



National Student Outcomes Survey 2022 (international component)—technical notes

National Centre for Vocational
Education Research

This document was produced as an added resource for further information on *International onshore VET qualification completer outcomes 2022*. The report is available on the NCVER Portal: www.ncver.edu.au.

Publisher's note

The views and opinions expressed in this document are those of NCVER and do not necessarily reflect the views of the Australian Government and state and territory governments. Any errors and omissions are the responsibility of the author(s).

© Commonwealth of Australia, 2023



With the exception of the Commonwealth Coat of Arms, the Department's logo, any material protected by a trade mark and where otherwise noted all material presented in this document is provided under a Creative Commons Attribution 3.0 Australia <<http://creativecommons.org/licenses/by/3.0/au>> licence.

The details of the relevant licence conditions are available on the Creative Commons website (accessible using the links provided) as is the full legal code for the CC BY 3.0 AU licence <<http://creativecommons.org/licenses/by/3.0/legalcode>>.

The Creative Commons licence conditions do not apply to all logos, graphic design, artwork and photographs. Requests and enquiries concerning other reproduction and rights should be directed to the National Centre for Vocational Education Research (NCVER).

This document should be attributed as NCVER 2023, *National Student Outcomes Survey 2022 (international component): technical notes*, NCVER, Adelaide.

This work has been produced by NCVER on behalf of the Australian Government and state and territory governments, with funding provided through the Australian Government Department of Education.

Published by NCVER, ABN 87 007 967 311

Level 5, 60 Light Square, Adelaide SA 5000

PO Box 8288 Station Arcade, Adelaide SA 5000, Australia

Phone +61 8 8230 8400 **Email** ncver@ncver.edu.au

Web <<https://www.ncver.edu.au>> <<https://www.lsay.edu.au>>

Follow us: <<https://twitter.com/ncver>> <<https://www.linkedin.com/company/ncver>>

Contents

Tables	4
Introduction	5
Survey scope	5
Questionnaire design	5
Reference periods	7
Survey methodology	7
Population	7
Sampling frame	8
Fieldwork	9
Financial incentive	9
Email communications	9
SMS communications	10
Privacy	10
Survey response	10
Estimation	10
Weighting	10
Reliability of estimates	11

Tables

1	Prize draw details, 2022	9
2	Survey response summary for international onshore VET qualification completers, 2022	10

Introduction

The National Student Outcomes Survey is an annual survey that collects information on vocational education and training (VET) students' reasons for training and their employment outcomes, their satisfaction with training and further study outcomes. Students included in the survey are those who completed training delivered by registered training organisations (RTOs) in the previous calendar year.

The international component of the National Student Outcome Survey collects information on international students who completed a nationally recognised VET qualification in Australia. Data from the international component of the 2022 National Student Outcomes Survey are presented in the publication *International onshore VET qualification completer outcomes 2022*.

Survey scope

Students are considered in scope of the international component if they completed nationally recognised training delivered by RTOs at certificate I level or higher, and they:

- paid for the training, and
- were 15 years of age or older on 27 May 2022, and
- were enrolled in 2021, and
- completed their qualification in Australia in 2021, and
- had successfully completed at least one subject during 2021, and
- had subject nominal hours reported during 2021.

Out of scope of the survey are international qualification completers who completed their training with an Australian training provider offshore.

Questionnaire design

The 2022 National Student Outcomes Survey collected data on qualification completers':

- 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
- impact of the COVID-19 pandemic on training
- experiences and satisfaction with online learning (new in 2022)
- suggestions for improvement.

In addition, the 2022 international component of the National Student Outcomes Survey collected data on:

- whether further study was undertaken in Australia or another country (for those undertaking further study)
- whether employed after training in Australia or another country (for those employed after training)
- satisfaction with main job (for those employed after training)
- barriers faced when looking for work (for those who looked for work after training)
- current country of residence and nationality on passport
- type of visa held (for those residing in Australia)
- satisfaction with support on arrival in Australia by training provider
- importance of reasons to study in Australia
- type of accommodation while training
- satisfaction with living in Australia while training.

There were several changes to the 2022 questionnaire, including:

- New questions were added on whether online learning was undertaken during the training, whether satisfied with support from teachers/trainers during online learning, whether satisfied with the overall quality of online learning experiences and the impact of the COVID-19 pandemic on aspects of training.
- The question on job after training changed back to the 'Yes' and 'No' response options that existed before the 2020 survey when the response options were revised due to the COVID-19 pandemic.
- Questions on challenges faced with online learning were asked of those who undertook their training online. In 2021, these questions were asked of those who transitioned to online learning during 2020 due to the COVID-19 pandemic. As a result of these changes, estimates on challenges faced with online learning in 2022 are not comparable with 2021.
- The response options of 'COVID-19 related challenges' and 'mental health issues' were added to the challenges faced with online learning question. In 2021, these categories were derived from the free text comments provided in the 'Other, please specify' item of the question.
- The response options 'got a job' and 'got a new job/changed jobs' were combined for the job-related benefits item. This change was applied to 2018 to 2021.
- Questions were removed on whether training shifted to online learning during 2020 due to the COVID-19 pandemic, the support received to assist this transition and whether the COVID-19 pandemic delayed work placements and on-the-job training during 2020.

The 2022 questionnaire can be viewed from the publication page at <https://www.ncver.edu.au/research-and-statistics/collection/student-outcomes/international-onshore-vet-qualification-completer-outcomes>.

Information on qualification completers was also obtained from the National VET Provider Collection. This included details of qualification completers' personal characteristics and some training information.

Reference periods

Qualification completers were asked to provide information with respect to two reference periods.

The first reference date was 27 May 2022. Qualification completers were asked to supply information on labour force status, employment characteristics, country of current residence and visa type.

The second reference period covered the six months before starting the training. Qualification completers were asked to supply information on labour force status and employment characteristics.

Survey methodology

Population

The population includes all students in scope of the survey. The population for the international component of the National Student Outcomes Survey came from data submitted as of 11 April 2022 to the National VET Provider Collection. The National VET Provider Collection holds 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/territory training authorities (STAs). The National VET Provider Collection is an administrative collection governed by the Australian Vocational Education and Training Management Information Statistical Standard: VET Provider Collection Specifications Release 8.0 (AVETMISS Release 8.0) and AVETMISS Data Element Definitions Edition 2.3, which are available at: <www.ncver.edu.au>. ¹

Removing duplicate training activity

Due to overlaps in the organisations submitting data² to NCVET, it is possible for the same training activity to be reported multiple times. A de-duplication process is applied to identify and remove duplicates 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 data submitted by STAs is retained in the survey population.

¹ For more information regarding the national collections please refer to Australian vocational education and training statistics explained at <<https://www.ncver.edu.au/research-and-statistics/vet-statistics-explained>>.

² 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 (the survey frame) or via their STA.

Selecting one record within an RTO

Some students undertook more than one qualification within an RTO. In such cases, the following hierarchy was applied to the derivation of the international onshore VET qualification completer population:

- where a student had completed two or more qualifications, the record with the higher qualification level was selected.
- where a student had completed two or more qualifications at the same qualification level, the record with the highest number of hours was selected.
- where a student had completed two or more qualifications with the same number of hours, the first record from the sorted program identifier (descending order) was selected.
- where a student had completed two or more qualifications with the same program identifier, the record with a valid USI was selected.

The application of this methodology resulted in a population of 74 216 international onshore VET qualification completers.

Sampling frame

The international survey component was conducted as a census of the 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 to send survey invitations. This section describes the methodology used to create the sampling frame.

To reduce respondent burden, qualification completers were removed from the sampling frame if they were:

- reported in the international onshore VET qualification completer population file as completing multiple qualifications during 2021 across multiple RTOs³
- surveyed for the 2022 domestic student component of the survey.

The sampling frame was also restricted to international onshore VET qualification completers:

- available for surveying as reported in the 'survey contact status' field in the National VET Provider Collection⁴
- whose student contact details could be obtained to send survey invitations.

The application of this methodology resulted in 71 360 qualification completers in the sampling frame.

Source of contact details

For the 2022 survey, students' contact details (i.e. name, mobile number and email address) for the selected sample were sourced from:

³ 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.

⁴ 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>>.

- TAFE NSW;
- STAs, excluding authorities in New South Wales, Tasmania, South Australia and the Northern Territory who requested NCVER provide the contact details;
- the Office of the Student Identifiers Registrar for students that had a unique student identifier; and/or
- NCVER from the Client Postal Details file submitted to the National VET Provider Collection.

Fieldwork

The 2022 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

International onshore qualification completers were eligible to win prizes in the same prize draw offered in the domestic student component of the National Student Outcomes Survey. This 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 1).

Table 1 Prize draw details, 2022

Prize draw	Close date	Prize draw details	Total prize value
1	15/6/2022	1 x \$1 000, 2 x \$500 and 8 x \$250 EFTPOS gift-cards	\$4 000
2	22/6/2022	1 x \$1 000, 2 x \$500 and 8 x \$250 EFTPOS gift-cards	\$4 000
3	29/6/2022	1 x \$1 000, 2 x \$500 and 8 x \$250 EFTPOS gift-cards	\$4 000
4	6/7/2022	1 x \$1 000, 2 x \$500 and 8 x \$250 EFTPOS gift-cards	\$4 000
5	13/7/2022	1 x \$1 000, 2 x \$500 and 8 x \$250 EFTPOS gift-cards	\$4 000
6	20/7/2022	1 x \$1 000, 2 x \$500 and 8 x \$250 EFTPOS gift-cards	\$4 000
7	27/7/2022	1 x \$1 000, 2 x \$500 and 8 x \$250 EFTPOS gift-cards	\$4 000
8	3/8/2022	1 x \$1 000, 2 x \$500 and 8 x \$250 EFTPOS gift-cards	\$4 000
9	10/8/2022	1 x \$1 000, 2 x \$500 and 8 x \$250 EFTPOS gift-cards	\$4 000
10	14/8/2022	1 x \$1 000, 2 x \$500 and 8 x \$250 EFTPOS gift-cards	\$4 000

Email communications

An invitation to complete the survey online was sent to all students with a valid email address from 6 to 10 June 2022. This email invitation contained a unique login code and an embedded link with direct access to the online survey.

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 6 to 10 June 2022. 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.

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, telephone numbers and email addresses were used by the fieldwork contractor during the fieldwork stage. Contact details of students' held by the fieldwork contractor for the purpose of this survey were destroyed upon conclusion of the project.

Survey response

Following the provision and cleaning of contact details, survey invitations were sent to 62 440 qualification completers. Of these, 13 686 responded to the survey. The national response rate for international onshore VET qualification completers was 21.9% (see table 2).

Table 2 Survey response summary for international onshore VET qualification completers, 2022

	Qualification completers	
	Number	%
Survey invitations	62 440	100.0
Responded	13 686	21.9
Sample loss/other response ¹	8 976	14.4
Refused/ unsubscribed	3 867	6.2
No response	35 911	57.5

Note 1 Sample loss includes returned to sender records. Other response refers to those who contacted the survey contractor's helpdesk with a query after the survey had closed and students who contacted the helpdesk to indicate they were of ill health and could not complete the survey.

Estimation

Weighting

Weighting is necessary to ensure the respondents represent the population as well as possible. The weighting procedure attempts to minimise bias so that the weighted responses represent the population and can be used to produce accurate estimates.

The weighting procedure consisted of four main steps:

1. A base weight was calculated for each unit, based on the probability of selection. Since a census approach was used, the base weight is equal to 1 for every respondent.
2. Base weights were adjusted to account for de-duplication of the population file, which ensured that individuals are only listed once on the sampling frame.
3. A raking procedure was used to adjust the weights to account for non-response and to ensure weighted marginal distributions matched population marginal distributions. Variables chosen for raking were those that were important predictors of non-response and key reporting variables, as well as key reporting variables:
 - state/territory of training organisation (eight categories: New South Wales, Victoria, Queensland, South Australia, Western Australia, Tasmania, Northern Territory and the Australian Capital Territory)
 - age group (five ranges: 15–19, 20–24, 25–34, 35–49, 50 years and over)
 - provider type (four categories: TAFE institutes, universities, community education providers and private training providers/enterprise providers)
 - gender (three categories: males, females, other or not stated)
4. Large weights were trimmed to reduce variance.

The population benchmarks used were based on the 2021 National VET Provider Collection.

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 been selected by chance.

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 all estimates in the DataBuilder and Excel products at <https://www.ncver.edu.au/research-and-statistics/collection/student-outcomes/international-onshore-vet-qualification-completer-outcomes> and can be used to calculate the 95% confidence intervals.