



National Student Outcomes Survey 2021: technical notes

National Centre for Vocational
Education Research

This document was produced as an added resource for further information on *VET student outcomes 2021*. The publication is available on the NCVER Portal: <<http://www.ncver.edu.au>>.

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Introduction

VET student outcomes 2021 provides a summary of the outcomes of students who completed nationally recognised vocational education and training (VET) delivered by registered training organisations (RTOs) in Australia during 2020 using data collected in 2021. The figures are derived from the National Student Outcomes Survey, which is an annual survey of VET students. The National Student Outcomes Survey collects information on VET students' reasons for training and their employment outcomes, satisfaction with training and further study outcomes.

This document details the National Student Outcomes Survey data that were used to derive the *VET student outcomes 2021* publication and related tools and products.

Survey scope

The 2021 National Student Outcomes Survey was designed to report on the outcomes of students who undertook nationally recognised VET delivered by RTOs. Students are considered in scope of the 2021 survey if:

- they were enrolled and had some contact hours in 2020
- they completed at least one subject during 2020
- they were 15 years of age or older at 28 May 2021.

Out of scope of the survey are:

- students who undertook recreational, leisure or personal enrichment courses
- students under 15 years of age
- students from correctional facilities.

International onshore VET qualification completers were included as an additional component of the 2021 National Student Outcomes Survey and are reported separately in *International onshore VET qualification completer outcomes*. For this reason, the international survey component is not covered in this document. For further information on the international survey component, refer to the *International onshore qualification completer outcomes* publication page at: <<https://www.ncver.edu.au/research-and-statistics/collection/student-outcomes/international-onshore-vet-qualification-completer-outcomes>>.

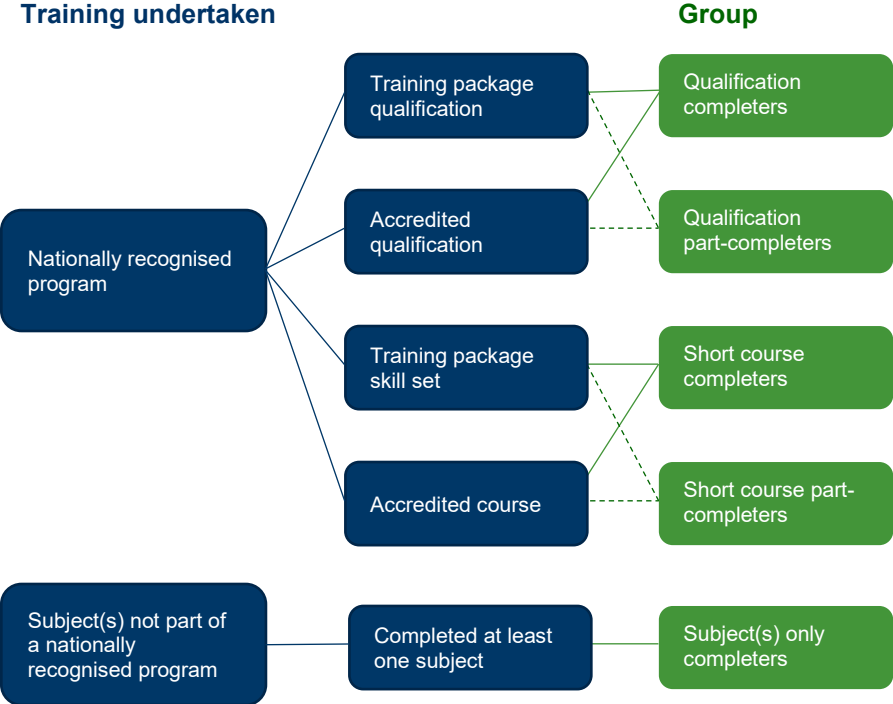
Student group

Historically the National Student Outcomes Survey included qualification completers (students who completed a qualification) and subject completers (students who completed at least one subject and left

the VET system without obtaining a qualification).¹ To better reflect the training undertaken in the VET system (figure 1), the number of groups surveyed from 2020 has expanded to cover:

- Qualification completers (previously known as graduates, no definition change to this group): students who completed a training package qualification or an accredited qualification.
- Qualification part-completers: 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: students who completed a training package skill set or an accredited course.
- Short course part-completers: 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: students who completed one or more subjects not delivered as part of a nationally recognised program² and who are no longer undertaking training in the VET sector.

Figure 1 Group definitions, National Student Outcomes Survey 2021



Due to lags in reporting, it is not possible to identify from the sampling frame ‘actual’ qualification part-completers and ‘actual’ short course part-completers; that is, those students who have successfully completed part of a qualification or short course *and are no longer undertaking that training*. Instead, samples were drawn for *potential* part-completers, which included students continuing in the training. The final status of respondents is determined through the survey responses. Similarly, it is not possible to identify from the sampling frame ‘actual’ subject(s) only completers; that is, those students who

1 Refer to attachment A: history of the survey.

2 Subjects not delivered as part of a nationally recognised program include stand-alone nationally recognised subject enrolments and enrolments in nationally recognised subjects that are delivered as part of a non-nationally recognised program.

completed one or more subjects and who are no longer undertaking training in the VET sector. The final status of these respondents is determined through survey responses. For further information, refer to the *Classification by student type* in the *Estimation* section of this document.

Questionnaire design

The 2021 National Student Outcomes Survey collected data on students’:

- main reason for training and whether they achieved that reason
- employment characteristics before and after training
- further study activity
- opinions of, and satisfaction with, the training and training provider
- the main reason for not continuing with the training (applicable to qualification part-completers and short course part-completers)
- impact of the COVID-19 pandemic on training (new in 2021)
- suggestions for improvement.

The 2021 questionnaire suite was designed to ensure students received only questions relevant to them. The questionnaires included:

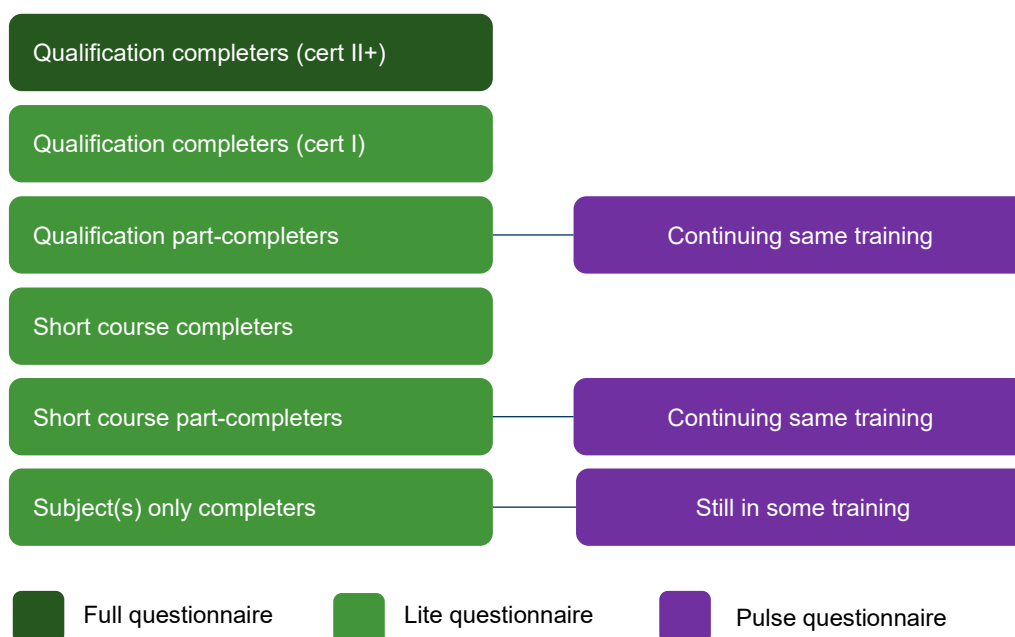
- pulse questionnaire for continuing students (approximately 2 minutes)
- short questionnaire, referred to as the ‘lite’ questionnaire (approximately 5 minutes)
- full questionnaire (approximately 10 minutes).

In 2021, qualification completers received either a full or lite questionnaire depending on the qualification they completed. Those who completed a certificate I received the lite questionnaire and those who completed a certificate II or above received the full questionnaire (figure 2). Those initially identified as part-completers who indicated through the survey they were continuing in that training received the pulse questionnaire, as did subject(s) only completers indicating through the survey they were doing further VET training. All other student groups received the lite questionnaire.

One state training authority (STA) contracted NCVET to include additional questions for the students whose training was funded by their organisation.

Figure 2 Questionnaires received by group, National Student Outcomes Survey 2021

Groups surveyed



Because most groups did not receive the full questionnaire, the following measures are available only for certificate II and above qualification completers, as the questions used to derive these measures were only asked in the longer questionnaire:

- recommend the training
- training provider type of further study
- employed in first full-time job, started after training
- median income after training
- industry of employment after training
- basis of employment before and after training
- labour force status before training
- personal benefits of undertaking training.

Information on students was also obtained from the 2020 National VET Provider Collection and 2020 National VET in Schools Collection, which was combined with survey responses. This included details of students' personal characteristics and some training information.

Reference period

Students were asked to provide employment information with respect to two reference periods:

- 28 May 2021 (proxy for after training) and
- Six months before starting training.

They were asked if they had a job at each reference period followed by relevant employment characteristics.

Questionnaire changes in 2021

There were several changes to the questionnaire in 2021.

- The wording was revised for the question on who paid for training.
- A new category of 'Problems with the work placement' was included in the reasons for not continuing the training question.
- A new question was added on whether the reason for not continuing training was due to the COVID-19 pandemic.
- New questions were added on whether the COVID-19 pandemic delayed work placements and on-the-job training during 2020.
- New questions were added on whether training shifted to online learning during 2020 due to the COVID-19 pandemic, the support received to assist this transition and the challenges faced during online learning.
- Questions and categories were removed on the impact of the COVID-19 pandemic on further study and employment outcomes.
- New questions were added for apprentices and trainees on reasons for undertaking an apprenticeship/traineeship, reasons for non-completion, employment outcomes, reasons why looking for work and satisfaction with skills learnt on-the-job.³

The 2021 questionnaires can be viewed from the publication page at

<https://www.ncver.edu.au/research-and-statistics/collection/student-outcomes/vet-student-outcomes>. Attachment B provides a summary of question changes between 2020 and 2021.

Survey methodology

The 2021 National Student Outcomes Survey was designed to provide estimates for several purposes, including (where the population size is sufficient) reporting for student types by:

- provider type (TAFE institutes, schools, private training providers, universities and community education providers) at the national level
- provider type (TAFE institutes and private training providers) at the state/territory level
- funding source (government-funded and fee-for-service) at the state/territory level.

In addition to these reporting requirements, the 2021 National Student Outcomes Survey was designed to provide qualification level data for all qualifications with 300 or more qualification completers nationally and RTO level data for RTOs with:

- 100 or more qualification completers
- 100 or more short course completers
- 550 or more qualification part-completers

³ The results from the new apprentice and trainee questions will be reported in a separate publication suite titled 'Apprentice and trainee outcomes 2021'.

- 250 or more short course part-completers and/or
- 550 or more subject(s) only completers.

Population

The population includes all students in scope of the survey and is derived from the National VET Provider Collection and National VET in Schools Collection, which are managed in accordance with the Australian Vocational Education and Training Management Information Statistical Standard (AVETMISS).⁴ The collections hold details on students, the training undertaken, and their achievement. The information is sourced from student enrolment records that are submitted to NCVET either directly from training providers or via state training authorities (STAs) or Boards of Studies. The survey population was extracted for the data submitted as at 13 April 2021.

Removing duplicate training activity

Due to overlaps in the organisations submitting data⁵, it is possible for the same training activity to be reported multiple times. A de-duplication process is applied to identify and remove duplicates when extracting the survey population where the same activity is reported for the same training provider in the same year via different data submitters. The de-duplication process requires an exact match on all the following fields:

- encrypted name identifier
- date of birth
- gender
- training organisation identifier
- program identifier
- subject identifier
- activity start date.

When duplicate training activity is identified, the following hierarchy is applied such that only the training activity at the highest hierarchy level is retained in the survey population:

- data submitted by STAs (to the National VET Provider Collection)
- data submitted by RTOs (to the National VET Provider Collection)
- data submitted by Boards of Studies (to the National VET in Schools Collection).

Selecting one record within an RTO

Some students undertook more than one program and/or subject within an RTO. In such cases, the following hierarchy is applied so that the student is retained in only one student type within the RTO after duplicate training activity is removed:

4 For more information regarding the National VET Provider Collection and National VET in Schools Collection, please refer to Australian vocational education and training statistics explained at <<https://www.ncver.edu.au/research-and-statistics/vet-statistics-explained>>.

5 It is possible for a training provider to submit their data on training activity either directly to NCVET for reporting in the National VET Provider Collection and/or National VET in Schools Collection (the survey frame) or via their STA or Board of Studies.

- qualification completer
- short course completer
- potential qualification part-completer
- potential short course part-completer
- potential subject(s) only completer.

Some students undertook more than one program or subject within the same student type. Where a student undertook more than one program within the qualification completer, short course completer, potential qualification part-completer or short course part-completer populations, the following sorted hierarchy is applied to the selection to ensure one record for each student is selected at each RTO⁶:

- Where a student had completed/part-completed two or more programs, the record with the highest level of education is retained.
- Where a student had completed/part-completed two or more programs at the same level of education, the record with the highest number of program enrolment hours is retained.
- Where a student had completed/part-completed two or more programs with the same number of enrolment hours, the record with the highest number of enrolment hours is selected.
- Where a student had completed/part-completed two or more programs with the same program field of education identifier, the record with the lowest field of education identifier is selected.
- Where a student had completed/part-completed two or more programs with the same field of education, the record with the highest program identifier is selected.
- If multiple records remain, the first record in the list is selected.

Where a student completed more than one subject in the potential subject(s) completers population, the following sorted hierarchy is applied to the selection to ensure one record for each student is selected at each RTO:

- Where a student completed two or more subjects, the record with the highest number of subject enrolment hours is selected.
- Where a student completed two or more subjects with the same number of subject enrolment hours, the record with the most recent date of completion is selected.
- Where a student completed two or more subjects with the same date of completion, the record with the most recent commencement date is selected.
- Where a student completed two or more subjects with the same date of commencement, the record with the government-funded record is selected.
- If multiple records remain, the first record is selected.

Sampling frame

The sampling frame refers to the de-duplicated records from the population available for surveying and for which contact details could be obtained in order to send survey invitations. This section describes the methodology used to create the sampling frame.

6 For further information on the data elements that are used for sorting and selecting records for sampling, refer to <<https://www.ncver.edu.au/rto-hub/statistical-standard-software/avetmiss-data-element-definitions-edition-2.3>>.

Some students completed training across multiple RTOs. In such cases, a hierarchy was applied to retain only one record for surveying in the sampling frame in order of reducing respondent burden. This was achieved by applying a similar hierarchy as per the methodology to retain only one student within an RTO. For details of the hierarchy, refer to the *Selecting one record within an RTO* section.

The sampling frame was then restricted to those students who were not deceased, and who were available for surveying as reported in the 'survey contact status' field in the 2021 National VET Provider Collection and 2021 National VET in Schools Collection.⁷

The sampling frame was also restricted to records for which student contact details could be obtained in order to send survey invitations. This includes students with a unique student identifier (USI) or whose contact details could be sourced from state training authorities (STAs) or from the contact details reported to NCVET (refer to the *Source of contact details* section in this document for more information). The sample was drawn after these exclusions were made to the frame.

Sampling design

The sample was selected in five parts, with independent samples drawn for each student type.

All records in the sampling frame were selected for the sample for qualification completers, short course completers and potential short course part-completers.

For potential qualification part-completers and potential subject(s) only completers, a stratified random sampling design was used with strata defined by cross-classifying state/territory (eight levels), provider type (five levels at a national level: TAFE institutes, universities, schools, community education providers, or private training providers and two levels by state and territory: TAFE institutes and private providers) and funding source (two levels: government-funded or fee-for-service).

In addition, all potential qualification part-completers from an RTO with 550 or more students on the frame were included in a certainty stratum⁸. Similarly, all potential subject(s) only completers from an RTO with 550 or more students on the frame were included in a certainty stratum. Within the non-certainty strata, units were selected using systematic probability proportional to size sampling. The size measure was used to increase the chance that units from targeted RTOs were sampled. Before sampling, units were sorted by provider type, funding source, age, gender, broad field of education, and Indigenous status to ensure the sample was representative with respect to these variables.

Source of contact details

Students' contact details (i.e. name, address, telephone/mobile numbers and email address) for the selected sample were sourced from STAs, the Office of the Student Identifiers Registrar (OSIR) or NCVET (from the *Client Postal Details* file submitted to the National VET data collections).

STAs provided the contact details for the students whose information in the National VET data collections originated from STAs, with the exception of four STAs who requested NCVET provide the contact details. The OSIR and NCVET provided the contact details for all remaining students, with the OSIR only able to provide the contact details for students that had a USI.

⁷ For further information on the Survey contact status field, refer to <<https://www.ncver.edu.au/rto-hub/statistical-standard-software/avetmiss-data-element-definitions-edition-2.3>>.

⁸ All records in the certainty stratum are surveyed.

Following the provision and cleaning of contact details, survey invitations were sent to 867 562 students (table 1).

Table 1 The number of students in the population and sampling frame and the number of students invited to complete the 2021 survey by student type at sampling

| Student type at sampling | Population | Sampling frame ¹ | Survey invitations sent |
|---|------------------|-----------------------------|-------------------------|
| Qualification completers | 558 009 | 461 765 | 452 385 |
| Short course completers | 75 290 | 67 299 | 66 331 |
| Potential qualification part-completers | 493 971 | 376 272 | 105 487 |
| Potential short course part-completers | 50 544 | 40 188 | 39 187 |
| Potential subject(s) only completers | 2 367 732 | 1 738 560 | 204 172 |
| Total | 3 545 546 | 2 684 084 | 867 562 |

Note: 1. The sampling frame refers to the de-duplicated records from the population available for surveying and for which contact details could be obtained in order to send survey invitations.

Fieldwork

Fieldwork commenced on 4 June 2021 and concluded on 15 August 2021. The 2021 data were collected by way of a self-enumeration online questionnaire or telephone interview. The details of the fieldwork methodology are provided below.

Financial incentive

A financial incentive, managed by the fieldwork contractor, was offered as a means of increasing the response rate. A rolling prize draw structure was used to maximise early response rates by offering more chances to win the earlier the survey is completed. Ten prize draws were conducted, timed to coincide with reminder activity, with winners selected at random (table 2).

Table 2 Prize draw details, 2021

| Prize draw | Close date | Prize draw details | Total prize value |
|------------|------------|--|-------------------|
| 1 | 16/6/21 | 1 x \$1 000, 2 x \$500 and 8 x \$250 EFTPOS gift-cards | \$4 000 |
| 2 | 23/6/21 | 1 x \$1 000, 2 x \$500 and 8 x \$250 EFTPOS gift-cards | \$4 000 |
| 3 | 30/6/21 | 1 x \$1 000, 2 x \$500 and 8 x \$250 EFTPOS gift-cards | \$4 000 |
| 4 | 7/7/21 | 1 x \$1 000, 2 x \$500 and 8 x \$250 EFTPOS gift-cards | \$4 000 |
| 5 | 14/7/21 | 1 x \$1 000, 2 x \$500 and 8 x \$250 EFTPOS gift-cards | \$4 000 |
| 6 | 21/7/21 | 1 x \$1 000, 2 x \$500 and 8 x \$250 EFTPOS gift-cards | \$4 000 |
| 7 | 28/7/21 | 1 x \$1 000, 2 x \$500 and 8 x \$250 EFTPOS gift-cards | \$4 000 |
| 8 | 4/8/21 | 1 x \$1 000, 2 x \$500 and 8 x \$250 EFTPOS gift-cards | \$4 000 |
| 9 | 11/8/21 | 1 x \$1 000, 2 x \$500 and 8 x \$250 EFTPOS gift-cards | \$4 000 |
| 10 | 15/8/21 | 1 x \$1 000, 2 x \$500 and 8 x \$250 EFTPOS gift-cards | \$4 000 |

Personalised letter

The personalised letters contained a unique login code and a QR code enabling direct access to the online survey. Students with a 'mailing address only' or 'a mailing address and a mobile' were sent a hard-copy letter inviting them to complete the survey. The invitation letters were lodged with Australia Post on

4 June 2021. A second batch of letter invitations were lodged with Australia Post on 16 June for students with a 'mailing address and an email address' where the email invitation had bounced.

A letter, timed to arrive the same time or just after the email invitation to students, was sent to the parents/guardians of all students with a mailing address aged 15 to 17 years. The letter informed parents about the survey, including how students' personal information is managed and protected, and asked them to encourage their child to participate.

All students with a 'mailing address only' or 'a mailing address and an email address' who had not responded to the survey were sent a hard-copy reminder letter approximately three to four weeks after the initial contact inviting them to complete the survey. The reminder letters were lodged with Australia Post on 12 July.

Students with a 'mailing address only' who had not responded to the survey approximately six weeks after the initial contact were sent a third hard-copy letter, lodged with Australia Post on 4 August 2021.

For further information on the content of the letters, refer to the invitation and parent letter supporting documents at <<https://www.ncver.edu.au/research-and-statistics/collections/student-outcomes/vet-student-outcomes>>.

Email communications

This email invitation contained a unique login code and an embedded link with direct access to the online survey. An invitation to complete the survey online was sent to all students with a valid email address on 7 June 2021, excluding 15 to 17 year-olds with address contact details, whose email invitation was delayed to coincide with the arrival of a letter to their parents/guardians. These 15 to 17 year-olds were sent the survey invitation email the following week on 15 June in place of email reminder one and were sent the content of email reminder one at a later stage in the fieldwork. As a result, the 15 to 17 year-old students received the same amount of emails as the other students.

Ten reminder emails with the embedded link to the online survey were sent to students who had not completed the survey. These emails were timed to coincide with a weekly prize draw.

The content of invitation and reminder emails varied slightly, with different themes used to encourage survey participation, ranging from the importance of the survey to the chance to win a prize.

SMS communications

Students who had a valid mobile number but no email were sent an SMS invitation to complete the survey from 7 June 2021. This SMS invitation was delayed by one week for some students to ensure its arrival coincided with letter communications. Students with their SMS delayed by one week included 15 to 17 year-olds and/or those with mailing address and mobile contact details.

Following these initial SMS communications, up to six SMS reminders were sent to students with a valid mobile number who had not completed the survey. Some of the SMS reminders were targeted to specific students.

Telephone follow-up

Telephone interviewing commenced approximately five weeks after the initial survey invitations was sent with the aim of boosting survey responses. Approximately 11 000⁹ students completed the survey over the telephone to boost responses in low responding groups (for example young males), selected RTOs and in other key reporting groups where more responses were required to meet the precision requirements of the survey design.

Privacy

All students were sent a link to the privacy collection notice. The privacy notice complied with the Australian Privacy Principles and provided further information on how personal information would be managed and protected. The privacy collection notice can be viewed from the publication page at <<https://www.ncver.edu.au/research-and-statistics/collection/student-outcomes/vet-student-outcomes>>.

Students' names, addresses, telephone numbers and email addresses were used by the fieldwork contractor during the fieldwork stage. The fieldwork contractor worked with external service providers for printing and collation services and email distribution services. The fieldwork contractor provided the students' contact details to the external providers for the purposes of administering the survey. Contact details of students held by the fieldwork contractor or the external providers for the purpose of this survey are destroyed upon conclusion of the project.

Response rate

National response rates were 32.6% for qualification completers, 27.4% for short course completers, 28.2% for potential qualification part-completers, 26.9% for potential short course part-completers and 23.2% for potential subject(s) only completers. Details of the response rates achieved at the national level are shown in table 3.

Table 3 Survey response summary by student type at sampling, 2021 (%)

| | Qualification completers | | Short course completers | | Potential qualification part-completers | | Potential short course part-completers | | Potential subject(s) only completers | |
|--------------------------|--------------------------|-------|-------------------------|-------|---|-------|--|-------|--------------------------------------|-------|
| | No. | % | No. | % | No. | % | No. | % | No. | % |
| Survey invitations | 452 385 | 100.0 | 66 331 | 100.0 | 105 487 | 100.0 | 39 187 | 100.0 | 204 172 | 100.0 |
| Completed | 147 333 | 32.6 | 18 146 | 27.4 | 29 756 | 28.2 | 10 555 | 26.9 | 47 369 | 23.2 |
| Sample loss ¹ | 49 904 | 11.0 | 7 404 | 11.2 | 13 623 | 12.9 | 6 005 | 15.3 | 23 209 | 11.4 |
| Refused | 55 923 | 12.4 | 10 596 | 16.0 | 12 967 | 12.3 | 5 468 | 14.0 | 35 415 | 17.3 |
| No response | 199 225 | 44.0 | 30 185 | 45.5 | 49 141 | 46.6 | 17 159 | 43.8 | 98 179 | 48.1 |

Note 1. Sample loss includes students whose hardcopy mail was returned to sender and/or whose electronic communication bounced.

⁹ Includes approximately 1 700 telephone interviews funded by an STA.

Table 4 shows the response rates by type of contact details available to send survey invites/reminders.

Table 4 Survey response rates by type of contact details by student type at sampling, 2021 (%)

| Type of contact details ¹ | Qualification completers | Short course completers | Potential qualification part-completers | Potential short course part-completers | Potential subject(s) only completers |
|--------------------------------------|--------------------------|-------------------------|---|--|--------------------------------------|
| Email, address and mobile | 36.8 | 31.7 | 32.9 | 31.8 | 26.8 |
| Email and address | 9.9 | 9.0 | 8.3 | 5.2 | 6.1 |
| Email and mobile | 24.2 | 17.8 | 22.7 | 20.4 | 16.5 |
| Email only | 9.1 | 5.4 | 6.5 | 6.8 | 6.5 |
| Address and mobile | 26.7 | 20.9 | 24.7 | 27.0 | 17.8 |
| Address only | 13.4 | 3.4 | 9.6 | 3.8 | 7.5 |
| Mobile only | 16.1 | 9.5 | 12.8 | 14.2 | 10.1 |
| Total | 32.6 | 27.4 | 28.2 | 26.9 | 23.2 |

Note 1. The type of contact details is based on the contact details post-fieldwork whereby groups are re-classified to adjust for students whose mail/email or SMS was reported as returned to sender or bounced.

Table 5 shows the response rates for students by state or territory of student residential address.

Table 5 Survey response rates by state and territory of residence by student type at sampling, 2021 (%)

| State/territory of residence | Qualification completers | Short course completers | Potential qualification part-completers | Potential short course part-completers | Potential subject(s) only completers |
|------------------------------|--------------------------|-------------------------|---|--|--------------------------------------|
| New South Wales | 34.1 | 26.5 | 28.3 | 26.8 | 22.9 |
| Victoria | 33.0 | 29.6 | 29.5 | 28.2 | 25.6 |
| Queensland | 30.4 | 27.1 | 26.3 | 26.6 | 22.8 |
| South Australia | 36.8 | 32.1 | 31.4 | 33.9 | 24.8 |
| Western Australia | 30.6 | 24.2 | 27.3 | 22.5 | 19.7 |
| Tasmania | 36.6 | 35.6 | 31.8 | 31.9 | 27.1 |
| Northern Territory | 28.3 | 29.4 | 20.1 | 29.5 | 19.9 |
| Australian Capital Territory | 41.2 | 27.4 | 31.7 | 25.6 | 25.8 |
| Total | 32.6 | 27.4 | 28.2 | 26.9 | 23.2 |

Estimation

Classification by group

Qualification completers and short course completers were classified as per the sampling frame (National VET Provider and National VET in Schools collections).

On completion of the fieldwork, potential qualification and short course part-completers were classified into one of the following groups: qualification part-completers, short course part-completers or continuing in the same training, based on the answer to the following question:

- 'Are you still enrolled in the training?' (Question 1 in the 2021 survey, only answered by part-completers).

On completion of the fieldwork, potential subject(s) only completer respondents were classified into one of the following groups: subject(s) only completers or continuing in some training, based on the answer to the following question:

- 'Are you currently enrolled in any other training with a TAFE institute, TAFE division of a university, Registered Private Provider or Adult and Community Education provider?' (Question 4 in the 2021 survey).

Those classified as continuing students were excluded from reporting. Table 6 shows the final reporting status of all student respondents by their student type at sampling.

Table 6 Reporting status of all student respondents by student type at sampling, 2021

| Reporting status | Student type at sampling | | | | | Total | |
|--|--------------------------|-------------------------|---|--|--------------------------------------|----------------|----------------|
| | Qualification completers | Short course completers | Potential qualification part-completers | Potential short course part-completers | Potential subject(s) only completers | Number | % |
| Qualification completer | 147 333 | na | na | na | na | 147 333 | 58.2 |
| Short course completer | na | 18 146 | na | na | na | 18 146 | 7.2 |
| Actual qualification part-completer | na | na | 17 454 | na | na | 17 454 | 6.9 |
| Actual short course part-completer | na | na | na | 7 776 | na | 7 776 | 3.1 |
| Part-completer continuing in the same training | na | na | 12 302 | 2 779 | na | 15 081 | 6.0 |
| Actual subject(s) only completer | na | na | na | na | 40 899 | 40 899 | 16.2 |
| Subject(s) only completer still in some training | na | na | na | na | 6 470 | 6 470 | 2.6 |
| Total | 147 333 | 18 146 | 29 756 | 10 555 | 47 369 | 253 159 | 100.0 0 |

Throughout all NCVET-published resources, the terms 'qualification part-completers' and 'short course part-completers' exclusively refers to 'actual' part-completers; that is, students who enrolled in a qualification/short course and are no longer undertaking that training. Similarly, throughout all NCVET published resources, the term 'subject(s) only completers' refers to 'actual' subject(s) only completers; that is, students who completed one or more subjects not delivered as part of a nationally recognised program and are no longer undertaking training in the VET sector.

Weighting

The sample of respondents may not accurately represent the population due to known sources of bias such as unequal probability of selection, as well as other sources of bias such as non-response. The weighting procedure attempts to minimise bias so that the weighted sample represents the population and can be used to produce accurate estimates.

The weighting procedure was undertaken separately for each of the five main groups through the following steps:

1. A base weight was calculated for each sampled unit in each of the five samples as the inverse of the probability that unit was selected in the sample.
2. A raking procedure was used to adjust the weights to account for non-response and to ensure weighted marginal distributions matched population marginal distributions in each group. Prior variables chosen for raking were those that were important predictors of non-response, as well as key reporting variables:

- provider type (five categories: schools, TAFE institutes, universities, community education providers and private training providers)
- state/territory of residence (eight categories: New South Wales, Victoria, Queensland, South Australia, Western Australia, Tasmania, Northern Territory and the Australian Capital Territory)
- funding source (two categories: government-funded and fee-for-service)
- gender (three categories: male, female and other or unknown)
- age group (five ranges: 15 to 19 years, 20 to 24 years, 25 to 34 years, 35 to 49 years and 50 years and over).

Reliability of estimates

Two types of error are possible in an estimate based on a survey: sampling error and non-sampling error. *Non-sampling error* may occur for reasons such as non-response bias, incorrect responses, interviewer errors, attrition and processing errors. *Sampling error* occurs because estimates are calculated from a random sample of the population. The estimates may differ from the true population value (that is, the value if the whole population had been sampled and responded to the survey) as well from estimates that would be produced if a different sample had by chance been selected.

By convention, a 95% confidence level is used to judge the amount of sampling error in an estimate. The confidence interval for an estimate is calculated using the formula:

$$\text{estimate} \pm 1.96 \times \text{SE}$$

where SE is the standard error of the estimate returned by SAS software (the standard error is an estimate of how much variation there is expected to be in a published estimate from one sample to another, based on the randomness of sample selection), taking into account the sampling design and population size. The chance that a 95% confidence interval contains the true population value is 19 in 20.

The half-width of the confidence interval, $1.96 \times \text{SE}$, is often referred to as the *margin of error*. The margin of error is provided for key variables in the DataBuilder <<https://www.ncver.edu.au/research-and-statistics/collection/student-outcomes/vet-student-outcomes>> and can be used to calculate the 95% confidence intervals.

Attachment A: History of the survey

The National Student Outcomes Survey was first conducted in 1995 and has been conducted annually by NCVET since 1997.

1995 (conducted by the Australian Bureau of Statistics), 1997 and 1998

- The survey was known as the Graduate Destination Survey and was a census of TAFE graduates with a qualification involving at least 200 hours or one semester of training.

1999

- The survey was renamed the Student Outcomes Survey and remained a census of graduates with a qualification involving at least 200 hours or one semester of training.
- For the first time, a small sample of module completers was introduced. The survey was also expanded to include students from community education, private training and other government providers.
- Separate questionnaires were used for graduates and module completers.
- Only information on TAFE students was published.

2000, 2001 and 2002

- A sample survey of graduates and module completers. For graduates, the minimum training length condition was removed.
- Separate questionnaires continued to be used for qualification completers and module completers.

2003

- The option to complete the survey via the internet was introduced.
- Students selected as module completers who identified themselves as graduates were reported as graduates. Previously, responses of these people were collected, but not used in reporting. At the aggregate level, this change made no difference, but for sub-populations the effect may be greater.

2004

- For the first time the same questionnaire was used for graduates and module completers.

2005

- Information on government-funded students from community education and private training providers was published for the first time.

2006, 2007 and 2008

- No changes were made.

2009

- A new recognition of prior learning (RPL) question block was included in the survey, replacing the one used previously.

2010

- No changes were made.

2011

- For the first time those with email addresses were invited to complete the survey online via email and/or a primary approach letter rather than being sent a hard-copy questionnaire.

2012

- For the first time ALL respondents received a primary approach letter inviting them to complete the survey online at the first mailing, rather than a hard-copy questionnaire. As in previous years, those with an email address also received an email invitation. Hard-copy questionnaires were only sent to those who did not complete online by a certain date.
- Students selected as potential module completers who identified themselves as graduates were modelled to determine final status. Previously, responses of these students were reported as graduates. Data were backdated to 2005.

2013

- Sampling changed from proportional allocation to sampling based on more balanced sampling error across institutes for the main survey variable, labour force status after training. The target sampling error for graduates was 4% and 8% for module completers, per institute.

2014

- The scope was expanded to include students from all jurisdictions who completed their training with a community education provider. This resulted in information being collected for New South Wales, Victoria, Queensland and Western Australia. Prior to 2014 only students from community education providers in New South Wales and Victoria were included in the survey.

2015

- Survey responses from fee-for-service students from community education providers were excluded from reporting and the summary publication was renamed *Government-funded student outcomes*. Data were backdated to 2006.
- Module completers were renamed to subject completers. The terminology was applied back to 2005.

2016

- The survey was expanded to report on the outcomes of students who completed their qualification on a fee-for service basis through private providers.
- The questionnaire was revised to a shorter, more user-friendly version that could be used on mobile devices. This questionnaire was implemented in 2016 for all students (TAFE institutes, universities, other government providers, private training providers and community education providers).
- As a result of shortening the questionnaire, the questions used to classify subject completers were streamlined, and the classification of subject completers was improved. Data for subject completers in previous years were backdated to 2006 using this improved derivation.

2017

- The expanded survey scope, which includes fee-for-service students from private training and community education providers, was applied to subject completers.
- International onshore VET qualification completers were included as an additional component of the National Student Outcomes Survey.
- The reminder postcard and the hard-copy questionnaire were removed from the contact methodology.
- Students under 18 years of age were excluded from scope. Data from previous years were back-cast.
- Government-funded training was broadly defined as all activity delivered by government providers and government-funded activity delivered by community education and private training providers. In 2017 the scope of government-funded training was revised and data for previous years were back-cast. Government-funded training now includes only Commonwealth and state/territory government-funded training (either Commonwealth or state-recurrent funding, Commonwealth specific-purpose funding or state-specific funding) from all training providers. All fee-for-service activity from training providers has been excluded.
- The derivation of qualification completers and subject completers changed to be more in line with administrative data. Previously, due to lags in the reporting of a large number of qualifications completed to the National VET Provider Collection, government-funded students who were sampled as subject completers were reported as qualification completers if they self-reported completing a qualification and were deemed eligible for that qualification via a logistic regression model. From 2017, those who self-report completing a qualification, are reported as subject completers, as per the administrative data (or sample selection). Data were back-cast for 2016, the year the data quality improvement is first seen. For further information, refer to the technical paper ‘Student Outcomes Survey: self-reported qualification completer model review’, available at <https://www.ncver.edu.au/research-and-statistics/publications/all-publications/student-outcomes-survey-self-reported-qualification-completer-model-review>.

2018

- Non-respondents with a mailing address were sent a hard copy letter approximately four weeks after the initial email contact. This represents a change to the previous methodology where the hard-copy letter was sent to all students at the commencement of the survey.
- In 2018, more RTOs received data about their students’ satisfaction and training outcomes than in previous years. The 2019 survey was designed to provide data for all RTOs with:
 - 100 or more domestic qualification completers in 2017, and/or
 - 860 or more domestic potential subject completers in 2017.

2019

- In 2019, the scope of the survey was modified to cover students who completed nationally recognised VET delivered by RTOs in Australia. Students who undertook non-nationally recognised training were excluded from the survey. The revised survey scope has been applied to qualification completers in 2017 and 2018.
- Following a trial in 2018, the 2019 questionnaire was revised. The changes included:

- minor changes to question wording to questions on ‘further study after training’ and ‘level of further study after training’
 - changes to question wording and a change from an agreement scale to a satisfaction scale for questions on satisfied with teaching and assessment and satisfied overall
 - a change in the order of the satisfied with teaching and assessment questions to appear after the developed problem-solving, improved writing skills and improved numerical skills bank of questions
 - the inclusion of a new category in the job-related benefits item of ‘gained extra skills for my job’
 - new questions added on ‘improved numerical skills’ and ‘better job after training’.
- In 2019, NCVET conducted a national Apprentice and Trainee Experience and Destination (ATED) Survey that was integrated with the 2019 National Student Outcomes Survey. The surveys ran concurrently. Key National Student Outcomes Survey questions were included in the ATED questionnaire alongside other questions specific to apprentices and trainees. Where a student was sampled for the National Student Outcomes Survey and the ATED Survey, they were invited to participate in one survey only—ATED. Following a mode effects analysis, the responses to the National Student Outcomes Survey questions for students sampled for both surveys were merged back into the National Student Outcomes Survey dataset. As a result of this approach, apprentices and trainees sampled for both surveys did not answer all questions in the National Student Outcomes Survey.

2020

- In 2020, students aged 15 to 17 years and those undertaking VET in Schools were included in the survey.
- Following a review of the subject completer group, the 2020 survey was designed to report by the following student types:
 - qualification completers (previously known as graduates, no definition change).
 - short course completers
 - qualification part-completers
 - short course part-completers
 - subject(s) only completers.
- Due to significant changes in the way student groups are reported in the 2020 survey, time-series information is not available for the following student groups: short course completers, short course part-completers and subject(s) only completers. A two-year time-series was available for qualification part-completers.
- To minimise burden, a shorter version of the questionnaire was used for all students with the exception of students who completed a qualification at certificate II or above.
- There were some questionnaire changes in 2020, including a change to the response scale for recommend the training provider and recommend the training from a ‘Yes / No’ response option to a ‘Very likely’ to ‘very unlikely’ response scale. The results from a trial of this change in scale suggest that the 2020 responses for these questions may differ to prior years due to the changes in question wording and the results are not comparable with prior years.

2021

- There were some changes to the 2021 questionnaire including:
 - minor revisions to existing questions on who paid for the training and reasons for not continuing training
 - the addition of new questions on the impact of the COVID-19 pandemic on training
 - the removal of questions and categories on the impact of the COVID-19 pandemic on employment and further study
 - the addition of questions for apprentices and trainees that will be reported in a new publication suite for release in 2022, titled ‘Apprentice and trainee outcomes 2021’.

Attachment B: Question wording changes from 2020 to 2021

Table B1 Summary of the changes to question wording from 2020 to 2021

| 2020 question wording | 2021 question wording |
|---|--|
| <p>What was your main reason for choosing not to continue the training? (Please select one option only)</p> <ol style="list-style-type: none"> I changed jobs or started a new job I lost my job I learnt the skills I needed for my job I achieved my training goals I started other training The training no longer related to my plans The training was not what I expected The training timetable was not flexible enough <p>Response option not offered in 2020</p> <ol style="list-style-type: none"> Family or personal reasons I completed all the training I intended to when I enrolled Other reason (please specify) <p>No corresponding question in 2020</p> | <p>What was your main reason for choosing not to continue the training? (Please select one option only)</p> <ol style="list-style-type: none"> I changed jobs or started a new job I lost my job I learnt the skills I needed for my job I achieved my training goals I started other training The training no longer related to my plans The training was not what I expected The training timetable was not flexible enough Problems with the work placement Family or personal reasons I completed all the training I intended to when I enrolled Other reason (please specify) <p>Was your reason for not continuing training due to COVID-19?</p> <ol style="list-style-type: none"> Yes No Partly |
| <p>How did you pay for your training? (single response)</p> <ol style="list-style-type: none"> My employer paid <p>Response option not offered in 2020</p> <p>Response option not offered in 2020</p> <p>Response option not offered in 2020</p> <p>No corresponding question in 2020</p> | <p>How did you pay for your training? <single response></p> <ol style="list-style-type: none"> My employer paid for the training I paid (includes via payment plan arrangements and support from family or friends) Other <no capture of verbatim response> Not applicable - no fees |
| <p>No corresponding question in 2020</p> | <p>Did any of your training (including work placement) shift to online learning in 2020 due to COVID-19?</p> <ol style="list-style-type: none"> Yes No |
| <p>No corresponding question in 2020</p> | <p>Did you receive support from your training provider to help you shift to online learning?</p> <ol style="list-style-type: none"> Yes No |
| <p>No corresponding question in 2020</p> | <p>How satisfied are you with the support offered by your training provider to help you shift to online learning?</p> <ol style="list-style-type: none"> Very satisfied Satisfied Neither satisfied nor dissatisfied |

| 2020 question wording | 2021 question wording |
|---|--|
| | 4. Dissatisfied 5. Very dissatisfied |
| No corresponding question in 2020 | Did you face any challenges with online learning in 2020? 1. Yes 2. No |
| No corresponding question in 2020 | What challenges did you face with online learning in 2020? 1. Subject matter not suitable to online learning 2. I missed the opportunity to get experience in a workplace 3. Course materials not available or not tailored for online learning 4. Lack of support from trainers/teachers/instructors 5. Unreliable internet at home 6. Lack of equipment (e.g. computer/printer) 7. I had limited digital skills (e.g. skills in accessing information from computers and other digital devices) 8. Lack of face-to face interaction with trainers/teachers/instructors 9. Lack of face-to face interaction with fellow students 10. Other (please specify) _____ |
| No corresponding question in 2020 | Did you have a work placement that was delayed during 2020 due to COVID-19? 1. Yes, my work placement was delayed 2. No, my work placement was not delayed 3. No, my training did not include work placement |
| Have you commenced another course or further study since undertaking the training in <insert training details>? 1. No 2. Yes, but I cancelled or withdrew 3. Yes, but course was cancelled due to COVID-19 4. Yes, but course was delayed or postponed due to COVID-19 5. Yes, still ongoing 6. Yes, finished | Have you commenced another course or further study since undertaking the training <insert training details>? 1. No 2. Yes, but I cancelled or withdrew Response option not offered in 2021 Response option not offered in 2021 5. Yes, still ongoing 6. Yes, finished |
| Have your hours changed since COVID-19? 1. Yes, hours have increased 2. Yes, hours have decreased 3. No | No corresponding question in 2021 |
| Did you have a job prior to 29th May 2020 which you lost due to COVID-19? (If have a job/temporarily stood down) Were you temporarily stood down due to COVID-19? 1. Yes 2. No | No corresponding question in 2021 |
| Were you actively looking for work at 29th May 2020 (even if you were already working)? (Please select one option only) 1. Yes – mainly looking for full-time work | |

| 2020 question wording | 2021 question wording |
|--|--|
| 2. Yes – mainly looking for part-time work | Response option not offered in 2021 |
| 3. No – not looking for work due to COVID-19 | |
| 4. No – not looking for work but not due to COVID-19 | |
| No corresponding question in 2020 | <p>What was your main reason for looking for different work?¹</p> <p>Employment-related reasons</p> <ol style="list-style-type: none"> 1. The pay is too low 2. Poor working conditions 3. I am not happy with the job prospects in the industry 4. I don't like the type of work 5. I don't get on with my boss or other people at work 6. Lack of work 7. Broaden knowledge and skills 8. For a change/to try for a different career <p>Personal reasons</p> <ol style="list-style-type: none"> 9. Problems with travelling/transport 10. Illness/health reasons 11. Family reasons 12. Any other major reason (please specify) |
| No corresponding question in 2020 | <p>Have you successfully completed all requirements of your apprenticeship or traineeship?¹</p> <ol style="list-style-type: none"> 1. Yes 2. No, still ongoing 3. No, cancelled or withdrew |
| No corresponding question in 2020 | <p>What was your main reason for not continuing your apprenticeship or traineeship?¹</p> <p>Employment-related reasons</p> <ol style="list-style-type: none"> 1. Got offered a better job 2. The pay was too low 3. Poor working conditions 4. I was not happy with the job prospects in the industry 5. I didn't like the type of work 6. I didn't get on with my boss or other people at work 7. I lost my job/was made redundant 8. I transferred to another apprenticeship/traineeship 9. Left job/changed career 10. Apprenticeship/Traineeship cancelled/discontinued 11. Not able to use the skills I was learning at work 12. Business closed <p>Training-related reason</p> <ol style="list-style-type: none"> 13. I wasn't happy with the on-the-job training 14. I wasn't happy with the off-the-job training 15. I found the study too difficult 16. Studying elsewhere (university/school) |

| 2020 question wording | 2021 question wording |
|-----------------------------------|--|
| | Personal Reasons 17. Problems with travelling/transport 18. Illness/health reasons 19. Family reasons 20. Lack of time 21. Moved 22. Any other main reason (please specify) |
| No corresponding question in 2020 | What was your main reason for starting your apprenticeship or traineeship? ¹ (Please select one option only) 1. Wanted to work in that type of job 2. Wanted a job (any type) 3. To gain a recognised qualification or certificate 4. To get paid to learn 5. It was a requirement of my job 6. It has good job prospects 7. It had good pay once qualified 8. To start my own business 9. Didn't get into uni/didn't want to go to uni 10. Opportunity to further knowledge and skills 11. Recommended/offered by company (not mandatory) 12. Part of school program/offered through school/requirement for school 13. Other reason (please specify) |
| No corresponding question in 2020 | Thinking about your employment as an apprentice/trainee, how satisfied are you with the skills you learnt on the job? ¹ 1. Very satisfied 2. Satisfied 3. Neither satisfied nor dissatisfied 4. Dissatisfied 5. Very dissatisfied 6. Not applicable |
| No corresponding question in 2020 | Was your on-the-job training delayed during 2020 by COVID-19? ¹ 1. Yes 2. No |
| No corresponding question in 2020 | How many hours did you work in your last week of your apprenticeship/traineeship? ¹ 1. 35 hours or more per week 2. 1 – 34 hours per week |
| No corresponding question in 2020 | Are you with the same employer as when you last undertook your apprenticeship/traineeship? ¹ 1. Yes, same employer 2. No, different employer |
| No corresponding question in 2020 | What was your main reason for changing employers? ¹ |

2020 question wording

2021 question wording

Employment-related reasons

1. Got offered a better job
2. The pay was too low
3. Poor working conditions
4. I was not happy with the job prospects in the industry
5. I didn't like the type of work
6. I didn't get on with my boss or other people at work
7. I lost my job/was made redundant
8. I transferred to another apprenticeship/traineeship
9. Lack of work
10. Broaden knowledge and skills
11. For a change/to try a different career
12. Employment not continued at the end of my training contract

Personal Reasons

13. Problems with travelling/transport
 14. Illness/health reasons
 15. Family reasons
 16. Moved
 17. Any other major reason (please specify)
-

Note: 1. These questions are asked of apprentices and trainees and will be reported in a new publication suite for release in 2022, titled 'Apprentice and trainee outcomes 2021'.