



# National Student Outcomes Survey 2017 (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 graduate outcomes 2017*. The report is available on the NCVER Portal: [www.ncver.edu.au](http://www.ncver.edu.au).

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This document should be attributed as NCVER 2017, *National Student Outcomes Survey 2017 (International component): technical notes*, NCVER, Adelaide.

Published by NCVER, ABN 87 007 967 311

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# 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, satisfaction with training and further study outcomes. Students included in the survey are those who completed their training in the previous calendar year.

In 2017, international onshore VET graduates were sampled as an additional, trial component to the 2017 National Student Outcomes Survey. In scope of this trial component were international graduates who completed their vocational education and training in Australia in 2016. This includes graduates undertaking VET courses delivered by:

- TAFE (technical and further education) institutes
- universities
- community education providers
- private training providers.

The international component of the survey excludes:

- international graduates who completed their training with an Australian training provider offshore
- those who undertook recreational, leisure or personal enrichment (short) courses
- those who undertook VET delivered in schools, where training activity was undertaken as part of a senior secondary certificate
- graduates under 18 years of age.

Graduates are defined as students who gained a qualification of Certificate I or higher through their training, as reported in the National VET Provider Collection.

Data from the international component of the 2017 National Student Outcomes Survey are presented in *International onshore VET graduate outcomes 2017* (new publication). Information in this publication is presented on the outcomes of international graduates who completed their training in the Australian VET system in 2016, with the data collected in mid-2017.

# Population

The population for the international component of the National Student Outcomes Survey came from the National VET Provider Collection<sup>1</sup>. The collection holds details on students, the training undertaken, and their achievement. The information is sourced from student enrolment records that are submitted to NCVER either directly from training providers or via state training authorities (STAs). The National VET Provider Collection is managed in accordance with the Australian Vocational Education and Training Management Information Statistical Standard (AVETMISS).

The international trial surveyed graduates only. Students were considered an in-scope graduate if they undertook training at Certificate I level or higher, and:

- they were enrolled in 2016, and
- the completed year of the program was 2016, and
- they had successfully completed at least one subject during 2016, and
- they had some contact hours recorded during 2016.

The following hierarchy was applied to the derivation of the international onshore VET graduate population where a graduate had completed two or more programs:

- Where a student had completed two or more programs, the record with the higher qualification level was selected.
- Where a student had completed two or more programs at the same qualification level, the record with the highest number of program enrolment hours was selected.
- Where a student had completed two or more programs with the same number of program enrolment hours, the record with the highest program record identifier was selected

Applying this hierarchy resulted in a population of 42 923 international onshore VET graduates. It was this population from which the sample for the survey was drawn.

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<sup>1</sup> For more information regarding the National VET Provider Collection please refer to Australian vocational education and training statistics explained at <<https://www.ncver.edu.au/support/support/all-support/vet-statistics-explained>>.

# Sampling frame

The sampling frame was comprised of graduates for whom contact details were available.

Contact details were sourced using two different methods. Where students had a USI, contact details were sourced from the USI Office. An application to source contact details using this method was submitted to, and approved by, the VET Data Access Committee.

For students without a USI, NCVET requested contact details from STAs. Contact details were sourced using this method for international graduates undertaking training at:

- TAFE in New South Wales, Western Australia, South Australia the Northern Territory, and
- Private training providers in South Australia and the Northern Territory.

The remaining international graduates, for whom contact details were not available, were excluded from the sampling frame.

Of the 42 923 international onshore VET graduates in the population, contact details were available for 37 690 graduates. All of these graduates received a survey invitation letter.

# Survey design

The 2017 survey was designed to report on the outcomes of international onshore graduates who paid for their training (see table 1).

**Table 1 Scope of the International onshore VET graduate outcomes publication**

	TAFE	University	Community education provider	Private training provider
Commonwealth and state funding	*	*	*	*
Domestic fee-for-service	*	*	*	*
International fee-for-service	✓	✓	✓	✓

## Survey response

The national response rate for international onshore VET graduates was 30.5% (see table 2).

**Table 2 Survey response summary for international onshore VET graduates, 2017**

	Graduates	
	n	%
Survey invitations	37 690	NA
In scope <sup>1</sup>	37 689	100.0
Responded (usable responses)	11 506	30.5
Responded (unusable responses) <sup>2</sup>	247	0.7
Did not respond	25 936	68.8
Email return to sender	270	0.7
SMS return to sender	5 327	14.1
1800 number return to sender	2	0.0
Refused	1 539	4.1
No response	18 798	49.9

Notes 1. 'In scope' refers to the number of graduates invited to participate in the survey, once self-identified out of scope selections have been removed.

2. 247 respondents to the survey were found to be out of scope after the completion of fieldwork.

Table 3 shows the response rates by type of contact details available to send survey invites/reminders.

**Table 3 Survey response rates for international onshore VET graduates by type of contact details, 2017 (%)**

	Graduates
	%
Email and mobile	34.8
Email only	18.3
Mobile only	16.4

Table 4 shows the response rates for graduates by the source of sample data.

**Table 4 Survey response rates for international onshore VET graduates by sample submitter, 2017 (%)**

Sample submitter	Base (n)	Responses (n)	Response rate (%)
USI Register	32 582	10 178	31.2
Non-USI Register total	5 107	1 328	26.0
NSW TAFE	3 469	877	25.3
WA TAFE	495	36	7.3
SA TAFE	227	89	39.2
SA Private Provider	832	295	35.5
NT TAFE	65	28	43.1
NT Private Provider	19	3	15.8
<b>Total</b>	<b>37 689</b>	<b>11 506</b>	<b>30.5</b>

## 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 sample represents 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. Base weights were adjusted to account for under coverage of graduates who did not have a USI and for whom contact details could not be obtained from the data submitter.
4. 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 (8 categories: New South Wales, Victoria, Queensland, South Australia, Western Australia, Tasmania, Northern Territory and the Australian Capital Territory)
  - Age group (4 ranges: 18–24, 25–34, 35–49, 50 years and over)
  - provider type (4 categories: TAFE, university, community education provider and private training provider)
  - sex (2 categories: Male, female)
5. Large weights were trimmed to reduce variance.

The population benchmarks used were based on the 2016 National VET Provider Collection.

# Fieldwork

## Email

All graduates with a valid email address were sent a personalised email invitation on 31 May 2017. The email included graduates' training details and instructions on how to complete the survey online. Each email contained a unique login code and an embedded link with direct access to the online survey.

Seven reminder emails with the embedded link to the online survey were sent to graduates who had not completed the survey. These emails were sent from 29 May to 1 June, 8 to 9 June, 14 to 15 June, 21 to 22 June, 5 to 6 July, 11 July and 18 to 19 July. Email reminders contained the URL address to the survey, along with each graduate's unique login code.

## SMS communications

Graduates who had a valid mobile number, but who did not have an email address were sent an SMS invitation to participate in the survey between 1 and 7 June. Following this initial SMS invitation, three SMS reminders were sent to graduates with a valid mobile number who had not completed the survey. The first and second reminder mentioned the prize draws. The first reminder was sent to graduates between 20 and 23 June. The second reminder was sent between 28 and 30 June. The final (non-incentivised) reminder was sent to all graduates who had not completed the survey on 31 July.

## Financial incentive

International graduates were eligible to win prizes in the same prize draw offered in 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. Five prize draws were conducted, timed to coincide with reminder activity, with winners selected at random (see table 5).

**Table 5 Prize draw details, 2017**

Prize draw	Close date	Prize draw details	Total prize value
1	4 June	1 x \$1,000, 2 x \$500 and 1 x \$250 pre-paid Visa gift-cards	\$2,250
2	18 June	1 x \$1,000, 2 x \$500 and 1 x \$250 pre-paid Visa gift-cards	\$2,250
3	2 July	1 x \$1,000, 2 x \$500 and 1 x \$250 pre-paid Visa gift-cards	\$2,250
4	16 July	1 x \$1,000, 2 x \$500 and 1 x \$250 pre-paid Visa gift-cards	\$2,250
5	30 July	1 x \$1,000, 2 x \$500 and 1 x \$250 pre-paid Visa gift-cards	\$2,250

## Privacy

International graduates received a primary approach email, with a link to an online privacy notice, which complied with the Australian Privacy Principles. The privacy notice stated that NCVER would not release information from the survey that would enable an individual survey respondent to be identified. For further information on the privacy notice, refer to the 2017 primary approach email <<https://www.ncver.edu.au/data/collection/student-outcomes/international-onshore-vet-graduate-outcomes/>>

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

# Survey data

The 2017 National Student Outcomes Survey collected data on graduates':

- reason for training and achievement of reason
- employment characteristics before and after training
- further study activity

- opinions of, and satisfaction with, the training
- suggestions for improvement.

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

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

- location of further study (for those undertaking further study)
- satisfaction with main job (for those employed after training)
- barriers faced when looking for work
- current country of residence
- type of visa held (for those residing in Australia).

## Reference period

Graduates were asked to provide information with respect to two reference periods.

The first reference date was 26 May 2017. Graduates were asked to supply information on labour force status, employment characteristics and additional study, and also give opinions on their training and suggestions for its improvement.

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

## 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 Excel summary tables at <https://www.ncver.edu.au/data/collection/graduate-outcomes> and can be used to calculate the 95% confidence intervals.