**Tasmanian Year 9 – 12 Educational Comment Submission to ACER September 2016**

**Some Background**

The need to maximise the educational standard of any society is beyond question. We know from research the direct correlation between the level of education attained and the positive impact on individuals and their society. For the individual there is:

- improved quality of life;
- increased life expectancy;
- improved earning capacity and likelihood of being financially self-sufficient beyond retirement;
- better and more long-term relationships;
- improved health and, statistically, less likelihood of substance dependence; and finally
- more educated people are more tolerant and more likely to be involved in a range of prosocial activities and they also make a greater contribution to economic growth

For the community there are decreased:

- crime rates;
- requirements on the public health and welfare sectors;
- impost on policing services; and
- costs associated with those areas and subsequent cost to the tax payer.

Tasmania has the 2nd lowest level of post-year 10 retention in the country – 67% (that's not including those who start TCE but don't complete it) and this has a significant impact with regard to employment rates. The following data clearly indicates the correlation between the level of education and its immediate impact in this area:

- The rate of unemployment for 25 – 34 year olds in Launceston who didn't finish Year 12 is 13% (National unemployment rate is 5.8% at the time of writing this commentary);
- Unemployment in Launceston drops to 5% if a person has any form of post-Year 12 education;
- Unemployment drops again to 3.1% if they have a degree;
- State-wide, 18.5% of Tasmanian households include at least one person with a tertiary degree, the national average is 23.7%

PISA (Program for International Student Assessment) testing data highlights the educational situation Tasmania finds itself in. These results from 2012 (apologies, I haven't collated this data from 2015) show that Tasmanian 15 year old students' Mathematical, Scientific and Reading Literacy results are worse than both the Australian and OECD averages. They are also the second worse across the country (only NT is worse).

| Literacy | Tasmanian Mean | Australian Mean | OECD Mean |
|---|---|---|---|
| **Reading** | **485** | 512 | 496 |
| **Mathematical** | **478** | 504 | 494 |
| **Scientific** | **500** | 521 | 501 |

In ‘real’ terms this puts Tasmanian 15 year old students approximately:

- 0.8 years behind the Australian average in Reading;
- 0.75 years behind the Australian average in Mathematics; and
- 0.6 years behind the Australian average in Science.

Of even greater concern is that over the period 2003, 2006, 2009 and 2012, Tasmanian results have declined significantly in Mathematics (507 down to 478) and Reading literacy (comment is made but there are no figures provided in the PISA report). Scientific literacy did not change significantly during that period.

To put those statements in context with the use of some figures, Mexico performs poorly in this testing and a researcher (Rick Hansushek) has estimated that if Mexico were to raise their academic achievement in these tests by 25 points (approximately a 6% increase on their current scores) it would add a net value of US$5 trillion to the Mexican economy.

**Key Issues for Tasmania:**

- Culture: There is a long-term culture of educational apathy beyond Year 10, “I’ve done OK with a Year 10 education. That was all I needed so it’s all my kids need”. This argument is a retrospective justification of a significant number of Tasmanian adults’ path in life and the implications for our young people is a lack of expectation and aspiration. This is generational and will take time to change.
- The system: High schools finish at Year 10 and this, coupled with the late Prep starting age for Tasmanian students, means that for many students the time that they reach the age where education is voluntary roughly coincides with the time they are starting Year 11. As a consequence the almost subliminal message is, ‘now is the time to make the decision about getting a job or doing further study’. We know that in today’s society, vocations that once had a minimum requirement of Year 9 or 10, now requires students to have completed Year 12. I admit, I am not certain that this is the case in Tasmania but it is in the rest of Australia, hence we are limiting the opportunities of our young people who may look to move interstate.
- Teacher knowledge: Compounding this disconnect between Year 7 – 10 and TCE is the Year 7 – 10 teachers’ awareness of what future education they are preparing their students for as well as TCE teachers not appreciating what their students’ foundation has been, educationally (see curriculum and assessment, later).
- Student educational aspirations and retention: Due to the transition required in to a Senior College for TCE, the subliminal message that ‘it’s a good option or acceptable to leave school at that stage’ results in a significant number of students not completing Year 12. Hence, they don’t even get to the point where University is an option. Completion of Year 12 must be a priority so that students have the option of entering University or further education.
- Modelling and mentoring: a more subtle aspirational issue, but one that undoubtedly has a significant an impact, is Year 7 – 10 students not seeing their older counterparts studying the TCE and modelling good academic behaviours. The role models for our High School students are Year 10s who are celebrated at schools and in the media, especially, for finishing Year 10 as if that is some kind of momentous achievement.
- Teacher education and UTAS educational requirements for teaching courses: the educational requirements to get in to UTAS, including in to Teaching degrees, are

amongst the lowest in the country (of advertised ATAR requirements). This is an important element to consider because research has told us that the teachers and teacher quality have the greatest impact/influence on student achievement outside the home environment (Hattie, Visible Learning). McKinsey and Company completed a report in September 2007, titled, 'How the World's Best Performing School Systems Come Out, On Top'. One of its three key findings was that, *"The quality of an education system cannot exceed the quality of its teachers".*

**University Teaching Course ATAR Requirements (2013)**

| | | Primary | Eng / Humanities | Maths | Science | HPE | Business |
|---|---|---|---|---|---|---|---|
| **NSW / ACT** | *High* | 88 | 82 | 84 | 84 | 80 | 96 |
| | *Low* | 60 | 60 | 60 | 67 | 64 | 60 |
| **Qld** | *High* | 81 | 72 | 78 | 87 | 83 | 87 |
| | *Low* | 55 | 55 | 55 | 55 | 55 | 55 |
| **SA / NT** | *High* | 80 | 73 | 72 | 70 | 75 | 73 |
| | *Low* | 60 | 60 | 70 | n/a | 61 | 60 |
| **Vic** | *High* | 76 | 85 | 85 | 84 | 81 | 85 |
| | *Low* | 60 | 60 | 60 | 55 | 51 | 55 |
| **Tas** | *High* | 65 | | | | 65 | |
| | *Low* | *ELC - 65* | | | | n/a | |
| **WA** | *High* | 75 | 75 | 70 | 70 | 67 | 75 |
| | *Low* | 65 | 65 | 69 | 65 | 65 | 65 |

Unfortunately I couldn't find a full set of data but from the above table you can see that UTAS' ATAR requirements to enter a Teaching course are at the lower end for Teaching Degrees, nationally. Whilst there is variation within each state's universities, the vast majority of our state's teachers are from a cohort of students with the lowest ATAR requirements for that profession in the country.

- Teacher Literacy Levels: The McKinsey Report went on to show *that 'a teacher's level of literacy, as measured by vocabulary and other standardised tests, affects student achievement more than any other measurable teacher attribute'*. The majority of our teachers come from within our state. Having been educated in Tasmania, they are a product of the Tasmanian education system. With *relatively* poor literacy levels throughout the state, it follows logically that our teachers' average literacy levels are lower than their counterparts interstate and so have a less positive effect on student outcomes than could otherwise be the case.
  What is the direct effect of teacher quality? *'If two average 8 year olds were placed with different teachers, one a high performer and one a low performer, within three years their performance diverges by more than 50 percentile points'*. The report went on to say, *'students placed with high performing teachers will progress at three times the rate of those placed with low performing teachers'*. And finally, *'at the primary level, students that are placed with low performing teachers for three years in a row suffer an educational loss which is largely irreversible'.* The whole situation becomes a self-fulfilling prophecy.
- Class sizes: As an aside, comparing the effect of reduced class sizes to that of teacher quality/standard, further studies have shown that, '*within a range of class sizes typical in OECD countries, variations in teacher quality completely dominated any effect of reduced class size'.* And a significant consideration is that reducing class sizes places more strain on resources – human and financial,

assuming the Government funding model doesn't change significantly (see Gov't funding, later).

- The curriculum and assessment: Year 7 to 10 follow the Australian Curriculum, which is perfectly fine except that it demands standards-based assessment whereas the TCE's assessment is criteria-based. This difference means that our students have to get used to a different form of assessment when they make the step from Year 10 to 11. Hence, they are not being prepared as well as they could be and this is yet another disconnect between Year 10 and 11 and something our students have to get used to when they are also making the transition and trying to find their place in a new school. Either Tasmanian schools need to be able to use criteria-based assessment, aligned to the Australian Curriculum, in Years 7 – 10 to be better prepared for the TCE or the TCE assessment needs to become standards-based.
- The TCE Literacy, Numeracy and ICT 'ticks': The Literacy, Numeracy and ICT ticks are irrelevant and out-dated as Goal 2 from the Melbourne Declaration states 'Successful learners have the essential skills of literacy and numeracy and are creative and productive users of technology, especially ICT, as a foundation for success in all learning areas'. At an absolute fundamental level, if a student can 'pass' all of their TCE subjects but still have to prove that they are literate and numerate then the TCE is of such a poor standard that it should be replaced. I don't think that's the case and I can't help but come to the conclusion that the 'ticks' are something that were included in the TCE to differentiate it from the senior curriculums of other states; however, they are now redundant.
- English should be compulsory in TCE: every student should have to study and pass one English subject in their TCE. This would be another reason to have the Literacy tick to be removed.
- Resourcing of TCE course construction, accreditation and moderation of results: TASC, and all aspects of TCE course construction etc, is under-resourced. We have more courses/subjects available than other states' senior curriculum but less resourcing – it doesn't make sense. Hence, there is a significant burden carried by teachers to do a lot of the writing, refining, consultation and preparation of assessment tasks ect. This typically occurs during/after the TCE exams which means that schools that operate from Year 7 – 12, where teachers still have classes after mid-November, are reluctant to release their TCE teachers for course writing.
- Lack of Government (Federal and State) funding: Research has unequivocally proven that higher educational attainment results in a range of positive social outcomes as mentioned at the start if this commentary. Hence, we need bipartisan support for increased funding of public education, not just a little more than the other party is offering in order to get re-elected for the next term, but significantly more than is currently the situation, for the long-term benefit of all.

There are many factors that affect the education of our young people but our goal must be to improve retention beyond Year 10 and educate more of our young people to the end of Year 12, as the first step in addressing the issues initially identified.

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