

Methodology for tertiary participation rates

Level of Compliance	Main Audience	Other
Inform 	<ul style="list-style-type: none">• Researchers and analysts	<ul style="list-style-type: none">• Tertiary education organisations

This guidance supports researchers and other interest parties to understand how the Ministry calculates and interprets tertiary participation data.

- ▼ What are participation rates
- ▼ Age-standardised participation rates
- ▼ Student numbers
- ▼ Population

What are participation rates?

Participation rates show the proportion of the population who are enrolled in education. They provide a useful way of comparing enrolments relative to the size of different populations.

The **participation rate** is the number of domestic students enrolled in tertiary education at any time during the year divided by the number of people in the population.

The total participation rate is the total number of students enrolled in tertiary education divided by the total population aged 15 and over.

Rates can be broken down by age group, ethnicity, gender, subsector and level of study. For example, the rate for 25 to 39 year old Māori women in bachelors degree is the number of 25 to 39 year old Māori women enrolled in bachelors degrees divided by the number of 25 to 39 year old Māori women in the population.

Age standardised participation rates

The **age standardised participation rate** has been adjusted to match the age distribution of the total population in the latest reporting year. This means that differences due to the different age structure of the population over time, or between groups, have been removed.

These rates are useful to look at differences that are not explained by differences in age structure. For example, if one ethnic group has a higher proportion of the population aged under 25, their total participation rate may appear higher than for another ethnic group with a lower proportion aged under 25. This is because the majority of tertiary students are aged under 25 and the higher rate for the first ethnic group is a result of more young people in that population. The age standardised rates remove the differences due to these kinds of population differences.

The Ministry of Education recommends using the participation rate as the standard reporting measure. This rate is easy to interpret and understand. The age standardised rates should only be used where the effect of different age structures on participation rates is an important consideration. It should be noted that the age standardised rates cannot be interpreted as the actual proportion of the population enrolled in tertiary education.

Student numbers

The published participation rates are based on the number of domestic students in formal tertiary education at funded tertiary education providers and in industry training. The count is of students enrolled at any time during the year for more than 0.03 EFTS (which equates to study of more than one week's full-time duration) at a provider and all industry trainees reported by an industry training organisation. This count covers the full year of enrolment and will be higher than the number of students enrolled at any point in time during the year.

The count excludes non-formal learning. It only includes those private training establishments that received Student Achievement Component funding, and/or had students with student loans or allowances, and/or Youth Guarantee programmes.

Students are counted in each ethnic group they identify with. Students are counted in each level and subsector they are enrolled in during the year. Totals are based on counts of unique individuals and include those students with unknown values. Age is calculated as at 31 December each year.

Population

The population numbers are taken from the latest estimated resident population numbers produced by Statistics New Zealand. These estimates are revised after every census, which can result in some changes to previously published data.

Statistics New Zealand produce annual estimates for the total and Māori population. We use the mean population for the year ending in December.

Following the 2018 census, there was a significant revision to the Māori estimated population from 2006 to 2018. This means that participation rates for Māori may be different from previously published. More information on this

revision can be found at: <https://www.stats.govt.nz/methods/maori-ethnic-group-population-estimates-200618-methods-and-results>

For the European, Pacific and Asian populations we use the census year estimated resident populations. These are available from 1996 to 2018. The estimates for intercensal years are created by interpolating in a straight line by individual year of birth. The estimates for 2019 onwards use the Statistics New Zealand National Ethnic Population projections, with the 2018 base population.

The European estimated resident population includes people who identify with 'Other ethnicities'. This includes people who respond as "New Zealander" on the census. Students identifying as 'other ethnicity' have been included with Europeans in the student count to be consistent with the population definition.

Prior to 2019, the Ministry used the previous population projection series for each intercensal period for the European, Pacific and Asian populations. These series tended to under- or over-estimate each population in the years immediately prior to each census. The new method described above provides more accurate estimates in each intercensal year. The results may vary from those previously published.

The Statistics New Zealand population estimates include international students living in New Zealand. International students are not included in the student count. In most cases, this makes very little difference to the result. It may have some effects on the participation rates for the younger Asian population, where international students make up a larger part of the resident population.

Further information on the estimate resident populations can be found here: <https://www.stats.govt.nz/methods/estimated-resident-population-2018-data-sources-and-methods>