

TASMANIAN COLLEGES: FIT FOR THE PURPOSE OF POST-COMPULSORY SCHOOLING? (Version 2, amended 16/8/14 with ICSEA data for colleges.¹)

This is the fourth in a series of papers we have written on education in Tasmania.

The first, [*Learning to Change Tasmania*](#), looks at what other nations (the OECD) are aiming to achieve in education, and the goals that the Committee of Australian Governments (COAG) has set for schooling in Australia - the *Melbourne Declaration on Educational Goals for Young Australians*. We note the COAG target that 90% of young Australians should be completing year 12 or a certificate level 2 by 2015, and that Tasmania's State Economic Plan places increasing the numbers of young people completing year 12, and gaining their Tasmanian Certificate of Education (TCE), at the centre of economic strategy. But the goal that Tasmania set for our students' year 12 attainment as part of the COAG process accepts that we will continue to lag behind other Australian states. This will have consequences for both the individual people, whose lifetime earnings will be diminished by their lack of qualifications, and the State as a whole as our workforce will not have the knowledge and skills required to keep up with the development of the rest of Australia – and indeed the world. We ask the question, are we really committed to the idea that all young Tasmanians should aim to complete year 12, and fall short of this goal only by exception – or do our arrangements for schooling accept that this goal is beyond us?

The second paper, [*Tasmanian Education Today: digging around in the data*](#), looks in detail at what we know about the capacity of Tasmanian students, teachers and our schools, so far as this is indicated by national and international testing. Using data from the National Assessment Program – Literacy and Numeracy (NAPLAN) and the Program for International Student Assessment (PISA), we show that the achievements of Tasmanian students and their schools up to the end of compulsory education (year 10) are not significantly different from those in most other states in Australia. The same is true in comparison to other countries which we would think of as being at least as advanced as Australia. Provided, in both cases, we compare the achievement of students from similar backgrounds in similar schools. This shows that Tasmanian students are no less capable of learning than their counterparts in the other states and advanced nations, and also that our teachers and schools are no less able to support their students to learn – up to the end of compulsory schooling. Beyond this, however, we run into trouble, with fewer young people progressing from year 10 to year 11 than in any other state or territory.

Our third paper [*A Note on Tasmanian Retention and Attainment*](#) followed this line of investigation, seeking a better understanding of what happens to students after they finish middle-schooling at year 10 and head off to senior secondary education – or not. From the very useful statistics published by the Tasmanian

¹ David Raw pointed out that the ICSEA data for the colleges is on *MySchool* but only for 2012. We have amended the paper to take account of this, with thanks to David. Having done that we took the opportunity to be more precise about our figures by using student enrolment/load data for year 11 in 2011, ICSEA data for 2012, school income (in the Addendum) for 2012, and graduation data for 2012. For those who read version 1 of these documents, that means the figures have changed slightly – but the message they are sending us is unchanged.

Qualifications Authority (TQA) (<http://www.tqa.tas.gov.au/2349>, table 3) we discovered that of Tasmanian students in the year 10 age-cohort in 2011 (across all schooling sectors, and counting continuation as taking a half-time load or more):

- 3.6% did not complete a pathway plan in year 10
- a further 25.2% did not continue from year 10 to year 11
- 14.5% more left between years 11 and 12
- and of the 56.7% remaining to year 12, only 77% completed their TCE.

Thus, just **43.7%** of all Tasmanian students (studying half-time or more, in private as well as public schools) who were in year 10 in 2011 had completed their TCE by 2013. This means that less than half of our youth are graduating from high school – by which we mean, as everywhere else in Australia, gaining their year 12 certificates.

Perhaps some of these young people focus more on work for a time and study at less than the half-time rate. Perhaps they return to study as adults after a break of a year or two, or later still. But even if this is so, the data presented in our *Note on Tasmanian Retention and Attainment* shows that school loses its central place in the lives of more than half of our young people before they graduate from high school, if they ever do.

That is the story so far. So now we are asking ‘What is going wrong?’ We bother all we meet with this question, and receive a range of replies:

- *Tasmanian kids are not interested in schooling.* But then why are their NAPLAN and PISA results almost as good as students in similar schools in other states? – in particular, in South Australia, the state most similar to Tasmania in terms of family income, which exercises a powerful influence over educational attainment including NAPLAN scores?
- *Tasmanian families and communities do not value education.* But then why are our NAPLAN scores closest to the Australian mean at year 3 when families have the biggest hand in their children’s education, and fall away from the mean as students progress to year 9, the last year of testing? Why also when we meet community leaders in local government in all regions of Tasmania do we hear of the community’s desire for more education, and even that the restriction of post-compulsory schooling (mainly) to the cities is a social justice issue?
- *Year 12 is not for everyone.* Then why has the COAG set 90% as the national target for the completion of year 12 or the equivalent? And what is to be our future as a state if, as the OECD says, more than 85% of newly created jobs require at least the completion of a high school certificate. How can we hope for a bright future for Tasmania if we accept, as is the case now, that less than half of our young people are ‘suited’ to this level of education – or perhaps we should say our education suits less than half of our young people?

Another problem we hear about, particularly from communities outside the major cities, is the structural and locational separation between compulsory education in the high schools and post-compulsory education delivered by the colleges. And indeed we came to this conclusion in *Digging Around in the Data*, where we reported that the apparent retention rate from year 10 to year 11 in Tasmania is more than 10% below the Australian average, and below all other jurisdictions. And Tasmania is the only place in Australia where more students drop out of the education system between years 10 and 11 than between years 11 and 12. This suggests that something about the Tasmanian education system, particularly between years 10 and 11, is putting up a barrier to students' completion of their schooling, and the structural division between the high schools and the colleges has to be the number one suspect.

The new Liberal Government in Tasmania has responded to this concern with a commitment to extend all high schools to year 12 within a decade, with the more regional and remote schools first cabs of the rank.

In discussion of this issue we have heard others say that this plan will be the end of the college system of senior secondary education – or, more dramatically, the death of the colleges - and that this would be a bad and regrettable outcome because, it is asserted and apparently widely believed, the colleges are doing a good job.

What we found hard to find, however, was much evidence-based argument in defence of the current system, as well as a widespread lack of clarity about what the aim of post-compulsory schooling should be (revealed not least by the assertion – not made by people about their *own* children, or members of their *own* community, but only ever about *others* - that year 12 is not for *everyone*).

Let's focus first on the aim.

Unless we want to claim that Tasmania is different from the rest of Australia, and indeed the rest of the OECD, and that somehow our population will have access to secure and rewarding employment without needing to complete secondary schooling (that is, the TCE or the TAFE equivalent, soon a Certificate III) we must take as the aim of our post-compulsory schooling that something like 90% of young Tasmanians should gain a year 12 level credential. Especially since the TCE, by including VET as well as traditional 'academic' subjects, is as much a preparation for further training and skilled employment as it is for higher education. Indeed, to quote the *Melbourne Declaration on Educational Goals for Young Australians*, we should see completing the TCE as the means by which our young people become 'successful learners, confident and creative individuals, and active and informed citizens'.

It is important to say that the aim is that 90% of young **Tasmanians** should complete their TCE. It might seem too obvious to state it like this, but the **purpose** of Tasmanian schools is to educate Tasmanians. It is not to educate young people in Melbourne, or the ACT, or Shanghai or Finland. Thus blaming the community or Tasmanian young people (or their families) for the low rate of year 12 completions simply misses the point that the purpose of **our** schools is to

have **our** young people complete their twelve years of school education. If our schools and our schooling system cannot achieve that aim, **it is the schools and the system** which have to change – which might include engaging with the community in different ways to ensure that there is stronger community support for increased educational attainment and a wider understanding of its importance.

Now let's see what light some data can throw on the performance of Tasmania's post-compulsory schooling system.

As we said just above, we think that the separation of years 11 and 12 in the colleges from the earlier years in the high schools leads to a lower rate of progression from year 10 to year 11. The evidence for this is, as noted in *Digging Around in the Data*, that Tasmania's rate of apparent retention from year 10 to year 11 is lower than any other state or territory. But this evidence is not conclusive, as the structural separation between schooling to year 10 and the colleges will not be the only difference between Tasmania and other states. To eliminate other possible causes we would need year 10 and year 11 enrolment data from like schools in Tasmania and the other states and territories – say, schools with the same Index of Socio-Economic Advantage (ICSEA), the measure of parental wealth which the federal Department of Education uses. Then we could see whether Tasmanian schools lose more students after year 10 than like schools in other states.

We have not found this kind of data in the public domain, but we can make some comparisons with data that is available.

For other states, we can get a lot of useful information from *MySchool*, the federal Government's website on schooling. We can use this for Tasmania too, as we will see below, but it does not give information about what happens when students move – or drop out – between one school and another (including between high schools and the colleges), as it only gives data school by school. What happens **between** schools is a data black hole.

This is a problem. In order to evaluate the success of the Tasmanian schooling system in educating Tasmanian young people to year 12, we need data **for each high school** which shows what percentage of the school's year 10 students proceed to year 11, and from there to year 12, and gain their TCE or a TAFE Certificate (which, as we understand, could contribute to their gaining their TCE also). Then we need, **for each college**, what percentage of their year 11 intake proceeds to year 12, and gains their TCE and/or a TAFE qualification and/or completes a (school-based) apprenticeship – which covers all of the 'graduation outcomes' of senior secondary schooling in Australia at present.

We do not have that data for the high schools at all, but we do have some relevant data from *MySchool* for the colleges, and we have this in a form which allows us to compare the performance of the colleges to high schools in other states in relation to the percentage of their students gaining the senior secondary certificate. This is a good start on getting the data we need, but we need to make some assumptions to gain any insights. We explain these in the box below.

First, *MySchool* gives us the number of students who gain their secondary school certificate in all Australian schools that offer year 12. It also has limited information on TAFE subjects completed in school.

If it also gave us the number of students enrolled in year 11, and the numbers of students (if any) that enrol just in year 12, then we could calculate the percentage of year 11 students who continue on into year 12 and gain their year 12 certificate, for each school, including the Tasmanian colleges.

We cannot quite do this, but *MySchool* gives us the total number of enrolments at each college, and the TQA gives, for each college, the actual number of students in year 12/13 (in a particular year). From these two data sources we can calculate the number of students in year 11. The TQA and *MySchool* also give us the number of students gaining their TCE (see <http://www.tqa.tas.gov.au/1324>), and thus we can calculate, for each college, the percentage of year 11 students who go on to complete their TCE. (Note that some of the 2012 TCE (and SACE) graduates will be part time students who were in year 11 in years prior to 2011, and perhaps students who enrolled at the school/college just in year 12. Thus we need to be clear that our figures are all best estimates, not an accounting to the last 'dollar'.)

We do not have equivalent data for other states, but we can get close for South Australia, where the Department of Premier and Cabinet publishes data on the apparent retention rate from year level to year level, which we can apply to the *MySchool* data on total enrolments in SA schools to estimate the number of year 11 students in each high school (which go from year 8 to year 12). It turns out that the year 11 students in SA are 22% of the total enrolment in the high schools for all of the State, so we assume that this same percentage of the total enrolment in each school in SA given in *MySchool* is in year 11. (See https://www.sa.gov.au/_data/assets/pdf_file/0005/20102/DECDApparentRetentionRates2012.pdf)

For some SA schools we can also get enrolment data from their *School Context Statement*, but this is in full-time equivalent load (FTE), which will be lower than the number of students enrolled if any are part time. So we use both the FTE and our estimate as above to give an upper and lower bound on the year 11 numbers in SA when we are able to do so (for example, for Marryatville, but not for Modbury), and hence also on the graduation rate.

Lastly, for SA just as for Tasmania, *MySchool* provides us with the number of year 12 certificates awarded to students at each school, which we can use to estimate the percentage of year 11 students at each SA high school who go on to complete their SACE, the equivalent of the TCE.

These assumptions allow us to compare the relative success of SA high schools and the Tasmanian colleges in taking year 11 students through to the completion of their year 12 certificates. We present data on a range of SA public schools, from Julia Gillard's old school, Unley High, through a few other Adelaide schools in the wealthier suburbs, to schools in much poorer outer suburbs, and to relatively remote country schools. The data is given in the tables below.

TABLE 1: ESTIMATE OF YEAR 11 STUDENTS GAINING THEIR SECONDARY SCHOOL CERTIFICATE, IN SELECTED SA HIGH SCHOOLS

SELECTED SA HIGH SCHOOLS (8-12)	ICSEA 2012	TOTAL ENROLMENT 2011	YEAR 11 IN 2011 (actual)	YEAR 11 IN 2011(est)	NUMBER OF STUDENTS ATTAINING SACE 2012	% YR 11 GAINING SACE	% EST YR 11 GAINING SACE
MARRYATVILLE HIGH SCHOOL	1123	1203	228	265	182	80%	69%
UNLEY HIGH SCHOOL	1096	1230	253	271	203	80%	75%
BRIGHTON SECONDARY SCHOOL	1074	1414	287	311	217	76%	70%
NORWOOD MORIALTA HIGH SCHOOL	1062	1443		317	227		72%
HENLEY HIGH SCHOOL	1022	1143	215	251	161	75%	64%
MODBURY HIGH SCHOOL	998	925		204	125		61%
SEAVIEW HIGH SCHOOL	984	609		134	52		39%
SALISBURY EAST HIGH SCHOOL	957	730		161	57		35%
GLOSSOP HIGH SCHOOL	953	685	136	151	92	68%	61%
MILLICENT HIGH SCHOOL	942	535		155	40		26%
PORT LINCOLN HIGH SCHOOL	932	747	157	164	75	48%	46%
SALISBURY HIGH SCHOOL	921	873	210	192	116	55%	60%
FREMONT ELIZABETH HIGH	908	987	169	217	47	28%	22%

TABLE 2: ESTIMATE OF YEAR 11s IN TASMANIAN COLLEGES GAINING THE TCE

TASMANIAN COLLEGES	ICSEA 2012	TOTAL ENROLMENT 2011	YEAR 11 IN 2011 (inferred)	NUMBER OF STUDENTS ATTAINING TCE 2012	% YR 11 GAINING TCE 2012
HOBART COLLEGE	1032	1148	658	234	36%
ROSNY COLLEGE	975	1250	698	293	42%
LAUNCESTON COLLEGE	969	1410	776	430	55%
ELIZABETH COLLEGE	995	1029	625	218	35%
HELLYER COLLEGE	954	831	551	143	26%
DON COLLEGE	938	1006	599	189	32%
NEWSTEAD COLLEGE	930	866	571	133	23%
CLAREMONT COLLEGE	894	840	538	101	19%
TOTALS/AVERAGES		8380	5016	1,741	35%

The comparison between the SA and Tasmanian data in the two tables above is pretty startling, with the average for the Tasmanian colleges below that for all of the South Australian high schools apart from Millicent (a forestry and dairying town of about 5,000 people, roughly half way between Adelaide and Melbourne) and Fremont Elizabeth, (in an area with 40% youth unemployment.) So the first thing we need to do is make sure the comparison is fair.

Comparing the ICSEA for the SA schools and Tasmanian colleges is helpful. We can also give readers an understanding of the kinds of SA schools we have selected by providing more details about them (much more is available on *MySchool*) and by identifying high schools in Tasmania with similar ICSEAs.

TABLE 4: COMPARISON OF SA SCHOOLS WITH TASMANIAN SCHOOLS: ICSEAs from 2013

SA SCHOOLS (8-12)	ICSEA 2013	COMMUNITY	TAS SCHOOLS (7-10)	ICSEA 2013	ATTENDANCE RATE SA/TAS
Unley High School	1080	Middle class inner suburban	Taroona High School	1107	92/90
Brighton Secondary School	1074	Middle class suburban			
Norwood Morialta High	1059	Middle class suburban			
Marryatville High School	1119	Middle class inner suburban			
Salisbury High School	928	Working class outer suburban	Prospect High School	933	86/90
Modbury High School	1005	Middle class outer suburban	Riverside High School	1011	92/92
Glossop High School	947	Rural - farming	Exeter High School	948	87/89
Henley High School	1031	Middle class suburban	Riverside High School	1011	90/92
Port Lincoln High School	937	Rural/ fishing	St Helens	941	85/90
Seaview High School	1006	Middle class suburban	Kingston High School	987	87/91
Salisbury East High School	962	Middle class outer suburban	Devonport High School	957	86/91
Millicent High School	916	Rural – forestry and dairying	Wynyard High School	921	90/90
Freemont-Elizabeth High	914	Working class outer suburban	Montrose Bay High School	893	82/87

We do not say that these schools are directly comparable, but Table 4 does give Tasmanian readers some idea of what the SA schools in Table 1 are like. **It also shows that the results of Tasmanian schools cannot be explained by early student disengagement as is sometimes suggested, since the attendance rates at Tasmanian schools are if anything above those of ‘like’ schools in SA.**

What else might explain the low TCE attainment/graduation rate of the Tasmanian colleges? One suggestion that has been put to us is that the TCE is harder to attain than the equivalent senior secondary certificates (SSC) in the other states. **Like progression and attainment data by school, this is certainly something else that needs an authoritative analysis.** We have not found it possible to test this assertion by the direct means of working through

the study requirements for the TCE and equivalent SSCs in other states, because the public information seems often to be written with a view to its being unpacked by an expert advisor for each student on an individual basis.

But what we have been able to do is to use *MySchool* data to look at the TCE completion rates of Tasmanian private school students and compare these with the SSC completion rates of students in like private schools in other states. We can do this for the Tasmanian private schools because, unlike the public high schools, they offer all years of schooling from prep/reception to year 12. This is useful in showing that there is no consistent pattern of Tasmanian private school students being less likely to gain their TCE than their peers gaining their SSCs in similar private schools elsewhere. Nevertheless we must acknowledge that the data from *My School* is limited in providing only the **total** school enrolment and the number of SSCs awarded, from which we have calculated the final column - the number of students gaining their SSC as a percentage of the total school enrolment - whereas a better comparison would be the number of SSCs as a percentage of year 12 enrolments only. But this is not available.

TALE 5: YEAR 12 GRADUATIONS AS A % OF TOTAL SCHOOL ENROLMENT, SELECTED SA, VIC, NSW AND TASMANIAN PRIVATE SCHOOLS. DATA FROM *MySchool* 2013.

SCHOOL	ICSEA	TOTAL ENROLMENT	NUMBER OF SENIOR SECONDARY CERTIFICATES ATTAINED (2012)	SENIOR SECONDARY CERTIFICATES AS A % OF TOTAL ENROLMENT
Launceston Church Grammar, TAS	1110	706	96	14%
St Pauls' Anglican Grammar Warragul VIC	1109	1398	150	11%
The Friends School, Hobart, TAS	1167	1265	147	12%
Caulfield Grammar School, VIC	1167	3070	386	13%
Marist Regional College, Burnie, TAS	1024	818	76	9%
MacKillop Catholic College, NSW	1023	1519	136	9%
Fahan School (girls) Sandy Bay	1142	337	33	10%
St John's Grammar, Belair, SA	1139	867	96	11%

St Michael's Collegiate (girls), Hobart, TAS	1146	726	69	10%
St Peter's Collegiate Girls' School, Sonyfell, SA	1168	599	55	9%
The Hutchins School, Sandy Bay, TAS	1121	954	71	7%
St Peter's College, St Peters, SA	1187	1241	129	10%

Before leaving this data we need to stress again that it is presented for no reason other than to provide a quick – and perhaps dirty – test of the claim that the TCE is harder to attain than the equivalent certificates in the other states. The table certainly does not provide a basis for comparing the schools in any detailed way, and does not take account of considerable differences between them. To take just the last pair in the table, for example, *MySchool* tells us that St Peters, the wealthiest school in SA, has an income of about 30% more per student than Hutchins, which would undermine any simple comparison from the start.

So back to the data about the Tasmanian college students' rate of attainment of their TCE.

What should we say about this? The data really does speak for itself, as SA schools with lower ICSEAs generally achieve much better graduation rates than Tasmanian colleges. But just to draw out one comparison, only Launceston College graduates a higher percentage of its year 11s than Port Lincoln High School – a school comparable to St Helens High School on ICSEA. This is surely a surprising result.

Moreover, if we recall that 25% of Tasmania's year 10 students did not get to year 11, then far from the colleges 'doing a good job', we estimate that **less than one third of public school year 10 students are completing their TCE.**

Can this really be true? Surely our data is wrong, or perhaps our methods of estimation has errors we have not thought of, all of which combine to drastically understate the success of the Tasmanian public education system in terms of secondary graduation rates – rather than cancelling each other out?

But recall that the TQA data says that only 43.7% of **all** 2011 Tasmanian year 10 students (who continued to study half time or more) had completed their TCE by 2013. If the colleges (and the few other public schools that currently go to year 12) are not performing at the same level or better than the private schools on this measure, they will be below this figure. This gives a cross-check on our analysis, and suggests that we are right in our estimation that only about 35% of entrants to the Tasmanian colleges gain their TCE.

Since this is the purpose of the colleges, like all other senior secondary schooling in Australia – including the private schools we have just looked at - we must conclude that rather than being confident that the colleges are doing a good job, we **need to question whether the colleges – or rather the current structure**

of senior secondary education in Tasmania - is fit for purpose and indeed, whether post-compulsory Tasmanian schooling needs a total rethink.

Clearly if we are to come to grips with this question in a serious, well informed way, it is essential that we get the relevant data into the public realm as the basis for a mature conversation with the community about what is to be done. Without authoritative data we will get endlessly side-tracked into arguments about the figures, and nothing will change.

Some will argue that sharing data about school and college performance will lead to blaming and shaming and stigmatising, and league tables, and more press about Tasmanians being behind other states, and other bad things. It need not.

First, the current situation has been so long in the making, that everyone who is involved in education or in politics has had a hand in it, and everyone can play a role in and benefit from fixing it. Blaming and shaming will not be a spectator sport: everyone has been a player, and it's time we left that negative narrative behind us so that, together, we can focus on the future.

Second, **the data we need on school performance is available in all other states**, where, despite initial fears, *MySchool* has not in fact led to a public loss of confidence in schools, or huge shifts of students between them – even though this latter was, on some accounts, the intended purpose of sharing so much data with the community. This has been analysed in detail by Ben Jensen of the Grattan Institute, in the paper [The Myth of Markets in School Education](#).

Third, we could go into a wide public discussion about the future of our Tasmanian education system with ambitious goals for dramatic improvements in the achievements of young people, and for the re-engagement of adults with learning. We could learn from other communities which have been guided by the principles of 'truth and reconciliation' to face difficult, long standing problems in a mature, well-informed and respectful way. And we could be emboldened in doing so by the aim that we will come out of such a discussion much strengthened, more optimistic, and much better placed for Tasmania and Tasmanians to thrive and prosper in the new world that is growing around us, where knowledge is the foundation of economic and social development.

Indeed, when we look at all our advantages – our small size, ease of communication, common language and ideals, lack of major social discord, and wonderful environment – there is no reason to expect anything else than an energising transformation from a sustained and clear-eyed examination of what Tasmania needs from its schooling system, what that system is now providing, and how we can shift from where we are now to where we need to be.

Eleanor Ramsay and Michael Rowan, July 2014 (Minor revisions 1 August; addition of ICSEA data for colleges and subsequent amendments 16 August.) As always, comments, criticism and suggestions for other data to look at are welcome. Please click on **Contact Us** at <http://educationambassadors.org.au>.

TASMANIAN COLLEGES: FIT FOR THE PURPOSE OF POST-COMPULSORY SCHOOLING?

ADDENDUM, 9 August 2014*

After we completed our paper on the Tasmanian Colleges we realised we had failed to consider a vital point. If the Colleges have such low numbers of students completing the TCE, what does it cost to produce a graduate, and how does this compare to the schools we considered along with the colleges in relation to their graduation rates?

Again, there is data publicly available on the *MySchool* web site that allows us to answer this question, and we thought it a good idea to produce this addendum to air the data and reflect upon it.

The college and school income and graduation data for 2012 – the latest available on *MySchool* - is given in table 1 below. Some notes are necessary to explain the data.

We are trying to determine how much it costs to produce a graduate from each of our Tasmanian colleges (and the comparison schools). To do this we need two figures for each college for the year we consider: the total cost of running the college, and the number of graduates that year. Determining the cost per graduate is then a simple calculation.

The total recurrent annual budget of each of the colleges is given on *MySchool*, as are numbers of graduates. But just who to count as a graduate is not obvious. In the main paper *Tasmanian Colleges: fit for the purpose of post-compulsory education?* We just looked at the TCE, but here, since schools are spending money on school based traineeships and apprenticeships as well, we should look more widely at all ‘graduations’ including the completion of training qualifications in school.

We have taken our guidance from the notes on *MySchool* which explain the various options, as follows. (See <http://www.myschool.edu.au/MoreInformation/CaveatsForSeniorSecondaryOutcomes2012#SeniorSecondaryOutcomes>)

First and most clearly in the count of the graduates, is the number of students to whom the ‘**senior secondary certificate [is] awarded**’ – ie, the count of those completing their TCE. The notes to *MySchool* say this number is the

count of students (any age, any residential/citizen status) shown in Tasmanian Qualifications Authority (TQA) records as having met the standards required for the award of the Tasmanian Certificate of Education this year.

MySchool also gives the number of students who ‘**completed senior secondary school**’, which in Tasmania is the

count of students shown in TQA records as finishing year 12 or year 13 in the specified year and receiving a formal statement showing one or more results in senior secondary courses and/or VET.

Clearly this latter count includes students who did not complete their TCE or any other qualification, but did complete one or more subjects that might have contributed to their gaining the TCE. Accordingly, we do not include this number in the count of graduates, for the same reason UTAS does not include the number of students who completed one unit or subject towards a degree among its graduates.

MySchool also gives two numbers on college students' VET achievements.

The first, **VET enrolments**, is the

count of students recorded this year with one or more completed units of competency categorised by provider identification of a qualification that can include these competencies.

Again these are unit or subject enrolments, not qualifications completed, so we do not count them towards the number of graduates.

The second, **school-based apprenticeships and traineeships**, is the

count of students recorded as completing a school-based apprenticeship or traineeship.

Like the TCE, this is a count of completed qualifications so here (but not in the main paper to which this is an addendum) we do include these in the number of graduates, although by doing so we may be counting individual students twice since, depending on the study choices made, it may be possible for an individual to complete both the TCE and a school-based apprenticeship or traineeship, much as university students may complete a double degree. But since both are positive outcomes, we count them both, and thus may be over-estimating the number of graduates and hence under-estimating the cost of graduating a student from the colleges.

TABLE 1.COST OF GRADUATES AT TASMANIAN COLLEGES, 2012. Data from <http://www.myschool.edu.au>, accessed 9 August 2014

COLLEGE	TOTAL NET RECURRENT ANNUAL INCOME	NUMBER OF STUDENTS ATTAINING TCE	NUMBER OF SCHOOL-BASED APPRENTICE-SHIPS AND TRAINEESHIPS	TOTAL NUMBER OF GRADUATES	COST PER GRADUATE
CLAREMONT	11,265,442	101	29	130	86,657
NEWSTEAD	10,913,243	133		133	82,054
HELLYER	10,895,427	143	30	173	62,979
DON	12,093,065	189	39	228	53,040
HOBART	13,725,077	234	27	261	52,587
ELIZABETH	11,689,991	218	30	248	47,137
ROSNEY	15,587,714	293	59	352	44,283
LAUNCESTON	15,721,865	430	59	489	32,151
TOTALS/AVERAGE	101,891,824	1,741	273	2,014	50,592

What should we make of this? Let us look at some other schools to get some comparable figures. How much does senior secondary schooling – that is, years 11 and 12 – cost per graduate in private schools, and in the schools we included in Table 1 of the main paper to which this note is an addendum, *Tasmanian Colleges: fit for the purpose of post-compulsory schooling?*

We cannot arrive at these figures quite so directly using *MySchool* data, as this gives the total recurrent income for private schools which typically cover the whole range of years from entry (at age five or so) to graduation at year 12, while the SA high schools are years 8-12. So we must estimate the income of the senior secondary part of these larger schools, which we do by assuming for the K-12 schools that the two senior secondary years are allocated 1/6 of the schools' total income, and for the SA high schools 2/5.

The result is presented in table 2 below.

TABLE 2. ESTIMATED COST OF GRADUATES AT SELECTED PRIVATE AND SA PUBLIC SCHOOLS. Data from <http://www.myschool.edu.au>, accessed 9 August 2014

COLLEGE/ SCHOOL	TOTAL NET SENIOR SCHOOL RECURRENT ANNUAL INCOME (estimate)	NUMBER OF STUDENTS ATTAINING TCE/HSC/etc	NUMBER OF SCHOOL-BASED APPRENTICE-SHIPS AND TRAINEESHIPS	TOTAL NUMBER OF GRADUATES	COST PER SENIOR SECONDARY SCHOOL GRADUATE (estimate)
SCEGGS, NSW	4,233,766	111		111	38,142
CRANBROOK SCHOOL, NSW	5,916,503	133		133	44,485
FRIENDS SCHOOL	3,857,791	147	8	155	24,889
ST MICHAEL'S COLLEGIATE, TAS	1,973,943	69	5	74	26,675

PORT LINCOLN HIGH SCHOOL	4,397,183	75	1	76	57,858
MILLICENT HIGH SCHOOL	3,045,472	40	9	49	62,152
SALISBURY HIGH SCHOOL	5,085,334	116	11	127	40,042
FREMONT ELIZABETH HIGH	4,619,851	47	6	53	87,167
SEAVIEW HIGH SCHOOL	2,743,544	52	9	61	44,976
GLOSSOP HIGH SCHOOL	3,822,383	92	10	102	37,474
HENLEY HIGH SCHOOL	6,283,462	161	9	170	36,962
MARRYATVILLE HIGH SCHOOL	6,254,947	182		182	34,368
UNLEY HIGH SCHOOL	6,212,161	203		203	30,602
SALISBURY EAST HIGH SCHOOL	3,638,026	57	2	59	61,661
BRIGHTON SECONDARY SCHOOL	7,036,881	217	7	224	31,415
MODBURY HIGH SCHOOL	4,505,428	125		125	36,043
NORWOOD MORIALTA HIGH SCHOOL	7,208,772	227		227	31,757

What do we learn from these comparisons? We should be careful not to try to draw too sharp a conclusion given that we have had to torture the publicly available data somewhat to produce the estimates given here. But in broad terms we may conclude that:

1. The Tasmanian Colleges spend much more money to produce a graduate than some of the wealthiest schools in Australia.
2. High schools in poorer and remote areas in South Australia fall in about the middle of the cost range of the colleges, with Claremont, Newstead and Hellyer costing more to produce a graduate than Port Lincoln High School, and Don not a lot less.
3. The cost of education per graduate depends – as of course it must – on the ability of the school to keep its students enrolled and progressing through to graduation. **Attrition is very expensive indeed.** This explains the high cost of graduates from Fremont-Elizabeth, which we estimate to graduate less than 30% of its year 11 students.

Attrition and low achievement is more likely when students come from poorer family backgrounds. **Children from poorer backgrounds just cost more to educate.** The school funding formula is intended to compensate for this (and the intent of the Gonski reforms was to increase this compensation to make outcomes fairer for all students). Perhaps this is the explanation of the higher cost of graduating a student from the colleges and the higher cost South Australian high schools?

Claremont College receives the most funding per student of the public schools we are comparing here. The table below uses this data to calculate the per student funding for every other school included in the table showing this as a percentage of that received by Claremont College.

TABLE 3: COMPARISON OF PER STUDENT INCOME AND GRADUATION RATE USING CLAREMONT COLLEGE AS THE BASE. (Income data from <http://www.myschool.edu.au>, accessed 9 August 2014)

SCHOOL	ICSEA 2012	\$/STUDENT	\$/STUDENT AS A % OF CLAREMONT	GRADUATION RATE	GRADUATION RATE AS A % OF CLAREMONT
CLAREMONT COLLEGE	894	16,198	100%	24%	100%
NEWSTEAD COLLEGE	930	16,092	99%	23%	96%
PORT LINCOLN HIGH SCHOOL	932	15,257	94%	48%	200%
ELIZABETH COLLEGE	995	15,024	93%	40%	167%
HELLYER COLLEGE	954	15,011	93%	31%	129%
HOBART COLLEGE	1032	14,900	92%	40%	167%
MILLICENT HIGH SCHOOL	942	14,735	91%	32%	133%
DON COLLEGE	938	14,655	90%	38%	158%
SALISBURY HIGH SCHOOL	921	14,603	90%	60%	250%
FREMONT ELIZABETH HIGH SCHOOL	908	14,590	90%	31%	129%
SEAVIEW HIGH SCHOOL	984	14,122	87%	46%	192%
ROSNY COLLEGE	975	14,024	87%	50%	208%
GLOSSOP HIGH SCHOOL	953	13,879	86%	75%	313%
MARRYATVILLE HIGH SCHOOL	1123	13,125	81%	80%	333%
HENLEY HIGH SCHOOL	1022	13,052	81%	79%	329%
UNLEY HIGH SCHOOL	1096	12,781	79%	80%	333%
SALISBURY EAST HIGH SCHOOL	957	12,531	77%	37%	154%
BRIGHTON SECONDARY SCHOOL	1074	12,479	77%	78%	325%
MODBURY HIGH SCHOOL	998	12,388	76%	61%	254%
NORWOOD MORIALTA HIGH	1062	12,383	76%	72%	300%
LAUNCESTON COLLEGE	969	11,992	74%	63%	263%

What we see from this table, as we go down the rows from schools that receive more per student to schools that receive less, is that both the ICSEA and the graduation rate do indeed trend up. However it should be noted that the relationship is far from linear, with schools receiving about the same income per student having very different graduation rates. In particular, considering Tasmanian colleges and South Australian high schools with about the same income per student, Port Lincoln High School appears to be doing better than all of the colleges apart from Rosny and Launceston. Glossop High School also stands out as a top performer – and interestingly it is a multi-campus school with the junior and senior secondary campuses separated by five or so kilometres.

We do not need to draw any more direct comparisons to make the point that whether we look at the schools and colleges receiving more per student, or those receiving less, there is no pattern which shows that the Tasmanian colleges are performing better than the South Australian schools in producing graduates at lower cost, including relatively small country schools like the following:

SCHOOL	ICSEA	ENROLMENT	SACE GRADUATES
Millicent	942	535	40
Glossop	953	685	92
Port Lincoln	932	747	75

Given that students in Tasmania can learn and do anything that like students in South Australia can learn and do, which we showed in our paper *Tasmanian Education Today: digging around in the data*, we might expect similarly good outcomes from the following Tasmanian secondary schools:

SCHOOL (2013 data)	ICSEA (estimated for combined schools)	ENROLMENT
Smithton	868	286+
Scottsdale	928	339+
Huonville/Dover	899	560+
St Helens/ St Marys	936	884+

We end this note by emphasising just how expensive attrition is, and thus how much effort it is worth expending to avoid it. We do this by comparing the cost of graduating a student from the colleges to the cost of the funding required for one student to complete two years of education in various courses at UTAS. For this comparison we use, as the annual course fee, the price an international student pays to undertake one year of the course (see <http://www.utas.edu.au/international/courses/courses-by-type>), and for the attrition rate, the average attrition rate for all UTAS courses averaged over a number of years (see Appendix 4.9 at <http://www.education.gov.au/selected-higher-education-statistics-2013-student-data>).

TABLE 3: COST OF ONE STUDENT COMPLETING TWO YEARS OF A UTAS COURSE

COURSE	ANNUAL COURSE FEE	%ATTRITION	COST FOR ONE STUDENT TO COMPLETE TWO YEARS
BA	20,263	20%	44,578
BSC	22,226	20%	48,897
B MEDICINE-SURGERY	51,505	20%	113,311

This shows us – perhaps surprisingly – that we are spending more to produce a graduate from the two senior years in most of our colleges than international students pay (on average) for one student to complete the first two years of their degrees at UTAS, except in the most expensive courses like medicine – and even that difference is uncomfortably small.

Thus it seems fair to conclude that given the large amount the State has already invested in young people by the time they reach the end of compulsory schooling, and the cost of the colleges, the relatively modest further investment

that will be required to ensure **successful** senior secondary programs in all high schools is likely to pay a handsome dividend, while continuing the low rate of attainment of year 12 will continue to be extraordinarily wasteful.

***NOTE**

This analysis is based, in part, on a spreadsheet which we recently showed or gave to a limited number of others. Since preparing that initial analysis, we have accepted that since some of the colleges, and some comparison high schools, have students completing in-school traineeships and apprenticeships, they should be included as graduates in the financial analysis, whether or not they have completed their TCE or equivalent. Their inclusion explains the major differences between the numbers in this addendum and the earlier spreadsheet. We have also updated that earlier analysis with more appropriate data on UTAS attrition rates. Nevertheless, while accepting these students' inclusion for the purposes of cost analysis, we stick by our fundamental policy point that **all students** should be aiming to complete their senior school certificate, and that **all schools and colleges** should be encouraging them to do so, for all the reasons we have given in earlier papers.

Eleanor Ramsay and Michael Rowan
9 August 2014

Criticisms and comments welcome. Please click on **Contact Us** at <http://educationambassadors.org.au>.