

What does educational success look like in Tasmania?

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This paper addresses the first three themes of the *Independent Review of Education in Tasmania: Public Consultation Paper*, and its conclusions have implications for themes 4 and 5 (Tasmanian Government, 2024).

This document “What does educational success look like in Tasmania?” analyses the challenges Tasmania faces in improving Year 12 attainment rates. It critiques the use of data in discussions about educational outcomes, highlighting that much of the comparison between Tasmania and other Australian jurisdictions is flawed due to differences in educational contexts and certification requirements.

Key points for policymakers:

1. **Incomparable Data:** Tasmania's retention and attainment rates are often compared to other states, but variations in certification standards make such comparisons misleading. The Productivity Commission and ACARA caution against using data for inter-jurisdictional comparisons without understanding these differences.
2. **Conflation of Retention and Certification:** The attainment rate, which is often cited, conflates retention (students staying in school until Year 12) with certification (students meeting the requirements for Year 12 certification). To address educational challenges effectively, policymakers need to distinguish between these two factors.
3. **Retention Rates:** These broadly align with the Index of Community Socio-Educational Advantage (ICSEA) in every jurisdiction. While Tasmania's retention rates between Years 10-12 are slightly below the national average, the Tasmanian rate is similar to NSW despite Tasmania having a much lower ICSEA. Many Tasmanian students are staying in school but are not meeting the strict certification requirements.
4. **Certification Standards:** Tasmania has the most stringent certification requirements in Australia. Students must complete 1200 hours of coursework with a higher achievement standard than other jurisdictions. This higher bar for certification contributes to lower attainment rates, despite similar retention.
5. **Jurisdictional Differences:** Other states have lower certification thresholds, with some allowing partial completion of senior secondary schooling or recognition for lower-level achievements. In contrast, Tasmanian students must meet higher minimum achievement levels across all subjects, making it more difficult to attain certification.

In conclusion, Tasmania's lower Year 12 attainment rate is primarily due to its high certification standards rather than retention. Policymakers should focus on revising these standards to more closely align with other jurisdictions and thus increase certification through the recognition of all student learning.

This paper is offered to help explain the data used in discourse around improving educational outcomes in Tasmania. Much of the current commentary centres around inappropriate data use and presentation, leading many to base their conclusions on unfounded assumptions. This paper will look at the requirements to receive year 12 certification in each jurisdiction.

Interpreting the data

Improving retention and attainment in Tasmania requires an understanding of the Tasmanian context. Quite often the retention and attainment figures are considered in comparison to figures from other jurisdictions in Australia, or even Australia as a whole. If this is done, then understanding the context of the other jurisdictions is also required, otherwise the data cannot be compared. This inability to compare data between jurisdictions is outlined wherever you can find raw retention and attainment data such as the Productivity Commission's Report on Government Services where it is stated:

“This indicator should be interpreted with caution as:

- *assessment, reporting and criteria for obtaining a Year 12 or equivalent certificate varies across jurisdictions*
- *students completing their secondary education in technical and further education institutes are included in reporting for some jurisdictions and not in others...*” (Productivity Commission, 2024)

Along with a graphic key to indicators highlighting the inability to compare data, it also specifically states that the *“Data is not comparable (Subject to caveats) across jurisdictions, but is comparable within some jurisdictions over time”*. (Figure 1; Productivity Commission, 2024).

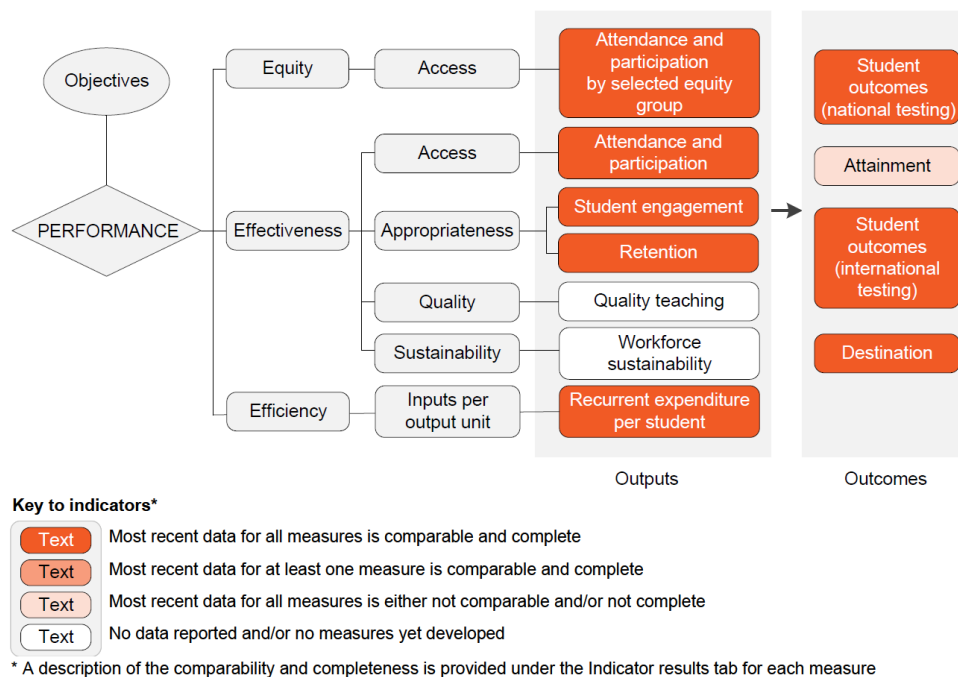


Figure 1: Comparability and completeness of indicators reported by the Productivity Commission as part of the Report on government Services (Productivity Commission, 2024).

These, and other data caveats are also presented with the ACARA data in the National Report on Schooling in Australia (Australian Curriculum, Assessment and Reporting Authority, 2024). Any assertions based on inter-jurisdictional comparisons that does not address the different contexts explained in the caveats are fundamentally flawed on this basis.

Conflating attainment and retention

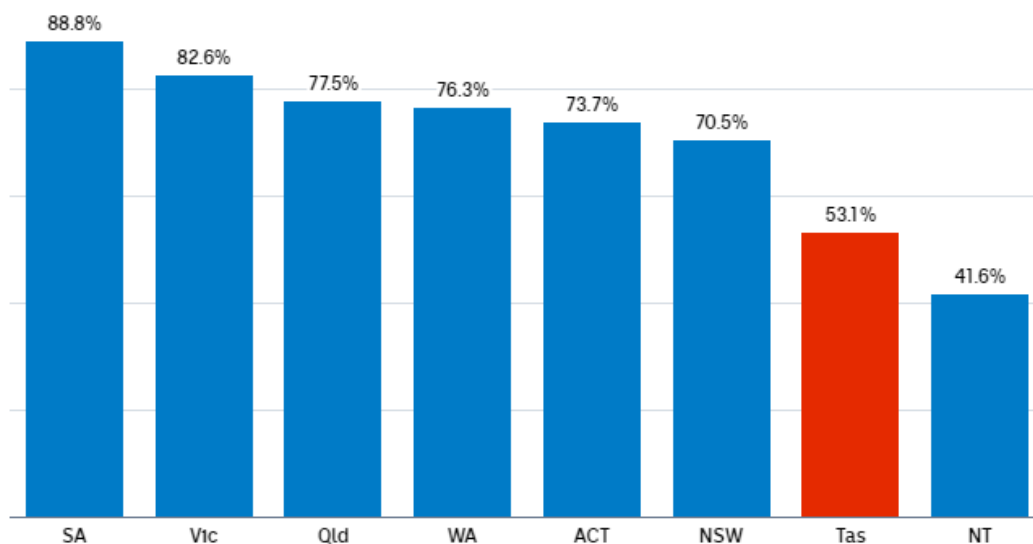
Another issue when looking at retention and attainment in Australia is that the two measurements are often conflated in the data presented. For example, the description of ‘attainment’ data provided by the Productivity Commission (2024) provides the description that:

Attainment’ (attainment rate) is defined as the number of students who meet the requirements of a Year 12 certificate or equivalent expressed as a percentage of the estimated potential Year 12 population. The estimated potential Year 12 population is an estimate of a single year age group that could have attended Year 12 that year, calculated as the estimated resident population aged 15–19 years divided by five....” (Productivity Commission, 2024).

Here we can see that this attainment rate is the expression of a percentage of the potential Year 12 population (number of persons aged 15-19 divided by 5), highlighting that this is based on those of the Year 12 population who are enrolled (are retained) versus those who do not. It then adds the layer of those who achieve Year 12 certification. Thus, the resulting attainment rate conflates retention and certification.

In order to understand how these two measurements can inform any policy responses, we first need to separate them. This helps us to understand how each is contributing to the overall figure and therefore point us towards the most effective response/s.

Unfortunately, the figures often presented to the public in media and commentary are the conflated certification and retention figure of ‘attainment’ (figure 2). This does not help us to understand the percentage of students being retained from year to year in schools, or to understand the percentage of students who are attending school and receiving certification. This can result in misguided attempts to solve ‘the problem’ without understanding what ‘the problem’ actually is. Any further analysis of the Year 12 certification data that conflates retention and certification as the attainment rate will be unable to pull apart the individual effects, resulting in conclusions that fail to recognise the nuance or detail relating to these measures. For example, would it be best to focus attention on increasing retention of students across Years 10-12, or would it be best to focus attention on increasing certification of students who already stay until Year 12? If 100% of students were retained until Year 12, then clearly the focus should be on increasing certification, whereas if only 53% of Year 12 students stay until Year 12 and they are the ones achieving certification of the cohort at a rate of 100%, then the focus should be on increasing retention. The answer to this is difficult to determine when presented with the certification rate of the entire potential Year 12 population as the attainment rate. Understanding both the retention data and the certification data can help us unpack the differences between Australia’s jurisdictions and find the reason contributing to the differences.



Source: Productivity Commission

Figure 2: Year 12 attainment rate (as a percentage of the potential 2022 Year 12 population) across jurisdictions in Australia (ABC News, 2024)

Retention

The retention data collated in the National Report on Schooling in Australia relevant to Years 11-12 is the ‘retention between Years 10 and 11’, and ‘retention between Years 10-12’. This is from a baseline enrolment figure of 99.3% of 6-15 year olds enrolled in school in 2020, the year from which the Year 10-12 retention for the year 2022 and 10-11 for 2021 is calculated (ACARA, 2024). From these figures we can also see the attrition rate (loss of students from formal schooling) between Years 11-12, corresponding with the years 2021-2022. This can be seen in figure 3, where the full height of the bars reflects the retention from Year 10 into Year 11, the full height of the dark blue bar reflect the retention from Year 10-12 and the difference between these (orange) is the attrition rate. The figure also shows the Index of Community Socio-Educational Advantage (ICSEA) for each jurisdiction relative to the national average of 1000 (Figure 3; MySchool, 2020).

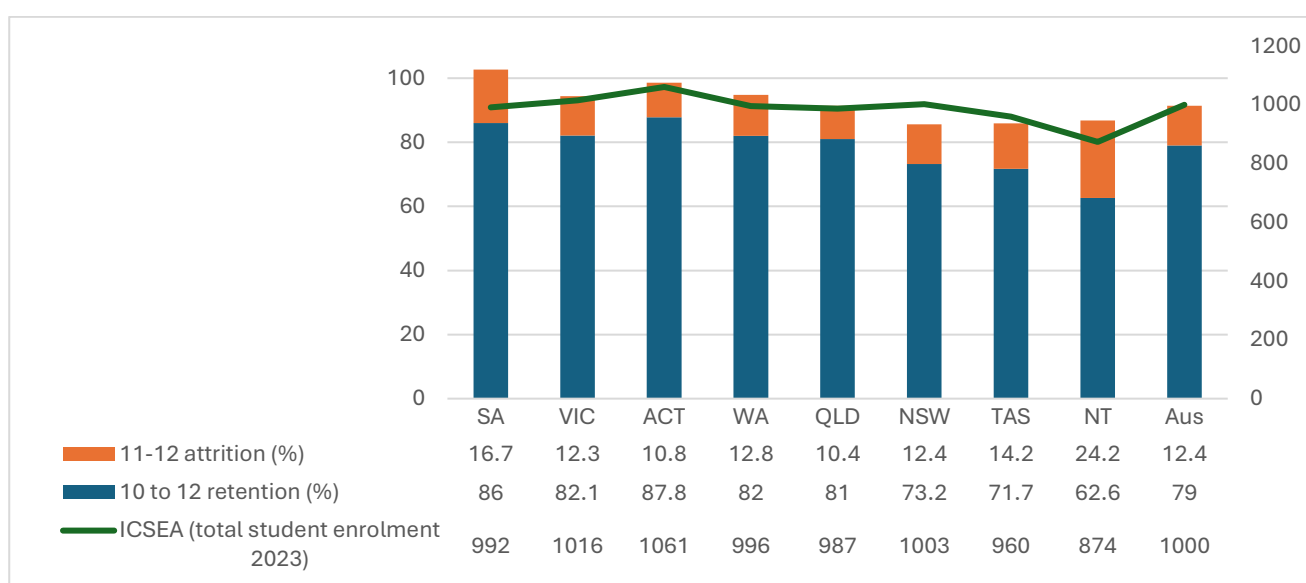


Figure 3: Full height of bars indicates Year 10-11 retention (%) for 2021, with 11-12 attrition (%) and 10-12 retention (%) indicated for 2022, Index of Community Socio-Educational Advantage (ICSEA) in each jurisdiction in Australia. Data sourced from ACARA (2024).

This reveals that retention broadly corresponds with ICSEA across Australia. Tasmania, in 2021, had a similar retention rate as New South Wales between Years 10-11 at around 86%, a few percent off the national average at just over 91%, and a similar attrition rate to all jurisdictions except for the Northern Territory (24%) and South Australia (17%) (Figure 3). Whilst there is always room for improvement with retention if it is below 100%, this data points to Tasmania being where it could reasonably be expected, relative to the national average based on ICSEA. Therefore, the question must be asked; with retention and attrition similar to NSW and close to the national average, how can Tasmania’s attainment rate be much lower than NSW and the national average?

Attainment and certification

The 2022 attainment rate for Australia was 76.5%, for NSW, 70.5% and for Tasmania, 53.1% (Figure 2; ACARA, 2024). This is despite apparent retention rates for Australia at 79%, 73.2% for NSW and 71.7% for Tasmania (Figure 3). This shows a large difference between the attainment rate and the apparent retention rate for Tasmania, yet a smaller difference for both the NSW and Australian figures. This high level of certification relative to the apparent retention from Year 10 to12 reveals that of the 79% of students who were retained from Year 10 to12 in Australia and the 76.3% attainment rate of the students who stay to Year 12 in Australia, 97% receive certification (Figure 4). For Tasmania, this figure is 81.4% (Figure 4). This points to the issue of certification, not retention, being the primary reason for Tasmania’s attainment rate being significantly lower than other jurisdictions and the national average.

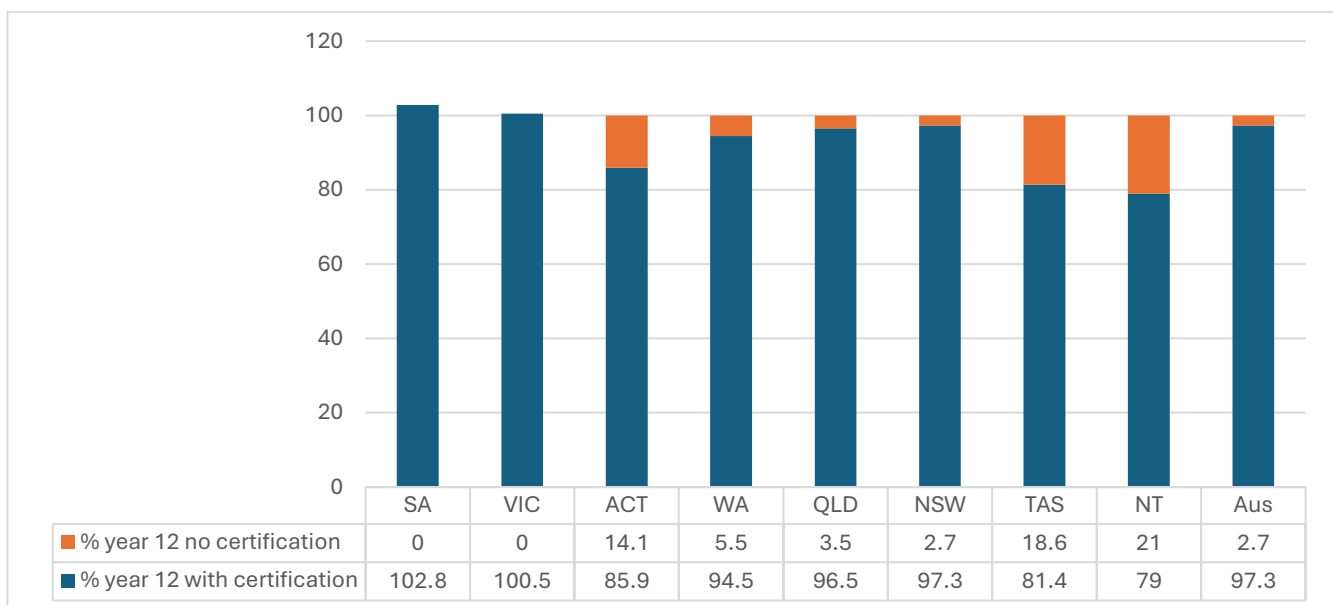


Figure 4: Percentage of Year 12 students in 2022 who were included in the certification data, or not, by jurisdiction. Data sourced from ACARA (2024).

This has been calculated with the following [‘percent certification’ – ‘percent Year 10 to 12 retention’ = ‘percent of enrolled Year 12 students not achieving certification’]. This calculation has the inbuilt assumption that 100% of potential Year 10 students are enrolled in Year 10, when the actual 2020 national figure for 6-15 year olds enrolled in school is 99.3%, indicating that the Year 10 figure would be lower than this. Data sourced from (Australian Curriculum, Assessment and Reporting Authority, 2024).

Now we understand the contributions of retention and certification to the attainment rates of each jurisdiction, we can see that retention is reasonably comparable between jurisdictions based on ICSEA, however there are some large differences between certification, particularly with some jurisdictions (Victoria and South Australia) showing a certification rate higher than the retention from Year 10 to12. To understand the differences in certification rates, we must understand what is being measured, or not, i.e. what counts as ‘certification’. These are the similarities and differences of measurement between jurisdictions.

Jurisdiction similarities and differences

Each jurisdiction has different standards that are to be met to receive certification. These include, literacy and numeracy measures, equivalent minimum hour measures, and achievement measures. These will be discussed here in order to understand how these contribute to the measure of attainment rates for the potential Year 12 population as reported by the Productivity Commission and ACARA.

Minimum Hour requirements

Whilst most jurisdictions require a 'full-time' enrolment which equates to between 1000-1320 hours depending on the jurisdiction, the 'minimum' hours required to be included in the certification data varies from between 120-1320 hours.

For example, to be included in the certification data of South Australia, students must complete a minimum of 120 hours (20 credit points for a stage 2 course – a Year 12 equivalent course) to receive a 'Certificate of Achievement' which contributes to their attainment rate. This is not the full 'South Australian Certificate of Education' (SACE) which requires a minimum of 1200 hours to be completed, yet it is still counted in the same way in the national certification data.

In Victoria, to be included in the certification data for the VCE students are required to complete a minimum of 800 hours of subjects, with a usual full-time load of between 1000-1200 hours, yet there is not requirement to achieve a minimum 'C' rating (Victorian Curriculum and Assessment Authority, 2024)

The highest minimum hour requirements to be completed to be included in the certification data include Tasmania (1200 hrs) and NSW (1320 hrs).

If we look at the certification rates of each jurisdiction compared to the minimum hour requirements and the ICSEA, there is a possible explanation for the differences in attainment rates (Figure 5).

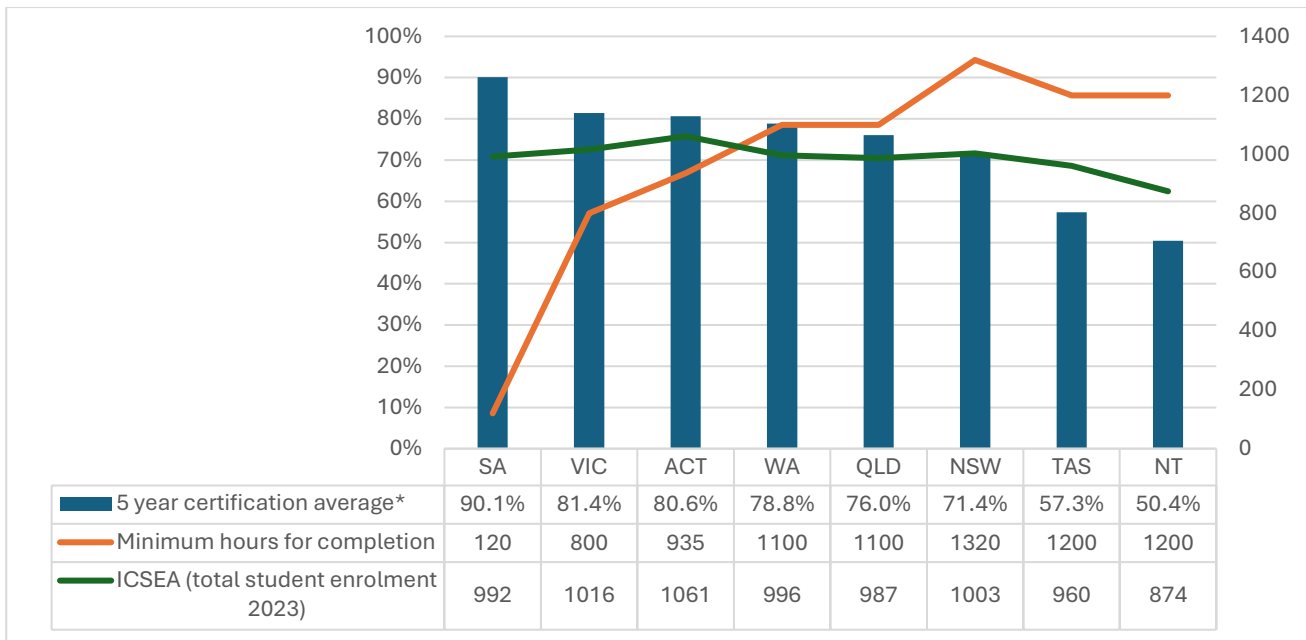


Figure 5: Minimum hour requirements of certification in each jurisdiction, the five-year certification average (2018-2022) and Index of Community Socio-Educational Advantage (ICSEA). Data sourced from ACARA (2024 and the relevant certification authority in each jurisdiction).

*The 5-year certification average has been used here to smooth out any anomalies such as the half-year cohort for Queensland in 2019, Covid-19 impacts, and single-year outliers. The Average ICSEA for Australia is 1000. Minimum hours for completion is the minimum number of hours of courses a student is required to complete or achieve within a jurisdiction to be included in the certification data for that jurisdiction.

We can see that high minimum hour requirements combined with a low ICSEA correspond with a low attainment rate and that the opposite is also true.

Completion or achievement requirements

Some certificates require minimum hours of ‘completion’, minimum hours of ‘achievement’, or both. This characteristic of a Senior Secondary Certificate is significant, in that the demands on students can be significantly different from one jurisdiction to another.

Completion Certificate:

NSW’s HSC has a completion requirement of 1320 hours, however students are only required to make a ‘genuine attempt’ at completing assessment tasks that contribute at least 50% of the overall marks and complete ‘some’ of the course outcomes. (NSW Education Standards Authority, 2019; NSW Education Standards Authority, 2024).

Victoria’s VCE is also a completion certificate, as “The VCE is awarded based on satisfactory completion of units” and “The decision about satisfactory completion of a unit is distinct from the assessment of levels of achievement.” (Victorian Curriculum and

Assessment Authority, 2024). The minimum completion requirement to receive the VCE is 800 hours.

Completion and achievement Certificate:

Western Australia has both ‘completion’ and ‘achievement’ requirements where students are required to complete 20 units (55 hours each), yet are only required to achieve a minimum ‘C’ rating in 14 of these, with 6 of these in Year 12 (School Curriculum and Standards Authority, 2024). So a student in Western Australia can fail to achieve a ‘C’ rating for 330 hours of Year 11 subjects and 440 hours of Year 12 subjects (total 770 hours), achieving less than a ‘C’ rating for 330 hours of courses, and still achieve the Western Australia equivalent of the TCE (School Curriculum and Standards Authority, 2024; Government of Western Australia , 2024).

Achievement Certificate:

In South Australia there is an achievement certificate, however 540 hours can be achieved at any rating, even below the ‘C’ standard. Most students complete a 60hr future planning course (10 SACE credits) in Year 10 to help them prepare for Year 11 and 12. They are then required to successfully complete an additional 100 credits (600hrs) of compulsory subjects with a minimum ‘C’ rating, with the remaining 540 hours able to be achieved at any rating from ‘E’ through to ‘A’ standard (SACE Board South Australia, 2024).

Tasmania has the highest achievement requirement for certification of any jurisdiction in Australia at 1200 hours of courses with a minimum achievement standard of a Preliminary Achievement (PA), which as explained later in this document, is equivalent to more than a ‘C’ standard in any other jurisdiction (Table 1).

TABLE 1: Completion or Achievement certificate (there are still requirements for ‘successful’ completion in each jurisdiction eg: in NSW there is a requirement to make a ‘genuine attempt’ at a minimum of 50% coursework; in South Australia a rating (‘E to A’ must be achieved in the 540hrs of courses not requiring a minimum of ‘C’ standard).

Jurisdiction	Certificate name for equivalent Year 12 Senior Secondary Certificate of Education (SSCE)	Completion, achievement or combination certificate	Total minimum hours required for Achievement	Total hours require for Completion	Total Hours required
Tasmania	TCE	Achievement	1200	1200	1200
Victoria	VCE	Completion	0	800	800
NSW	HSC	Completion	0	1320	1320
SA/NT (Full Certificate)	SACE	Completion and Achievement	1200, 660 at minimum C rating (60 of these usually completed in Year 10), 540	1200	1200
SA/NT – Record of Achievement	-	Achievement	120 (20 Credits at stage 2)	120	120
WA	WACE	Completion and Achievement	770	1100	1100
ACT	SSC	Achievement	935	935	935
QLD	QCE	Achievement	1100	1100	1100

Literacy and numeracy requirements

Most jurisdictions have a minimum literacy and numeracy standard equivalent to the Australian Core Skills Framework (ACSF) level 3, however some have only required this for successful completion of the Senior Secondary Certificate (SSC) as late as 2020 (Board of Studies, Teaching & Educational Standards NSW, 2017; NSW Education Standards Authority, 2024). This measurement of ACSF Level 3 can be measured differently across jurisdictions. Depending on the jurisdiction students can receive pre-qualification from their results in the standardised Year 9 National Assessment Program-Literacy and Numeracy (NAPLAN) test if they achieve a Band 8 or higher, others can complete a bridging course, pass an online test in Year 10, or attempt it again in Year 11 and 12, or students can complete a specific course that demonstrates the ACSF 3 if they achieve a minimum 'C' rating.

Pre-qualification via NAPLAN results and Testing from Year 10.

In Western Australia, students can pre-qualify for the ACSF Level 3 standards if they achieve a certain rating for their NAPLAN results from Year 9 at a Band 8 (or higher). If they do not meet this standard in Year 9 NAPLAN tests, they are able to complete an online test. Students are required to sit the tests from Year 10, but can opt in as early as Term 4 in Year 9. If a student does not achieve the standard prior to Year 11, they are required to select a course that will help them to gain those skills in both literacy and numeracy in Year 12. Students are also only able to enrol in 'general' or 'ATAR' subjects in Year 12 if they meet these standards, whilst those who do not must enrol in 'foundation' courses, therefore putting students on a pathway to success in learning. In 2022, over 36% of students met the numeracy and literacy standards through this prequalification process (School Curriculum and Standards Authority, Government of Western Australia, 2024).

NSW have a similar requirement to WA, where students can be recognised for prior achievement at the NAPLAN Band 8 level, and if not, can attempt tests in Year 10, 11 and 12 to meet the standard. (NSW Education Standards Authority, 2024)

Successful subject Completion

Tasmania students are required to complete a course (150 hours per course) where reading, writing and oral communication (literacy), numeracy, and ICT skills are required to be demonstrated equivalent to the standard. These are called Everyday Adult Standards, commonly referred to as literacy, numeracy, or ICT 'ticks' and to achieve these, students are required to pass the course by receiving a 'Satisfactory Achievement' (comparative to a 'C' rating overall) or higher. This is similar to South Australia, where they have a compulsory literacy course of 120 hours and a compulsory numeracy course of 60 hours where a minimum 'C' rating is also required (Board of SACE, 2024).

Not all jurisdictions require the ACSF level 3 requirements to be met, but can still include mandatory requirements to complete English courses as part of the certificate (Table 2)

Table 2: Australian Core Skills Framework 3 requirements across jurisdictions in Australia sources: (NSW Education Standards Authority, 2024) (School Curriculum and Standards Authority, 2024) (The ACT Board of Senior Secondary Studies, 2024) (Western Australia Department of Education, 2024) (Queensland Curriculum and Assessment Authority, 2024) (NSW Education Standards Authority, 2024) (Victorian Curriculum and Assessments Authority, 2024).

Jurisdiction	ACSF Standard III for literacy and numeracy required for Senior Secondary Certification	Prequalification if achievement at Year 9 Band 8 NAPLAN	Testing in Year 10 or earlier	Testing in Year 11 or 12	Based on successful subject completion (C- standard) and hours
TAS	YES	NO	NO	Optional	YES - Year 11 or Year 12 usually 150hr literacy course and 150hr numeracy course minimum 'C' rating required
VIC	NO	NO	NO	YES – General Assessment Tests, but not required.	NO – (English is a mandatory subject and satisfactory completion required, not 'achievement').
NSW	YES	YES	YES	YES - If not previously met	NO
SA/NT – NT use the SACE for senior secondary (Northern Territory Government, 2024)	YES:(Full Certificate) NO: (Record of Achievement-included in certification data)	NO	NO	NO	Year 11 60 hour Numeracy course, Year 11 120hr Literacy course. Minimum 'C' rating required
WA	YES	YES	YES	YES – if not previously met	NO
ACT	YES	YES	NO	NO	YES – Bridging courses being offered from 2025 – only available to those not meeting yr9 NAPLAN standards and requiring an 'A' rating.
QLD	YES	NO	NO	NO	YES – minimum of Satisfactory completion in Year 11 Maths unit and English Unit (55hrs each). Or Short Course.

Given that there are over 92% of students achieving both their literacy and numeracy ticks in Tasmania, this is not the significant barrier to students achieving their TCE (Tasmanian Assessment, Standards and Certification, 2023). The National certification rate is 97% for those in Year 12, however this would be skewed by the possibility of students in South Australia and Victoria who do not need pass these literacy and numeracy requirements to be included in the certification data, thus increasing the national certification rate, which would actually be closer to Tasmania’s rate if were required. This can also be seen by more than 100% of Year 12 students in Victoria and South Australia jurisdictions receiving certification, and given the large population of Victoria, would have an influence on the national rate (Figure 4).

Minimum pass rating requirements

In Tasmania, each TASC course is assessed against multiple criteria. This is different to most other jurisdictions that use a single criteria per subject. For example, in Western Australia and South Australia each criteria can have multiple sub-parts, or elements within the criteria (Table 1; Appendix 1). For example, the subject of Biology taught at the non-pre-tertiary standard (Year 11) in Tasmania includes 37 elements across eight (8) criteria. Whereas in all other jurisdictions there is only a single criterion. In NSW “Teachers use professional, on-balance judgement to allocate grades based on the Common Grade Scale for Preliminary courses” (NSW Education Standards Authority, 2024).

Whilst criteria are not the only factors to consider when determining an overall rating for assessment, these are the reference standards being applied in each assessment. To achieve a ‘pass’ in each jurisdiction, there is generally an ‘on-balance’ requirement of assessment at a ‘C’ standard which is essentially a ‘50%<’ overall rating for a standard. However, in the TCE, the ‘pass’ for the non-pre-tertiary level biology subject, this is greater than 75% of all criteria at a ‘C’ standard (i.e minimum of 6 ‘C’ ratings for a ‘Satisfactory Achievement’), whereas the lower ‘Preliminary Achievement’ requires a greater than 50% of all criteria at a ‘C’ standard (i.e minimum of 4 ‘C’ ratings) (Tasmanian Assessment, Standards, and Certification, 2024). This suggests that the ‘C’ passing rating in all jurisdictions except for Tasmania is above 50% of the standard, whereas Tasmania is at 75% minimum (Table 3).

Table 3: Number of criteria and sub-parts (elements or phrases) assessed in Biology at a Year 11 level across jurisdictions in Australia. (Appendix 1)

Jurisdiction	Number of criteria per subject	Number of total sub-parts (elements or phrases) within a criterion or criteria	Reporting to Assessment Authority	Final result	Can a less than 50% at a C rating for this subject contribute to successful attainment of certification? *If satisfying all other requirements	If not meeting the minimum ‘50% C rating, will a student be required to complete another course additional to full-time study to meet full certification requirements?
TAS	8	37	8 Ratings	C standard (75% of criteria (6) for a Satisfactory Achievement or 50% of criteria (4) for a Preliminary Achievement)	No	Yes – A student will be required to complete another 150hrs in addition to the 1200 they are already enrolled in.
VIC	1	9	Satisfactory or Not-Satisfactory	Satisfactory	Yes	No
NSW	1	2	1 Rating	C standard (50%)	Yes	No
SA/NT	1	8	1 Rating	C standard (50%)	Yes	No
WA	1	9	1 Rating	C standard (50%)	Yes	No
ACT	1	9	1 Rating	C standard (50%)	Yes	No
QLD	1	11	Satisfactory or Unsatisfactory	Satisfactory	Yes - ‘Satisfactory’ requirement	‘Satisfactory’ requirement – 110 hours.

Case Study

Given that there are large differences between jurisdictions in how certification is measured and applied, it is clear that attainment rates between jurisdictions should not be compared. Yet, this continues to be the case in media, commentary and general discourse around educational success in Tasmania. This means that many Tasmanians, and anyone else paying attention, get the impression that Tasmania is under-performing when it comes to senior secondary education, yet this is clearly not reflective of the effort and ability of young Tasmanians who are putting their futures in our hands. If we take a hypothetical case study, we can see how a student studying for their TCE in Tasmania might not be included in certification data, yet if they applied the same effort in any other jurisdiction in Australia, would achieve the relevant Senior Secondary Certificate of Education (SSCE).

Case study scenario

A student in Tasmania is required to complete 1200 hours of subjects (120 points) over Year 11 and 12. They are also required to complete a subject with a Literacy tick and a subject with a numeracy tick. If they satisfy these requirements, they are automatically given the ICT tick if they have demonstrated these skills through their completion of the other subjects.

(Please note that this scenario is fictional, but entirely possible)

Tasmanian Student: Michael

Michael enrolled in 4 subjects for Year 11, with the Home Group subject of Financial Literacy as well, which is mandatory at his school. This gives him an extra 5 points in addition to the expected 60 points from the other subjects. Yet Michael only receives a Limited Achievement (LA) for Biology in Year 11 after only achieving 3 C-ratings in this subject. This means that even though Michael completed the subject and covered the full year of the course content, he did not achieve the minimum 4 'C' ratings required in order to gain a qualification that would register him as achieving successful completion of that course.

Subject	Hours	ACSF level 3	Result	Points
English 3 (pre-tertiary)	150	Literacy	SA	15
General Mathematics 2	150	Numeracy	SA	15
Drama 3 (Pre-Tertiary)	150	Literacy	SA	15
Biology 2	150		LA	0
Financial Literacy	50		SA	5

Michael enrolled in 4 subjects for Year 12 as well as the compulsory Home Group course worth 5 points:

Subject	Hours	ACSF level 3	Result	Points
Business Studies 3 (pre-tertiary)	150		CA	15
Legal Studies 3 (pre-tertiary)	150	Literacy	CA	15

Philosophy 3 (pre-tertiary)	150	Literacy	HA	15
Visual Art 2	150		SA	15
You, Your Family, and the community	50		SA	5

Based on these subject enrolments and subsequent Awards, Michael **WOULD NOT** achieve the TCE.

If Michael put in the same amount of effort (in terms of hours to complete courses, at the same year level/s, and the same standard) in any other jurisdiction, he would have received both a Senior Secondary Certificate and an ATAR. In Tasmania Michael does **not** receive either of these because he is 5 points short, receiving only 115 of the required 120 points. This indicates that even though he has achieved a minimum 'C' rating for 1150 hours of courses, and more than 50% of elements at a 'C' standard in a further 150 hours, a higher achievement level than required for any other jurisdiction, and a successfully completed 1300hrs of courses, he does **not** receive certification.

Michael has satisfied the ACSF level 3 standards for reading and writing, and oral communication (AKA Literacy), many times, and Numeracy, but in Year 11 his family were moving house when some large assignments were due for Biology 2. He decided to focus his efforts on achieving the literacy and numeracy ticks and making sure he could get a good score in his pre-tertiary courses (Drama and English). His teachers gave him extensions for his assignments after he told them about the disruption of moving house on his studies, but because the extensions run into the next assessment tasks, this meant that he could still only achieve the 'C' standard for 3 of the 8 criteria in Biology 2, despite achieving the C standard in 26 elements of the 37 elements. In a single criteria subject, as all other jurisdictions, this would be more than enough to achieve a minimum 'C' rating.

This strategy of focussing effort on some subjects to achieve a higher ATAR score would be a useful strategy in any other jurisdiction, where a student is able to achieve a standard below a minimum 'C' standard in one or more subjects from between 540 hours, to 1320 hours, but in Tasmania, Michael has **not** been able to achieve either a Senior Secondary Certificate or an ATAR due to achieving a standard below a minimum 'C' rating in only one course, falling short by 50 hours, despite achieving a minimum 'C' standard and completing more hours in year 11 and 12 than required in every other jurisdiction.

In this example, Michael would be encouraged by his school to complete another 50 hour course to meet the minimum TCE point requirement. This is in addition to the full-time load in Year 12, of which 3 are pre-tertiary courses, significantly increasing the workload in Year 12. In any other jurisdiction where a student falls short by 50 hours by achieving a rating lower than a minimum 'C' standard in a non-compulsory course, none would require that student to increase their Year 12 load above full-time to make up for this.

This barrier of achieving certification for a Tasmanian Student, with students having to achieve a minimum ‘C’ standard across all their subjects, is apparent in the data where 81.9% of Year 12 students in 2022 obtained 120+ TCE points, similar to the certification rate for Year 12 students in the same Year of 81.4% (Figure 4; Tasmanian Assessment, Standards and Certification, 2023). The percentage of Year 12 students obtaining 80+ TCE points was above 92% (Tasmanian Assessment, Standards and Certification, 2023). This points to the minimum successful completion of 1200 hours of courses, the highest requirement in Australia, as being the main barrier to achieving the TCE in Tasmania.

What does success look like in Tasmania?

The case study is only one example of the differences of measuring achievement and certification between jurisdictions. From this example we can see how easy it is to fall short of TCE points and therefore certification in Tasmania.

If we were to ignore the evidence presented here about how attainment data is not comparable between jurisdictions and decide to compare certification between states despite the data caveats, then surely we can ignore them for all demographic indicators with similar caveats. If we did this we would find that Tasmania’s young people continue to successful education outcomes comparative to the national average and employment or further education at a higher rate than any other jurisdiction (Figure 6; Figure 7).

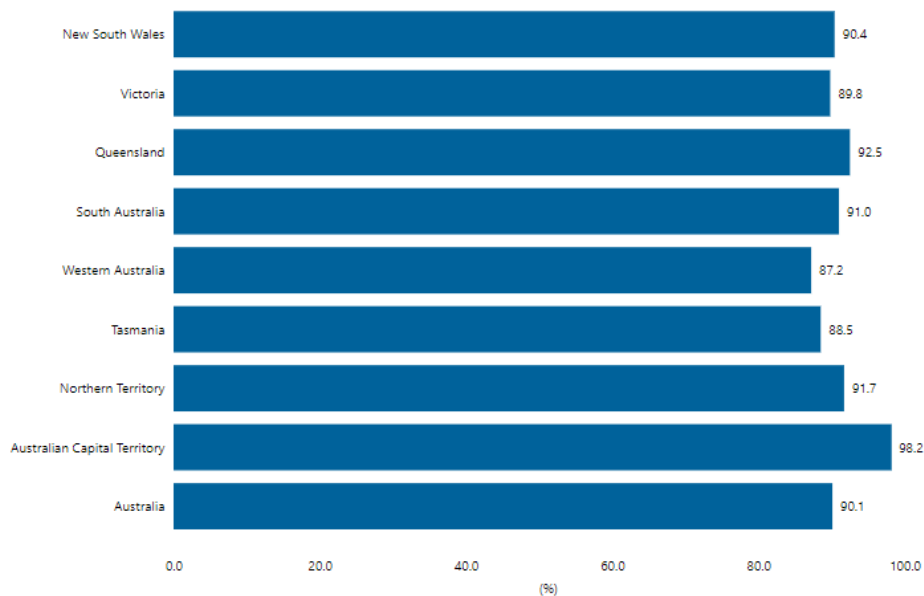
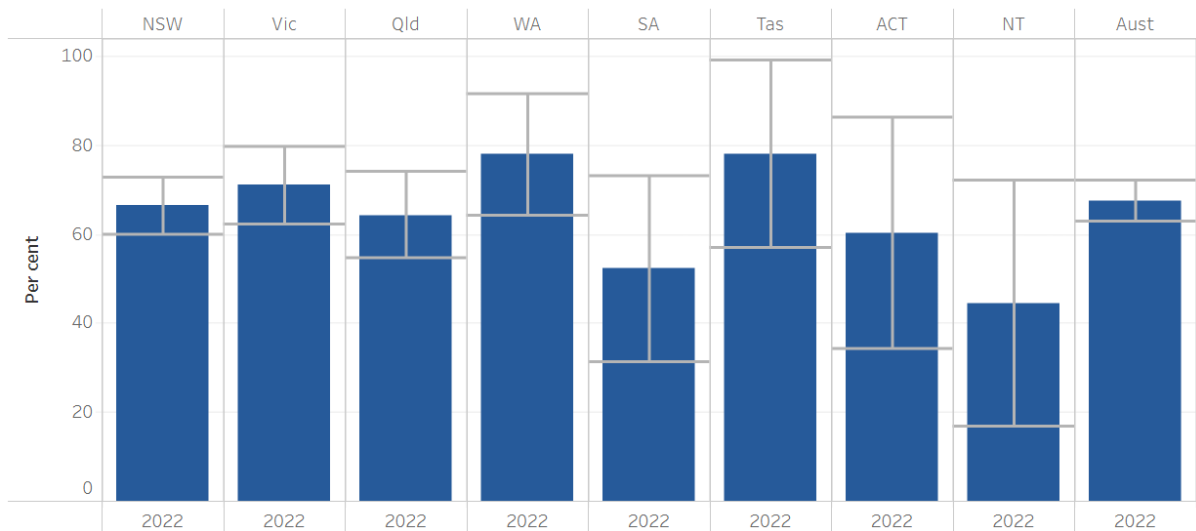


Figure 6: Proportion of people aged 20-24 who have completed a Year 12 or equivalent or AQF certificate III or above by state/territory, Survey of Education and Work 2022 (%) (ACARA, 2023).



Source: table 4A.59

Figure 7: Proportion of all school leavers who are fully engaged in education or work (15-24 year old) by jurisdiction, 2022 (Productivity Commission, 2023).

So either way we look at it, Tasmanian Students are receiving a valuable education that is preparing them for the workforce and further education, as evidenced by having the highest rate of 20-24 year olds engaged in further education or work, as well as a comparative rate of those achieving Year 12 certification or an AQF Certificate III, despite starting from a low base of potential Year 12 students receiving certification (Figure 6; Figure 7). This would still suggest that there is an issue with the certification process and requirements to accurately reflect student success, not the quality of the education the students are receiving that helps prepare them for further education and work beyond Year 12.

In 2018 South Australia was faced with a question of recognising all levels of achievement, or not, when a review looked at the South Australia Certificate of Education and removing the ability to receive subject credits for the 90 credits (540 hours) for which students can could receive a rating below a ‘C’ standard (Government of South Australia, 2018). This was put to the SACE board, who responded with

“The SACE Board will not proceed with the recommendation to disallow SACE credits for subjects where students have achieved D or E grades. D and E grades are an indication of achievement within a subject, albeit low achievement. Students, schools and systems should strive for higher performance but low performing students should not be penalised by removing their SACE credits.” (SACE Board, 2019).

We can see that there are significant differences in the Year 12 certification requirements across all jurisdictions, highlighting the reason the Productivity Commission, and Australian Certification, Assessment and Reporting Authority both deem the Year 12 attainment rates to not be comparable. These differences also go some way in explaining the reason for the differences in Year 12 certification between jurisdictions.

So when we are looking at solving the ‘problem’ of low attainment rates in Tasmania, we need to be guided by the data, which suggests that Tasmanian students are achieving their TCE despite the current barriers. Those who are not achieving the TCE, given the same effort and application of skills and understanding in another jurisdiction, could have achieved their certification standards.

In response to the question “*what does success look like for students in Tasmania?*”

When they have higher minimum achievement requirements across all subjects, higher minimum hour achievement requirements across all senior secondary years, higher minimum hour requirements for both literacy and numeracy requirements at ACSF level 3, no prior recognition of NAPLAN results, and the lowest ICSEA of any State, at the moment, success in the form of a Senior Secondary Certificate of Education for a Tasmanian looks a lot harder than for any other student in Australia.

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APPENDIX 1: Different Jurisdiction assessment standards for Biology in year 11

Victoria (Victorian Curriculum and Assessment Authority)

For the VCE: “The award of satisfactory completion for a unit is based on the teacher’s decision that the student has demonstrated achievement of the set of outcomes specified for the unit.”

“The decision about satisfactory completion of a unit is distinct from the assessment of levels of achievement. Schools will report a student’s result for each unit to the VCAA as S (satisfactory) or N (not satisfactory).”

for year 11 subjects: “Procedures for the assessment of levels of achievement in Units 1 and 2 are a matter for school decision. Assessment of levels of achievement for these units will not be reported to the VCAA. Schools may choose to report levels of achievement using grades, descriptive statements or other indicators”

“The award of satisfactory completion for a unit is based on whether the student has demonstrated the set of outcomes specified for the unit” p.27 VCA Biology Study Guide.

New South Wales

In NSW there is a Common grade scale for preliminary courses. For the ‘C’ standard, it says:

“C: The student demonstrates sound knowledge of content and understanding of course concepts, and applies skills and processes in a range of familiar contexts. In addition the student demonstrates skills in selecting and integrating information and communicates relevant ideas in an appropriate manner.”

Queensland (Queensland Curriculum and Assessment Authority, 2024)

C
<p>The student describes concepts, theories, models and systems, and their limitations. They give detailed accounts of concepts, theories, models and systems by making relationships, reasons or causes evident. The student communicates using scientific representations and language within appropriate genres to present information. They collect, collate and process evidence.</p> <p>The student applies their understanding of scientific concepts, theories, models and systems within their limitations to explain phenomena and predict outcomes, behaviours and implications. They use representations of scientific relationships and data to determine unknown scientific quantities and recognise the limitations of models and theories when discussing results.</p> <p>The student analyses by identifying the essential elements, features or components of qualitative data. They use mathematical processes to identify trends, patterns, relationships, limitations and uncertainty in quantitative data. They interpret evidence by using their knowledge and understanding to draw conclusions based on their analysis of evidence and established criteria.</p> <p>The student evaluates processes, claims and conclusions by describing the quality of evidence, applying findings, and describing the reliability and validity of experiments. They investigate phenomena by carrying out experiments and research investigations.</p>

However, in year 11 “Marks are not required for determining a unit result for reporting to the QCAA.” And “Schools report student results for Unit 1 and Unit 2 to the QCAA as satisfactory (S) or unsatisfactory (U). Where appropriate, schools may also report a not rated (NR).”

Western Australia (Government of Western Australia, School Curriculum and Standards Authority, 2024)

C rating for year 11 Biology in the Western Australia Curriculum

C	Understanding and applying concepts Describes some biological structures, systems and processes in a general way. Presents statements of ideas, with some development of an argument. Selects some scientific information to support a point of view but includes some irrelevant or incorrect information. Explains biological concepts, without detail, using representations and some scientific language.
	Science inquiry skills With guidance, formulates a hypothesis, that includes dependent and independent variables, within a context that has been provided. Plans an investigation to collect appropriate data. Inconsistently identifies some controlled variables. Presents data using basic tables and graphs. Describes trends in the data and draws simple conclusions that may not be linked back to the hypothesis. Describes difficulties experienced in conducting the investigation and suggests general improvements. Communicates information and concepts, without detail, using some scientific language and conventions. Representations lack detail.

South Australia/Norther Territory (SACE Board, South Australia, 2024)

C	<p>Deconstructs a problem and designs a considered and generally clear biological investigation.</p> <p>Obtains, records, and represents data, using generally appropriate conventions and formats, with some errors but generally accurately and effectively.</p> <p>Undertakes some analysis and interpretation of data and evidence to formulate generally appropriate conclusions with some justification.</p> <p>Evaluates procedures and some of their effect on data.</p>	<p>Demonstrates knowledge and understanding of a general range of biological concepts.</p> <p>Applies biological concepts generally effectively in new or familiar contexts.</p> <p>Explores and understands aspects of the interaction between science and society.</p> <p>Communicates knowledge and understanding of biology generally effectively, using some appropriate terms, conventions, and representations.</p>
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TASMANIA (Tasmanian Assessment, Standards, and Certification, 2024)

Criterion 1: work independently and collaboratively towards goals

Standard Element	Rating C
E01 - Uses strategies to complete work within timeframes	uses planning strategies to enable the completion of key elements of tasks within agreed time frames
E02 - Modifies tasks to improve and complete activities	identifies how modifications were made to improve outcomes and complete tasks
E03 - Describes contributions to complete collaborative activities	identifies own contribution to the completion of a product in collaborative activities.

Criterion 2: access, interpret and communicate biological data and information

Standard Element	Rating C
E01 - Interprets problems and makes predictions	interprets simple problems and makes simple predictions in familiar contexts
E02 - Represents and records sources of information	represents and records sources of information as directed from a limited range of relevant sources

Standard Element	Rating C
E03 - Describes the reliability of data and sources of information	identifies factors from a given range that influence the reliability of primary and secondary data and sources of information
E04 - Uses appropriate formats and units	uses appropriate scientific structures, conventions, formats and units for communication of data and information, as directed
E05 - Uses biological terminology	uses given scientific terminology to clearly communicate concepts and ideas.

Criterion 3: undertake biological inquiry to generate and analyse data

Standard Element	Rating C
E01 - Describes risk	identifies where they have considered safety and ethics when planning and conducting investigations
E02 - Develops hypotheses	identifies and constructs evidence-based questions and problems that can be tested scientifically
E03 - Designs and conducts investigations	plans and conducts investigations to generate valid simple data in response to a question or problem
E04 - Selects and represents data to draw conclusions	selects and represents data to demonstrate trends and presents simple, evidence-based conclusions
E05 - Analyses conclusions and processes	discusses processes and conclusions and suggests improvements.

Criterion 4: describe the local, national and global context for biological science

Standard Element	Rating C
E01 - Explains broader context of biology	describes the local, national or global context and some social, economic or ethical implications of biological knowledge
E02 - Explains collaboration and use of evidence in the development of biology	identifies the roles of collaboration and new evidence in the development of biological knowledge
E03 - Explains the role of technologies in biology	identifies and compares relationships between the development of technologies and biological knowledge
E04 - Explains ways biology meets needs in society	identifies ways in which biology has been used to meet needs in society.

Criterion 5: describe and use concepts of cell structure

Standard Element	Rating C
E01 - Describes types of cells	identifies functions and structures of plant and animal cells
E02 - Describes organelles and their functions	identifies cell organelles and their function
E03 - Describes the structure and function of the cell membrane	identifies structural components and functions of the cell membrane
E04 - Describes the effect of surface area to volume ratio	identifies the effect of surface to volume ratio on cell function and processes
E05 - Describes cell differentiation and specialisation	identifies given specialised cells and their function within multicellular organisms.

Criterion 6: describe and use concepts of cell processes

Standard Element	Rating C
E01 - Describes properties of biological molecules	identifies properties of biological molecules and the cellular processes in which they are involved
E02 - Describes passive transport of materials across cell membranes	identifies factors that affect movement of materials across cell membranes
E03 - Describes enzyme function	identifies the functions of enzymes and the factors that affect them
E04 - Describes processes of photosynthesis	identifies the molecules synthesised and wastes produced within the biochemical process of photosynthesis
E05 - Describes processes of cellular respiration	identifies the molecules synthesised and wastes produced within the biochemical process of cellular respiration.

Criterion 7: describe and use concepts of multicellular organisms

Standard Element	Rating C
E01 - Describes digestion in animals	identifies structures and processes required for digestion in animals
E02 - Describes gas exchange in plants and animals	identifies structures and processes required for gas exchange in plants and animals
E03 - Describes transport in plants and animals	identifies structures and processes required for transport in plants and animals
E04 - Describes the functions and processes of cell division	identifies the functions and processes of cell division
E05 - Describes the functions and processes of sexual and asexual reproduction	identifies the functions and processes of sexual and asexual reproduction.

Criterion 8: describe and use biodiversity and ecosystem concepts.

Standard Element	Rating C
E01 - Describes and applies classification techniques	identifies and applies biological classification techniques
E02 - Describes and applies concepts of biodiversity	identifies and applies concepts of biodiversity
E03 - Describes and uses evidence of evolution	identifies and uses evidence in support of evolution
E04 - Describes energy flow and matter cycling through ecosystems	identifies energy flow and matter cycling through ecosystems
E05 - Describes ecosystem change over time	identifies ecosystem change over time.

Australian Capital Territory (ACT Board of Senior Secondary studies, 2023)

	<p><i>A student who achieves a C grade typically</i></p>
Concepts, Models and	<ul style="list-style-type: none"> describes the fundamental properties and functions of system components, processes and interactions, and how they are affected by factors across a range of temporal and spatial scales describes the nature, functions, limitations and applications of theories and models with supporting evidence describes evidence with reference to models and/or theories, and develops evidence-based conclusions and describes limitations
Contexts	<ul style="list-style-type: none"> describes how the applications of science meet needs, make decisions, and is influenced by social, economic, technological, and ethical factors
Inquiry Skills	<ul style="list-style-type: none"> plans and conducts safe, ethical inquiries individually and collaboratively, that collect valid data in response to a question describes relationships in data sets, reliability and validity of data and representations, and describes common errors describes processes and claims, and identifies alternatives with some reference to evidence reflects on their own thinking and explains planning, time management, use of appropriate strategies to work independently and collaboratively communicates accurately demonstrating scientific literacy, in a range of modes, styles, representations, and genres for specific purposes, with appropriate evidence and mostly consistent referencing