international research has demonstrated the relationship between increased proficiency in literacy and numeracy and positive outcomes for individuals, communities and the economy (for example, Balatti, Black & Falk 2006; Clark & Dugdale 2008; Earle 2010; O’Dwyer & Mihelic 2021; OECD 2021; Schwerdt, Wiederhold & Murray 2020; Shomos & Forbes 2014).

The need for individuals to build and develop these skills is becoming even more important, with the continuing growth in the use of technology in the workplace causing a shift away from low-skill work (Payton 2017). Data from the 2011–12 Programme for the International Assessment of Adult Competencies (PIAAC) show that between 10% and 16% of employed 15 to 64-year-old Australians at that time had literacy and numeracy skills assessed as being at a level that may have impacted on their ability to fully participate and function in a technologically advanced economy (ABS 2013a).² Further, approximately 13% of 15 to 64-year-olds who were employed at that time were assessed as having low levels of digital literacy,³ while around 18% of employed people were unable to have their digital literacy proficiency classified at all (that is, people with no computer experience, those who opted out of computer-based assessment and those who failed the information and communication technology task; ABS 2013b).

For individuals, the relationship between LLND skill proficiency and employment is particularly clear. For example, PIAAC data show that around 82% of all working-age Australians assessed at proficiency Level 4 or 5 (the highest levels) in literacy were employed (either full-time or part-time) compared with the approximately 56% of working-age Australians assessed as having literacy proficiency at or below Level 1 (ABS 2013a). Schwerdt, Wiederhold and Murray (2020) suggested that the proportion of adults with low levels of literacy skill can have a greater impact on economic growth rates than the proportion of adults with high literacy proficiency.

The need to assist people to improve their foundation skills is recognised by national and state and territory education and training policy, which supports training in these areas. Indeed, one of the priorities agreed upon by all Australian governments in the current Heads of Agreement for Skills Reform is the provision of ‘stronger support for foundation skills and ensuring access for all Australians with low levels of language, literacy, numeracy, and digital literacy’ (Department of Premier & Cabinet 2020, p.2).

In April 2022, to assist in the realisation of this priority, the (draft) National Foundation Skills Framework 2022–32 was released. Its vision is for Australian adults to have access to quality education and training to enable them to ‘continuously develop the foundation skills they need to actively and confidently

1 The terms ‘LLND and employment skills’ and ‘foundation skills’ are used interchangeably in this report.

2 For literacy, 9.8% of employed 15 to 64-year-olds were assessed at Level 1 or below, where Level 5 is the highest level; for numeracy, 15.9% of employed 15 to 64-year-olds were assessed at this level.

3 Employed persons aged 15–64 years assessed as being at below Level 1 on the ‘Problem Solving in Technology-Rich Environments’ measure, where Level 3 is the highest level.

participate in the economy and community'.⁴ This high-level framework allows for the states and territories, and the educational sectors, to align their priorities against the national goals outlined within it. These include increased engagement in further education and/or training and increased employment outcomes.

There is no question that investigating and measuring the impact of foundation skills programs on the employment and further study outcomes of learners is important; this was the original intention of this project. However, as we embarked on this research, it became apparent that it was equally important to gain a better understanding of the learning journeys individuals take on their way to developing these skills. As such, the questions that guided our research were:

- What are the course, provider and socio-demographic characteristics of those undertaking nationally recognised LLND and employment skills programs?
- What are the movements of foundation skills students within the VET system? That is, what does their journey through VET look like?
 - What are the completion patterns of those who undertake foundation skills programs?
 - Which socio-demographic characteristics of the student are associated with completing a nationally recognised VET program (LLND or employment skills or other VET)?
- What are the further study and employment outcomes of those who undertake foundation skills training?

Our research was exploratory in nature. Using total VET activity (TVA) data at the unit record level, we applied a quantitative cohort-based approach to investigating patterns in pathways through VET for the students who had enrolled in a defined list of foundation skills programs. The estimates derived from the National Student Outcomes Survey were also explored to understand outcomes following training for the students who had completed a qualification, as well as the reasons for discontinuing training for those who had only partly completed.

The nationally recognised foundation skills programs investigated were limited to an agreed list of fields of education and qualification levels within the research scope and are detailed in the body of the report. The period of analysis was limited to 2016 to 2019, which covered the first full year after the implementation of the unique student identifier (USI), in 2015, to the onset of the global COVID-19 pandemic, in 2020. It is important to note that the period of analysis does not represent a definitive commencing/completing period but rather a window of time. This being the case, learners could be enrolled in a nationally recognised VET program prior to 2016 and could go on to complete their program(s) after 2019. Our unit of analysis was students with a valid USI and with *at least one* nationally recognised LLND or employment skills program enrolment during the period 2016 to 2019 *and* at least one nationally recognised program enrolment (any LLND or employment skills or other VET program) in 2016.

The focus here on nationally recognised foundation skills programs does not diminish the role and import of non-nationally recognised or pre-accredited foundation skills programs in developing the skills of learners.

⁴ <<https://www.skillsreform.gov.au/reforms/foundation-skills/>>.

Describing foundation skills learners

The scope of the study was 145 540 students and 408 865 enrolments in nationally recognised VET programs, including 228 640 enrolments in foundation skills programs, over the period 2016 to 2019.

Key student characteristics

- Just over half of the students enrolled in LLND programs were born in countries other than Australia (52.4%), with similar proportions of students indicating English either was (45.8%) or was not (46.7%) the main language spoken at home.
- For students enrolled in employment skills programs, around 71.4% were born in Australia, with a similar proportion indicating that English was the main language spoken at home.
- Higher proportions of Indigenous students (15.0% vs 6.8%) or those with disability (37.7% vs 13.9%) were enrolled in employment skills programs by comparison with those in LLND programs.
- Higher proportions of students enrolled in employment skills programs lived in regional or remote areas by comparison with students enrolled in LLND programs (40.3% vs 27.3%), while the majority of LLND students lived in major cities (71.0% vs 59.0%).

Key program and provider characteristics

- The majority of enrolments in employment skills programs were government-funded, certificate I, accredited qualifications and undertaken with a TAFE (technical and further education) institute. For LLND program enrolments, the pattern was not as distinct, likely reflecting the broader range of programs captured under this category.
- Two-thirds of LLND program enrolments were with TAFE and were either at the certificate I or certificate II level. Almost 60% of LLND program enrolments were accredited qualifications, with approximately one-fifth being in accredited courses and a similar proportion in training package qualifications.

The journey of foundation skills learners through VET

To explore the movement, or journey, of foundation skills learners through VET, we mapped learner enrolments between 2016 and 2019, using the USI as the base linking key across collection years. The focus here was on enrolment activity rather than completions, which were examined later. The mapping exercise resulted in the identification of four major foundation skills learner groups, which themselves were a high-level representation of the many enrolment pathways undertaken by these learners. (These are detailed in appendix B). The four major learner groups were:

- ‘Foundation skills only’ learners, who enrolled in an LLND or employment skills program in 2016 and only enrolled in LLND or employment skills programs subsequently. This group represented 40.7% of students in 2016.
- ‘Foundation skills followed by other VET’ learners, who enrolled in an LLND or employment skills program in 2016 and enrolled in other VET programs in subsequent years. This group represented 13.6% of students in 2016.
- ‘Foundation skills and other VET concurrently’ learners, who enrolled in an LLND or employment skills program and another VET program concurrently in 2016. This group represented 27.4% of students in 2016.

- ‘Other VET followed by foundation skills’ learners, who enrolled in a VET program in 2016 (not LLND or employment skills) and enrolled in an LLND or employment skills program in subsequent years. This group represented 18.3% of students in 2016.

Each of these groups varied in their student, course and provider characteristics, which, along with myriad enrolment pathways, demonstrates the complexity and diversity of learners and their learning choices.

Completions

Following our exploration of the enrolment journeys of foundation skills learners, we then turned our attention to identifying, in each of the four learner groups, which of their in-scope programs had recorded a completion outcome in the 2016–19 analysis window. The following are the key results:

- Approximately half (52.7%) of all foundation skills learners had completed a nationally recognised VET program by the end of 2019, either an LLND or employment skills program or other VET program.
- Focusing on the four learner groups, we found that almost a third of the ‘Foundation skills only’ learners had completed a nationally recognised VET program within the period of analysis. This compares with around 60%–70% of foundation skills learners who had also enrolled in other VET programs.

Further study and employment outcomes of foundation skills learners

For this component of the research, a linked dataset was generated using total VET activity and data from the 2020 National Student Outcomes Survey. Propensity score weighting was applied to set up control groups against which to compare the foundation skills qualification completers and part-completers. When we looked at a range of indicators relating to employment and further study outcomes as well as satisfaction with and benefits from the training, we found:

- Foundation skills qualification completers had poorer employment outcomes compared with their non-foundation skills qualification completer peers and they were less likely to recommend either the training they had undertaken or the provider.
- Foundation skills qualification completers who were employed after training were, however, significantly more likely than their non-foundation skills peers to indicate that they found the training relevant to their current job.
- Foundation skills qualification completers and part-completers were significantly more likely to indicate that their writing and numerical skills had improved following the training. This finding provides a degree of validation for the purpose of foundation skills programs.

Concluding remarks

While this research found the employment outcomes of foundation skills learners were not as good as those of their non-foundation skills peers, this does not mean the training was not beneficial. A narrow focus on post-training outcome measures as indicators of success, risks ignoring the full range of reasons why learners may be undertaking foundation skills training. Understanding their underlying intention or motivation for enrolling is important. For some learners, getting a job may not be the goal; instead, their intention may be to improve their English language skills or their numeracy skills, enabling them to more confidently engage with their community. Similarly, not all learners are looking to complete a full qualification. It may be that improving in specific skills and having the ability to apply those skills is the outcome the learner wanted. Our analysis of data from the 2020 National Student Outcomes Survey

indicated that almost 40% of foundation skills qualification part-completers did not complete training for personal reasons, compared with 24% of their non-foundation skills peers, a finding that reinforces the importance of understanding learner intention and exploring reasons for non-completion.

This research also shows that learners who enrol in foundation skills programs *in some combination* with other VET programs are more likely to complete *any* VET program than learners who *only* enrol in foundation skills programs. Further research is warranted therefore to investigate the relationship between learner intentions and outcomes to determine what more can be done to assist particularly 'foundation skills only' learners, who do intend to complete, achieve their goal. For example, a more comprehensive examination of the total VET activity data could illuminate systemic patterns in learner and course characteristics, specifically those that signal a likelihood of disengaging with VET before completing a program.

In closing, from a methodological point of view, this research is important as it is the first to explore a learner's movements through VET by means of the unique student identifier. We are now presented with the opportunity to further refine the methodological approach applied here and to broaden the application to explore the journeys of other learner cohorts through VET.



Who is doing foundation skills programs?

The aim of this exploratory research was to learn more about those who undertake nationally recognised⁵ LLND and employment skills programs following school and to investigate their VET and employment outcomes. Using total VET activity data at the unit record level, a quantitative cohort-based approach was applied to investigate patterns in pathways through VET for those students who were enrolled in a defined list of foundation skills programs. The estimates derived from the National Student Outcomes Survey were also explored to understand the outcomes following training for those students who had completed all or part of a qualification, as well as, for the latter group, the reasons for discontinuing training.

The questions that guided this project were:

- What are the course, provider and socio-demographic characteristics of those undertaking nationally recognised LLND and employment skills programs?
- What are the movements of foundation skills students within the VET system? That is, what does their journey through VET look like?
 - What are the completion patterns of those who undertake foundation skills programs?
 - Which socio-demographic characteristics of the student are associated with completing a nationally recognised VET program (LLND or employment skills or other VET)?
- What are the further study and employment outcomes of those who undertook foundation skills training?

Key points

- Three-quarters of employment skills program enrolments were government-funded, certificate I, accredited qualifications undertaken at a TAFE institute. The pattern for LLND program enrolments was more varied.
- Higher proportions of Indigenous students, those with a disability, and students from regional/remote areas were enrolled in employment skills programs than in LLND programs.

Research scope

Programs in scope

In 2015, the National Foundation Skills Strategy (NFSS) Review Framework Working Group agreed on a list of foundation skills programs which covered the fields of education of General Education Programmes (FOE 1201), Employment Skills Courses (FOE 1205), Other Education (FOE 0799) and Office Studies (FOE 0809). There was no limit on qualification level, which meant even diploma-level courses were included

⁵ Our focus on nationally recognised foundation skills (LLND and employment skills) programs does not diminish the importance of non-nationally recognised foundation skills programs. While NCVET currently collects non-nationally recognised training activity data through the Government-funded students and courses collections, the limitations of the non-nationally recognised data include that it cannot be validated against the statistical standard (AVETMISS) or reported against any known classification systems, such as Level or Field of Education. Recognising that non-nationally recognised training is funded by the Commonwealth and state and territory governments, any data provided by NCVET relating to foundation skills should be considered as a minimum capture of this type of training activity.

in the scope of the NFSS Review Framework Working Group. However, because the intended purpose of the various government-funded LLND and employment skills programs (such as the Adult Migrant English Program⁶ or the Skills for Education and Employment⁷) is to develop skills at the foundational or fundamental level, for the purposes of this project we refined the scope of the NFSS Review Framework Working Group to better reflect this. This prompted a rescoping exercise with the Project Advisory Committee, resulting in the qualification levels and fields of education shown in table 1.

Students in scope

After identifying the LLND and employment skills programs in scope, a cohort approach was taken to explore student training activity and their journey within VET. The cohort of students identified consisted of those with a valid unique student identifier and at least one nationally recognised program enrolment in 2016 (any program equals LLND or employment skills or other VET). A dataset was then generated for this cohort, based on government-funded and fee-for-service program enrolments between 2016 and 2019. This period of analysis captures the first full year following the implementation of the unique student identifier, in 2015, to the onset of the COVID-19 pandemic. The period of analysis does not represent a definitive commencing or completing period but rather a window of time. This dataset was then refined to include only those students with at least one nationally recognised LLND or employment skills program enrolment during the period 2016–19.

The scope was refined further after an initial examination of the data to exclude USIs associated with more than 10 unique program enrolments between 2016 and 2019. Secondary school students undertaking foundation skills programs at school were also excluded from the scope, as the focus of this research was on outcomes for learners not in secondary school. The numbers of secondary school students enrolled in foundation skills programs is not insignificant, as highlighted in the box in appendix A.

The resultant program and student scoping parameters are presented in table 1.

Table 1 Description of scoping parameters for the foundation skills programs

Scoping parameter	Description
Period of analysis	2016–19 This period of analysis covers the first full year following the implementation of the unique student identifier, in 2015, to the onset of the global COVID-19 pandemic, in 2020. Note that the period of analysis does not represent a definitive commencing/completion period but a window of time. As such, learners could be enrolled in a nationally recognised VET program prior to 2016.
Unit of analysis	Students with a valid unique student identifier and with <i>at least one</i> nationally recognised LLND/employment skills program enrolment during 2016–19 <i>and</i> at least one nationally recognised program enrolment (any program = LLND/employment skills or other VET) in 2016. USIs associated with enrolment in more than 10 unique programs during the period of analysis were excluded.
Qualification level	Nationally recognised courses up to certificate II with the exception of higher-level courses that are dedicated LLND programs, such as Certificate III/IV in Spoken and Written English; Certificate III in General Education for Adults; Certificate III in EAL (English as an Additional Language)
Fields of education	1201 – General Education Programmes 1205 – Employment Skills Courses 0799 – Other Education The Course in Underpinning Skills for Industry Qualifications will also be included in the scope, although it is currently coded under FOE 0703 (Curriculum and Education Studies). It was previously coded under FOE 0799.

6 <<https://immi.homeaffairs.gov.au/settling-in-australia/amep/about-the-program>>.

7 <<https://www.dese.gov.au/skills-education-and-employment>>.

	0203 – specifically the Certificate I/II in Information, Digital Media and Technology 0915 – specifically the Certificate I in Fundamental English for Speakers of Other Languages
Excluding secondary school students	Enrolments excluded based on the following criteria: - Data submitter is a board of study, or - Training organisation type is a school, or - Student is still enrolled in secondary school
Residency criterion	Domestic students only, that is to say, international fee-paying students were excluded.

Enrolments in LLND and employment skills programs

Applying the scoping parameters resulted in 145 540 students and 408 865 enrolments in any nationally recognised VET program, including 228 640 enrolments in foundation skills programs.

Looking at the subset of foundation skills program enrolments, 124 programs were in scope for analysis for the 2016–19 period, the majority of which (102 or 82%) were in LLND programs. The number of programs within scope, by qualification level, is presented in table 2.

Table 2 LLND and employment skills programs in scope by qualification level

Qualification level	LLND programs	Employment skills programs
Course (statement of attainment)	21	3
Certificate I	34	16
Certificate II	29	3
Certificate III	9	
Certificate IV	9	
Total	102	22

Note: Appendix A provides the number of enrolments for each of the in-scope LLND and employment skills programs for the 2016–19 period of analysis.

Source: National VET Provider Collection, 2016–19.

Characteristics of LLND and employment skills learners

In this section we are guided by the first research question:

- What are the course, provider and socio-demographic characteristics of those undertaking nationally recognised LLND and employment skills programs?

This question was addressed using the cohort dataset described above, focusing only on the foundation skills programs in scope for this study. The key variables of interest were:

- provider type
- type of training (accredited course or qualifications/training package qualifications)
- program level of education
- program funding source (government-funded/fee-for-service)
- socio-demographic data (student age, gender, country of birth, main language spoken at home, Indigenous status, disability status, highest prior education level, remoteness, relative socioeconomic disadvantage, labour force status).

Course and provider characteristics

The cohort dataset included 207 390 LLND program enrolments and 21 250 employment skills program enrolments between 2016 and 2019. The course and provider characteristics of these program enrolments is presented in table 3. A few trends are noteworthy:

- The majority of *employment skills* program enrolments were government-funded, certificate I, accredited qualifications and undertaken with a TAFE institute.
- For *LLND* program enrolments, the pattern was not as distinct, probably reflecting the broader range of programs captured under this category. Two-thirds of LLND program enrolments were with TAFE and were either at the certificate I or certificate II level. Almost 60% of LLND program enrolments were in accredited qualifications, with approximately one-fifth being in accredited courses and a similar proportion in training package qualifications.

Table 3 Program and provider characteristics of enrolments in LLND or employment skills programs, expressed as a percentage of the total number of enrolments for the in-scope cohort, 2016–19

		LLND programs	Employment skills programs
		% (n)	% (n)
Provider type	TAFE institute	66.0 (136 885)	74.4 (15 800)
	University	4.8 (10 000)	0.3 (70)
	Community education provider	8.1 (16 785)	7.9 (1 680)
	Enterprise provider	1.2 (2 515)	4.3 (905)
	Other training provider*	6.0 (12 390)	0.4 (85)
	Private provider	13.9 (28 815)	12.7 (2 705)
Type of training	Accredited course	20.9 (43 370)	21.3 (4 520)
	Accredited qualifications	56.8 (117 780)	78.5 (16 690)
	Training package qualifications	22.3 (46 240)	0.2 (40)
Funding source	Fee-for-service	11.7 (24 180)	10.2 (2 160)
	Government-funded	88.3 (183 210)	89.8 (19 090)
Program level	Certificate IV	2.6 (5 365)	-
	Certificate III	11.0 (22 820)	-
	Certificate II	31.2 (64 690)	16.4 (3 475)
	Certificate I	34.3 (71 145)	62.4 (13 255)
	Course	20.9 (43 370)	21.3 (4 520)
Total		207 390	21 250

Note: *Other training provider' includes providers such as professional or industry associations, or equipment and/or product manufacturers or suppliers.

Source: National VET Provider Collection, 2016–19.

For the 2016–19 period, the LLND programs that each had around 5% or more of the enrolments were:

- FSK20119 Certificate II in Skills for Work and Vocational Pathways (9.9% of enrolments)
- 10363NAT Certificate II in Spoken and Written English (9.0%)
- 10362NAT Certificate I in Spoken and Written English (8.7%)
- 10364NAT Certificate III in Spoken and Written English (8.4%)
- 52626WA Course in Applied Vocational Study Skills (5.5%)
- FSK10119 Certificate I in Access to Vocational Pathways (4.7%).

The enrolments in these six programs (from the 102 LLND programs in total) accounted for almost half (46.1%) of all enrolments in LLND programs.

For the same time period, the employment skills programs that each had around 5% or more of the enrolments were:

- 10093NAT Course in Vocational and Community Engagement (19.8% of enrolments)
- 10089NAT Certificate II in Skills for Work and Training (13.7%)
- 10088NAT Certificate I in Access to Work and Training (12.9%)

- 10087NAT Certificate I in Access to Work and Training (Introductory) (11.6%)
- 22302VIC Certificate I in Work Education (9.3%)
- 22280VIC Certificate I in Employment Pathways (7.8%)
- 52769WA Certificate I in Gaining Access to Training and Employment (GATE) (5.7%)
- 22128VIC Certificate I in Work Education (5.0%).

The enrolments in these eight employment skills programs (from the 22 employment skills programs in total) accounted for 85.8% of all enrolments in employment skills programs.

Student characteristics

In terms of student characteristics, 132 870 students in the cohort had at least one LLND program enrolment, and 19 160 students had at least one employment skills program enrolment between 2016 and 2019. It is important to note that, for the period of the analysis, students could be included in the enrolment numbers for both LLND and employment skills programs. The following analysis of socio-demographic characteristics is, however, based on each student's first enrolment record in either an LLND or an employment skills program (except for age, which is reported separately, based on the first LLND program enrolment and the first employment skills program enrolment for students who had enrolled in both types of programs). The socio-demographic characteristics of these students are presented in table 4. The gender split and age distribution of learners enrolled in LLND programs or employment skills programs are similar as are their profiles relating to their level of disadvantage (SEIFA), labour force status and previous highest level of education. There are some differences though:

- Just over half of the students enrolled in LLND programs were born in countries other than Australia (52.4%), with similar proportions of students indicating English either was (45.8%) or was not (46.7%) the main language spoken at home.
- For students enrolled in employment skills programs, around 71.4% were born in Australia, with a similar proportion indicating that English was the main language spoken at home. As a point of comparison, the 2016 Census data indicate that two-thirds (66.7%) of residents were born in Australia, with almost 73% having English as the main language spoken at home (ABS 2016).
- Higher proportions of Indigenous students (15.0% vs 6.8%) or those with a disability (37.7% vs 13.9%) were enrolled in employment skills programs than in LLND programs.
- Higher proportions of students enrolled in employment skills programs lived in regional or remote areas compared with students enrolled in LLND programs (40.3% vs 27.3%), while the majority of LLND students lived in major cities (71.0% vs 59.0%).

Table 4 Socio-demographic characteristics of students enrolled in LLND or employment skills programs, expressed as a percentage of the total number of unique students

		LLND programs	Employment skills programs
		% (n)	% (n)
Gender	Female	54.1 (71 900)	53.6 (10 265)
	Male	45.6 (60 560)	46.3 (8 875)
	Unknown	-	-
Age	Under 15	0.1 (80)	0.1 (20)
	15–19	13.6 (18 035)	17.0 (3 260)
	20–24	16.2 (21 505)	16.0 (3 070)
	25–44	42.8 (56 925)	35.3 (6 755)
	45+ years old	27.3 (36 325)	31.6 (6 055)
	Unknown	-	-
Country of birth	Australia	43.0 (57 145)	71.4 (13 680)
	Other	52.4 (69 635)	26.0 (4 980)
	Unknown	4.6 (6 090)	2.6 (500)
Main language spoken at home	English	45.8 (60 795)	71.0 (13 770)
	Other	46.7 (62 045)	20.7 (3 965)
	Unknown	7.6 (10 035)	7.4 (1 425)
Indigenous	Yes	6.8 (9 080)	15.0 (2 880)
	No	88.9 (118 065)	81.0 (15 510)
	Unknown	4.3 (5 725)	4.0 (765)
Disability	Yes	13.9 (18 475)	37.7 (7 215)
	No	73.0 (96 990)	58.4 (11 195)
	Unknown	13.1 (17 410)	3.9 (750)
Remoteness	Major cities	71.0 (94 375)	59.0 (11 300)
	Regional/remote areas	27.3 (36 270)	40.3 (7 725)
	Overseas/No usual address	0.9 (1 140)	0.4 (75)
	Unknown	0.8 (1 085)	0.3 (60)
SEIFA (IRSD) [†]	1 Most disadvantaged	31.0 (41 155)	32.5 (6 225)
	2	19.6 (26 030)	24.3 (4 660)
	3	19.0 (25 295)	18.3 (2 495)
	4	16.4 (21 795)	12.4 (2 380)
	5 Least disadvantaged	12.2 (16 185)	11.8 (2 260)
	Unknown	1.8 (2 415)	0.7 (135)
Previous highest educational level	Did not go to school	4.3 (5 770)	1.1 (220)
	Year 9/10/11	31.9 (42 405)	39.7 (7 610)
	Year 12	29.5 (39 220)	23.5 (4 495)
	Certificate I to IV	15.0 (19 960)	20.8 (3 985)
	Diploma and above	9.8 (13 080)	8.7 (1 670)
	Unknown	9.4 (12 435)	6.2 (1 180)
Labour force status	Employed	24.9 (33 095)	22.3 (4 275)
	Not employed, seeking employment (unemployed)	33.4 (44 385)	42.1 (8 075)
	Not employed, not seeking employment (not in the labour force)	30.0 (39 855)	28.2 (5 405)
	Unknown	11.7 (15 535)	7.4 (1 410)
Total (n)		132 870	19 160

Note: [†]Socio-economic Indexes for Areas (Index of Relative Socio-economic Disadvantage).

Source: National VET Provider Collection, 2016–19.



What is the journey of foundation skills learners through VET?

Learner movements through the VET system

The introduction of the USI to the VET sector in January 2015, which as its name suggests is intended to uniquely identify a student and remain with them for life, provides the opportunity to collect information about a student's training activity and their journey in VET. Consequently, the question that guided this part of the analysis was:

- What are the movements of foundation skills students within the VET system?

Recalling that the unit of analysis is students with a valid USI who were enrolled in at least one foundation skills program during 2016–19 and in at least one program (any program) in 2016, we attempt to map out the journey of a foundation skills learner between 2016 and 2019 using the USI as the base linking key across the collection years. It is important here to emphasise two points. Firstly, learners could be enrolled prior to 2016 and that this analysis represents a window of time rather than the start point of their VET journey. Secondly, the focus of this mapping exercise is on enrolment activity not completions, which are examined later.

The outcome of this mapping exercise resulted in four major learner groups, which are listed below and diagrammatically described in figure 1:

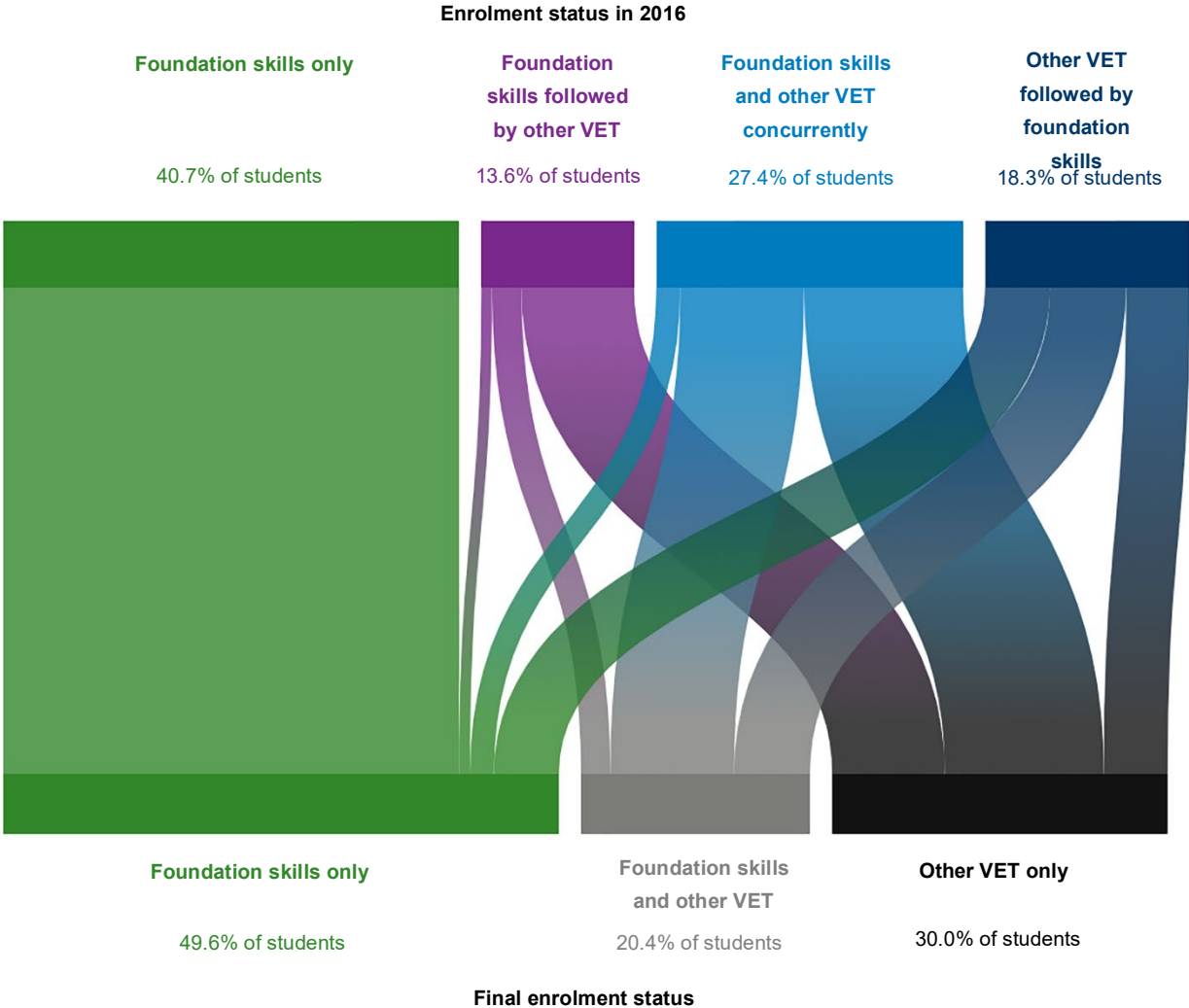
- *Foundation skills only* (the green group in figure 1): those learners who enrolled in an LLND or employment skills program in 2016 and only enrolled in LLND or employment skills programs subsequently. This group represented 40.7% of students in 2016.
- *Foundation skills followed by other VET* (the purple group in figure 1): those learners who enrolled in an LLND or employment skills program in 2016 and enrolled in other VET programs in subsequent years. This group represented 13.6% of students in 2016.
- *Foundation skills and other VET concurrently* (the light blue group in figure 1): those learners who enrolled in an LLND or employment skills program and another VET program concurrently in 2016. This group represented 27.4% of students in 2016. Looking at their final enrolment status in figure 1, we can see that many of these learners were subsequently only enrolled in other VET programs, while a smaller proportion were only enrolled in foundation skills programs.
- *Other VET followed by foundation skills* (the dark blue group in figure 1): those learners who enrolled in a VET program in 2016 (not LLND or employment skills) and enrolled in an LLND or employment skills program in subsequent years. This group represented 18.3% of students in 2016.

Key points

- Foundation skills learners often embark on complex journeys through the VET system, involving multiple enrolments in LLND or employment skills and, in many cases, other VET programs.
- There are distinct groups of foundation skills learners, each having varying student, course and provider characteristics.
- Learners who enrol in foundation skills programs *in some combination with other VET programs* are more likely to complete *any* nationally recognised VET program than those who *only* enrol in foundation skills programs.

The four learner groups are themselves a high-level representation of the many paths that the learners in focus take while engaged in the VET system. Figure 1 shows the complexity of student movement during their time in the VET system. The data upon which this figure is based are shown in table B1, which also indicates the number of students who followed each enrolment journey (of the 44 possible journeys in total) during the period of analysis. Table B1 highlights that the categorisation of students to one of the four major groups based on their enrolment in 2016 is a simplification of many different patterns of movement through VET.

Figure 1 Pathways of foundation skills learners through VET



Note: The final enrolment of the learner could have been in 2016, 2017, 2018 or 2019.

The composition of each of the four groups, in terms of student, course and provider characteristics, varies as shown in the following figures. Figure 2 provides a summary of the key characteristics for the entire learner cohort as a point of comparison, while figures 3 to 6 provide a summary of the same key characteristics for each of the groups. Tables B2 and B3 provide all the descriptive data for each of the four groups.

Figure 2 Key student, course, and provider characteristics for the entire foundation skills learner cohort, based on 2016 enrolment status

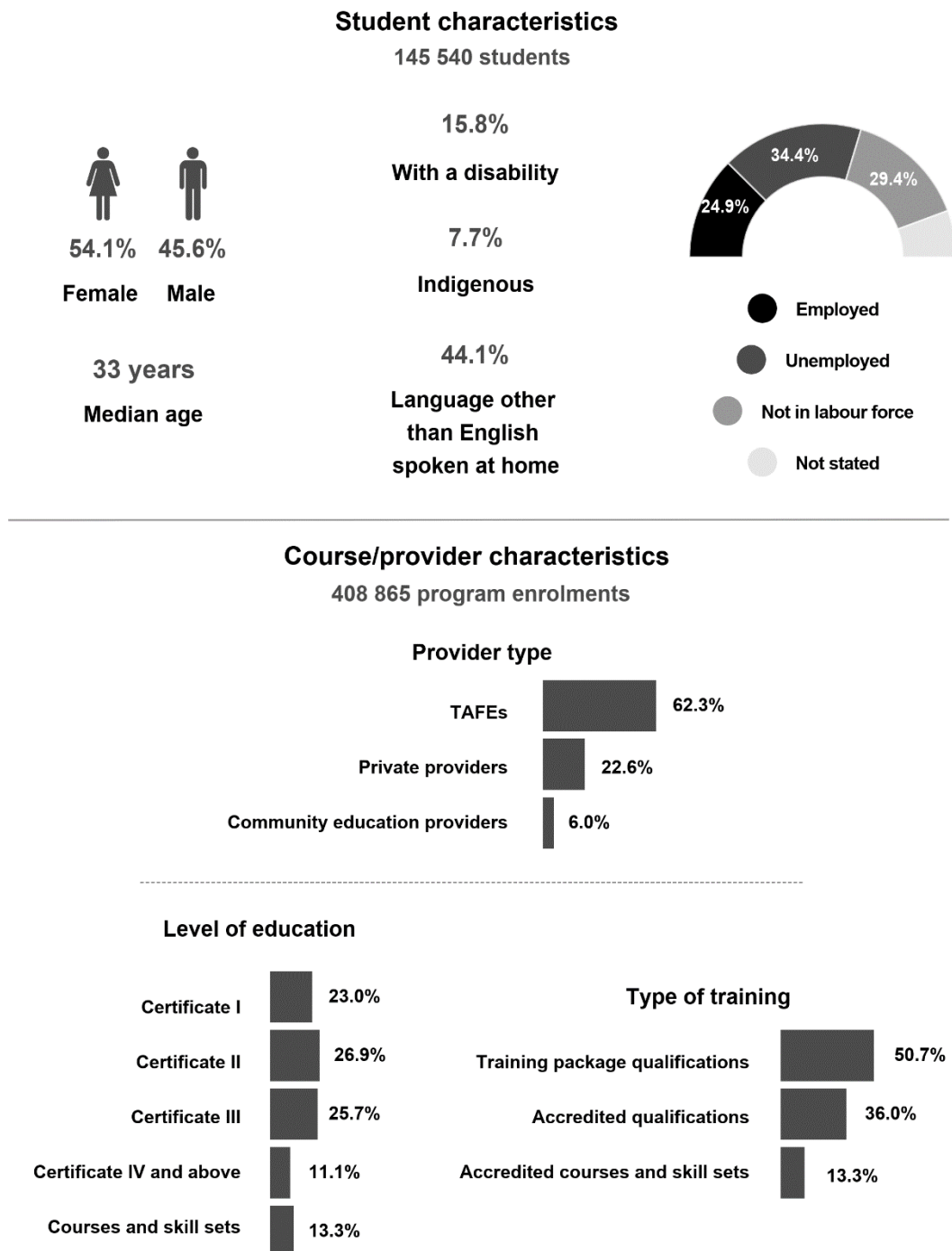


Figure 3 Key student, course, and provider characteristics for the 'Foundation skills only' learner group, based on 2016 enrolment status

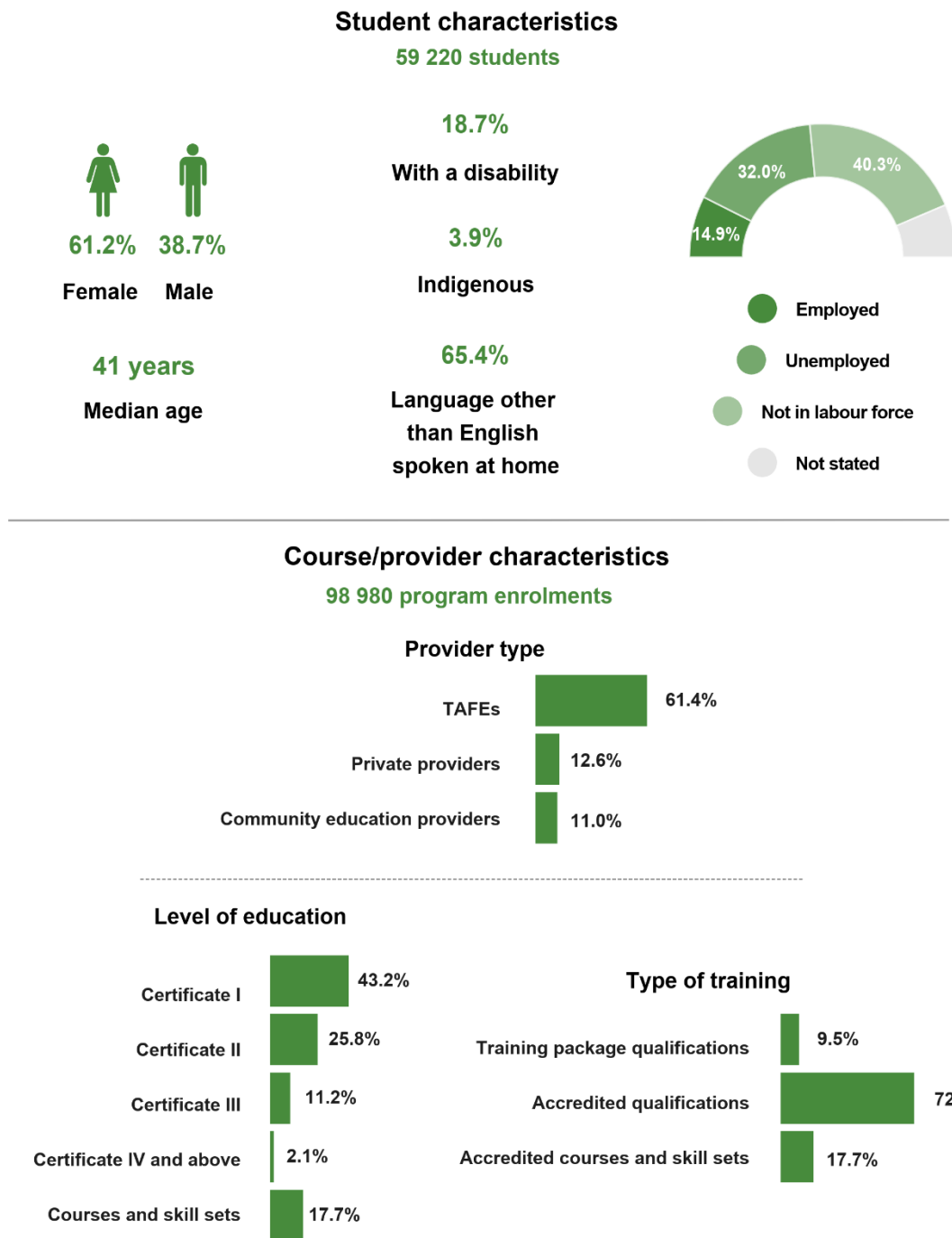


Figure 4 Key student, course, and provider characteristics for the 'Foundation skills followed by other VET' learner group, based on 2016 enrolment status

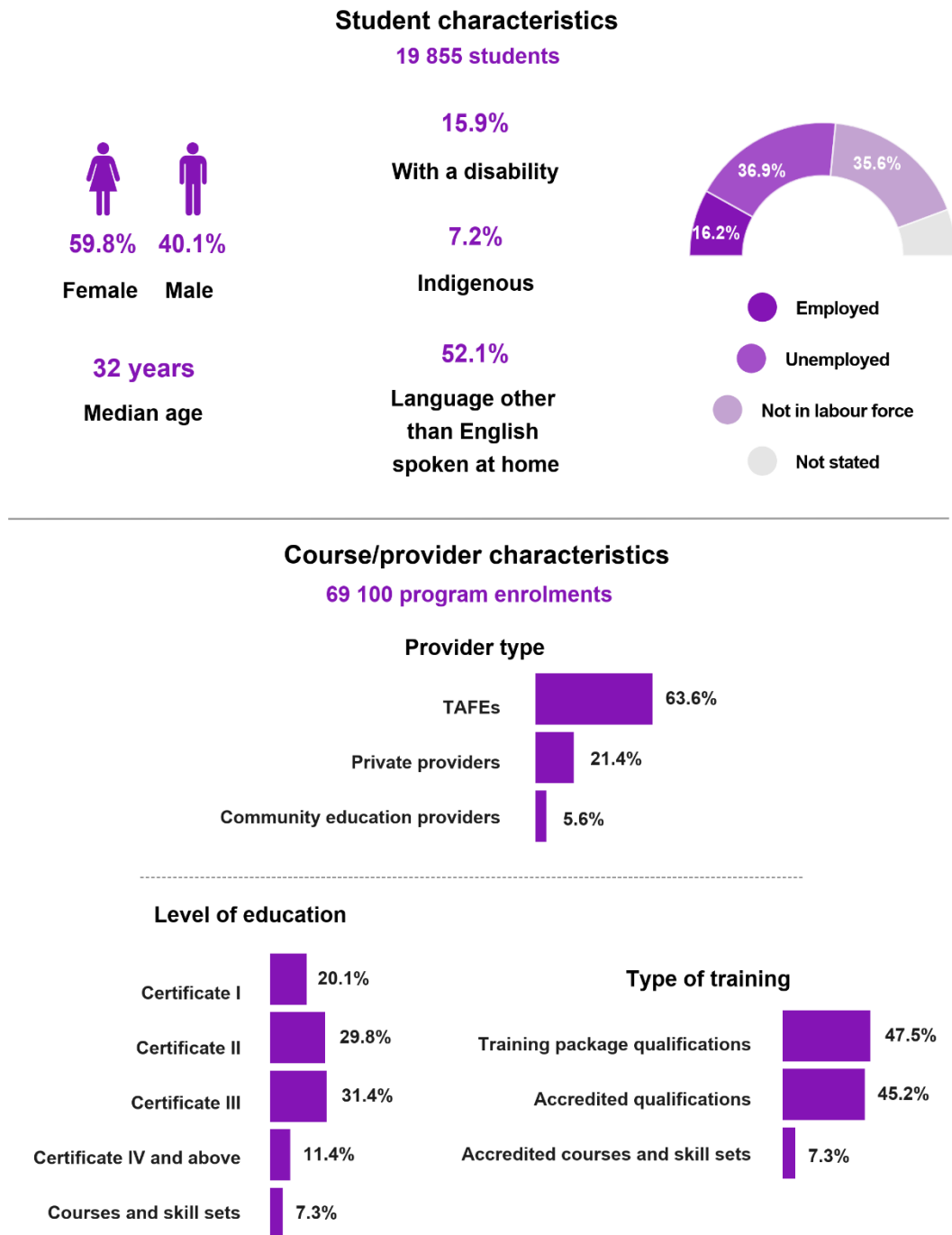


Figure 5 Key student, course, and provider characteristics for the 'Foundation skills and other VET concurrently' learner group, based on 2016 enrolment status

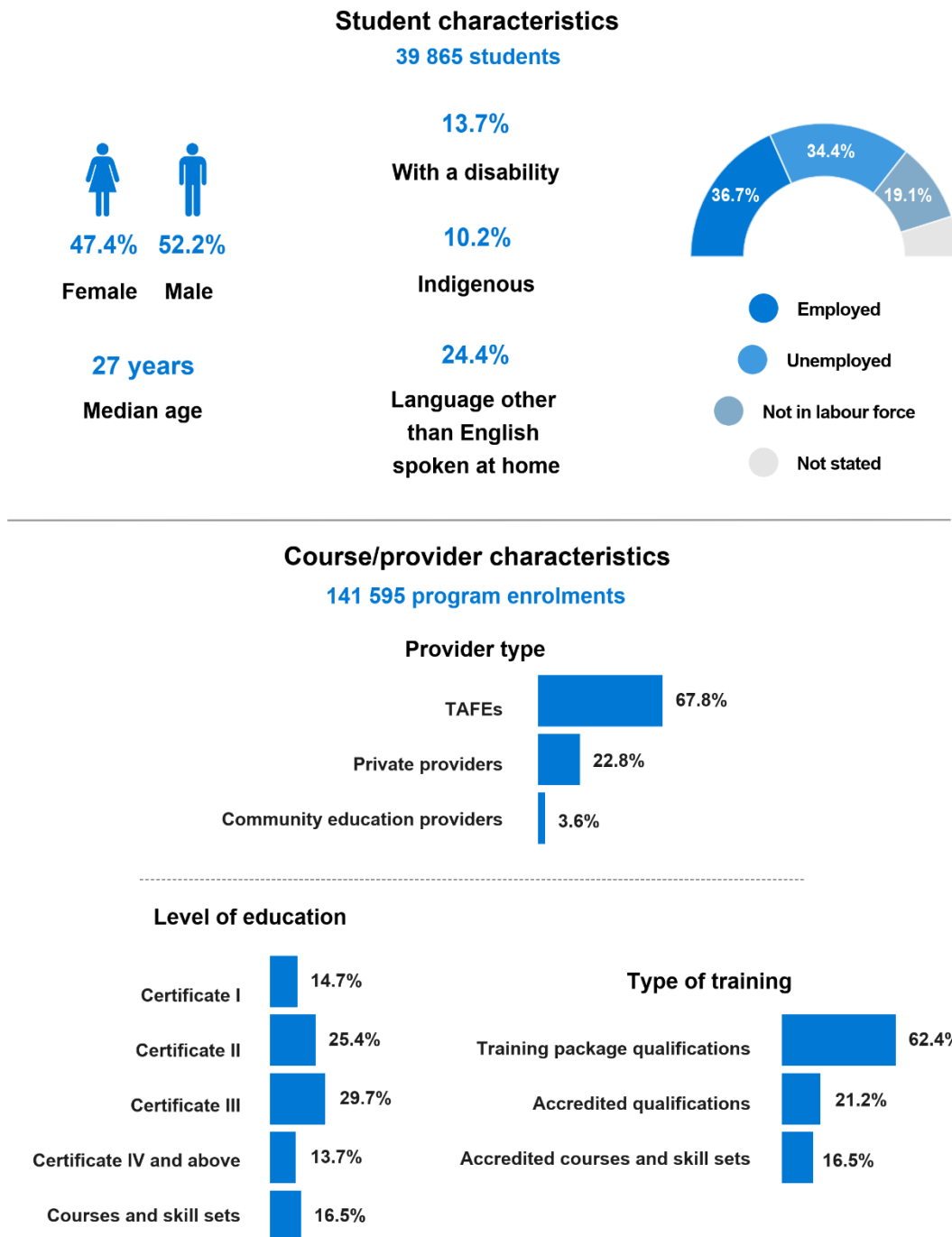
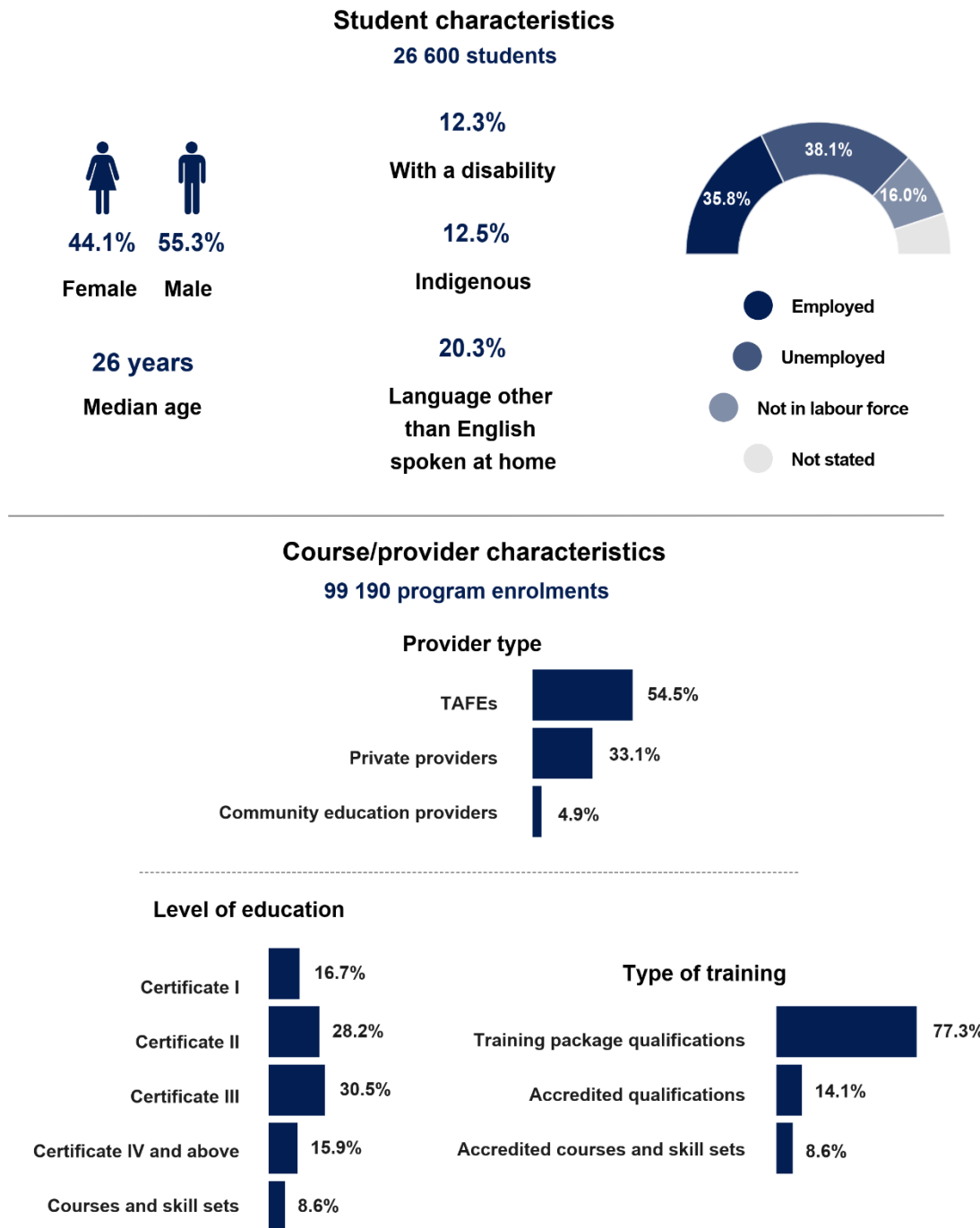


Figure 6 Key student, course, and provider characteristics for the 'Other VET followed by foundation skills' learner group, based on 2016 enrolment status



Figures 3 to 6 and tables B2 and B3 indicate distinct differences in the socio-demographic composition of these groups. We can see that the 'Foundation skills only' and the 'Foundation skills followed by other VET' groups are more similar, in terms of comprising a greater proportion of learners who are female, are 25 years or older, speak a language other than English at home, were born in a country other than Australia, live in a major city, and are not in the labour force.

The 'Foundation skills and other VET concurrently' and 'Other VET followed by foundation skills' groups also share similarities in their socio-demographic composition, having a greater proportion than the other two groups of learners who are male, are 24 years or younger, have English as the main language spoken at home, were born in Australia, identify as Indigenous, live in regional or remote areas, and are employed. These two learner groups also had higher proportions of learners who may have been enrolled as an apprentice or trainee at some point during the period 2016 to 2019: 21.3% of the 'Foundation skills and other VET concurrently' group and 23.5% of the 'Other VET followed by foundation skills' group were an apprentice or trainee at some point during the period of interest (table B2).

In terms of program and provider characteristics, the differences between the groups are minimal (see table B3), although there are a few exceptions:

- The majority of programs in which learners from all four groups were first enrolled were government-funded training, although a quarter of enrolments in 2016 within the 'Other VET followed by foundation skills' group were fee-for-service.
- Learners across the four groups were also most likely to be enrolled in programs provided by a TAFE institute, although 11% of those in the 'Foundation skills only' group were enrolled in programs provided by community education providers and a third of learners in the 'Other VET followed by foundation skills' group were enrolled in programs with private providers.
- Most of the learners were likely to have enrolled in accredited qualifications or training package qualifications, with the exception of learners in the 'Foundation skills only' group, who were more likely to have primarily enrolled in accredited qualifications (72.8%) and accredited courses (17.7%).
- The 'Foundation skills only' group also differed from the other three groups with respect to the level of their first enrolment, with approximately 70% enrolling in certificate I or II programs, almost 18% enrolling in accredited courses, and around 13% enrolling in certificate III or higher qualifications (table B3). Further, as shown in table B2, 60% of learners in this group were enrolled in only one program, with around 17% enrolling in three or more programs during the 2016–19 period. These findings contrast with the enrolment pattern by program level and number of enrolments for learners in the other three groups, where approximately 43%–46% of enrolments were at the certificate III and higher level (table B3), and at least two-thirds of learners in these groups had enrolled in three or more programs during the 2016–19 period (table B2).

As a final point of interest, the top five programs by enrolment numbers for each of the four groups are shown in table 5.

Table 5 Top 5 program enrolments for each of the foundation skills learner groups based on 2016 enrolment status

Group	LLND/employment skills programs	%	Other VET programs	%
Foundation skills only	10362NAT - Certificate I in Spoken and Written English	14.2	N/A	0
	10363NAT - Certificate II in Spoken and Written English	11.9		
	10364NAT - Certificate III in Spoken and Written English	8.6		
	10361NAT - Course in Preliminary Spoken and Written English	7.6		
	22250VIC - Certificate I in EAL (Access)	4.8		
Total program enrolments	98 985	100	0	0
Foundation skills followed by other VET	10364NAT - Certificate III in Spoken and Written English	13.1	CHC33015 - Certificate III in Individual Support	7.9
	10363NAT - Certificate II in Spoken and Written English	11.5	CHC30113 - Certificate III in Early Childhood Education and Care	5.1
	FSK20119 - Certificate II in Skills for Work and Vocational Pathways	6.9	BSB30120 - Certificate III in Business	4.4
	10362NAT - Certificate I in Spoken and Written English	6.6	CHC50113 - Diploma of Early Childhood Education and Care	2.4
	FSK10119 - Certificate I in Access to Vocational Pathways	3.6	BSB20120 - Certificate II in Workplace Skills	2.0
Total program enrolments	38 040	100	30 790	100
Foundation skills and other VET concurrently	52626WA - Course in Applied Vocational Study Skills (CAVSS)	16.5	CHC33015 - Certificate III in Individual Support	4.6
	FSK20119 - Certificate II in Skills for Work and Vocational Pathways	11.0	BSB30120 - Certificate III in Business	3.6
	39281QLD - Course in Core Skills for Employment and Training - Communication (Intermediate)	7.2	CHC30113 - Certificate III in Early Childhood Education and Care	3.0
	10364NAT - Certificate III in Spoken and Written English	5.2	UEE30820 - Certificate III in Electrotechnology Electrician	2.7
	FSK10119 - Certificate I in Access to Vocational Pathways	4.2	CPC10111 - Certificate I in Construction	2.3
Total program enrolments	57 760	100	83 515	100
Other VET followed by foundation skills	FSK20119 - Certificate II in Skills for Work and Vocational Pathways	27.1	BSB30120 - Certificate III in Business	4.1
	FSK10119 - Certificate I in Access to Vocational Pathways	10.0	CHC33015 - Certificate III in Individual Support	4.1
	52823WA - Course in Applied Vocational Study Skills (CAVSS)	9.0	UEE30820 - Certificate III in Electrotechnology Electrician	2.8
	FSK10219 - Certificate I in Skills for Vocational Pathways	6.8	CPC10111 - Certificate I in Construction	2.7
	52626WA - Course in Applied Vocational Study Skills (CAVSS)	4.4	CHC30113 - Certificate III in Early Childhood Education and Care	2.5
Total program enrolments	33 845	100	62 785	100

Program completion

After exploring the enrolment journeys of foundation skills learners, our attention now turns to program completions, where our interest lies in:

- What are the completion patterns of those who undertake foundation skills programs?
- Which socio-demographic characteristics of the student are associated with completing a nationally recognised VET program (LLND or employment skills or other VET)?

Completion patterns

For the four groups of learners who were tracked in the previous section, we identified which of their in-scope programs had recorded a completion outcome in the 2016 to 2019 analysis window. For each learner, we determined whether they had completed:

- at least one foundation skills program, but no other VET program
- at least one other VET program, but no foundation skills program
- at least one foundation skills program and at least one other VET program.

It is important to note that some learners may still have been actively enrolled in their programs in 2019 and that this analysis does not reflect the eventual completion status of each learner.

The patterns of completion for each of the four groups of interest are shown in table 6. Firstly, we note that approximately half (52.7%) of the total cohort had completed any nationally recognised LLND, employments skills or other VET program by the end of the period of analysis, in 2019.

Focusing now on our four groups, we can see that almost a third of the ‘Foundation skills only’ learners had completed a nationally recognised VET program within the 2016–19 period of analysis. This is notably less than the proportion of completers in the other three learner groups.

It is interesting to see that, for the ‘Foundation skills followed by other VET’ learners, 70% completed a nationally recognised VET program, with about 20% only completing a foundation skills program within the period of analysis.

A higher proportion of ‘Foundation skills and other VET concurrently’ and ‘Other VET followed by foundation skills’ learners had completed a VET program other than a foundation skills program than learners in the other two groups.

Table 6 Patterns of completion among foundation skills learners at the end of the 2016–19 period of analysis

	Learner group									
	Foundation skills only		Foundation skills followed by other VET		Foundation skills and other VET concurrently		Other VET followed by foundation skills		Total	
	%	n	%	n	%	n	%	n	%	n
Type of nationally recognised program completed:										
Foundation skills only	31.8	18 835	20.1	3 990	7.3	2 920	6.9	1 825	18.9	27 570
Foundation skills and other VET			26.7	5 295	17.1	6 815	12.1	3 255	10.5	15 340
Other VET only			22.9	4 545	44.1	17 580	44.0	11 700	23.2	33 825
Total	31.8	18 835	69.7	13 830	68.5	27 315	63.0	16 750	52.7	76 735

Note: The ‘Total’ column includes any VET program; that is, LLND or Employment skills or Other VET.

Characteristics of learners who complete a nationally recognised VET program (LLND or employment skills or other VET)

To understand the socio-demographic characteristics associated with completing one or more VET programs, we further investigated the completions data to examine the proportion of learners who had completed *any* of the LLND or employment skills or other VET programs in which they had enrolled by the following characteristics (based on each learner's first enrolment record):

- age
- gender
- disability status
- country of birth
- main language spoken at home
- socioeconomic status based on SEIFA
- remoteness of client's residential address
- highest prior educational achievement
- Indigenous status
- labour force status.

Table B4 provides the data from which there are a few trends to note:

- For all of the learner groups, a higher proportion of females than males complete any VET program.
- For all of the learner groups, the proportion of Indigenous learners who complete any program is lower than the proportion of non-Indigenous learners who complete any program.
- For all learner groups, with the exception of the 'Foundation skills only' group, approximately 70%–75% of learners born in countries other than Australia complete any program compared with around 60%–65% of learners born in Australia. Similarly, approximately 70%–75% of learners whose main language spoken at home *is not* English complete a program compared with approximately 62%–67% of learners who have English as their main language spoken at home.
- For all learner groups, with the exception of the 'Foundation skills only' group, the proportions of learners with disability who complete any program are similar to the proportion of learners without disability who complete any program. For the 'Foundation skills only' group, the proportion of learners with disability who complete is higher than the proportion of learners without disability who complete any program (41.7% vs 30.2%).
- Among the 'Foundation skills followed by other VET' group, a higher proportion of older learners (25 years and older) complete any VET program compared with learners 24 years or younger.
- For the 'Foundation skills and other VET concurrently' group and the 'Other VET followed by foundation skills' group, the proportion of employed or unemployed learners completing any program is higher than that of learners who are not in the labour force. This pattern does not hold for the other two groups.



What are the further study and employment outcomes for those who complete foundation skills programs?

Enrolling in an LLND or employment skills program is, of course, only part of the journey. How individuals fare following their training is of equal importance. As such, our interest here was:

- What are the further study and employment outcomes of those who undertook foundation skills training?

To answer this question, we created a linked total VET activity and National Student Outcomes dataset for 2019 qualification completers and part-completers. Propensity score weighting was applied to set up control or baseline student groups against which to compare the foundation skills learners. Propensity score weighting performs a balancing act to ensure that the distribution of the covariates (that is, student characteristics) are similar for the students enrolled in foundation skills programs by comparison with those who were not enrolled in these programs. By doing so, we are essentially removing the effect of observable confounders when estimating the effect of being enrolled in foundation skills programs on a particular student outcome. Further information about the rationale for using propensity score weighting and how it was done can be found in appendix B.

The National Student Outcomes Survey⁸ has five distinct groups, with these reflecting the training undertaken in the VET system. The groups are segmented by training type as follows:

- *Qualification completers* are students who completed a training package qualification or an accredited qualification.
- *Qualification part-completers* are students who enrolled in but only completed part of a training package qualification or an accredited qualification (and are no longer undertaking that training).
- *Short course completers* are students who completed a training package skill set or an accredited course.
- *Short course part-completers* are students who enrolled in but only completed part of a training package skill set or accredited course (and are no longer undertaking that training).
- *Subject(s) only completers* are students who completed one or more subjects not delivered as part of a nationally recognised program and who are no longer undertaking training in the VET sector.

For the purposes of our research, we focused on the first two of these groups: foundation skills qualification completers and part-completers. For a range of indicators relating to satisfaction with and benefits from the training, as well as employment and further study, we compared these two groups

Key points

- Foundation skills qualification completers and part-completers are significantly more likely to indicate that the training improved their writing and numerical skills.
- Foundation skills qualification completers have poorer employment outcomes compared with their non-foundation skills qualification completer peers.

8 Up until the 2020 survey year the Student Outcomes Survey included graduates (students who completed a qualification) and subject completers (student who completed at least one subject and left the VET system without a qualification). For further information see <<https://www.ncver.edu.au/research-and-statistics/collections/student-outcomes/vet-student-outcomes>>.

against their respective control group. Table 7 presents the outcomes for the learners who completed a full foundation skills qualification in 2019 compared with their control group, while table 8 presents the outcomes for the learners who partly completed a foundation skills qualification by 2019 compared with their control group.

As shown in table 7, foundation skills qualification completers had significantly poorer employment outcomes than their non-foundation skills counterparts. They were also significantly less likely to have achieved their main reason for training, or to recommend the training or their training provider to others compared with their non-foundation skills qualification completer peers. Yet, seemingly at odds with these results, the foundation skills qualification completers who were employed after training were significantly more likely to indicate than their non-foundation skills peers that they had found the training relevant to their current job. Foundation skills qualification completers were also significantly more likely to be enrolled in further study after training than their non-foundation skills peers.

Somewhat validating is that compared with their non-foundation skills qualification completer peers, foundation skills qualification completers were significantly more likely to indicate that the training had improved their writing and numerical skills (table 7).

Table 7 Outcomes of foundation skills qualification completers compared with their control group, 2019 (proportion +/- margin of error)

	Qualification	
	Foundation skills	Non-foundation skills
Employment and further study outcomes		
Employed or in further study after training	60.5 (0.5)	64.0 (1.3)
Not employed before training	72.2 (1.0)	71.3 (1.0)
Of these: Employed after training	13.7 (0.9)	23.4 (1.3)
After training (as at the end of May of the survey year)		
Employed	30.1 (1.0)	41.8 (1.2)
Not employed	69.9 (1.0)	58.2 (1.2)
Not employed, seeking employment (unemployed)	28.0 (1.0)	23.2 (1.0)
Not employed, not seeking employment (not in the labour force)	41.5 (1.1)	34.6 (1.4)
Employed before training	27.8 (1.0)	28.7 (1.0)
Of these: Employed at a higher skill level after training	5.1 (1.0)	9.7 (0.7)
Of these: Perceived job improvement after training	20.6 (1.8)	25.3 (1.5)
Employed in first full-time job, started after training	3.0 (na)	4.3 (0.3)
Improved employment status after training	23.6 (1.0)	32.7 (1.2)
Enrolled in further study after training	42.3 (1.1)	38.5 (1.2)
Studying at university	3.6 (1.1)	4.2 (0.3)
Studying at TAFE institute	29.8 (0.6)	26.1 (0.8)
Studying at a private training provider or community education provider	6.2 (1.3)	4.8 (0.3)
Studying at other provider	6.0 (0.7)	5.8 (0.4)
Training		
Main reason for undertaking the training		
Employment-related	46.3 (1.1)	43.1 (1.1)
Further study	19.3 (0.8)	20.6 (0.9)
Personal development	34.4 (1.0)	36.2 (1.4)
Satisfaction outcomes		
Developed problem-solving skills	82.2 (0.8)	81.7 (1.1)
Improved writing skills	74.7 (1.0)	54.9 (1.3)

	Qualification	
	Foundation skills	Non-foundation skills
Improved numerical skills	65.9 (1.1)	53.5 (1.3)
Satisfied with teaching	89.9 (0.7)	90.9 (0.8)
Satisfied with assessment	88.7 (0.7)	90.9 (1.0)
Satisfied with the overall quality of training	88.7 (0.7)	91.2 (0.8)
Achieved their main reason for doing the training	80.5 (0.9)	82.2 (0.9)
Recommendation		
Recommend training	44.5 (1.4)	49.5 (0.8)
Recommend training provider	46.3 (1.1)	53.3 (1.2)
Benefits of training		
Of those employed after training		
Found the training relevant to their current job	70.4 (2.0)	63.2 (1.7)
Received at least one job-related benefit	74.6 (1.9)	72.8 (1.5)
Total	6 120	151 185

Note: Grey shading indicates a statistically significant difference between the two groups at the 95% significance level, na = not applicable; refer to table B5 for the definitions and derivations of the data items.

Source: Student Outcomes Survey 2020.

As we can see in table 8, the employment and further study outcomes of foundation skills qualification part-completers were similar to those of their non-foundation skills counterparts, although they were significantly less likely to indicate that they were employed at a higher skill level after the training. Like foundation skills qualification completers, qualification part-completers were significantly more likely than their non-foundation skills part-completers to indicate that the training had improved their writing and numerical skills. Foundation skills qualification part-completers were also significantly more likely than their non-foundation skills peers to indicate that their main reason for not continuing with the training was because of personal reasons (table 8).

Table 8 Outcomes of foundation skills qualification *part-completers* compared with their control group, 2019 (proportion +/- margin of error)

	Qualification	
	Foundation skills	Non-foundation skills
Employment and further study outcomes		
Employed or in further study after training	52.7 (4.8)	57.4 (7.6)
Not employed before training	75.2 (4.3)	77.6 (4.5)
Of these: Employed after training	15.3 (4.1)	22.4 (7.6)
After training (as at the end of May of the survey year)		
Employed	30.7 (4.5)	36.0 (6.7)
Not employed	69.3 (4.5)	64.0 (6.7)
Not employed, seeking employment (unemployed)	31.5 (4.6)	29.4 (6.8)
Not employed, not seeking employment (not in the labour force)	37.4 (4.6)	34.0 (8.1)
Employed before training	24.8 (4.3)	22.4 (4.5)
Of these: Employed at a higher skill level after training	2.7 (1.8)	8.4 (3.9)
Of these: Perceived job improvement after training	19.7 (7.7)	18.6 (5.2)
Improved employment status after training	25.2 (4.5)	27.4 (6.2)
Enrolled in further study after training	30.6 (4.3)	30.3 (7.6)
Training		
Main reason for undertaking the training		
Employment-related	50.2 (4.7)	48.6 (7.3)
Further study	15.9 (3.2)	15.9 (5.6)
Personal development	33.9 (4.4)	35.5 (7.9)
Main reason for not continuing with the training		
Got what was wanted from the training	10.0 (4.0)	7.7 (3.4)
Change in job situation	13.5 (5.6)	16.6 (7.9)
Training-related reasons	28.8 (6.9)	36.5 (10.3)*
Personal reasons	39.6 (7.4)	24.2 (7.8)
Other reasons	8.1 (3.2)	15.0 (7.5)
Satisfaction outcomes		
Developed problem-solving skills	73.7 (4.3)	71.8 (7.0)
Improved writing skills	69.6 (4.5)	40.9 (7.8)
Improved numerical skills	60.2 (4.9)	41.3 (7.6)
Satisfied with teaching	83.4 (4.0)	80.8 (5.0)
Satisfied with assessment	82.7 (4.0)	80.1 (6.2)
Satisfied with the overall quality of training	78.9 (4.0)	79.0 (5.0)
Achieved their main reason for doing the training	71.2(4.3)	75.0 (5.2)
Recommendation		
Recommend training provider	39.0 (4.5)	41.2 (7.6)
Benefits of training		
Of those employed after training		
Found the training relevant to their current job	64.5 (8.9)	52.7 (10.4)*
Received at least one job-related benefit	78.6 (6.5)	68.0 (8.8)
Total (n)	1 098	14 760

Notes: Grey shading indicates a statistically significant difference between the two groups at the 95% significance level; * = the estimate has a margin of error greater than or equal to 10% and therefore should be used with caution; refer to table B5 for the definitions and derivations of the data items.

Source: Student Outcomes Survey 2020.

References

- ABS (Australian Bureau of Statistics) 2013a, *42280DO003_201112 Programme for the International Assessment of Adult Competencies, Australia, 2011–12*, tables 1, 7–8, viewed 16 May 2022, <<https://www.abs.gov.au/statistics/people/education/programme-international-assessment-adult-competencies-australia/latest-release#data-download>>.
- 2013b, *42280DO005_201112 Programme for the International Assessment of Adult Competencies, Australia, 2011–12*, tables 4–6, viewed 16 May 2022, <<https://www.abs.gov.au/statistics/people/education/programme-international-assessment-adult-competencies-australia/latest-release#data-download>>.
- 2016, *Census of Population and Housing: general community profile, Australia, 2016*, cat.no.2001.0, ABS, Canberra.
- Department of Prime Minister and Cabinet 2020, *Heads of Agreement for Skills Reform*, viewed 28 April 2022, <<https://www.pmc.gov.au/resource-centre/domestic-policy/heads-agreement-skills-reform>>.
- Balatti, J, Black, S & Falk, I 2006, *Reframing adult literacy and numeracy course outcomes: a social capital perspective*, NCVER, Adelaide.
- Clark, C & Dugdale, G 2008, *Literacy changes lives: the role of literacy in offending behaviour: a discussion piece*, National Literacy Trust, London, viewed 27 April 2022, <http://www.literacytrust.org.uk/assets/0000/0422/Literacy_changes_lives__prisons.pdf>.
- Earle, D 2010, *Labour market outcomes of skills and qualifications*, Tertiary education occasional paper, New Zealand, Ministry of Education, no.2010/05, MOE, Wellington, viewed 27 April 2022, <http://www.educationcounts.govt.nz/_data/assets/pdf_file/0006/73716/labour-market-outcomes.pdf>.
- O’Dwyer, L & Mihelic, N 2021, *Provision of foundation skills training by community education providers in regional Australia*, NCVER, Adelaide.
- OECD (Organisation for Economic Co-operation and Development) 2013, *Survey of adult skills – first results – Australia*, viewed 28 October 2021, <http://www.oecd.org/skills/piaac/Country%20note%20-%20Australia_final.pdf>.
- 2021, *OECD skills outlook 2021: learning for life*, OECD Publishing, Paris, viewed 30 May 2022, <<https://doi.org/10.1787/0ae365b4-en>>.
- Payton, A 2017, *Skilling for tomorrow*, NCVER, Adelaide.
- Schwerdt, G, Wiederhold, S, & Murray, T 2020, *Literacy and growth: new evidence from PIAAC*, PIAAC Gateway, Washington, DC, viewed 23 May 2022, <https://static1.squarespace.com/static/51bb74b8e4b0139570ddf020/t/5e41921d9b373537f6380dbf/1581355550744/2020_Schwerdt_Wiederhold_Murray_Literacy-and-Growth.pdf>.
- Shomos, A & Forbes, M 2014, *Literacy and numeracy skills and labour market outcomes in Australia*, Staff Working Paper, Productivity Commission, Canberra, viewed 23 May 2022, <<https://www.pc.gov.au/research/supporting/literacy-numeracy-skills>>.
- Skills Australia 2010, *Australian workforce futures: a national workforce development strategy*, Commonwealth of Australia, Canberra.



Appendix A

Secondary school students enrolled in foundation skills programs

Applying the scoping criteria outlined in table 1, we identified 44 405 unique secondary school students and 60 480 unique program enrolments in 120 LLND or employment skills programs. Program enrolments in Queensland (30 600) represented about half of all foundation skills program enrolments by secondary school students, while Western Australia had about 20% of program enrolments (13 295).

Over 90% (56 485) of foundation skills program enrolments by secondary school students were in LLND programs, with the Certificate II in Skills for Work and Vocational Pathways (15 435 enrolments) and the Certificates I/II in Information, Digital Media and Technology (9 725 and 9 070 respectively) making up around 60% of those program enrolments.

The Certificate I in Employment Pathways (970 enrolments), the Certificate II in Skills for Work and Training (545 enrolments) and the Certificate I in Work Education (505 enrolments) made up around 50% of the 3990 enrolments in employment skills programs.

Table A1 Enrolments in the in-scope LLND programs, 2016–19

Program ID	Program name	Enrolments
FSK20119	Certificate II in Skills for Work and Vocational Pathways	20 575
10363NAT	Certificate II in Spoken and Written English	18 605
10362NAT	Certificate I in Spoken and Written English	18 020
10364NAT	Certificate III in Spoken and Written English	17 330
52626WA	Course in Applied Vocational Study Skills (CAVSS)	11 455
FSK10119	Certificate I in Access to Vocational Pathways	9 665
10361NAT	Course in Preliminary Spoken and Written English	8 465
FSK10219	Certificate I in Skills for Vocational Pathways	6 535
22250VIC	Certificate I in EAL (Access)	6 155
22235VIC	Certificate I in General Education for Adults (Introductory)	5 580
ICT10115	Certificate I in Information, Digital Media and Technology	5 410
39281QLD	Course in Core Skills for Employment and Training - Communication (Intermediate)	4 960
52823WA	Course in Applied Vocational Study Skills (CAVSS)	4 260
22237VIC	Certificate II in General Education for Adults	4 055
ICT20115	Certificate II in Information, Digital Media and Technology	4 050
22251VIC	Certificate II in EAL (Access)	3 930
22236VIC	Certificate I in General Education for Adults	3 910
22259VIC	Course in EAL	2 750
39280QLD	Course in Core Skills for Employment and Training - Communication (Basic)	2 730
22301VIC	Certificate I in Transition Education	2 245
10365NAT	Certificate IV in Spoken and Written English - Further Studies	2 170
22234VIC	Course in Initial General Education for Adults	2 085
39282QLD	Certificate I in Core Skills for Employment and Training - Communication	1 980
22253VIC	Certificate III in EAL (Access)	1 980
10581NAT	Course in Vocational and Community Engagement	1 700
10853NAT	Certificate I in English Proficiency	1 460
22252VIC	Certificate II in EAL (Employment)	1 435
10080NAT	Certificate II in Routine English Language Skills	1 390
10727NAT	Certificate I in Spoken and Written English	1 370

Program ID	Program name	Enrolments
10079NAT	Certificate II in Foundation English Language Skills	1 265
22238VIC	Certificate III in General Education for Adults	1 155
10728NAT	Certificate II in Spoken and Written English	1 130
10854NAT	Certificate II in English Proficiency	1 095
10076NAT	Certificate II in Foundations for Vocational and Further Study	1 055
10078NAT_	Certificate I in Basic English Language Skills	1 045
39289QLD	Certificate II in Core Skills for Employment and Training - Numeracy	1 040
22484VIC	Certificate I in EAL (Access)	985
22476VIC	Certificate I in General Education for Adults (Introductory)	930
22485VIC	Certificate II in EAL (Access)	915
22258VIC	Certificate IV in EAL (Further Study)	900
10855NAT	Certificate III in English Proficiency	885
10729NAT	Certificate III in Spoken and Written English	820
10725NAT	Course in Preliminary Spoken and Written English	820
22472VIC	Certificate I in General Education for Adults	785
22257VIC	Certificate IV in EAL (Employment / Professional)	780
10290NAT	Certificate I in Skills for Education and Training Pathways	765
10366NAT	Certificate I in Access to Work and Training	740
22293VIC	Certificate I in Initial Adult Literacy and Numeracy	730
10588NAT	Certificate I in Fundamental English for Speakers of Other Languages	705
10366NAT	Certificate IV in Spoken and Written English - Employment	695
22483VIC	Course in EAL	660
10582NAT	Certificate I in Preparation for Work and Training	645
10584NAT	Certificate II in Career Preparation	645
39288QLD	Certificate I in Core Skills for Employment and Training - Numeracy	640
39279QLD	Course in Core Skills for Employment and Training - Communication (Preliminary)	585
10266NAT	Certificate II in Education and Skills Development	570
39286QLD	Course in Core Skills for Employment and Training - Numeracy (Basic)	555
22256VIC	Certificate IV in EAL (Access)	535
22486VIC	Certificate III in EAL (Access)	520
22473VIC	Certificate II in General Education for Adults	500
39287QLD	Course in Core Skills for Employment and Training Numeracy (Intermediate)	500
22294VIC	Course in Initial Adult Literacy and Numeracy	500
39283QLD	Certificate II in Core Skills for Employment and Training - Communication	455
22471VIC	Course in Initial General Education for Adults	450
10288NAT	Course in Skills to Develop Learning Pathways	440
10253NAT	Certificate II in Women's Education	435
10291NAT	Certificate II in Skills for Education, Training and Employment Pathways	420
52837WA	Certificate I in Entry to General Education (EGE)	335
10289NAT	Course in Skills to Access Learning Pathways	315
10077NAT	Certificate II in Skills for Work and Study	305
22217VIC	Certificate II in Mumgu-dhal tyama-tiyt	250
22488VIC	Certificate II in EAL (Employment)	205
22215VIC	Certificate I in Mumgu-dhal tyama-tiyt	195
39285QLD	Course in Core Skills for Employment and Training Numeracy (Preliminary)	145
22448VIC	Certificate II in Mumgu-dhal tyama-tiyt	135
22474VIC	Certificate III in General Education for Adults	125
10591NAT	Certificate II in Further Study Skills	120

Program ID	Program name	Enrolments
10730NAT	Certificate IV in Spoken and Written English for Further Study	115
22207VIC	Certificate I in Developing Independence	90
22492VIC	Certificate IV in EAL (Further Study)	85
22447VIC	Certificate I in Mumgu-dhal tyama-tiyt	70
91549NSW	Certificate I in Employability: Becoming a Worker	50
22487VIC	Certificate IV in EAL (Access)	45
10580NAT	Certificate II in Study Skills	40
52560WA	Certificate I in Leadership Development	35
10738NAT	Certificate II in Vocational Preparation for Women	35
22490VIC	Certificate IV in EAL (Employment / Professional)	35
22333VIC	Certificate I in Developing Independence	30
52562WA	Certificate II in Leadership Development	20
52696WA	Certificate I in Entry to General Education (EGE)	10
21250VIC	Certificate I in General Education for Adults	5
10563NAT	Certificate I in Work and Life Skills	5
21771VIC	Certificate I in General Education for Adults (Introductory)	5
21938VIC	Course in ESL	0
21774VIC	Certificate III in General Education for Adults	0
21772VIC	Certificate I in General Education for Adults	0
52665WA	Course in Underpinning Skills for Industry Qualifications	0
21773VIC	Certificate II in General Education for Adults	0
91345NSW	Certificate II in General And Vocational Education (Cgve)	0
40622SA	Certificate III in English Proficiency	0
40620SA	Certificate I in English Proficiency	0
10726NAT	Course in Spoken and Written English for Job Seeking	0
Total		207 390

Note: Enrolment counts have been rounded to the nearest 5, so '0' counts indicate fewer than 5 enrolments.
Source: National VET Provider Collection, 2016–19.

Table A2 Enrolments in the in-scope employment skills programs, 2016–19

Program ID	Program name	Enrolments
10093NAT	Course in Vocational and Community Engagement	4 205
10089NAT	Certificate II in Skills for Work and Training	2 900
10088NAT	Certificate I in Access to Work and Training	2 745
10087NAT	Certificate I in Access to Work and Training (Introductory)	2 475
22302VIC	Certificate I in Work Education	1 975
22280VIC	Certificate I in Employment Pathways	1 650
52769WA	Certificate I in Gaining Access to Training and Employment (GATE)	1 220
22128VIC	Certificate I in Work Education	1 060
22129VIC	Certificate I in Transition Education	620
52773WA	Certificate I in Leadership	480
52774WA	Certificate II in Leadership	475
52771WA	Certificate I in New Opportunities for Women (NOW)	350
52770WA	Certificate I in Wider Opportunities for Work (WOW)	320
52768WA	Course in Gaining Access to Training and Employment (GATE) (Introductory)	300
52524WA	Certificate I in Industrial Skills (Entry Level Training)	200
22481VIC	Certificate II in Work Education	95
52860WA	Certificate I in Industrial Skills (Entry Level Training)	70
CHC10108	Certificate I in Work Preparation (Community services)	40
52529WA	Certificate I in Gaining Access to Training and Employment (GATE)	30
52526WA	Certificate I in Wider Opportunities for Work (WOW)	20
10075NAT	Course in Workskills for Life	10
22012VIC	Certificate I in Vocational Preparation	0
Total		21 250

Note: Enrolment counts have been rounded to the nearest 5, so '0' counts indicate fewer than 5 enrolments.

Source: National VET Provider Collection, 2016–19.



Appendix B

Learner movements through the VET system

Table B1 Detail of movements of foundation skills learners based on enrolment status, 2016–19

TRACK	USI_count	Rounded	Initial	Final	Sankey id
LLND/EMP only	59219	59220	0	4	1
LLND/EMP, then LLND/EMP/OTHER	3340	3340	1	5	3
LLND/EMP, then LLND/EMP/OTHER, then LLND/EMP	922	920	1	4	2
LLND/EMP, then LLND/EMP/OTHER, then LLND/EMP, then LLND/EMP/OTHER	64	65	1	5	3
LLND/EMP, then LLND/EMP/OTHER, then LLND/EMP, then OTHER	71	70	1	6	4
LLND/EMP, then LLND/EMP/OTHER, then OTHER	2362	2360	1	6	4
LLND/EMP, then LLND/EMP/OTHER, then OTHER, then LLND/EMP	56	55	1	4	2
LLND/EMP, then LLND/EMP/OTHER, then OTHER, then LLND/EMP/OTHER	65	65	1	5	3
LLND/EMP, then OTHER	12118	12120	1	6	4
LLND/EMP, then OTHER, then LLND/EMP	391	390	1	4	2
LLND/EMP, then OTHER, then LLND/EMP, then LLND/EMP/OTHER	24	25	1	5	3
LLND/EMP, then OTHER, then LLND/EMP, then OTHER	25	25	1	6	4
LLND/EMP, then OTHER, then LLND/EMP/OTHER	314	315	1	5	3
LLND/EMP, then OTHER, then LLND/EMP/OTHER, then LLND/EMP	33	35	1	4	2
LLND/EMP, then OTHER, then LLND/EMP/OTHER, then OTHER	72	70	1	6	4
LLND/EMP/OTHER	15196	15195	2	5	6
LLND/EMP/OTHER, then LLND/EMP	2757	2755	2	4	5
LLND/EMP/OTHER, then LLND/EMP, then LLND/EMP/OTHER	225	225	2	5	6
LLND/EMP/OTHER, then LLND/EMP, then LLND/EMP/OTHER, then LLND/EMP	25	25	2	4	5
LLND/EMP/OTHER, then LLND/EMP, then LLND/EMP/OTHER, then OTHER	65	65	2	6	7
LLND/EMP/OTHER, then LLND/EMP, then OTHER	546	545	2	6	7
LLND/EMP/OTHER, then LLND/EMP, then OTHER, then LLND/EMP	13	15	2	4	5
LLND/EMP/OTHER, then LLND/EMP, then OTHER, then LLND/EMP/OTHER	15	15	2	5	6
LLND/EMP/OTHER, then OTHER	19784	19785	2	6	7
LLND/EMP/OTHER, then OTHER, then LLND/EMP	301	300	2	4	5

TRACK	USI_count	Rounded	Initial	Final	Sankey id
LLND/EMP/OTHER, then OTHER, then LLND/EMP, then LLND/EMP/OTHER	18	20	2	5	6
LLND/EMP/OTHER, then OTHER, then LLND/EMP, then OTHER	39	40	2	6	7
LLND/EMP/OTHER, then OTHER, then LLND/EMP/OTHER	626	625	2	5	6
LLND/EMP/OTHER, then OTHER, then LLND/EMP/OTHER, then LLND/EMP	35	35	2	4	5
LLND/EMP/OTHER, then OTHER, then LLND/EMP/OTHER, then OTHER	221	220	2	6	7
OTHER, then LLND/EMP	7511	7510	3	4	8
OTHER, then LLND/EMP, then LLND/EMP/OTHER	435	435	3	5	9
OTHER, then LLND/EMP, then LLND/EMP/OTHER, then LLND/EMP	22	20	3	4	8
OTHER, then LLND/EMP, then LLND/EMP/OTHER, then OTHER	90	90	3	6	10
OTHER, then LLND/EMP, then OTHER	1567	1565	3	6	10
OTHER, then LLND/EMP, then OTHER, then LLND/EMP	17	15	3	4	8
OTHER, then LLND/EMP, then OTHER, then LLND/EMP/OTHER	21	20	3	5	9
OTHER, then LLND/EMP/OTHER	9247	9245	3	5	9
OTHER, then LLND/EMP/OTHER, then LLND/EMP	842	840	3	4	8
OTHER, then LLND/EMP/OTHER, then LLND/EMP, then LLND/EMP/OTHER	55	55	3	5	9
OTHER, then LLND/EMP/OTHER, then LLND/EMP, then OTHER	86	85	3	6	10
OTHER, then LLND/EMP/OTHER, then OTHER	6554	6555	3	6	10
OTHER, then LLND/EMP/OTHER, then OTHER, then LLND/EMP	40	40	3	4	8
OTHER, then LLND/EMP/OTHER, then OTHER, then LLND/EMP/OTHER	111	110	3	5	9

Note: The key for interpreting this table follows.

Key to reading table B1

Node label	Node	Node level
LLND/EMP (only)	0	Initial
LLND/EMP	1	Initial
LLND/EMP/OTHER	2	Initial
OTHER	3	Initial
LLND/EMP	4	Final
LLND/EMP/OTHER	5	Final
OTHER	6	Final

Initial	Final	Sankey id
0	4	1
1	4	2
1	5	3
1	6	4
2	4	5
2	5	6
2	6	7
3	4	8
3	5	9
3	6	10

Table B2 Socio-demographic characteristics of foundation skills learners in each of the four learner groups, based on the learner's first enrolment record

		Foundation skills only		Foundation skills followed by other VET		Foundation skills and other VET concurrently		Other VET followed by foundation skills		Total	
		%	n	%	n	%	n	%	n	%	n
Gender	Female	61.2	36 244	59.8	11 867	47.4	18 882	44.1	11 738	54.1	78 731
	Male	38.7	22 898	40.1	7 954	52.2	20 824	55.3	14 705	45.6	66 381
	Not stated/Unknown	0.1	77	0.2	36	0.4	160	0.6	155	0.3	428
Age	15–19*	6.5	3 855	18.2	3 610	25.1	10 025	24.2	6 435	16.4	23 925
	20–24	8.9	5 250	13.9	2 755	18.9	7 535	22.0	5 840	14.7	21 380
	25–44	42.7	25 270	47.5	9 425	39.3	15 650	38.6	10 275	41.7	60 620
	45+ years old	42.0	24 845	20.5	4 065	16.7	6 650	15.2	4 040	27.2	39 600
	Not stated/Unknown	0.0	0	0.0	0	0.0	5	0.0	10	0.0	15
Country of birth	Australia	25.2	14 930	38.6	7 660	63.6	25 340	70.3	18 705	45.8	66 635
	Other	69.6	41 235	57.7	11 460	32.2	12 850	25.9	6 895	49.8	72 440
	Not stated/Unknown	5.2	3 055	3.7	735	4.2	1 675	3.8	1 000	4.4	6 465
Main language spoken at home	English	27.5	16 295	41.6	8 265	68.2	27 180	69.6	18 525	48.3	70 260
	Other	65.4	38 740	52.1	10 345	24.4	9 735	20.3	5 400	44.1	64 215
	Not stated/Unknown	7.1	4 185	6.3	1 250	7.4	2 955	10.1	2 675	7.6	11 065
Indigenous	Yes	3.9	2 340	7.2	1 435	10.2	4 050	12.5	3 335	7.7	11 160
	No	93.2	55 205	89.4	17 755	84.1	33 545	81.4	21 650	88.1	128 150
	Not stated/Unknown	2.8	1 675	3.4	665	5.7	2 270	6.1	1 615	4.3	6 230
Disability	Yes	18.7	11 095	15.9	3 155	13.7	5 465	12.3	3 280	15.8	23 000
	No	68.9	40 810	70.5	13 995	72.9	29 055	78.1	20 770	71.9	104 635
	Not stated/Unknown	12.4	7 315	13.6	2 705	13.4	5 340	9.6	2 545	12.3	17 910
Remoteness	Major cities	78.5	46 510	72.2	14 335	60.1	23 970	63.7	16 950	69.9	101 760
	Regional/remote areas	19.9	11 760	26.3	5 215	38.3	15 275	34.7	9 230	28.5	41 480
	Overseas/No usual address	0.8	495	0.7	140	0.7	290	0.9	250	0.8	1 175
	Not stated/Unknown	0.8	450	0.8	165	0.8	335	0.6	170	0.8	1 120
SEIFA (IRSD) [†]	1 Most disadvantaged	31.5	18 635	32.6	6 480	29.8	11 895	31.0	8 250	31.1	45 255
	2	19.1	11 285	19.9	3 940	20.6	8 230	21.8	5 800	20.1	29 260
	3	17.8	10 535	19.1	3 795	20.3	8 095	19.5	5 175	19.0	27 600
	4	16.3	9 645	15.0	2 985	16.2	6 475	16.0	4 255	16.0	23 360

		Foundation skills only		Foundation skills followed by other VET		Foundation skills and other VET concurrently		Other VET followed by foundation skills		Total	
		%	n	%	n	%	n	%	n	%	n
Previous highest educational level	5 Least disadvantaged	13.6	8 035	11.6	2 305	11.4	4 540	10.1	2 700	12.1	17 580
	Unknown	1.8	1 080	1.8	350	1.6	635	1.6	420	1.7	2 485
	Did not go to school	7.8	4 635	3.5	695	0.9	340	0.6	165	4.0	5 840
	Year 9/10/11	33.5	19 835	34.9	6 930	30.2	12 045	32.7	8 685	32.6	47 490
	Year 12	29.2	17 285	28.1	5 585	28.9	11 510	28.9	7 695	28.9	42 070
	Certificate I to IV	9.1	5 385	12.9	2 565	22.6	9 000	21.6	5 730	15.6	22 680
	Diploma and above	9.5	5 620	12.2	2 425	9.9	3 945	8.6	2 280	9.8	14 270
Labour force status	Not stated/Unknown	10.9	6 465	8.3	1 655	7.6	3 025	7.7	2 040	9.1	13 185
	Employed	14.9	8 820	16.2	3 215	36.7	14 640	35.8	9 515	24.9	36 190
	Not employed, seeking employment (unemployed)	32.0	18 920	36.9	7 320	34.4	13 700	38.1	10 140	34.4	50 080
	Not employed, not seeking employment (not in the labour force)	40.3	23 890	35.6	7 075	19.1	7 605	16.0	4 245	29.4	42 815
Number of enrolments per learner	Not stated/Unknown	12.8	7 590	11.3	2 245	9.8	3 920	10.1	2 700	11.3	16 455
	1	60.0	35 505	0.0	0	0.0	0	0.0	0	24.4	35 505
	2	23.4	13 875	32.6	6 465	31.0	12 350	21.6	5 735	26.4	38 245
Apprentice or trainee [‡]	3 or more	16.6	9 840	67.4	13 390	69.0	27 515	78.4	20 865	49.2	71 610
	Yes	0.0	15	8.2	1 625	21.3	8 490	23.5	6 255	11.3	16 385
	No	100.0	59 200	91.8	18 230	78.7	31 375	76.5	20 345	88.7	129 155
Total			59 220		19 855		39 865		26 600		145 540

Note: Counts have been rounded to the nearest 5 therefore percentages may add to more than 100%. * The category 15–19 includes those aged less than 15 years (less than 1%); † Socio-economic Indexes for Areas (Index of Relative Socio-economic Disadvantage); ‡ The learner could have been an apprentice or trainee at any point during the 2016–19 period.

Table B3 Program and provider characteristics of foundation skills learners in each of the four learner groups, based on the learner's first enrolment record in 2016

		Foundation skills only		Foundation skills followed by other VET		Foundation skills and other VET concurrently		Other VET followed by foundation skills		Total	
		%	n	%	n	%	n	%	n	%	n
Provider type	TAFE institute	61.4	60 765	63.6	43 950	67.8	96 015	54.5	54 030	62.3	254 760
	University	5.5	5 445	4.9	3 375	2.6	3 670	2.3	2 325	3.6	14 815
	Community education provider	11.0	10 845	5.6	3 890	3.6	5 095	4.9	4 870	6.0	24 695
	Enterprise provider	0.6	605	0.9	605	1.5	2 135	3.6	3 585	1.7	6 935
	Other training provider	8.9	8 835	3.6	2 515	1.6	2 330	1.6	1 590	3.7	15 270
	Private provider	12.6	12 490	21.4	14 765	22.8	32 350	33.1	32 785	22.6	92 390
Type of training	Accredited courses	17.7	17 565	6.1	4 215	15.1	21 390	7.1	7 050	12.3	50 220
	Accredited qualifications	72.8	72 040	45.2	31 260	21.2	29 955	14.1	13 940	36.0	147 195
	Training package qualifications	9.5	9 375	47.5	32 800	62.4	88 305	77.3	76 690	50.7	207 170
	Training package skill sets	0.0	0	1.2	820	1.4	1 945	1.5	1 510	1.0	4 275
Funding source	Fee-for-service	10.5	10 405	17.1	11 805	14.9	21 120	25.2	24 970	16.7	68 300
	Government-funded	89.5	88 575	82.9	57 295	85.1	120 475	74.8	74 220	83.3	340 560
Program level	Certificate I	43.2	42 755	20.1	13 890	14.7	20 750	16.7	16 600	23.0	93 990
	Certificate II	25.8	25 510	29.8	20 615	25.4	35 995	28.2	27 955	26.9	110 070
	Certificate III	11.2	11 040	31.4	21 680	29.7	42 090	30.5	30 290	25.7	105 095
	Certificate IV	2.1	2 120	8.1	5 570	8.1	11 415	7.7	7 590	6.5	26 690
	Diploma or higher	0.0	0	3.3	2 310	5.7	8 015	8.3	8 195	4.5	18 520
	Other*	17.7	17 565	7.3	5 035	16.5	23 335	8.6	8 560	13.3	54 495
Total (n)		98 980		69 100		141 595		99 190		408 865	

Note: Counts have been rounded to the nearest 5 therefore percentages may add to more than 100%. *Other refers only to accredited courses for the 'Foundation skills only' group, and to accredited courses and other accredited programs for the other groups.

Characteristics of learners who complete a nationally recognised VET program (LLND or employment skills or other VET)

Table B4 Proportion of foundation skills learners in each of the four groups who have completed any nationally recognised VET program (LLND or employment skills or other VET) within the 2016–19 period of analysis by socio-demographic characteristic

		Foundation skills only		Foundation skills followed by other VET		Foundation skills and other VET concurrently		Other VET followed by foundation skills		Total	
		%	n	%	n	%	n	%	n	%	n
Gender	Female	33.7	12 210	75.3	8 935	73.7	13 915	68.7	8 065	54.8	43 125
	Male	28.9	6 610	61.2	4 870	63.8	13 290	58.4	8 590	50.3	33 360
	Not specified	20.8	15	66.7	25	69.4	110	63.2	100	58.2	250
Age	Under 15	34.8	15	63.2	25	76.9	10	81.6	30	60.0	80
	15–19	38.0	1 445	66.7	2 385	71.2	7 125	66.8	4 275	64.0	15 230
	20–24	34.1	1 790	66.2	1 820	69.5	5 240	63.3	3 695	58.7	12 550
	25–44	30.0	7 570	70.1	6 610	66.6	10 420	59.3	6 085	50.6	30 690
	45+ years old	32.2	8 010	73.6	2 990	68.0	4 520	65.6	2 650	45.9	18 170
	Not stated/Unknown	50.0	0	0.0	0	85.7	5	87.5	5	82.4	15
Country of birth	Australia	39.8	5 935	60.6	4 645	65.8	16 680	60.5	11 325	57.9	38 580
	Other	29.4	12 115	75.5	8 660	73.2	9 410	69.6	4 795	48.3	34 980
	Not stated/Unknown	25.7	785	72.3	530	73.4	1 230	63.1	630	49.1	3 175
Main language spoken at home	English	39.7	6 450	62.7	5 170	66.9	17 855	61.5	11 315	58.7	41 220
	Other	28.9	11 205	75.0	7 775	72.0	7 300	67.7	3 695	46.1	29 605
	Not stated/Unknown	28.3	1 180	71.2	885	71.2	2 165	63.5	1 740	53.4	5 910
Indigenous	Yes	28.2	660	50.9	730	57.4	2 325	52.9	1 765	49.1	5 480
	No	32.2	17 770	71.2	12 650	69.6	23 330	64.5	13 960	52.8	67 715
	Not stated/Unknown	24.2	405	67.7	450	73.0	1 660	63.3	1 025	56.8	3 540
Disability	Yes	41.7	4 630	68.2	2 155	66.7	3 645	60.5	1 985	54.0	12 410
	No	30.2	12 310	69.6	9 735	68.1	19 780	62.9	13 065	52.5	54 890
	Not stated/Unknown	25.9	1 895	71.8	1 940	72.9	3 895	66.7	1 700	52.7	9 430
Remoteness	Major cities	31.6	14 705	72.4	10 380	70.4	16 865	64.2	10 875	51.9	52 825
	Regional/remote areas	32.9	3 870	62.6	3 265	66.2	10 115	61.3	5 655	55.2	22 910
	Overseas/No usual address	29.0	145	52.1	75	41.7	120	44.8	110	38.2	450
	Not stated/Unknown	25.7	115	66.5	110	64.5	215	63.7	105	49.0	550

		Foundation skills only		Foundation skills followed by other VET		Foundation skills and other VET concurrently		Other VET followed by foundation skills		Total	
		%	n	%	n	%	n	%	n	%	n
SEIFA (IRSD) [†]	1 Most disadvantaged	31.2	5 810	68.8	4 455	66.6	7 920	62.6	5 165	51.6	23 350
	2	32.6	3 680	70.0	2 760	69.5	5 725	61.0	3 535	53.7	15 700
	3	33.4	3 520	69.0	2 620	69.8	5 650	64.6	3 345	54.8	15 130
	4	31.2	3 015	72.2	2 155	72.4	4 685	65.6	2 790	54.1	12 645
	5 Least disadvantaged	31.8	2 550	71.1	1 640	66.0	2 995	62.7	1 690	50.5	8 880
	Unknown	24.3	265	57.8	205	53.5	340	52.6	220	41.3	1 025
Previous highest educational level	Did not go to school	18.8	870	62.0	430	48.8	165	52.1	85	26.6	1 555
	Year 9/10/11	30.9	6 130	62.3	4 315	59.8	7 200	54.3	4 715	47.1	22 360
	Year 12	33.9	5 855	74.5	4 160	71.9	8 280	68.1	5 240	55.9	23 535
	Certificate I to IV	39.4	2 120	69.7	1 785	72.6	6 530	65.9	3 780	62.7	14 220
	Diploma and above	37.9	2 130	80.5	1 955	76.2	3 005	74.5	1 700	61.6	8 795
	Not stated/Unknown	26.7	1 725	71.4	1 185	70.5	2 135	60.1	1 225	47.5	6 270
Labour force status	Employed	33.9	2 985	68.7	2 210	71.3	10 430	66.4	6 320	60.6	21 945
	Not employed, seeking employment (unemployed)	33.9	6 410	69.7	5 100	71.7	9 820	65.5	6 635	55.8	27 965
	Not employed, not seeking employment (not in the labour force)	31.0	7 400	70.4	4 980	56.2	4 275	48.1	2 045	43.7	18 695
	Not stated/Unknown	26.9	2 040	68.8	1 545	71.2	2 790	64.9	1 750	49.4	8 130

Notes: Counts have been rounded to the nearest 5, so '0' counts indicate fewer than 5 enrolments; * includes those fewer than 15 (less than 1%); [†] Socio-economic Indexes for Areas (Index of Relative Socio-economic Disadvantage). The total includes any VET program, i.e. LLND or Employment skills or Other VET.

Student Outcomes Survey data: propensity score weighting

Propensity score weighting is one simple technique that can be used to control for selection biases in non-random studies. In our context, the objective of this technique is to estimate the causal effect of those students enrolled in foundation skills programs during 2019 on a number of survey variables.

Without randomisation of groups, an imbalance of covariate attributes is likely to occur. Propensity score weighting performs a balancing act to ensure that the distribution of covariates (that is, student characteristics) is similar for the students enrolled in foundation skills programs by comparison with those who were not enrolled in foundation skills programs. By doing so, we are essentially removing the effect of observable confounders when estimating the effect of being enrolled in foundation skills programs on a particular student outcome.

With propensity scores weighting, balancing weights (also known propensity scores) can be applied to the existing survey weights to account for differences between these two groups.

In performing the propensity scores weighting technique, the data processing stage adopted was as follows:

- analyses of the demographics attributes of those students enrolled in foundation skills programs versus those who were not enrolled in foundation skills programs before performing the propensity scores weighting technique.
- identification of the key covariate attributes that are likely to cause the imbalance in the profiles among these two student groups. The potential list of identified attributes was:
 - student demographics: age, disability status, gender, Indigenous status, employment status before training, client SEIFA and remoteness status, client state of residence
 - course attributes: program qualification level, program funding source, whether the program is part of an apprenticeship and/or traineeship
 - student's main reason for study.

There is no right answer to the right number of attributes (variables) to fit into the modelling. In considering the modelling performance, as well as to avoid biased selections based on certain demographics and student segments, a high number of variables is generally preferred.

- propensity score estimation.
- weight estimation using propensity scores.

Student Outcomes Survey data: definitions and derivations

Table B5 Student Outcomes Survey data items: definitions and derivations

Data items	Definitions and derivations
Employment and further study outcomes	'Improved employment status after training' is defined as either employment status changing from not employed before training to employed after training or employed at a higher skill level after training or received a job-related benefit. An individual may have reported a positive response to more than one measure contributing to improved employment status after training.
	'Employed at a higher skill level' is based on those employed before training who are employed in an occupation with a higher skill level after training, by comparison with their occupation before training. The base includes those not employed after training.
	'Perceived job improvement after training' is based on those employed before training, who reported they are employed in a better job/role than their previous job/role.
Satisfaction outcomes	The percentage of students satisfied with various aspects of their training and the training provider is based on the proportion of respondents reporting that they are 'Very satisfied' or 'Satisfied' with the relevant questionnaire item.
	The percentage of students who developed problem-solving skills, improved writing skills and improved numerical skills is based on the proportion of respondents reporting that they 'Strongly agree' or 'Agree' with the relevant questionnaire item.
	'Achieved main reason for training' is based on the proportion of respondents reporting that the training 'fully' or 'partly' helped them to achieve their main reason for training.
Recommendation	The percentage of students who would recommend their training provider is based on the proportion of respondents reporting 'Very likely' or 'Likely' with the relevant questionnaire item.
Benefits of training	Job-related benefits are based on those employed after training, who reported receiving a job-related benefit from the training, including: set up or expanded their own business, got a promotion, increased earnings, or other job-related benefits. From 2019, a new category was included for 'gained extra skills for my job'.



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