

STATE OF TASMANIA YEARS 9 – 12 EDUCATION REVIEW

Submission by Eleanor Ramsay and Michael Rowan

ATTACHMENT 1

Using *MySchool* to benchmark Tasmanian Year 12 attainment rates against similar schools in other states

Prof Eleanor Ramsay and Prof Michael Rowan, June 2016
[Minor correction 2 July 2016 – see note (2), page 24.]

*Few tragedies can be more extensive than the stunting of life,
few injustices deeper than the denial of an opportunity to strive or even
to hope, by a limit imposed from without, but falsely identified as lying
within.*

Stephen Jay Gould

PREAMBLE

Prof Alan Reid, in his defence of the importance of public education, *Building our nation through public education*, writes

Apart from denying individuals the chance to develop to their fullest potential, there is now overwhelming evidence demonstrating the deleterious effects of educational inequality on social and economic outcomes and political participation. Productivity falls, participation in civic life is diminished, and social dislocation is greater. Since education is one of the most important determinants of levels of inequality, it is clear that there is need for urgent action to improve equity in Australian schooling.

The kind of evidence for inequality in Australian schooling Prof Reid would have in mind compares the outcomes for students in wealthier schools in wealthier communities with the outcomes for students in poorer schools in poorer communities. This evidence is well known, and is the basis for attempts to reduce inequality in schooling, most recently by the Gonski funding reforms.

In what follows we compare Tasmanian schools to like schools elsewhere in Australia. We do not compare unlike schools. Thus we do not consider the kind of evidence that is usually presented to demonstrate the level of inequality in Australian schooling.

But while we seek to compare outcomes only from like schools, inequality is still at the heart of this analysis. For, as the data analysed in the following pages will show, the educational outcomes for senior secondary students in Tasmanian government schools are much lower than for comparable schools in other states, which means **there is not only inequality between unlike schools in Tasmania (as elsewhere), but also between Tasmanian government schools and like schools in other states.**

Furthermore, this difference increases as we look at schools in more disadvantaged communities, here and in other states. The inconvenient truth revealed by this data is that the outcomes from Tasmanian state senior secondary schools do not match those from like schools in other states, and fall further and further behind for students from less advantaged communities.

Thus we have in Tasmania a double inequality in our schooling. First, and as in the rest of the country, students in our more advantaged schools are achieving much better outcomes than students in schools at the other end of the scale. That is the problem Gonski is trying to fix. But then we also have inequality between our government schools and like schools in other states. That is a problem we in Tasmania need to fix.

And this is despite all but two of the Tasmanian state schools in this analysis receiving more dollars per student than their similar schools, Burnie and Kingston High Schools being the exceptions.

We have an equity problem in Australian schooling. But we have almost exactly twice the problem – an equity crisis – in the senior secondary education in Tasmania. This has been the main motivation for our work.

AIM

The aim of this analysis is:

- first, to compare the rate at which students from Tasmanian high schools gain their senior secondary certificates, in comparison to students from comparable high schools in other states, and
- second, to compare the performance of the students in the same schools in NAPLAN at year 9, and
- third, to reflect upon the substantial difference in the educational outcomes identified by these two comparisons.

SOME METHODOLOGICAL CONSIDERATIONS

Attempts to compare the performance of schools across jurisdictions are bedevilled by claims that comparisons between the schools or systems chosen:

- (1) are in some way ‘not fair’ or ‘misleading’ due to differences between the schools that are not reasonably considered to be a property of the school itself – such as the level of parental support for children’s learning, or
- (2) do not compare ‘apples with apples’.

To overcome the first objection we need to find sets of schools which can be fairly compared, and thus for which it is **reasonable to expect that all the schools will have a similar level of performance on some measure**.

Here we accept the work done by the Australian Curriculum and Reporting Authority (ACARA), which manages the NAPLAN testing. ACARA has undertaken research to develop a measure for identifying schools which can fairly be expected to have the same performance in NAPLAN tests. The measure they have developed is the Index of Community Socio-Educational Advantage (ICSEA).

ICSEA is determined by a formula which, since its revision in 2013, takes account of:

- the educational attainment of the parents of the students at each school,
- the category of employment of the parents at each school (Senior management in large business organisation, government administration and defence and qualified professionals • Other business managers, arts/media/sportspersons and associate professionals • Tradesmen/women, clerks and skilled office, sales and service staff • Machine operators, hospitality staff, assistants, labourers and related workers • Not in paid work in last 12 months),
- the school's location (metropolitan, provincial, remote or very remote), and
- the percentage of the students who are Indigenous.

For a simple explanation of ICSEA see

[http://www.acara.edu.au/verve/resources/20160418 ACARA ICSEA A.pdf](http://www.acara.edu.au/verve/resources/20160418_ACARA_ICSEA.pdf) and for a more thorough discussion see <http://www.acara.edu.au/verve/resources/Guide to understanding 2013 ICSEA values.pdf>.

ACARA claims that schools with the same ICSEA can reasonably be expected to have the same NAPLAN results, and thus that any differences between the NAPLAN results of schools with the same ICSEA need to be explained by factors internal to the school, such as the quality of the teaching, rather than by looking at the context of the school itself, such as its location in a particular community, or its students' family backgrounds. ACARA uses this proposition as a selection rule to constitute sets of similar schools which can be fairly compared in terms of their performance in the NAPLAN tests.

We intend to accept this claim, and the list of similar schools which ACARA's work has provided on the *MySchool* site for each Tasmanian school in this study, with several qualifications.

First, we understand some critics claim that it is not fair to compare state and private schools with the same ICSEA. As we recall discussion of this from some years ago, their argument runs as follows: regardless of their educational background and kind of employment, parents who choose to send their children to private schools are more likely to be strongly committed to their children attaining good school results than parents of the same background who do not choose private schooling for their children. Also, parental interest in their children's performance is positively correlated with students' higher performance. Thus, a public school cannot fairly be expected to have the same level of student attainment as a private school with the same ICSEA.

We do not have any data to test this hypothesis, and so far as we are aware it is not supported by ACARA's research on ICSEA as a means of identifying similar schools – schools whose performance on NAPLAN it is fair to compare. But here we accept the hypothesis to forestall as a line of criticism of our results that it is not fair to compare public and private schools with the same ICSEA. This would have been important in considering the results for Taroona High School, since most of the schools in the *MySchool* similar schools list for Taroona are private

schools, a consequence of Taroona's high ICSEA. (The 2015 ICSEA of Taroona (1109) is about the same as Launceston Church Grammar School (1111).)

So we do not include interstate private schools among the comparison schools for Tasmanian public schools, but we do allow the reverse.

On the basis of a similar concern, we exclude from the list of similar schools any single sex girls school – on the assumption that comparing two schools of like ICSEA, one a single sex girls' school and the other either a co-educational or single sex boys school, the single sex girls school could be expected to have a greater proportion of its students performing at a higher level.

Likewise, we exclude from the list of similar schools any school which is academically selective, for obvious reasons.

This gives us a total list of 202 interstate schools, in similar schools groups numbering between 8 and 33 for the 14 Tasmanian schools in our sample, (10 government schools, and 4 non-government schools). In addition, we include all of the Tasmanian colleges in our analysis, since most students from the high schools in our sample will attend one of the colleges if they continue to Year 12.

Thus, in response to objection (1) above, we take as a premiss of our argument that:

[A] non academically selective, co-educational schools of the same type (government/non-government schools) and with a similar ICSEA can be fairly compared in relation to their NAPLAN results;

and make the further assumption that:

[B] schools that can be fairly compared in relation to their NAPLAN achievements can also be fairly compared in relation to their Year 12 attainment levels.

Relevant to this assumption, note that factors which are commonly held to affect Year 12 completion rates, such as school location and parental level of education and kind of employment (whether employed, and if so, unskilled, skilled or professional) are already taken into account in determining a school's ICSEA, which in turn determines which schools may be fairly compared in relation to their NAPLAN results. See, for example, <http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4102.0Main+Features40Mar+2011>

This allows us to use the *MySchool* web site to identify, for any given Tasmanian school, a set of similar schools elsewhere in Australia for the purposes of considering and comparing both NAPLAN and Year 12 attainment.

To be precise, in this study *MySchool* was used to identify a list of interstate schools with about the same ICSEA as each of the fourteen Tasmanian schools in this analysis, and from this set of schools we extracted the subset of schools which meet the requirements of (A) above, relaxing this requirement, as already indicated, to admit interstate government schools to the list of similar schools for

a Tasmanian non-government school, but not interstate non-government schools to the list of similar schools for Tasmanian government schools.

For this study, we selected the following Tasmanian schools based on two factors: their location (to give a spread around the State) and their ICSEA (to include more and less advantaged schools). The schools were chosen from a list which did not include data about their Year 12 attainment. The schools (in ICSEA order), their 2015 ICSEAs, and the number of interstate schools used for comparison are:

The Friends School	1169	9
Scotch Oakburn	1118	9
Taroona High School	1109	8
Launceston Christian School	1054	15
Marist Regional College	1020	31
Kingston High School	995	14
Burnie High School	957	24
Devonport High School	956	28
Queechy High School	953	33
Scottsdale High School	933	28
Wynyard High School	914	23
Huonville High School	910	32
Campbell Town High School	909	12
Mountain Heights School	885	9

Note that none of the mainland comparison schools are from the ACT or the NT, because both are too different to Tasmania to be useful for comparison, e.g., the average ICSEA of the ACT colleges is about the same as Taroona, the Tasmanian government school with the highest ICSEA. Neither do we use any WA schools, as their 2012 Year 10 cohort was unusually small following a change to the school starting age some years before.

Note also that some of the sets of similar interstate schools share members.

In total, our data set of 224 schools comprises:

- 10 Tasmanian government high schools
- 8 Tasmanian government colleges
- 4 Tasmanian non-government schools
- 151 government schools in other states
- 51 non-government schools in other states

Having determined the set of schools to be compared, we now consider the second problem in comparing schools in different states: how do we ensure we are comparing ‘apples with apples’, or more precisely, considering measures which are equivalent and thus a fair basis for comparison.

This issue is easily resolved where different states use the same measure, as with NAPLAN attainment. This is a national measure, which we take as a fair measure of performance across all schools with the same or very similar ICSEAs. (See http://www.acara.edu.au/verve/resources/Reliability_and_validity_of_NAPLAN

[.pdf](#), and Masters et al 2008, at http://www.curriculum.edu.au/verve/resources/ACER_Report_on_Reporting_and_comparing_school_performances.pdf).

For Year 12 attainment, however, we do not have a national measure, and thus it is possible that in comparing the rate at which students attain their state's Year 12 certificate we are not comparing like with like.

But all we need to assume is that if a sample of students in one jurisdiction attained their senior secondary certificate, then almost all of them would have attained their certificate had they studied in another jurisdiction, all other things being equal; and similarly if they had not attained their certificate in one jurisdiction, almost all would not have attained it in another.

This is all we need to claim for the Year 12 attainment rates in different states to be fairly comparable. We do not need to say that the requirements to attain a certificate in one state are exactly the same as those in another, nor even that the standards or amount of study required in one state are the same as those in another - but simply that the nature of the certificates and the standards of assessment for the courses that make them up are sufficiently similar that **any big differences in rates of attainment of the senior secondary certificate between schools in different states cannot be explained by differences in the requirements of the Year 12 certificates themselves**. This is all we assume here.

This assumption – that the Year 12 certificates of the various Australian jurisdictions are all apples – is supported by three lines of argument.

First, higher education entry in Australia is based on ranking applicants' study for their Year 12 certificates, with these results determining their ATARs. Now note that more than 10% of domestic undergraduate offers by Australian universities are to students whose home state is elsewhere (see <https://www.education.gov.au/undergraduate-applications-offers-and-acceptances-publications>, 2013 Report, Table 11). Could it be that with such a large movement of students, and a strong focus on university course/unit pass rates and graduation rates, that substantial differences in the level of preparation of applicants from different states would not be noticed and cause controversy across the higher education sector, particularly in relation to the highly competitive entry to prestige, high ATAR courses such as law and medicine? We think not – from which it follows that Year 12 standards must be comparable across jurisdictions.

Second, with the sole exception of Tasmania, the Year 12 certificates of all Australian jurisdictions are overseen by independent boards which include strong representation from amongst the most respected school leaders in each state, who can typically be expected to have national roles also. It is most unlikely that a board overseeing the Year 12 qualification in one state would be unaware that the demands of their certificate were out of line with the requirements elsewhere.

The same goes for teaching staff, especially principals and other senior staff (mainly in private schools), who regularly move between states to new positions.

On the basis of these three independent lines of argument, we conclude that schools' attainment rates of each jurisdiction's Year 12 certificate give us a fair basis for comparison.

For ease of comparison we also need to find a single measure based on NAPLAN results. We use year 9 NAPLAN test results for a single year, and rather than use the results of all five of the tests, we use the average of the percentages of students above the national minimum standards for reading and numeracy.

We use NAPLAN data for 2015, as at the time of writing this is the most recent data available on *MySchool*.

Likewise, Year 12 attainment data for 2014 is used as the most recent data on *MySchool*, and we also have this same data for Tasmanian high schools that (wholly or dominantly) end at Year 10, thanks to the recent much welcomed data release by the Office of Tasmanian Assessment, Standards and Certification (TASC) and the Department of Education – see <http://www.tqa.tas.gov.au/1324>. This gives direct continuation data for each Tasmanian high school, i.e. the number and percentage of the 2012 Year 10 students at each high school gaining their Tasmanian Certificate of Education (TCE) in 2014, wherever they undertook their senior secondary study, providing only they remained in Tasmania. We use this data for all of the Tasmanian high schools in this study - with the exception of the two schools with enrolments of less than 300 students for which we use an average of five years of TCE attainment (2011 – 2015) to smooth out small sample fluctuations, with each year weighted 10% more than the preceding year to take account of the general improving trend.

Unlike the *MySchool* Year 12 attainment data that we use for schools in other states – which counts all certificates awarded in a calendar year regardless of which year the students commenced their senior secondary study - this TASC data does not include students who completed their TCE over three or more years. However, data from the Legislative Council Hansard provided in answer to Questions on Notice numbers 26 of 2014 and 69 of 2016, asked by the Hon Ruth Forrest, shows that including students who take up to four years to complete their TCE at college adds no more than 5% to the total of TCE completions.

While such an increase is important, most especially for the students concerned, including such extended completions does not change the overall picture emerging from comparing the rates of Year 12 certificate completion at schools in Tasmania with those of similar schools interstate, as the range of the differences between Tasmanian and interstate schools are many times greater than this. Moreover, we have no data to attribute the 'year 13/14 completion rate' for individual colleges back to individual high schools, so we have not included these part-time completers in this analysis.

Nor does this analysis take account of the fact that some students leave Tasmania after Year 10 without completing their Year 12 certificates. According to data from the Tasmanian Qualifications Authority (TQA), the number of such

students is about 120 per year, which is negligible in this analysis, assuming they are reasonably evenly spread across at least most of our high schools.

With those qualifications we can use the *MySchool* Year 12 attainment data for other states' schools to provide a comparison to Tasmanian schools' direct continuation data. We do this by calculating for each interstate school in the sample, the number of students gaining their Year 12 certificate in 2014 (which *MySchool* gives us) as a percentage of that school's 2012 Year 10 cohort.

For QLD and Victoria, year level enrolment for individual schools is available here (see <http://education.qld.gov.au/schools/statistics/enrolments.html> and here <https://www.data.vic.gov.au/data/dataset/all-schools-fte-enrolments-feb-2012>), respectively.

For NSW and SA, year level enrolment by school is not publicly available. But we can estimate the size of the 2012 Year 10 cohort from each school's total enrolment for that year based upon what percentage of the 2012 total enrolment in that state in that calendar year was in Year 10.

We note that that if this estimate for any interstate school is lower than the actual Year 10 enrolment for that school in 2012, this would overestimate the percentage of Year 10s gaining their senior secondary certificate. To reduce the likelihood of this occurring, we apply to each interstate school's total 2012 enrolment, the percentage of Year 10s in the class of schools in each state which has the highest proportion of its enrolment in Year 10. By doing this, we can be confident that we are making a high estimate of Year 10 numbers for these interstate state schools taken as a whole, resulting in a low estimate for their rate of senior secondary certificate completion.

Thus for each NSW school, we estimate the 2012 Year 10 enrolment as 18.5% of the total school enrolment for that year. This is the percentage of the total school enrolment in Year 10 in the educational region of Western NSW, which has the highest percentage of the total school enrolment in Year 10 in that State – in consequence, no doubt, of this region having the highest rate of students leaving after Year 10 or year 11. (See <https://www.det.nsw.edu.au/media/downloads/about-us/statistics-and-research/key-statistics-and-reports/statistics-bulletins/stats2011-cese-bulletin.pdf>) Likewise, we use 19.7% as the percentage of the total 2012 Year 10 school enrolment for all SA schools, this being the percentage relevant to country SA schools. (See <http://www.decd.sa.gov.au/aboutdept/files/pages/reports/2012/2012enrolmentterm1.pdf>.)

We use 2012 data for the Year 10 cohort since most of this cohort of students attaining their senior secondary certificates would have done so in 2014, the year for which we consider Year 12 attainment data. As noted above, some of the 2012 Year 10s will have completed their senior secondary certificates in 2015, or will do so in later years, and some of the Year 12 certificates awarded to students in each school in 2014 will have been awarded to students who were in Year 10 in 2011, perhaps even earlier. We assume the rate of part time study has not varied significantly over the few years prior to 2012, and thus that the number of

certificates issued in 2014 is an accurate measure of the number of Year 10s from 2012 gaining their certificates in 2014 or later.

There is a final consideration to be discussed before leaving this measure. Some schools enrol a significant number of students at Year 11 or 12, and thus there will be some students in the count of Year 12 certificate completers who were not Year 10 students at that school. Like the issue of part-time study considered in the paragraph above, this is not an issue with the Tasmanian data as this tracks individual students. But in other states there is the possibility that the data is skewed, particularly by international students enrolling after Year 10. However, only six schools amongst the set of state schools considered in this analysis are licensed to enrol international students (as listed on the CRICOS register), all in NSW – or more precisely, only these six schools are licensed to enrol students without either citizenship or permanent residence status. All but two of these six schools were low ICSEA schools whose ‘international students’ will be recently arrived refugees likely to have little English, and not more likely to be in Year 12 than any other year. And the two higher ICSEAS schools have the lowest percentage of their Year 10s attaining their HSC in their similar schools group. Accordingly, we conclude that this is not a factor that is likely to make interstate comparisons of Year 12 certificate attainment rates unfair to Tasmanian government schools.

We claim that taking these precautions gives reasonable grounds to assert that the performance measure for Year 12 attainment for each school used in this study – the *MySchool* figure for the number of 2014 Year 12 certificates, expressed as a percentage of the known or estimated Year 10 class of 2012 – is fair to Tasmanian schools.

But there is also a simpler measure of Year 12 performance available which is not subject to these concerns at all – the percentage of students who enrol in Year 12 that gain their certificate. This can be calculated from two pieces of data which *MySchool* gives for each high school that offers Year 12 – which of course excludes most Tasmanian high schools, the reason we cannot use this as our only basis of comparison.

MySchool defines these two measures as follows:

Senior secondary certificate awarded: The number of students for each school who left at the end of 2014 having fulfilled the requirements for a senior secondary certificate issued by a Board of Studies in the relevant state or territory.

Completed senior secondary school: The number of students for each school who left at the end 2014 having completed the equivalent of two or more years post Year 10 studies (not necessarily full-time nor consecutive) who are eligible for a statement of results, or a record of achievements.

These and more nuanced definitions for each jurisdiction are given at <https://www.myschool.edu.au/MoreInformation/CaveatsForSeniorSecondaryOutcomes2014#SeniorSecondaryOutcomes>.

MySchool warns that these measures are based on state by state definitions rather than a single national definition and thus must be compared with caution. However, the additional detail given about the definitions used in each jurisdiction does not suggest any difference between states that would entail that the percentage of students gaining their senior secondary certificates at a particular school in a particular calendar year, expressed as a percentage of the students who completed secondary school at that school in that year, cannot be fairly used as a performance measure for all similar schools in all states.

To confirm this we have read the 2014 Annual School Reports of the 23 interstate schools similar to Burnie High School. Fifteen of the 23 school reports gave either the number of Year 12 students and the number attaining their senior secondary certificate, or the percentage of Year 12 students gaining their certificate. The fifteen include schools in all states used in this study.

In all cases the numbers reported to the school community in the school's annual report were very close to those we found on *MySchool*, and in all but two cases where the figures were different the annual report gave a higher figure for senior secondary certificate attainment. In the two cases where the *MySchool* data was higher than the annual report data, the difference was 1% and 2%.

For the Tasmanian colleges we can conduct a similar check of the *MySchool* data for the number of students in Year 12 in 2014 and the number receiving their Year 12 certificates that year, by using the Attainment Profiles given on the web site of the TASC (see <http://www.tqa.tas.gov.au/1324>). Again, this data is sufficiently close to what is given on *MySchool* – at most a 6% difference – that it does not affect any conclusion we can draw from the numbers, as we will note below.

Accordingly, we conclude that the *MySchool* information on the number of students studying Year 12 and the number of students completing their senior secondary certificates, gives a fair and accurate measure of the success of the school in supporting those students who are retained to Year 12 to complete their senior secondary certificates.

We use this measure for the eight Tasmanian colleges and all private schools, the former not enrolling Year 10 students and the latter, as P-12 schools, making estimations of Year 10 enrolments more difficult. As already noted it is not possible to use this simpler measure for Tasmanian high schools since until very recently these either do not offer Year 12, or – historically – have done so as a subsidiary means of attaining the TCE with the major route for their students to Year 12 study being enrolment at one of the colleges located in Hobart, Launceston, Devonport and Burnie.

Note that our use of this measure is not invalidated by the criticism that in the competition for enrolments, schools use their Year 12 class' results as a marketing strategy, and keep these results up by discouraging less able students from enrolling in Year 12 – so what looks like an excellent performance in supporting Year 12 students to gain their senior secondary certificates might in

fact be the result of a ruthless culling of Year 11 students judged less likely to succeed at Year 12.

However schools reputed to do this – high prestige private schools in the major cities - are not included in our data. And for government schools in particular, there is a strong counter-pressure of accountability for retaining students to Year 12. A key performance indicator for NSW public schools, for example, is the percentage of students who took their year 9 NAPLAN tests at the school that go on to gain their HSC.

Before proceeding, we summarize the performance measures for which we have collected the data discussed below.

NAPLAN:

For each school, the average of the percentages of the 2015 Year 9s above the national minimum standard for reading and numeracy.

Senior Secondary Certificate:

1. % of Year 10 students gaining the senior secondary certificate:
 - for Tasmania, the % of the 2012 Year 10 students at each school gaining their TCE in 2014;
 - for QLD and VIC, the number of students at each school gaining their state's senior secondary certificate in 2014, expressed as a % of the Year 10 students at the school in 2012;
 - for NSW and SA, the number of students at each school gaining their state's senior secondary certificate in 2014, expressed as a % of the estimated number of Year 10 students at the school in 2012.
2. % of students enrolling in Year 12 in 2014 gaining their senior secondary certificate in 2014.

Two final methodological or perhaps philosophical points before getting to the data.

First, clearly we rely on NAPLAN as measure of school performance. We are of course aware of many criticisms of NAPLAN in the literature, and among practicing teachers, who sometimes call it 'NAPALM'.

Our use of NAPLAN does not imply that we think it is the only or even the most important measure of the quality of a school, nor even that its most important use is as a measure of school quality rather than a diagnostic tool to identify where students are having trouble – school by school, class by class, and individual by individual – so that action can be taken to improve their learning. The Gonski reforms are a good example of such action at the systems and national level – which is one reason why former champions of NAPLAN such as Dr Kevin Donnelly now oppose it (see <http://www.abc.net.au/news/2010-05-10/34006>).

Second, while we began looking at schooling in Tasmania with the assumption that Year 12 is a qualification for all, we were somewhat surprised to find some denying this. For example, one mayor asked us to draft a short paper for him to use as a basis for discussion with some in his area opposed to extending schools to Year 12 on the basis that not all local students could (or should?) aspire to that level of education.

In case the nationwide assumption about the value of Year 12 for all students is not shared by all, we quote from the Australian Bureau of Statistics (ABS) document referred to above to show that any lingering views to the contrary are now very much out of step with thinking in the rest of Australia:

Within Australia, Year 12 attainment is regarded as a key factor in the formal development of an individual's skills and knowledge. Those with Year 12 have a greater likelihood of continuing with further study, particularly in higher education, as well as entering into the workforce. Year 12 attainment contributes to the development of a skilled workforce, and in turn, to ongoing economic development and improved living conditions. The Council of Australian Governments' [National Education Agreement \(2009\)](#) aims to lift the Year 12 or equivalent attainment rate for 20-24 year olds to 90% by 2015.

Moreover, the idea that the way divides at Year 10, with those interested in university study proceeding to Year 12 and those interested in training for a trade taking another path, no longer accurately reflects labour market trends. The ABS report makes this clear in observing as follows:

In 2010, there were around 72,000 employed 20-24 year olds who were trainees or apprentices, with males comprising the majority of this group (88%). **Two-thirds (66%) of these trainees or apprentices had attained Year 12.** [Emphasis added]

Traditionally, apprenticeships and traineeships have offered alternative training-employment pathways for students who have not attained Year 12, particularly for young men. However, most recently the majority of young people employed as apprentices have attained Year 12.

To sum up the above: gaining their Year 12 certificate is important for all students. Accordingly, it is important that young people in Tasmania, in every community, have an equal chance of gaining that qualification compared to their fellows in other states. Data from *MySchool*, and the TASC, allows us to benchmark the performance of Tasmanian schools with like schools in other states to determine whether our young people are being afforded this equal chance.

RESULTS

The full data set of results can be downloaded from the *Education Ambassadors* web site by clicking on the link in the *Did You Know* section – see <http://educationambassadors.org.au>.

Here we summarize our results in a series of graphs, with comments on each, and a table which presents an overview of how the Tasmanian schools compare with their interstate groups of similar schools.

We begin with a comparison between each Tasmanian school and its set of similar schools in other states, and where possible to do so, further divide this set of similar schools into metropolitan and provincial/remote, and smaller and larger schools.

We then discuss what we learn from these comparisons.

Note that we organize the comparison around the high schools, and in each set include the college or colleges at which we expect most students from that high school would enrol for Years 11 and 12.

One final and most important note.

The data that follows, except for Campbell Town and Mountain Heights as noted above, could be described as a single year snapshot of the schools' performance.

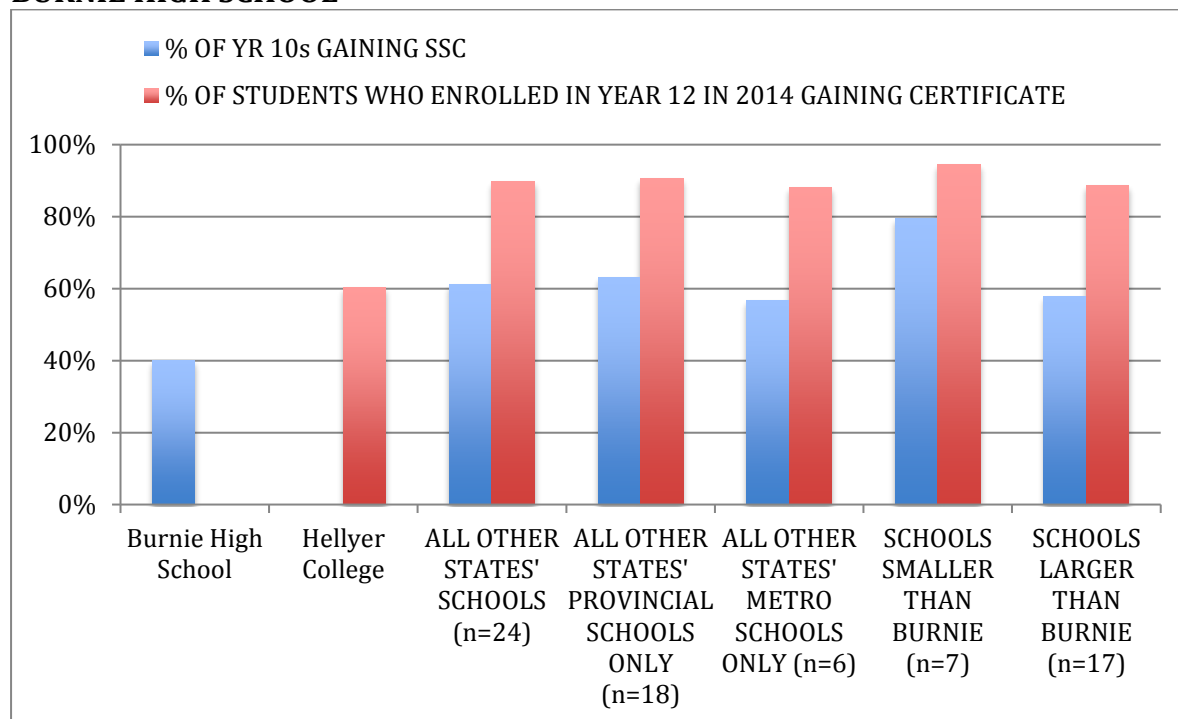
The word 'snapshot' is well chosen. We have all had the experience of looking at a holiday snap of ourselves and thinking 'that does not look like me!'

It would be wrong, therefore, to look at the 2014 Year 12 attainment data for the 2012 Year 10s from, say, Burnie High School, and conclude 'that is what Burnie is like as a school'.

But what we can say is that taking all the Tasmanian schools together a pattern emerges – actually two strikingly different patterns, one for NAPLAN, one for Year 12 attainment.

If we looked at a different year's data, Burnie's snapshot might well change. But the wider picture it fits into would remain the same. That is what we should focus on.

BURNIE HIGH SCHOOL¹



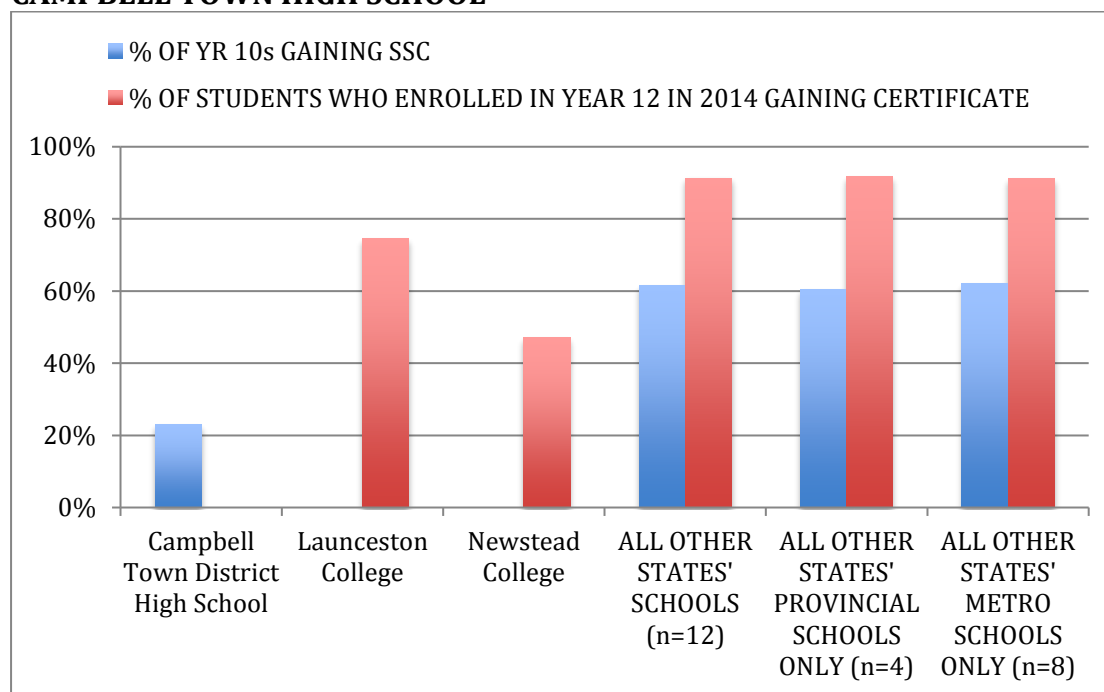
Note that:

1. Both Burnie High and Hellyer College are well below Burnie's similar schools in other states for senior secondary certificate (SSC) attainment - Burnie's Year 10s are 21% below their interstate counterparts in attaining their SSCs, and Hellyer's Year 12s are 30% below.
2. In schools similar to but smaller than Burnie, the average rate for Year 10s attaining their SSC is 22% above the larger schools, and these smaller schools also have 6% more of their Year 12s gain their SSC.
3. Among Burnie's comparison schools the Year 10s at provincial schools also gain their SSC at a rate 6% higher than metropolitan schools. Other differences are less than 5%, which we ignore as too small to be meaningful.
4. In Burnie's set of similar schools, the three schools with Year 10 to SSC results closest to Burnie's (40%) are Woodville High, 35% (SA Metro), Kingaroy High, 48% (QLD Provincial) and Woolgoolga High, 48% (NSW Provincial).
5. In Burnie's set of interstate similar schools, the three schools with Year 12 SSC attainment rates closest to Hellyer's (60%) are Woodville High, 62% (SA Metro), Kingaroy High, 75% (QLD Provincial), and Bundaberg North State High School, 78% (QLD Provincial).

¹ The data on which this and other tables area based, including NAPLAN data, will be found in *Did You Know* at <http://educationambassadors.org.au>

6. Burnie is 4th amongst its 25 similar interstate schools for average Yr 9 NAPLAN, and 24th of 25 for the % of Year 10s gaining their senior secondary certificate.
7. Devonport and Burnie are similar schools.

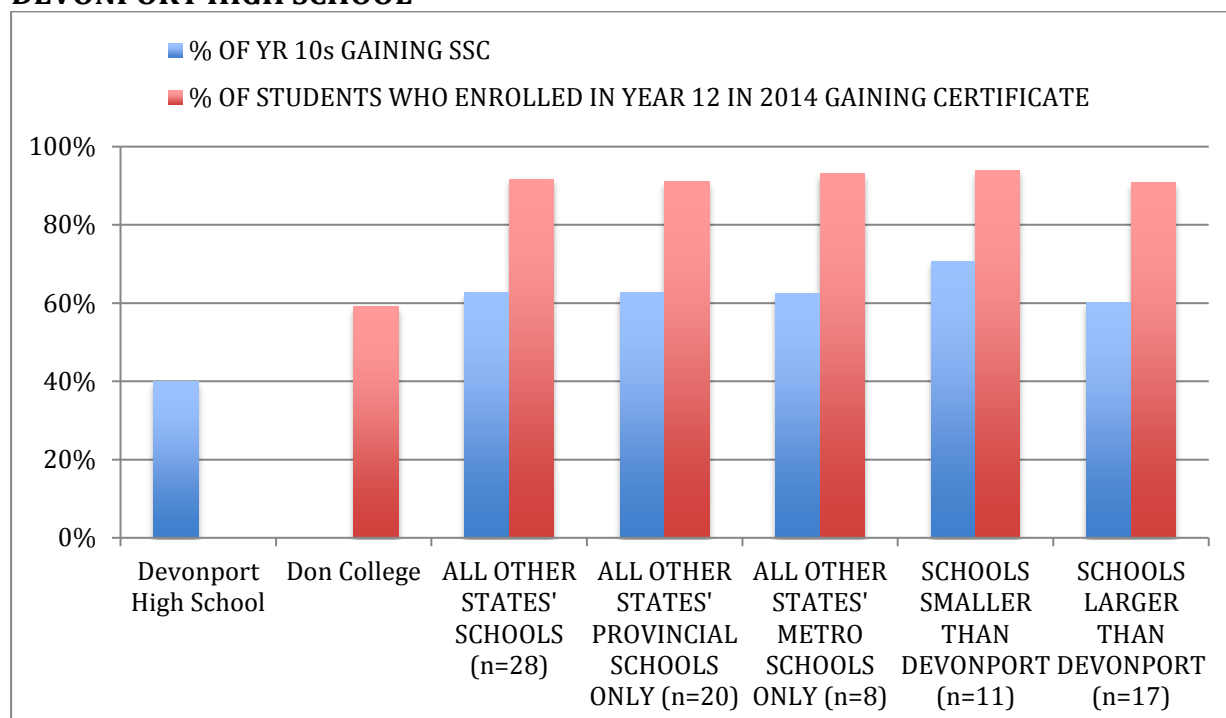
CAMPBELL TOWN HIGH SCHOOL



Note that:

1. Campbell Town High, and Launceston and Newstead colleges are well below Campbell Town's similar schools in other states for SSC attainment.
2. Although Launceston College (75%) is well above Newstead College (47%) for the % of Year 12s attaining their certificate, it is below every school in Campbell Town's interstate similar schools list on this measure except for Hay War Memorial High School (NSW, Provincial) at 73%, with the next lowest two being Bass High School, 84% (NSW, Metro), and Heatley Secondary College, 85% (QLD, Metro).
3. Campbell Town is first out of 13 for average Yr 9 NAPLAN, and 13th out of 13 for % of Year 10s gaining their SSC.

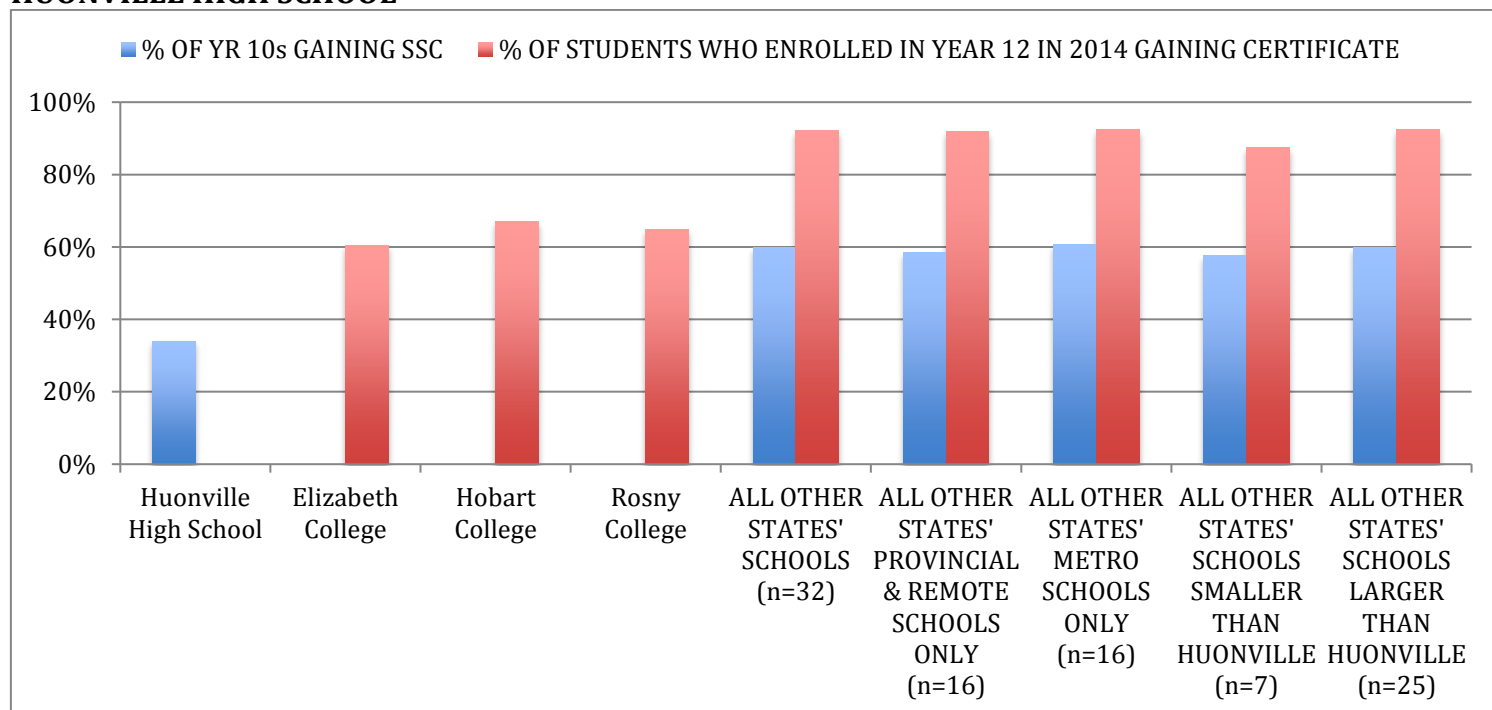
DEVONPORT HIGH SCHOOL



Note that:

1. Devonport High and Don College are well below Devonport's similar schools in other states - Devonport's Year 10s are 23% below their interstate counterparts in attaining their SSC, and Don's Year 12s are 33% below.
2. There is very little difference between the other states' provincial/metro/smaller/larger schools' means on either of these measures, except that Year 10s from the smaller schools similar to Devonport have a rate of SSC attainment 11% above the larger schools.
3. In Devonport's set of similar schools, the three schools with Year 10 results closest to Devonport (40%) are Woodville High, 35% (SA Metro), Kingaroy High, 48% (QLD Provincial) and Woolgoolga High, 48% (NSW Provincial).
4. In Devonport's set of similar schools, the three schools with Year 12 results closest to Don College (59%) are Woodville High, 62% (SA Metro), Kingaroy High, 75% (QLD Provincial), and Bundaberg North High, 78% (QLD, Provincial).
5. Devonport and Burnie are similar schools.
6. Devonport is 8th out of 29 for average Yr 9 NAPLAN, and 28th out of 29 for % of Year 10s gaining their SSC.

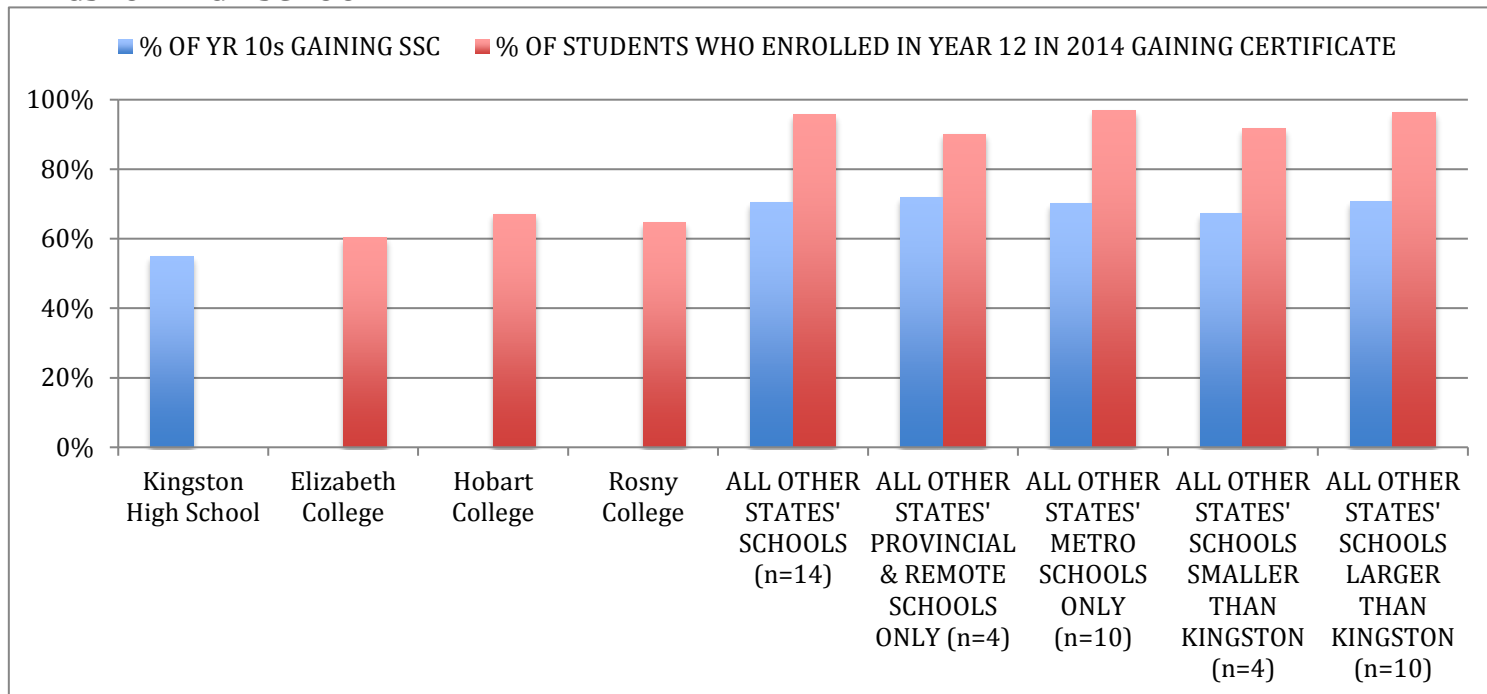
HUONVILLE HIGH SCHOOL



Note that:

1. Huonville High and the three colleges are well below Huonville's similar schools in other states - Huonville's Year 10s are 26% below their interstate counterparts in attaining their SSC, and the colleges' Year 12s are 25% and more below.
2. There is very little difference between the other states' provincial/metro/smaller/larger schools' means on either of these measures, although the larger interstate schools have 5% more of their Year 12s gaining their SSC.
3. In Huonville's set of similar schools, the three schools with Year 10 to SSC results closest to Huonville's (34%) are Orara High, 40% (NSW Provincial), Warialda High, 42% (NSW Provincial), and Cobar High, 44% (NSW Remote).
4. In Huonville's set of similar schools, the three schools with Year 12 SSC results closest to the three Hobart located Tasmanian colleges (60-67%) are Hay War Memorial High, 73% (NSW, Provincial), Moura State High School, 81% (QLD, provincial), and Cobar High, 83% (NSW, Remote).
5. Huonville is 3rd out of 33 for average Yr 9 NAPLAN, and 33rd out of 33 for the % of Year 10s gaining their SSC.

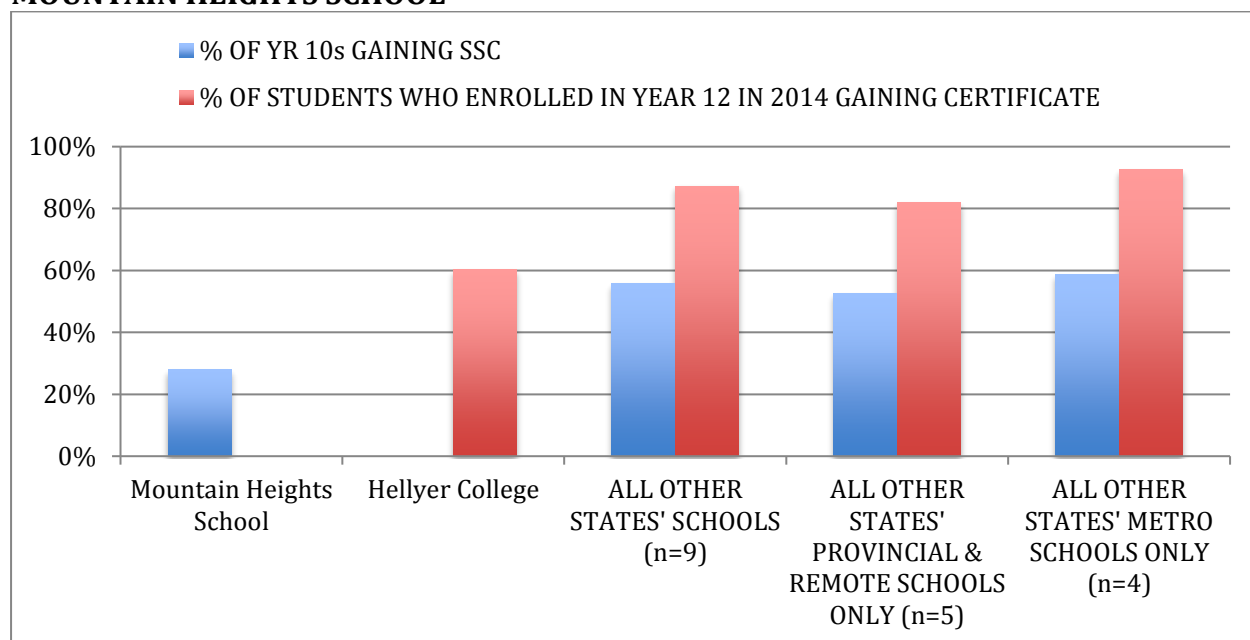
KINGSTON HIGH SCHOOL



Note that:

1. Kingston High and the three colleges are well below Kingston's similar schools in other states - Kingston's Year 10s are 15% below their interstate counterparts in attaining their SSC, and the three Hobart located colleges' Year 12s are about 30% and more below.
2. There is little difference between the other states' provincial/metro/smaller/larger schools' means on either of these measures, with metropolitan and larger schools doing better on their Year 12s completing their certificates by 7% and 5% respectively.
3. In Kingston's set of similar schools, the three schools with Year 10 results closest to Kingston's (55%) are all NSW Metro schools – Whitebridge, (50%); Elizabeth Macarthur, (52%); and Karabar high schools (60%).
4. In Kingston's set of similar schools, the three schools with Year 12 SSC results closest to the three Tasmanian colleges' (60-67%) are Clare High School, 85% (SA, provincial), Daylesford Secondary College, 89% (VIC Provincial), and Warrnambool College, 92% (VIC Provincial).
5. Kingston is 8th out of 15 for average Yr 9 NAPLAN, and 13th out of 15 for the % of its Year 10s gaining their SSC.

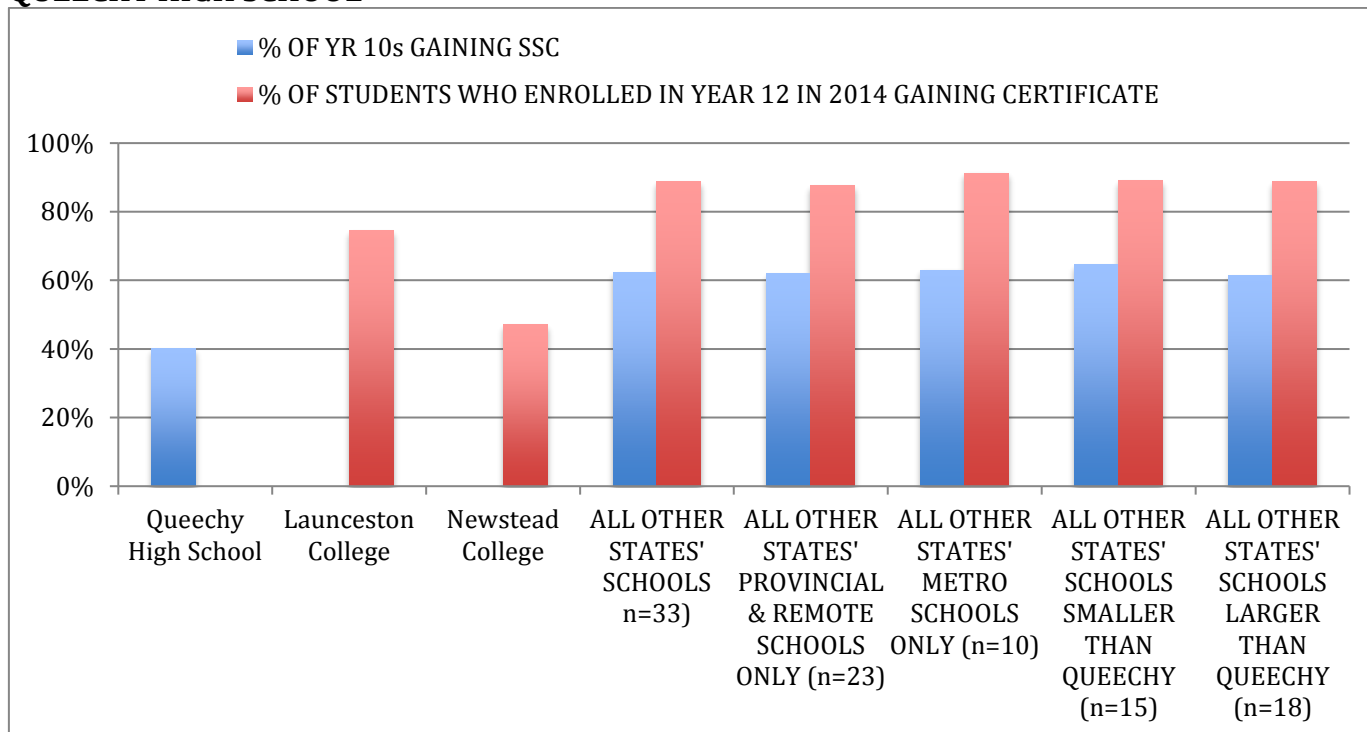
MOUNTAIN HEIGHTS SCHOOL



Note that:

1. Mountain Heights and Hellyer College are well below Mountain Heights' similar schools in other states - Mountain Heights' Year 10s are 28% below their interstate counterparts in attaining their SSC, and Hellyer's Year 12s are 27% below.
2. The Mountain Heights similar interstate schools in metro areas are about 6% better than the provincial schools on Year 10s gaining their SSC, and 11% on their Year 12s gaining their SSC.
3. In Mountain Heights' set of similar schools, the three schools with Year 10 results closest to Mountain Heights', (28%) are Port Augusta High, 30% (SA, Provincial), Tamworth High School, 41% (NSW, Provincial), and Warrawong High, 51% (NSW, Metro).
4. In Mountain Heights' set of similar schools, the three schools with Year 12 results closest to Hellyer College's (60%) are Port Augusta High School, 47% (SA, Provincial), St George High, 79% (NSW, Remote), and Spinifex State College, 86% (QLD, remote).
5. Mountain Heights is 1st out of 10 for average Yr 9 NAPLAN, and 10th out of 10 for the % of its Year 10s gaining their SSC.

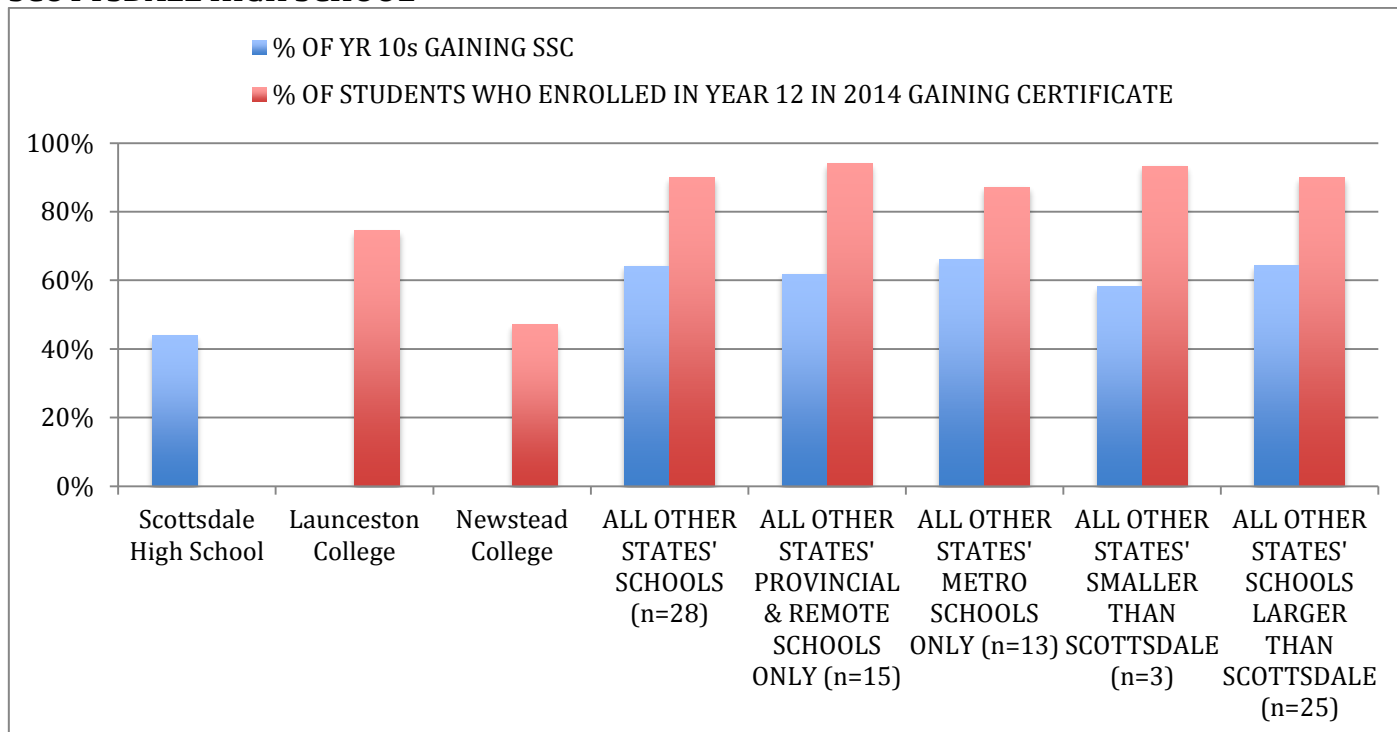
QUEECHY HIGH SCHOOL



Note that:

1. Queechy High and the two colleges in Launceston are well below Queechy's similar schools in other states - Queechy's Year 10s are 22% below their interstate counterparts in attaining their SSC, and Launceston's and Newstead's Year 12s are 14% and 42% below.
2. There is very little difference between the other states' provincial/metro/smaller/larger schools' means on either of these measures.
3. In Queechy's set of similar schools, the three schools with Year 10 results closest to Queechy's (40%) are Woodville High, 35% (SA Metro), LeFevre High School 41% (SA, Metro), and Broadford Secondary College, 51% (VIC, Provincial).
4. In Queechy's set of similar schools, the three schools with Year 12 SSC results closest to Launceston's (75%) and Newstead's (47%) colleges are LeFevre High School, 61% (SA, Metro), Woodville High, 62% (SA Metro), and Dalby High, 66% (QLD Provincial).
5. Queechy is 29th out of 34 for average NAPLAN, and 33rd out of 34 for % of Year 10s gaining their SSC.

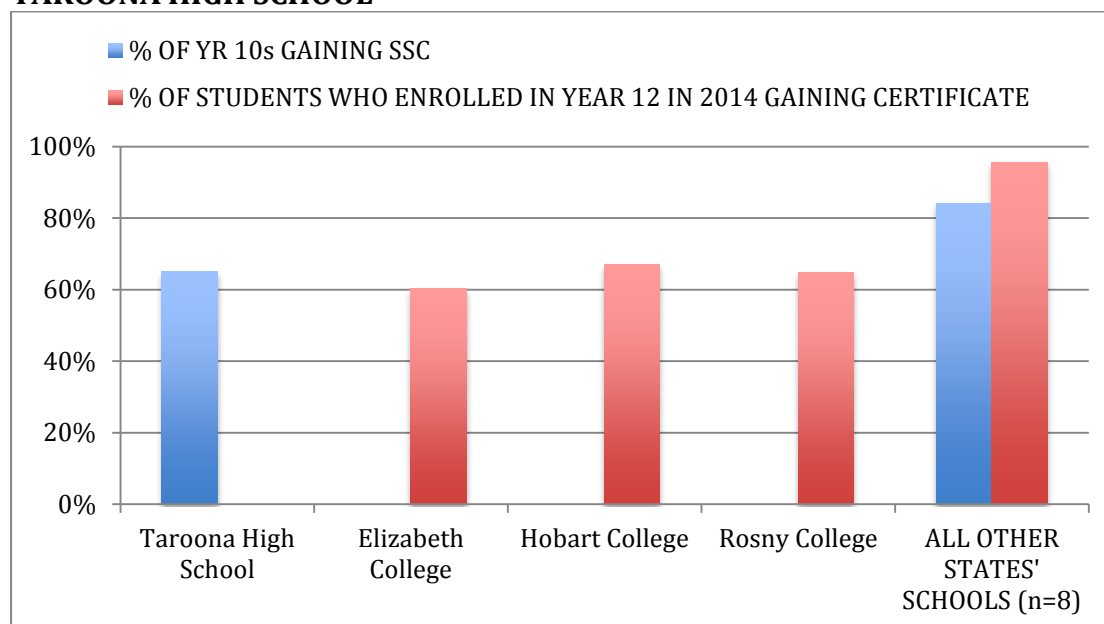
SCOTTSDALE HIGH SCHOOL



Note that:

1. Scottsdale High and the two colleges in Launceston are well below Scottsdale's similar schools in other states - Scottsdale's Year 10s are 20% below their interstate counterparts in attaining their Year 12 certificates, and Launceston's and Newstead's Year 12s are 15% and 43% below.
2. There is little difference between the other states' provincial/metro/smaller/larger schools' means on either of these measures, with 6% fewer Year 10s in schools smaller than Scottsdale gaining their SSC than in the larger schools, but 7% more of the Year 12s in provincial and remote schools gaining their SSC compared to metropolitan schools.
3. In Scottsdale's set of similar schools, the three schools with Year 10 SSC attainment closest to Scottsdale's (44%) are Valley View High, 37% (SA, Metro), Kurunjang Secondary College, 38% (VIC Metro), and Batemans Bay High, 41% (NSW Provincial).
4. In Scottsdale's set of similar schools, the three schools with Year 12 SSC results closest to Launceston (74%) and Newstead (47%) colleges' are Beenleigh High, 60% (QLD, Metro), Valley View High School, 67% (SA, Metro), and Craigmores High, 76% (SA Metro).
5. Scottsdale is 5th out of 29 for average NAPLAN, and 26th out of 29 for the % of Year 10s gaining their SSC.

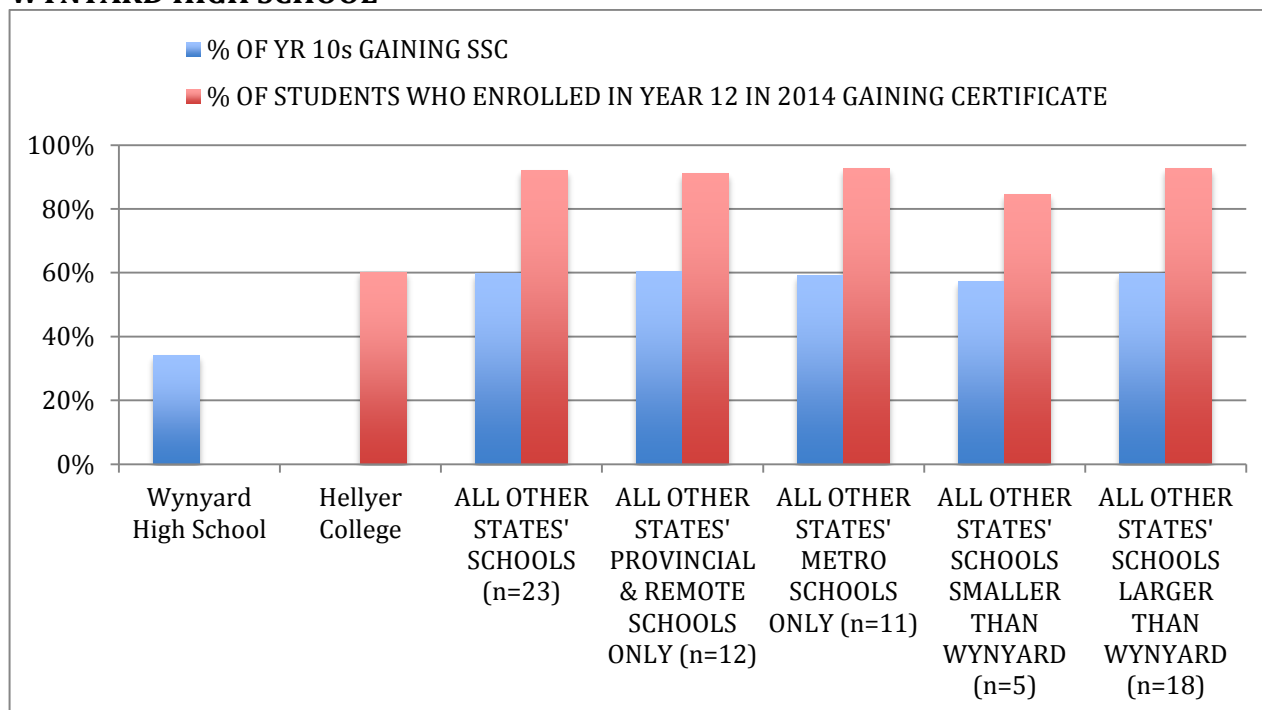
TAROONA HIGH SCHOOL



Note that:

1. Tarroona High and the three colleges are well below Tarroona's similar schools in other states - Tarroona's Year 10s are 19% below their interstate counterparts in attaining their SSCs, and Hobart, Rosny and Elizabeth colleges are 29% - 36% below.
2. In Tarroona's set of similar schools, the three schools with Year 10 SSC results closest to Tarroona's (65%) are Chatswood High School, 67% (NSW, Metro), Killarney Heights High, 75% (NSW, Metro), and Marryatville High, 77% (SA, Metro).
3. In Tarroona's set of similar schools, the three schools with Year 12 SSC results closest to the three colleges' (60-67%) are Marryatville High, 88% (SA, Metro), Kenmore High, 92% (QLD, Metro), and Northcote High School, 97% (VIC Metro).
4. Tarroona is 5th out of 9 for average NAPLAN, and 9th out of 9 for % of Year 10s gaining their SSC.

WYNYARD HIGH SCHOOL



Note that:

1. The Tasmanian schools are well below Wynyard's similar schools in other states - Wynyard's Year 10s are 26% below their interstate counterparts in attaining their Year 12 certificates, and Hellyer's Year 12s are 32% below.
2. There is little difference between the other states' provincial/metro/smaller/larger schools' means on either of these measures, except for 8% fewer Year 12s in schools smaller than Wynyard gaining their SSC than in the larger schools.
3. In Wynyard's set of similar schools, the three schools with Year 10 results closest to Wynyard's (34%) are Orara High, 40% (NSW Provincial), Kanahooka High, 42% (NSW Metro), and Cobar High, 44% (NSW Remote).
4. In Wynyard's set of similar schools, the three schools with Year 12 results closest to Hellyer's (60%) are Hay War Memorial High, 73% (NSW, Provincial), Moura High School, 81% (QLD, Provincial), and Cobar High, 83% (NSW, Remote).
5. Wynyard is 10th out of 24 for average NAPLAN, and 24th out of 24 for the % of Year 10s gaining their SSC.

SUMMARY OF TASMANIAN HIGH SCHOOLS' PERFORMANCE COMPARED TO THEIR SIMILAR SCHOOLS on YR 9 NAPLAN and YR 12 ATTAINMENT

	NAPLAN position ²	Year 10s completing SSC position
Burnie High School*	4/25	24/25
Campbell Town District High School	1/13	13/13
Devonport High School	8/29	28/29
Huonville High School	3/33	33/33
Kingston High School	8/15	13/15
Mountain Heights School	1/10	10/10
Queechy High School	29/34	33/34
Scottsdale High School	5/29	26/29
Taroona High School*	5/9	9/9
Wynyard High School*	10/24	24/24

* see note 2 below

OBSERVATIONS/CONCLUSIONS

In presenting the findings from our data analysis, we focus on a number of propositions commonly advanced as explanations for the current outcomes from Tasmanian senior secondary schooling to see which are supported, and which are undermined, by the data just presented.

1. State by state comparisons are misleading. When we compare Tasmanian schools with like schools in other states our schools are doing just as well.

The data above shows the this claim – that our schools are doing just as well as like schools in other states - is true of NAPLAN at year 9, and indeed it understates the strength of the Tasmanian high schools. As we have seen,

- two of the ten Tasmanian state schools are top of their similar schools group for NAPLAN – and well clear of the next highest scoring school,
- another six are in the top half, and
- only Queechy and Taroona are nearer the bottom of the group.

(Note here the importance of similar schools group comparisons. Taroona's year 9 NAPLAN average is the highest in the group of ten Tasmanian state schools, but its performance against interstate similar schools is in fact the second lowest.)

In relation to Year 12 attainment, however, this claim is not consistent with the data:

² The differences between school average NAPLAN scores are typically small. Accordingly, the precise rank of a school does not give much information, while its being near the top, or near the bottom, does. Note also that these ranks were corrected after discovering a transcription error on 2 July 2015, with changes as follows: Burnie, 1/25 to 4/25; Taroona 6/9 to 5/9; Wynyard 12/24 to 10/24.

- Five of the ten Tasmanian state schools have the lowest number of students gaining their Year 12 certificates, expressed as a percentage of the Year 10 class two years prior, in comparison with their interstate similar schools group, and the remaining five Tasmanian schools are at best three places from the bottom of their group.
- If we look at the percentage of students taking some courses at Year 12 that gain their senior secondary certificates, the situation is no better for Tasmania.
- Launceston College is the lead performer among Tasmania's eight colleges. But if we add the colleges to the sets of interstate schools that are similar schools to our ten Tasmanian public schools, Launceston's position on this measure is 145th out of 159 (the total made up of 151 interstate high schools plus the 8 Tasmanian colleges).
- The other Tasmanian colleges fill seven out of the remaining 14 positions between 145th and 159th. (Note that if we use the TASC data referred to above rather than the *MySchool* numbers, Launceston Colleges' position improves from 145th to 140th, while the other colleges show less improvement.)

2. Small schools cannot offer successful Year 12 programs.

This claim is not supported by the data. Looking only at differences of 5% or more:

- The interstate similar schools **smaller** than Burnie High School had a **greater percentage** of students who attempted Year 12 gaining their senior secondary certificates, whereas for Huonville, Kingston and Wynyard their smaller similar schools had a lesser percentage of Year 12s gain their certificates.
- The differences between Year 12's SSC attainment for smaller and larger schools are not large – no more than 8%.
- Comparing the rate of Year 10 students going on to gain their senior secondary certificates, the picture is more marked, with Year 10s being 22% and 11% more successful in the schools smaller than Burnie and Devonport in their groups of similar schools, and less successful only in Scottsdale's group (6% less).

3. Year 12 programs are more successful in metropolitan schools.

This claim receives only very weak support from the data, again considering only differences of 5% or more:

- The Year 12 certificate attainment rate by the Year 12s at the provincial schools was lower only for Kingston's and Mountain Heights' group, by 7% and 11% respectively, but 7% higher for Scottsdale's.
- Of the similar schools groups where the sample size was big enough to divide into provincial and metropolitan schools (which we set at four in the smallest subset), only Burnie and Mountain Heights had differences between the two of 5% or more of their Year 10 students continuing with their schooling to gain their senior secondary certificates, with Burnie's similar provincial schools average being 6% above the metro schools, and Mountain Heights' 6% below.

4. Using the rate of TCE attainment as a measure of school performance is misleading, since the TCE has not been respected or seen as important for students' futures. Instead students, and schools/colleges have focused on the ATAR.

Data from the Office of Tasmanian Assessment, Standards and Certification web site (<http://www.tqa.tas.gov.au/1324>) does not support this idea.

From the school attainment profiles **for 2014**, of the 5140 year 12/13 Australian resident students between 15 and 19 attending government schools in Tasmania in 2014, 51% achieved the TCE and less than half, just 23%, an ATAR.

5. The similar school comparisons are unfair to Tasmania because ICSEA does not adequately take account of the 'feeling of remoteness' of Tasmanian communities.

To test this hypothesis we chose a further sample of eleven of the most remote schools in Australia, using a map to find remote communities (excluding Indigenous communities) and then looking at *MySchool* to see if there was a school offering Year 12 in that community.

This generated the following group of remote schools, listed in increasing order of their Year 12 students gaining their senior secondary certificates in 2014 (except for schools smaller than 300 students where we use a simple average of the last five years (2011-14) of Year 12 attainment data in schools to smooth out small sample effects):

- Coober Pedy (SA outback opal mining town)
- Leigh Creek (SA outback coal mining town)
- Wilcannia Central School (NSW, River Darling station country)
- Norseman District School (WA outback mining town)
- Ceduna Area School (SA, far west fishing and farming community)
- Centralian Senior College (Alice Springs)
- Lightning Ridge Central School (NSW outback opal mining town)
- Balranald High School (NSW station country)
- Bourke High School (NSW, iconic 'outback')
- Condobolin High (NSW listed as provincial, but in geographic centre)
- Longreach State High School (QLD, station country)

Note that the ICSEAs of these schools are generally much lower than Tasmanian schools, certainly the ten state schools in our sample – only four are above Mountain Heights' and only one above Campbell Town's. The average ICSEA of these schools (863) is about as far below Mountain Heights' (885) as Mountain Heights' is below Huonville's (910).

Despite this:

- A greater % of the students enrolling in Year 12 gained their senior secondary certificates in seven out of these eleven remote schools than at Rosny, Hobart and Launceston colleges, and only two, Coober Pedy and Leigh Creek are below Don, Hellyer and Elizabeth colleges.

- To give further detail for just two of these remote schools from their 2015 annual school reports (which are available on line, as for all schools in all other states):
 - Condobolin had 21 students gain their HSC, 100% of their Year 12 class, 50% of whom have gone on to university. The school's total enrolment was 205 students, 48% of whom were Aboriginal.
 - Bourke High School had 12 students gain their HSC, 100% of the Year 12 class, with 7 receiving an ATAR, and 28% of the class going on to university. 72% of Bourke High's 147 students are Aboriginal. The school's language other than English (LOTE) is Paakantji, the local Aboriginal language.

Note that a criticism of using the percentage of the Year 12 class gaining their senior secondary certificate as an indicator of the success of the school in supporting all of its students to get their Year 12 qualification – that this figure can be inflated by a low rate of retention to Year 12 – certainly applies to the smaller of these schools, where the size of the Year 12 class shows that only a minority of student who commence high school continue to Year 12. But taken together – treating them as one school - their Year 12 class is 12% of the total enrolment whereas an 'equal share' would be 11%.

Nonetheless our point here is not to compare these schools individually or as a whole with the Tasmanian colleges – as mostly very small and all very remote schools they could scarcely be less suitable comparison schools – but only to show that the claim that the 'feeling of remoteness' explains why so few of Tasmania's Year 12 students gain their senior secondary certificates is not consistent with the successful Year 12 programs of these most remote schools.

6. The comparison is not fair because the TCE is harder to obtain than the senior secondary certificates of the other states – the SACE, VCE/VCAL, HSC and QCE.

We have previously undertaken a detailed study of this quite common assertion and found no evidence to support the claim – see <http://educationambassadors.org.au/494-2/> and for a detailed chart of the various requirements <http://educationambassadors.org.au/wp-content/uploads/2015/09/SSC-Requirements-all-States.pdf>.

Also, this claim is not supported by the rates for senior secondary certificate attainment by the Year 12 class in Tasmanian private schools, which are much closer to those of their interstate similar schools

- with gaps of 6%, 11%, 15% and 19%,
- whereas the gap between the Tasmanian state schools' Year 12 attainment rates and those of their similar interstate schools are in the region of 30%,
- with the smallest gaps being for Kingston High (15%) compared to its interstate similar schools and for Launceston College when compared to the schools in Queechy's interstate similar schools group (14%).

It might be thought that the gaps between the private schools percentage of year 12s gaining their senior secondary certificates and their interstate private

schools are large enough to consider that there is an effect here that warrants an explanation. The most plausible explanation, however, is that the three schools with larger gaps – Launceston Christian School, The Friends School and Marist Regional College – are disadvantaged by the choice of year. We have checked this by using the TASC data on the rate of TCE attainment at all Tasmanian schools in this analysis (which allows us to use one source of data for all schools), comparing the percentage of TCE completions for 2014 with the average of the preceding two years. For all public schools and the colleges there is an improvement in the TCE attainment rate in 2014 over the average for 2012 and 2013. For these private schools, however, only Launceston Christian School shows an improvement, with the others all having a 'bad year' in 2014. If we used the average of the 2012 and 2013 data instead of 2014 the gaps for the schools would be 4%, 4%, 10% and 15%. If we had used just 2015, the gaps would have even less, 0%, 3%, 9% and 11%.

This reminds us that using just one year of data for any school can give a misleading picture of its performance. We have done so, however, since the main object of our analysis are the Tasmanian public schools, and while they lag far behind their interstate similar schools they are on an improving trend. Using an average of several years of data would therefore make these school appear to be performing at a lower level than they now are. We have made an exception to this just for the two small schools in our Tasmanian sample, Campbell Town and Mountain Heights, where we have reflected the improving trend in their Year10s TCE attainment by using a weighted average of five years of data (2011-15) giving each succeeding year 10% additional weight in calculating the average.

7. Poverty in Tasmania is different – our poor people are not out of luck, but out of ambition, affected by generations of welfare dependence, and consequently neither employment or education is valued by them.

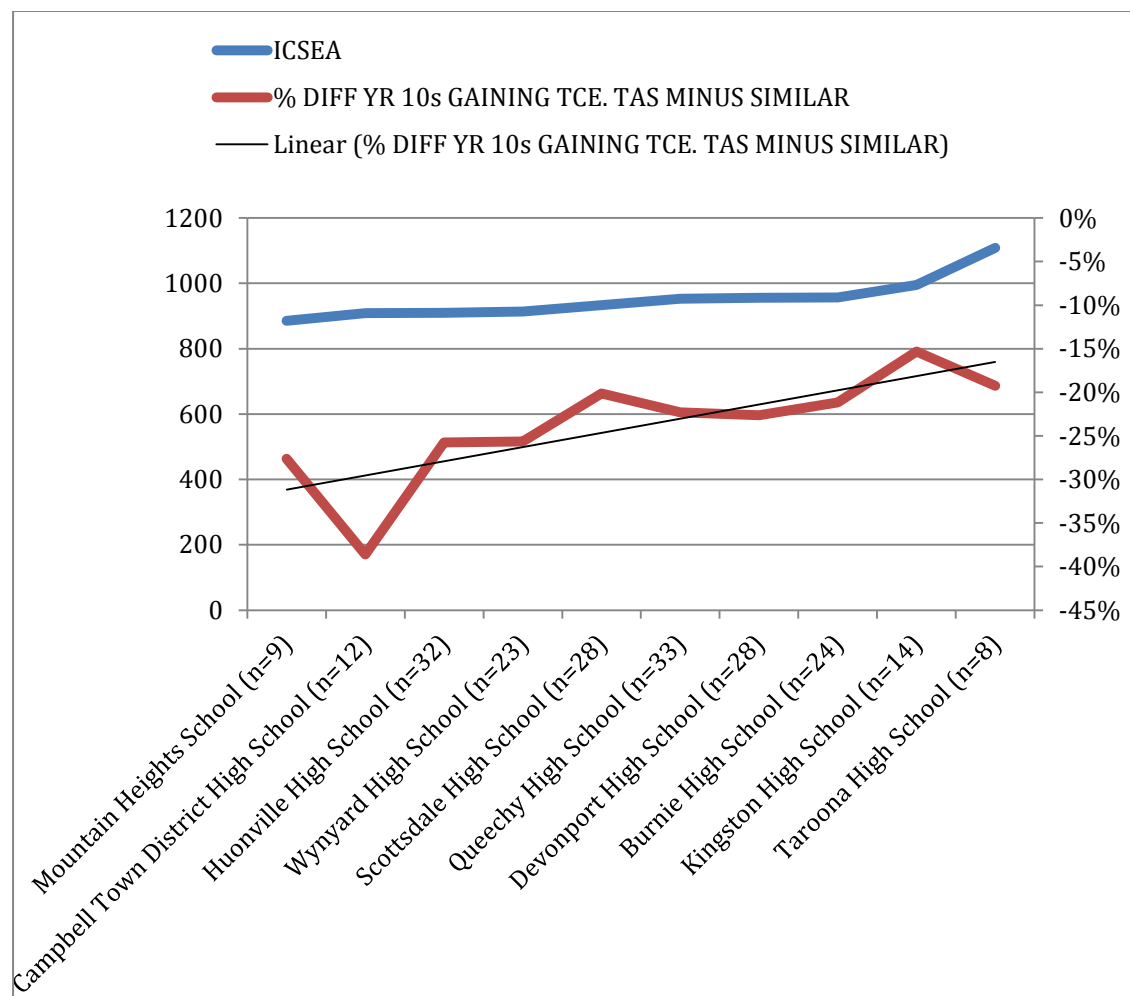
While we have often had this put to us, the facts just do not bear it out. First, Tasmania's rate of welfare dependence, measured by the percentage of children living in welfare dependent families is not that different to other states (see <http://phidu.torrens.edu.au/social-health-atlases/data#social-health-atlas-of-australia-population-health-areas>)

- Australia 23.3%
- NSW 24.0%
- VIC 22.6%
- QLD 24.1%
- SA 26.0%
- TAS 30.0%

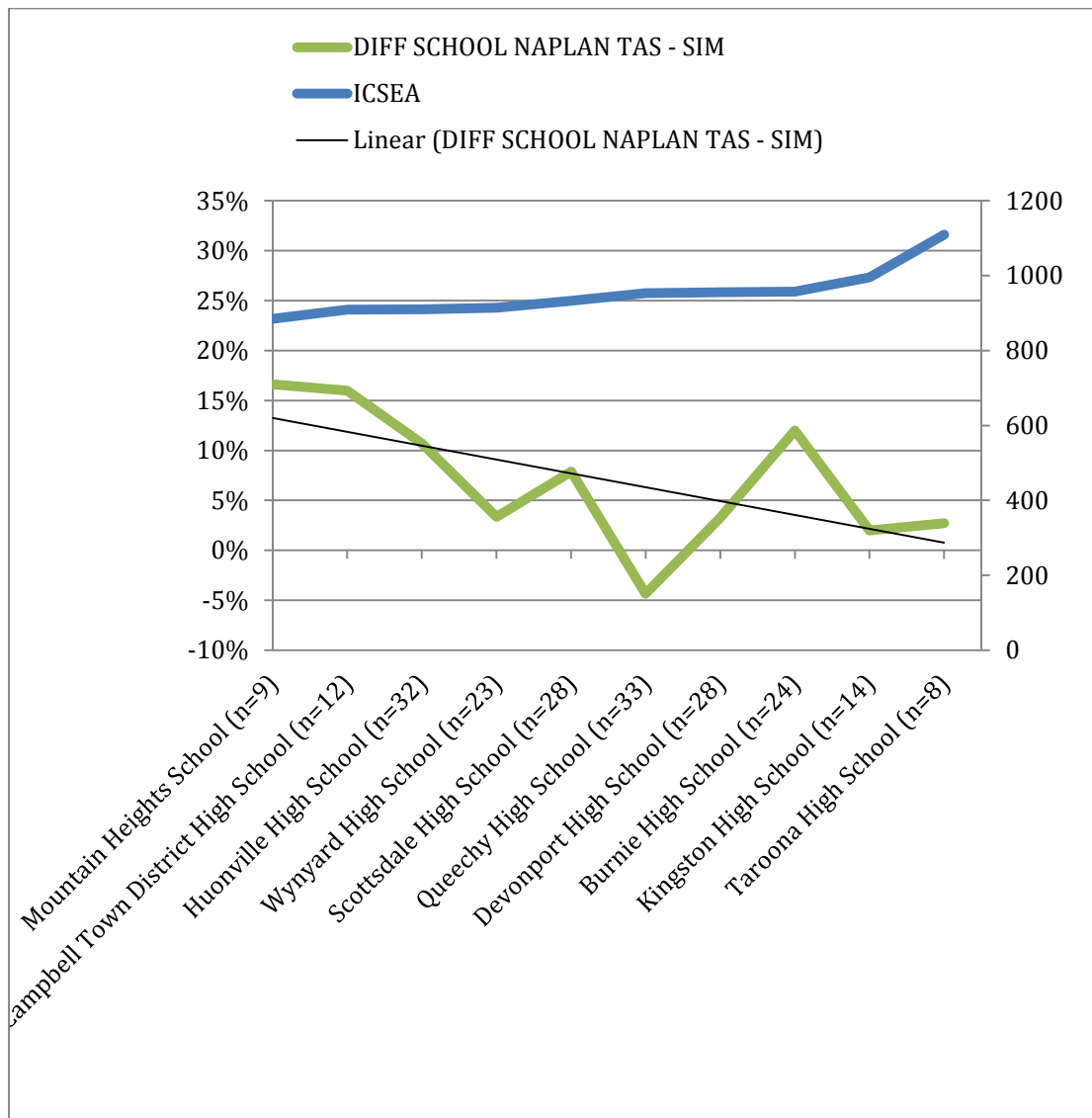
We have gaps here of about 4-7% in terms of welfare dependency, whereas we are looking for an explanation of gaps of about 20% - 30% in Year 12 attainment between our high schools/colleges and their interstate similar schools.

Moreover, our slightly higher rate of welfare dependence is not affecting our NAPLAN performance relative to comparable schools in our sample. There is something of interest here, requiring further exploration and explanation.

If we first look at the graph below of ICSEA vs. TCE attainment for state schools in Tasmania (which uses the % of Year 10s gaining their TCE), it shows **an improvement in school performance and thus a decrease in the gap** between Tasmanian and other states' schools with **increasing ICSEA**, with the trend narrowing the gap from -30% to -15% as we move from lower to higher ICSEA schools.



However, if we look at the graph for the difference between Tasmania's state schools' year 9 NAPLAN and those of the other states' schools, the relationship is reversed, with a **fall in the Tasmanian school performance and thus Tasmania's 'positive gap' decreasing with increasing ICSEA** for the schools in our sample



Hence, so far as NAPLAN goes, Tasmanian students from lower ICSEA schools in our sample are outperforming their interstate counterparts in similar schools by almost 15% (on the average of year 9 reading and numeracy results), but for students at schools enrolling students from more advantaged backgrounds this falls off to around parity at Taroona's ICSEA.

An illuminating way to look at this data is this.

Outcomes from schooling in Australia are correlated with parental background. Children from better educated and wealthier parents, living in major cities, have greater success at school by any ordinary measure.

In Tasmania, if we can generalize from our sample – and we see no reason why the schools we have chosen would not allow us to do this - the equity gap is narrower than in the rest of Australia for NAPLAN outcomes, evidenced by the NAPLAN performance of our lower ICSEA schools in the sample exceeding that of their similar schools interstate, with the superior performance falling away as ICSEA increases.

For Year 12 attainment, however, it is the reverse, with our lower ICSEA schools further behind their comparable schools interstate than the higher ICSEA schools in our sample.

Thus, provided only that our sample is representative of all Tasmanian high schools, we can say to the end of Year 10, Tasmanian schooling is less inequitable than in the other states, but beyond Year 10, it is more inequitable.

This is a conclusion we should take very seriously indeed, and make more widely known.

Moreover, informed by this data, it is hard to argue that our families with lower levels of education, employment more towards the unskilled than the professional end of the classification and higher unemployment, do not value education – at least until year 9 or, since that is not a stopping point, the end of Year 10.

If there is a problem with education not being valued by lower ICSEA families, it is a problem that only begins with senior secondary education.

8. There is a Tasmania effect, cause to be identified, which explains the gap.

Let us review what we have discovered about the schools in our sample from these findings, which we infer also holds for all schools in Tasmania.

The Year 10 students at each of two state schools, from an equivalent combination of

- families which are alike in parental level of education and category of employment, and attending schools in comparable locations within their states, with similar levels of Indigenous enrolment,

and who achieved a similar level of results in their year 9 NAPLAN test,

- will at best be 15% less likely to achieve their Year 12 certificate if their school is in Tasmania rather than SA, Victoria, NSW or Queensland,
- and most likely the Tasmanian Year 10 students' chances of attaining their Year 12 certificate will be around 25% less,
- and, depending on their school, up to 40% less than their interstate counterparts.

If we now look just at the students who enrol in Year 12, the Tasmanian students from these same similar backgrounds will, compared to their interstate compatriots, be:

- at best 15% less likely to end their schooling achieving their senior secondary certificates

- at worst more than 40% less likely to end their schooling achieving their senior secondary certificates
- and most likely to have about a 30% lesser chance of completing their certificates.

What can explain these results?

Clearly we cannot look to the children themselves for an explanation, or to their families, for in comparing schools with like ICSEA we have chosen schools in which any differences between the children and their families have no explanatory power in relation to their achievement, at least as measured by NAPLAN.

Might they nonetheless differ, however, in their attitude to the importance of gaining their Year 12 qualification?

Not according to the findings of the UTAS-DoE Linkage research project (2012-2014) which found that of almost four thousand rural and outer regional primary, high school and college students in the study, 90% think that education is important, 73% that continuing past Year 10 is important, with almost half intending to go to university and about a third to get an apprenticeship.³

But in any case it does not follow from the claim, that Tasmanians differ from their mainland cousins in their attitude to the importance of gaining the Year 12 certificate, that Tasmania's poor performance in senior secondary education is to be explained by **facts about the students and their families**. For where do students and their families get their ideas about the importance for all of gaining their Year 12 certificates?

We think the answer will be found in the hidden curriculum – to use a wonderful concept of Ivan Illich's – communicated by the division between junior and senior high school. What message does it send to teachers, principals, communities and most of all to families that their local school ends at Year 10, whereas elsewhere in Australia schools successfully offer the senior secondary years even in the most far flung places?

This was put to us most crisply by a tradesman on the West Coast, who said the reason the local kids think school ends at Year 10 is that their school ends at Year 10.

In short, on the basis of all the data discussed and other information just presented, we conclude that **the Tasmania effect which explains the gap in senior secondary attainment between Tasmanian and like schools interstate, is a property not of the students, or their families, or their communities, but of our senior secondary schooling system.**

³ As reported by a member of the research team, Dr Jane Watson, in the *Mercury*, December 10, 2014, pages 18-19

Perhaps others will be able to offer another explanation better supported by the data. But whatever we take to be the cause of our situation, it is clear that we need to act to eliminate the intolerable inequity in Tasmanian schooling laid bare by this analysis.

Indeed, to return to the theme of inequality with which we began, this data confronts us with some sobering realities.

The gap between Year 12 attainment rate of year 10 students in schools in other states that are similar to (with ICSEAs as low as) Mountain Heights School (56%), compared to schools in other states that are similar to (with ICSEAs as high as) Taroona High School (84)%, is 28%.

Everyone agrees we should not have such unequal outcomes from schooling in Australia for students with different backgrounds and family circumstances as reflected by their schools' **very different** ICSEAs. And pretty much everyone agrees that we need something like the funding model recommended by the Gonski review to deal with these inequalities of opportunities and outcomes. The Australian Education Union, and the ALP, have been at the forefront in arguing the case for the Gonski funding on the basis that this level of inequality is unacceptable.

But the gap between the Year 12 attainment rate of year 10 students in schools in other states that are **similar** to (with ICSEAs as low as) Mountain Heights School (56%) and the rate at Mountain Heights School itself (28%) is exactly as great – 28% - while for Taroona it narrows to 19%.

In all conscience we cannot say that one year 12 attainment gap of 28% is unacceptable in modern Australia, and another of 28% - or even 19% - is something not to be concerned about.

We need to take the 'Tasmania gap' as seriously as the 'Gonski gap', seek out the evidence which will explain the Tasmania gap, and act to close it with as much energy and urgency as has been devoted to the 'I Give a Gonski' campaign.