



**LEVELS OF PARTICIPATION AND ACHIEVEMENT  
RATES IN YEARS 11 AND 12 OR EQUIVALENT  
IN TASMANIA**

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## Participation and achievement rates in Tasmania

Tasmania's participation and achievement in senior secondary education and training is low:

- full time participation in school/college for 17 year olds in Tasmania is given by the ABS as 63% of the age group (ABS Schools Australia 4221.0 Table 53) in comparison with NSW (68%) and Victoria (78%)
- participation in education and training of 17 year-old Tasmanians is about 78% (80% for Australia) in comparison with above 90% for top performing OECD countries (OECD Education at a Glance 2006 Table C 1.3)
- the proportion of the Tasmanian age cohort completing Year 12 or its equivalent is estimated at no more than 55% (see below) compared with an Australian average of about 69%
- about 50% of Tasmanians aged 15 and over do not have a post-year 10 qualification (ABS 6278.0 – persons reporting highest level of education less than year 12).

### Analysis of 2006 Year 12 data set:

Define the year 12 participating cohort as:

- identified by the school as year 12 or year 13 in 2006
- has one or more results (PA or better or a VET competency) at senior secondary education and/or training (complexity level 1 or above) in 2006 (and may well have results from earlier years).

With this definition there are in the 2006 TQA data file:

- 4005 Australian citizens/permanent residents under 20 years of age
- 3007 year 12 students with 120 or more units of credit in senior secondary education and training (TQA accredited courses, TCE, VET certificates and competencies, and/or TQA recognised studies) recorded at any time before 31/12/2006 who are also Australian citizens/permanent residents under 20 years of age.

Note that the 120 units of credit corresponds roughly to about 1200 hours of attendance with some sort of achievement - over 2 years this is less than 18 hours a week during school time.

Using figures provided by the Australian Bureau of Statistics for individual age groups 15 to 19 years as at July 2006, the age-weighted population estimate for Tasmania is 6686. An age-weighted population estimate takes into account the variation in numbers of persons in each age group.

This gives a completion rate of  $3007/6686 = 45$  percent. If we assume (no reason one way or the other at the time of writing this) that the patterns of participation haven't changed much in the last four years then we can estimate that currently about 45 % of Tasmanians 'complete' year 12 or equivalent through a program of senior secondary education and training before they are 20.

If we knew which of those students in TAFE Tasmania and other RTOs who are completing certificate IIIs and/or apprenticeships by the age of 20 do so without having completed a full program of senior secondary education and training we could give an improved estimate of year 12 or equivalent completion rates. A very rough estimate suggests that we should add another 500 to give a total figure of about 3533 – about 53 per cent.

Note that there are clear differences in participation by gender and by socio-economic status:

- males form 51.5 percent of the population (15-19) but only about 45 percent of the year 12 completers
- socio-economic status (estimated from address) is significantly associated with how much study is completed, with how much more demanding study is completed and with success.

The estimation of socio-economic status from address has some uncertainties in it, including

- the address we use is the one given by students at the end of year 12
- the information is about the area students live in rather than their particular circumstances.

The index we use has an Australia wide mean of 1000 and standard deviation of 100.

For the Tasmanian population as a whole, the index has a mean of 948. For the 3007 15-19 year-olds who 'completed' year 12 in 2006, the index has a mean of 977 – a very significant difference of nearly one-third of a standard deviation. That is, assuming that the total population figure is a reasonable guide to the index for the 15-19 year old group (it may be an overestimate), students from lower socio-economic backgrounds are much less likely to complete year 12.

We have also used a classification of areas (from Commonwealth Department of Health and Ageing – Rural, Remote and Metropolitan Areas) to get some indication of differential participation patterns by region. These indications are only approximate, since they depend on assumptions about the addresses we use and on assumptions about the age structure of the population.

According to ABS census data figures, about 42 per cent of the total Tasmanian population lives in an area (Statistical Local Area) classified as 'capital city' and 27 per cent in an area classified as 'other rural areas' (e.g. Huon Valley, Circular Head). For year 12 completers, however, the proportion is higher in areas classified as 'capital city' (48 per cent of the total) and lower in areas classified as 'other rural' (22 per cent of the total). That is, patterns of participation appear to be significantly different between the capital city and rural areas – an unsurprising observation.

It is possible to make a comparison of the overall completion rate with other states on a roughly similar basis by looking at the numbers completing their 'year 12 qualification'. These numbers will include some mature age students and some overseas students. The Tasmanian figures with overseas and mature age students included give the number completing as a proportion of the population cohort of 48.8 percent instead of the better estimate of 45 percent given above – an inflation of about 3 percent. The impact of these factors on data from other states is likely to vary.

<b>State</b>	<b>Year 12 completion qualification</b>	<b>Size of cohort completing the 'year 12' qualification</b>	<b>Approximate population</b>	<b>Approximate percentage completion rate</b>
NSW	HSC	61472	91348	67 %
Victoria	VCE	48352	67961	71 %

Of course, the Tasmanian figures are those for a year in which there was no expectation that students would 'complete' a full program of senior secondary education and training and any comparisons have to be set in that context.

## Participation and achievement profile – 2006 – statewide data

Statewide Data		Comments
Year 12/13 in 2006	4797	
Of these 4797 students		
<ul style="list-style-type: none"> <li>are Australian Citizens/permanent residents</li> </ul>	4663	
<ul style="list-style-type: none"> <li>are Australian Citizens/permanent residents over 19</li> </ul>	658	
<ul style="list-style-type: none"> <li>are Australian Citizens/permanent residents 15 to 19</li> </ul>	4005	6686 is total age-cohort population figure
Of these 4005 students ...		
<ul style="list-style-type: none"> <li>completed at least 120 units of credit (VET or TCE)</li> </ul>	3007	1) see above for comparisons with total age-cohort population figure 2) 75% of the 4005 reaching the end of year 12
<ul style="list-style-type: none"> <li>have a TER</li> </ul>	2137	53% of the total, 71% of those doing 120 units of more; significant female/male difference – 76% and 64%
<ul style="list-style-type: none"> <li>did some VET</li> </ul>	1215	30% - f/m % about the same
<ul style="list-style-type: none"> <li>did at least one TCE level 5</li> </ul>	3261	81% of the total
<ul style="list-style-type: none"> <li>did some maths at TCE level 5</li> </ul>	1776	
<ul style="list-style-type: none"> <li>did some science at TCE level 5</li> </ul>	1566	
<ul style="list-style-type: none"> <li>did some VET and have a TER</li> </ul>	254	
<ul style="list-style-type: none"> <li>did at least 4 TCE level 5 subjects</li> </ul>	2570	
<ul style="list-style-type: none"> <li>Average proportion of VET units forming part of a complete certificate</li> </ul>	0.52	Would be 1.0 if all VET units led to a complete qualification
<ul style="list-style-type: none"> <li>Average TCE units of credit per student</li> </ul>	122.6	
<ul style="list-style-type: none"> <li>Average VET units of credit per student</li> </ul>	9.2	
<ul style="list-style-type: none"> <li>Mean TER</li> </ul>	75.9	If all persons completed year 12 and all received a TER the mean would be 50.0
<ul style="list-style-type: none"> <li>Standard deviation TER</li> </ul>	16.8	
<ul style="list-style-type: none"> <li>Median TER</li> </ul>	78.5	
<ul style="list-style-type: none"> <li>Mean year 12 points score</li> </ul>	9.9	Counts all subjects (TCE/VET). 9.9 is roughly equivalent to the achievement that gets a TER of 50.0
<ul style="list-style-type: none"> <li>Standard deviation year 12 points score</li> </ul>	3	
<ul style="list-style-type: none"> <li>Median year 12 points score</li> </ul>	10.3	
<ul style="list-style-type: none"> <li>Mean SES Advantage/Disadvantage</li> </ul>	971.2	948.0 is average for total Tasmanian population 1000.0 is Australia-wide average
<ul style="list-style-type: none"> <li>Standard deviation of SES</li> </ul>	93.0	100 is Australia-wide standard deviation