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## 4 School education interpretative material

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The school education interpretative material is supporting material and includes explanations of why indicators have been chosen, and wherever possible, a link to the stated objectives of the service. It includes indicator definitions, technical details defining how the indicator is measured and guidance on how the indicator is to be interpreted, including caveats and the indicator's completeness and comparability status.

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Further information on the Report on Government Services including other reported service areas, the glossary and list of abbreviations is available at [https://www.pc.gov.au/research/ongoing/report on government services](https://www.pc.gov.au/research/ongoing/report-on-government-services).

## 4.1 Indicators

Different delivery contexts, locations and types of clients can affect the equity, effectiveness and efficiency of school education services.

The comparability of performance indicator results is shaded in indicator interpretation boxes, figures and data tables as follows:

- Data are comparable (subject to caveats) across jurisdictions and over time.
- Data are either not comparable (subject to caveats) within jurisdictions over time or are not comparable across jurisdictions or both.

The completeness of performance indicator results is shaded in indicator interpretation boxes, figures and data tables as follows:

- Data are complete (subject to caveats) for the current reporting period. All required data are available for all jurisdictions.
- Data are incomplete for the current reporting period. At least some data were not available.

## Outputs

Outputs are the services delivered (while outcomes are the impact of these services on the status of an individual or group) (see section 1). Output information is also critical for equitable, efficient and effective management of government services.

## Equity

### Access — Attendance by target group

‘Attendance by target group’ is an indicator of governments’ objective for school education services to be provided in an equitable manner (box 4.1).

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### Box 4.1 Attendance by target group

‘Attendance by target group’ compares the attendance rate of those in the target group (Aboriginal and Torres Strait Islander students, students in remote/very remote areas) with the attendance rate of those outside the target group (non-Indigenous students, students in major cities and regional areas).

Similar rates of attendance for those within and outside the target groups indicates equity of access.

The student attendance rate is the number of actual full time equivalent student days attended by full time students as a percentage of the total number of possible student attendance days attended over the period.

Data reported for this measure are:

- comparable across jurisdictions (subject to caveats) from 2018 onwards but not prior to 2018 and are not comparable over time (data for 2018 are not comparable to earlier years)
- incomplete for the current reporting period; 2020 data were not available due to COVID-19.

## Effectiveness

### Access — Attendance

‘Attendance’ is an indicator of governments’ objective that school education services promotes student participation (box 4.2).

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### Box 4.2 Attendance

‘Attendance’ is defined by the student attendance rate — the number of actual full time equivalent student days attended by full time students as a percentage of the total number of possible student attendance days attended over the period.

Higher or increasing rates of attendance are desirable. Poor attendance has been related to poor student outcomes, particularly once patterns of non-attendance are established (Hancock et al. 2013).

Data reported for this measure are:

- comparable across jurisdictions (subject to caveats) from 2018 onwards but not prior to 2018 and are not comparable over time (data for 2018 are not comparable to earlier years)
- incomplete for the current reporting period; 2020 data were not available due to COVID-19.

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## Appropriateness — Student engagement

‘Student engagement’ is an indicator of governments’ objective that school education services engage all students (box 4.3).

### Box 4.3 Student engagement

‘Student engagement’ is defined as encompassing the following three dimensions:

- *behavioural engagement* — which may be measured by identifiable behaviours of engagement, such as school attendance, attainment and retention
- *emotional engagement* — which may be measured by students’ attitudes to learning and school
- *cognitive engagement* — which may be measured by students’ perception of intellectual challenge, effort or interest and motivation (Fredricks, Blumenfeld, and Paris 2004).

It is measured using data from the Programme for International Student Assessment (PISA) — a triennial assessment of 15 year-old students conducted by the Organisation for Economic Cooperation and Development (OECD) that also collects student and school background contextual data. PISA collects information on one aspect of *emotional engagement* — students’ sense of belonging at school. Students’ level of agreement to six statements are combined to construct a Sense of Belonging as School Index (table 4A.25).

Higher or increasing scores on the Index illustrate a greater sense of belonging at school, which is desirable. The index is standardised to have a mean of 0 across OECD countries. Higher values of the index indicate a greater sense of belonging at school than the OECD average and lower values indicate a lesser sense of belonging at school than the OECD average.

Data reported for this measure are:

- comparable (subject to caveats) across jurisdictions (Index scores are only available for one year)
- complete for the current reporting period (subject to caveats). All required 2018 data are available for all jurisdictions.

These data should be interpreted with caution, as they are limited to one aspect of emotional engagement and captured for students at a single age (students aged 15 years).

National data are not currently agreed to report against behavioural or cognitive engagement. However contextual information is provided on State and Territory government student engagement surveys, where they have been conducted (table 4.1). These surveys collect information from students across the behavioural, emotional, and cognitive domains of engagement. In addition, some aspects of behavioural engagement are captured via the attendance, retention and attainment indicators.

**Table 4.1 School student engagement survey results**

<b>New South Wales</b>	
<i>Key Features:</i>	Student engagement data is collected from NSW government schools twice a year, in Term 1 and Term 3, for students in Years 4 to 6 (primary schools) and Year 7 to 12 (high schools). The surveys are available to all department schools, and all students within scope in participating schools.
<i>Domain:</i>	Data are collected on the key domains of student engagement: behavioural, emotional and cognitive.
<i>Statistics:</i>	Student engagement is multi-dimensional and differs across school years. As such, there is no single indicator of engagement. Longitudinal modelling conducted by the NSW Department of Education shows that various drivers of student engagement can impact student outcomes. Students who demonstrate positive attitudes towards attendance and behaviour, and are academically motivated can be several months ahead in their learning compared with students who do not demonstrate these traits. Similarly, students who experience high academic expectations and who have a positive sense of belonging and high levels of advocacy at school experience a range of positive schooling outcomes.
<i>Link:</i>	More information, including results from longitudinal modelling, is available from the NSW Centre for Education Statistics and Evaluation website: <a href="http://surveys.cese.nsw.gov.au/">http://surveys.cese.nsw.gov.au/</a>
<b>Victoria</b>	
<i>Key Features:</i>	The annual Attitudes to School Survey gathers data to support: (1) student wellbeing; (2) engagement; (3) school improvement; and (4) planning in Victorian government schools. The online survey captures the attitudes and experiences of students in Years 4 to 12 and is designed principally to inform improvement opportunities within government schools.
<i>Domain:</i>	The Attitudes to School Survey measures aspects of student's emotional and cognitive engagement.
<i>Statistics:</i>	Results for 2019 indicate that the majority of Victorian government school students feel connected to their schooling. On a five point likert scale, students in Years 5 to 6 record a mean score of 4.2 and students in Year 7 to 9 record a mean score of 3.5.
<i>Link:</i>	<a href="https://www2.education.vic.gov.au/pal/data-collection-surveys/policy">https://www2.education.vic.gov.au/pal/data-collection-surveys/policy</a>
<b>Queensland</b>	
..	
<b>Western Australia</b>	
..	
<b>South Australia</b>	
<i>Key Features:</i>	Data are sourced from the Wellbeing and Engagement Collection and are collected annually. Collection of 2020 data were delayed due to COVID-19 and were not available in time for inclusion in the 2021 Report. Data for 2019 are the most recent available. The window for completion for 2019 was March 18 to April 5. The purpose of the survey is to seek students' views about their wellbeing and engagement with school. Students in Years 4 to 12 participated in the collection. The survey is voluntary at a school, student and question level — 93 per cent of all public schools participated. The survey asks students about their social and emotional wellbeing; school relationships and engagement and learning in school; and physical health and wellbeing and after school activities. Students' answers are kept confidential.

**Domain:** Connectedness to school – having at least on adult at school who provides support to a young person.  
 Emotional engagement with teachers – support and relationships with teachers.  
 School climate- overall tone of the school environment, including the way teachers and students interact and how students treat each other.  
 School belonging – the degree to which young people feel connected and valued at their school.  
 Peer belonging – feeling that they belong to a social group.  
 Friendship intimacy – quality of social support from peers.  
 Perseverance – having the tenacity to stick with things and pursue goals, despite challenges that arise  
 Cognitive engagement – persistence with classroom tasks, generating ideas and attitudes related to holding a growth mindset.  
 Academic self-concept – perceptions of themselves as students and how interested and confident they feel at school.

**Statistics:** The proportion of students who reported low, medium and high levels of wellbeing in 2019.

Domain	High	Medium	Low
Connectedness to school	60%	30%	10%
Emotional engagement with teacher	72%	25%	3%
School climate	38%	43%	20%
School belonging	45%	34%	21%
Peer belonging	54%	31%	15%
Friendship intimacy	69%	20%	10%
Perseverance	45%	41%	14%
Cognitive engagement	49%	38%	13%
Academic self-concept	64%	28%	8%

**Link:** <https://www.education.sa.gov.au/department/research-and-data/wellbeing-and-engagement-collection/about-wellbeing-and-engagement-collection>

### Tasmania

**Key features:** The Tasmanian Department of Education conducts an annual [Student Wellbeing Survey](#) for students in Years 4 to 12 in Tasmanian Government schools. This survey was first run in 2019 and received 28 663 valid responses.  
 The Student Wellbeing survey supports the [2018-2021 Department of Education Child and Student Wellbeing Strategy: Safe, Well and Positive Learners](#) which was published on 28 June 2018 and was developed to support the Department's Wellbeing Goal under the [2018-2021 Department of Education Strategic Plan, Learners First: Every Learner Every Day](#). It supports the [Tasmanian Child and Youth Wellbeing Framework](#) and adopts the six [ARACY](#) wellbeing domains: Loved and Safe, Material Basics, Healthy, Learning, Participating and Positive sense of culture and identity.

**Domain:** The domain of Learning within the Student Wellbeing Survey measures the following subdomains of engagement:

- Emotional Engagement with teachers — *Support and relationships with teachers.*
- Engagement (flow) — *Being absorbed, interested and involved in activity or the world.*
- Cognitive Engagement — *Persistence with classroom tasks, generating ideas and attitudes related to holding a growth mindset.*

**Statistics:** The levels of engagement are determined based on respondents who indicated medium or high wellbeing, as a proportion of all responses across the questions associated with the three Learning subdomains associated with engagement in the Student Wellbeing Survey.  
 In 2019 these are:

1. Emotional Engagement with teachers — 95 per cent
2. Engagement (flow) — 62 per cent
3. Learning — Cognitive Engagement 83 per cent

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**Link:** 2019 Student Wellbeing Survey State Report:  
<https://publicdocumentcentre.education.tas.gov.au/library/Shared%20Documents/Tasmanian-Government-School-Report.PDF>  
Information on the Student Wellbeing Survey may be found at:  
<https://www.education.tas.gov.au/about-us/projects/child-student-wellbeing/student-wellbeing-survey-2/>  
Additional information on the Department's Student and Child Wellbeing Strategy may be found at: <https://www.education.tas.gov.au/about-us/projects/child-student-wellbeing/>

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### **Australian Capital Territory**

**Key Features:** The ACT conducts the Australian School Climate and School Identification Measurement Tool (ASCSIMT) survey in all public schools. All students in years 4-12, school staff and parents of all students from preschool to year 12 are invited to complete the survey. The ASCSIMT was developed in partnership with the Australian National University. The survey explores the relationships between school climate and the sense of belonging of students and how these relate to student behavioural and emotional engagement and to a number of domains of student wellbeing and behaviour. The survey is conducted every August in conjunction with the School Satisfaction Survey.  
The survey allows for longitudinal research into student engagement.

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**Domain:** The domains addressed by the survey include:

- Academic emphasis (cognitive engagement)
  - Shared values and approach
  - Staff/student and student/student relations
  - School Identification (sense of belonging)
  - Emotional and behavioural engagement
  - Support and safety
  - A range of student behaviours
  - A range of emotional wellbeing elements
- 

**Statistics:** Results are from the August 2020 survey. Across the ACT, 71 per cent of student respondents indicated that they experienced a strong sense of Shared Values and Approach in their schools. Seventy seven percent of students agreed that their schools had strong Academic emphasis (cognitive engagement). Sixty seven percent of students exhibited strong School Identification (belonging). Eighty two percent of respondents indicated strong behavioural engagement.

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### **Northern Territory**

**Key features:** The Northern Territory Department of Education annual School Survey collects the opinions of staff, students and their families about school performance, culture and services.  
The NT School Survey is conducted in all Northern Territory Government schools across Weeks 4 – 6 of Term 3.  
There are three different versions of the survey designed to specifically target: students in Years 5 to12, parents and carers of students at all year levels and school-based staff including teaching and administration staff.

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**Domain:** The NT School Survey contains questions that aim to provide schools with key insights into student wellbeing, engagement, and learning experiences from the perspective of the school community.

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**Link:** <https://education.nt.gov.au/statistics-research-and-strategies/school-survey>

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**Source:** State and Territory governments (unpublished).

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## Appropriateness — Retention

‘Retention’ to the final years of schooling is an indicator of governments’ objective that the school education system aims to engage all students and promote student participation (box 4.4).

### Box 4.4      **Retention**

‘Retention’ (apparent retention rate) is defined as the number of full time school students in year 10 that continue to year 12.

The term ‘apparent’ is used because the measures are derived from total numbers of students in each of year 10 and year 12, not by tracking the retention of individual students. Uncapped rates (rates that can be greater than 100 per cent) are reported for time series analysis. Care needs to be taken in interpreting the measures as they do not take account of factors such as:

- students repeating a year of education or returning to education after a period of absence
- movement or migration of students between school sectors, between states/territories and between countries
- the impact of full fee paying overseas students.

These factors may lead to uncapped apparent retention rates that exceed 100 per cent.

This indicator does not include part time or ungraded students (which has implications for the interpretation of results for all jurisdictions) or provide information on students who pursue year 12 (or equivalent qualifications) through non-school pathways.

Apparent retention rates are affected by factors that vary across jurisdictions. For this reason, variations in apparent retention rates over time within jurisdictions may be more useful than comparisons across jurisdictions.

A higher or increasing rate is desirable as it suggests that a larger proportion of students are continuing in school, which may result in improved educational outcomes.

Data reported for this measure are:

- comparable (subject to caveats) across jurisdictions and over time
- complete for the current reporting period (subject to caveats). All required 2019 data are available for all jurisdictions.

## Quality — Quality teaching

‘Quality teaching’ is an indicator of governments’ objective that school education delivers high quality teaching of a world-class curriculum (box 4.5). A good quality curriculum provides the structure for the provision of quality learning (UNESCO-IBE 2016), while teachers are the single most important ‘in-school’ influence on student achievement (Hattie 2009). Teacher quality can influence student educational outcomes both directly and indirectly, by fostering a positive, inclusive and safe learning environment (Boon 2011).



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### Box 4.5      **Quality teaching**

'Quality teaching' is defined in relation to the teaching environment, including the quality of the curriculum and the effectiveness of the teachers. Teachers are considered effective where they:

- create an environment where all students are expected to learn successfully
- have a deep understanding of the curriculum and subjects they teach
- have a repertoire of effective teaching strategies to meet student needs
- direct their teaching to student needs and readiness
- provide continuous feedback to students about their learning
- reflect on their own practice and strive for continuous improvement (PC 2012).

This indicator may be measured in future by student responses to survey questions on their perceptions of the teaching environment including the curriculum. High or increasing proportions of students indicating positive responses to the teaching environment are desirable.

Data are not yet available for reporting against this indicator.

## **Efficiency**

An objective of the Steering Committee is to publish comparable estimates of costs. Ideally, such comparison should include the full range of costs to government. This section does not report on non-government sources of funding, and so does not compare the efficiency of government and non-government schools. Box 4.6 provides further information on the data used to report on the efficiency measures in this Report.

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### Box 4.6      **School expenditure data reported in this section**

Efficiency indicators in this section are based on financial year recurrent expenditure on government and non-government schools by the Australian Government and State and Territory governments. Capital expenditure is generally excluded, but as Quality Schools funding and Students First funding cannot be separated into capital and recurrent expenditure, these payments are treated as recurrent expenditure in this section. Expenditure relating to funding sources other than government (such as parent contributions and fees) are excluded.

#### **Sources of data — government recurrent expenditure on government schools**

Total recurrent expenditure on government schools is unpublished data sourced from the NSSC, under the auspices of the Education Council.

- Each State and Territory government reports to the Education Council on its expenditure on government schools. Recurrent expenditure on government schools comprises: employee costs (including salaries, superannuation, workers compensation, payroll tax, termination and long service leave, sick leave, fringe benefits tax); capital related costs (depreciation and user cost of capital [UCC]); umbrella departmental costs; and other costs (including rent and utilities). The Education Council provides unpublished data on the UCC for government schools, imputed as 8 per cent of the written down value of assets (table 4A.13).

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## Box 4.6 (continued)

- The Australian Government reports its allocation to each State and Territory for government schools, consistent with Treasury Final Budget Outcomes — including the Quality Schools funding (from 1 January 2018), Students First funding (to 31 December 2017) and a range of National Partnership payments (table 4A.12).
- To avoid double counting, Australian Government allocations are subtracted from the State and Territory expenditure to identify 'net' State and Territory government expenditure (table 4A.10).

### **Sources of data — government recurrent expenditure on non-government schools**

Total recurrent expenditure on non-government schools is sourced from unpublished data from State and Territory governments, and published data from the Australian Government as follows:

- Each State and Territory government provides unpublished data on its contributions to non-government schools (table 4A.10).
- The Australian Government reports its allocation to each State and Territory for non-government schools, consistent with Treasury Final Budget Outcomes — including the Quality Schools funding (from 1 January 2018), Students First funding (to 31 December 2017) and National Partnership payments (see table 4A.12).

### **Allocation of funding**

#### *Quality Schools Package — Australian Government*

From 1 January 2018 the Australian Government introduced the Quality Schools Package replacing the Students First funding model which had been in effect since 1 January 2014. The Quality Schools Package is needs based. Commonwealth funding will be based on the Schooling Resource Standard that provides a base amount per student and additional funding for disadvantage. Students with greater needs will attract higher levels of funding from the Commonwealth. Funding is provided for government and non-government schools.

#### *State and Territory governments*

In general, State and Territory government schools systems are funded based on a variety of formulas to determine a school's recurrent or base allocation, with weightings and multipliers added for students facing disadvantage. For non-government schools, State and Territory governments also provide funding for recurrent and targeted purposes, usually through per capita allocations. Indexation of costs is normally applied to these funding arrangements for both the government and non-government school sectors. Changes in overall funding by State and Territory governments across years is affected by all these factors, including enrolment numbers and school size, location and staffing profiles. Commencing 1 January 2019 with the signing of the National School Reform Agreement state and territory funding requirements are set as a percentage of the Schooling Resourcing Standard.

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Box 4.6 (continued)

**User cost of capital (UCC)**

The UCC is defined as the notional costs to governments of the funds tied up in capital (for example, land and buildings owned by government schools) used to provide services. The notional UCC makes explicit the opportunity cost of using government funds to own assets for the provision of services rather than investing elsewhere or retiring debt.

UCC is only reported for government schools (*not* non-government schools). It is estimated at 8 per cent of the value of non-current physical assets, which are re-valued over time.

*Source:* Australian Government Department of Education Skills and Employment (2020) <https://www.education.gov.au/quality-schools-package-factsheet>, accessed 9 October 2020.

Inputs per output unit — Recurrent expenditure per student

‘Recurrent expenditure per student’ is an indicator of governments’ objective to provide school education services in an efficient manner (box 4.7).

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## Box 4.7 Recurrent expenditure per student

'Recurrent expenditure per student' is defined as total government recurrent expenditure per FTE student, reported for government schools and for non-government schools. Government recurrent expenditure per FTE student includes estimates for UCC for government schools (box 4.6). UCC is not included for non-government schools.

FTE student numbers (table 4A.3) are drawn from the ABS publication *Schools Australia 2019* (ABS 2020) and averaged over two calendar years to match the financial year expenditure data. From 2018-19 FTE enrolled students used to derive NSW and total Australian recurrent expenditure per student for government and all schools excludes Norfolk Island Central School FTE enrolments.

Holding other factors constant, a low or decreasing government recurrent expenditure or staff expenditure per FTE student may represent better or improved efficiency.

Care should be taken in interpretation of efficiency data as:

- a number of factors beyond the control of governments, such as economies of scale, a high proportion of geographically remote students and/or a dispersed population, and migration across states and territories, may influence expenditure
- while high or increasing expenditure per student may reflect deteriorating efficiency, it may also reflect changes in aspects of schooling (increasing school leaving age, improving outcomes for students with special needs, broader curricula or enhancing teacher quality), or the characteristics of the education environment (such as population dispersion).

Data reported for this measure are:

■ comparable (subject to caveats) across jurisdictions and over time. (Note that as non-government schools data do not account for UCC nor non-government sources of funding, the data are *not comparable* for comparing the efficiency of government and non-government schools.)

■ complete for the current reporting period (subject to caveats). All required 2018-19 data are available for all jurisdictions.

## Outcomes

Outcomes are the impact of services on the status of an individual or group (see section 1).

### Student outcomes (national testing)

'Student outcomes (national testing)' is an indicator of governments' objective that Australian schooling aims for all young Australians to become successful lifelong learners, confident and creative individuals, and active and informed members of the community (box 4.8).

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## Box 4.8 Student outcomes (national testing)

‘Student outcomes (national testing)’ is defined by measures drawn from the National Assessment Program — Literacy and Numeracy (NAPLAN) and National Assessment Program (NAP) sample assessments.

All data are accompanied by confidence intervals. See sub-section 4.2 for details on NAPLAN and NAP confidence intervals.

### National Assessment Program — Literacy and Numeracy (NAPLAN)

NAPLAN testing is undertaken by students in years 3, 5, 7 and 9. Measures are reported for the proportion of students at or above the national minimum standard in NAPLAN testing and mean scale score for reading, numeracy and writing.

Achieving (but not exceeding) the national minimum standard represents achievement of the basic elements of literacy or numeracy for the year level (ACARA 2020). The mean scale score refers to a mean (average) score on a common national scale.

States and territories have different school starting ages resulting in differing average ages of students and average time students had spent in schooling at the time of testing. See table 4.2 for more information on average ages of students and average years of schooling across jurisdictions at the time of testing in 2019.

A high or increasing mean scale score or proportion of students achieving at or above the national minimum standard is desirable.

From 2018, NAPLAN has been transitioning from pen and paper tests to online testing. For the 2018 transition year, the online test results were equated with the pen and paper tests. Results for both the tests are reported on the same NAPLAN assessment scale and so should be comparable with previous years.

Data reported for these measures are:

- comparable (subject to caveats) across jurisdictions and over time
- complete for the current reporting period (subject to caveats). All required 2019 data are available for all jurisdictions.

### NAP Sample assessments

NAP national sample assessments are undertaken by students in year 6 and 10, on a triennial, rotating basis. Measures are reported for the proportion of students at or above the proficient standard in NAP assessments and mean scale score for:

- NAP civics and citizenship literacy
- NAP Science literacy (testing undertaken by year 6 students only for all jurisdictions)
- NAP information and communication technologies (ICT) literacy.

The proficient standards, which vary across the tests, are challenging but reasonable levels of performance, with students needing to demonstrate more than minimal or elementary skills expected at that year level to be regarded as reaching them.

A high or increasing mean scale score or proportion of students achieving at or above the proficiency standard is desirable.

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**Box 4.8** (continued)

Data reported for these measures are:

- comparable (subject to caveats) across jurisdictions and over time
- complete for the current reporting period (subject to caveats). All required data are available for 2019 (for civics and citizenship literacy), 2018 (for science literacy) and 2017 (for ICT literacy).

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**Table 4.2 2019 NAPLAN average age and years of schooling**

<i>State/Territory</i>	<i>Average age and Years of schooling</i>	<i>Year 3</i>	<i>Year 5</i>	<i>Year 7</i>	<i>Year 9</i>
NSW	<i>Average age</i>	8 y 7 m	10 y 7 m	12 y 7 m	14 y 7 m
	<i>Years of schooling</i>	3 y 4 m	5 y 4 m	7 y 4 m	9 y 4 m
Vic	<i>Average age</i>	8 y 9 m	10 y 9 m	12 y 9 m	14 y 9 m
	<i>Years of schooling</i>	3 y 4 m	5 y 4 m	7 y 4 m	9 y 4 m
Qld	<i>Average age</i>	8 y 5 m	10 y 5 m	12 y 5 m	14 y 5 m
	<i>Years of schooling</i>	3 y 4 m	5 y 4 m	7 y 4 m	9 y 4 m
WA	<i>Average age</i>	8 y 5 m	10 y 5 m	12 y 5 m	14 y 5 m
	<i>Years of schooling</i>	3 y 4 m	5 y 4 m	7 y 4 m	9 y 4 m
SA	<i>Average age</i>	8 y 7 m	10 y 7 m	12 y 7 m	14 y 7 m
	<i>Years of schooling</i>	3 y 4 m	5 y 4 m	7 y 4 m	9 y 4 m
Tas	<i>Average age</i>	8 y 11 m	10 y 11 m	12 y 11 m	14 y 11 m
	<i>Years of schooling</i>	3 y 4 m	5 y 4 m	7 y 4 m	9 y 4 m
ACT	<i>Average age</i>	8 y 7 m	10 y 7 m	12 y 7 m	14 y 8 m
	<i>Years of schooling</i>	3 y 4 m	5 y 4 m	7 y 4 m	9 y 4 m
NT	<i>Average age</i>	8 y 6 m	10 y 6 m	12 y 6 m	14 y 6 m
	<i>Years of schooling</i>	3 y 4 m	5 y 4 m	7 y 4 m	9 y 4 m
Aust	<i>Average age</i>	8 y 7 m	10 y 7 m	12 y 7 m	14 y 7 m
	<i>Years of schooling</i>	3 y 4 m	5 y 4 m	7 y 4 m	9 y 4 m

Source: ACARA (2020) *National Assessment Program — Literacy and Numeracy Achievement in Reading, Writing, Language Conventions and Numeracy: National Report for 2019*, ACARA, Sydney.

## Attainment

‘Attainment’ is an indicator of governments’ objective that Australian schooling aims for all young Australians to become successful lifelong learners, confident and creative individuals, and active and informed members of the community (box 4.9).

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### Box 4.9      **Attainment**



‘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 divided by five.

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
- the aggregation of all postcode locations into three socioeconomic status categories (as a disaggregation for socioeconomic status) — high, medium and low — means there may be significant variation within the categories. The low category, for example, will include locations ranging from those of extreme disadvantage to those of moderate disadvantage.

A high or increasing completion rate is desirable.

Data reported for this measure are:

-  not comparable across jurisdictions, but are comparable (subject to caveats) within some jurisdictions over time
-  complete for the current reporting period (subject to caveats). All required 2019 data are available for all jurisdictions.

### Equity of outcomes

‘Equity of outcomes’ is an indicator of governments’ objective that the outcomes of Australian schooling are equitable (box 4.10).

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### Box 4.10      **Equity of outcomes**

‘Equity of outcomes’ is defined as the difference in the scores for students at the median and the lower end of national testing for literacy and numeracy.

The test score difference between students undertaking standardised tests (such as NAPLAN or Programme for International Student Assessment [PISA]) can be used to measure the relative performance gap between students at the median and the lower end of achievement. (For example, see Bruckauf and Chzhen (2016).)

A low or decreasing gap between poor performing students and the median performers (and median score not reducing over time) is desirable.

Data are not yet available for reporting against this indicator.

The Student outcomes (national testing) indicator (box 4.8) provides NAPLAN data on the proportion of students at or above the national minimum standard and mean scale score, by special needs group (including Indigenous status and, geographic location).

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## Student outcomes (international testing)

‘Student outcomes (international testing)’ is an indicator of governments’ objective that Australian schooling aims for students to excel by international standards (box 4.11).

### Box 4.11 Student outcomes (international testing)

‘Student outcomes (international testing)’ is defined by Australia’s participation in three international tests:

- Trends in International Mathematics and Science Study (TIMSS) — conducted by the IEA as a quadrennial international assessment — measures the proportion of sampled year 4 and year 8 students achieving at or above the IEA intermediate international benchmark, the national proficient standard in Australia for mathematics and science in the TIMSS assessment.
- Programme for International Student Assessment (PISA) — conducted by the OECD as a triennial international assessment — measures the proportion of sampled 15 year old students achieving at or above the national proficient standard (set to level 3) on the OECD PISA combined scales for reading, mathematical and scientific literacy.
- Progress in International Reading Literacy Study (PIRLS) — conducted by the International Association for the Evaluation of Educational Achievement (IEA) as a quinquennial international assessment — measures the proportion of sampled year 4 students achieving at or above the IEA intermediate international benchmark, the national proficient standard in Australia for reading literacy in the PIRLS assessment.

A high or increasing proportion of students achieving at or above the national proficient standard, or a high or increasing mean scale score is desirable.

Data reported for these measures are:

- comparable (subject to caveats) across jurisdictions and over time
- complete for the current reporting period (subject to caveats). All required 2019 (TIMSS), 2018 (PISA) and 2016 (PIRLS) data are available for all jurisdictions.

## Destination

‘Destination’ is an indicator of governments’ objective that Australian schooling aims for all young Australians to become active and informed members of the community positioning them to transition to further study and/or work and successful lives (box 4.12).



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**Box 4.12 Destination**

'Destination' is defined as the proportion of school leavers aged 15–24 years who left school in the previous year, who are participating in further education, training and/or employment. Data are reported for school leavers whose highest level of school completed was year 12, or year 11 and below.

A higher or increasing proportion of school leavers participating in further education, training and/or employment is desirable.

Data are sourced from the Survey of Education and Work and for this indicator relate to the jurisdiction in which the young person was resident the year of the survey and not necessarily the jurisdiction in which they attended school.

Data reported for this measure are:

- comparable (subject to caveats) across jurisdictions and over time
- complete for the current reporting period. All required 2020 data are available for all jurisdictions.

This Report includes information on the student destination surveys conducted by each State and Territory government, as context to this indicator (table 4.3). These surveys collect information from a larger number of students within relevant jurisdictions, but the research methods and data collection instruments differ which do not enable comparative reporting.

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**Table 4.3 School leaver destination survey results**

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**New South Wales**

The NSW Post School Destinations and Experiences Survey commenced in 2010 and has been conducted annually since 2013, collecting information about students' main destinations in the year after leaving school, either having completed Year 12 or left early. The survey includes students from government, Catholic and independent schools and can be completed online or via the telephone. In 2020 the survey was conducted between late August and early November and the sample comprised 18 865 Year 12 completers and 5978 early school leavers.

Of the Year 12 completers 62.1 per cent were undertaking some form of education and training (45 per cent a bachelor degree, 8.6 per cent a vocational education and training (VET) course (including Advanced Diplomas, Diplomas and Certificates I-IV), 4.8 per cent an apprenticeship and 3.7 per cent a traineeship), 26.9 per cent were employed, 7.7 per cent looking for work and 3.3 per cent were not in the labour force, education or training.

Of the early school leavers 51.4 per cent were undertaking some form of education or training (27.7 per cent an apprenticeship, 16.1 per cent a VET course, 6.4 per cent a traineeship and 1.1 per cent a bachelor degree), 25.4 per cent were employed, 17.3 per cent looking for work and 5.9 per cent were not in the labour force, education or training.

Analytical reports and fact sheets providing detailed information on participant subgroups can be accessed from the NSW Department of Education website.

**Victoria**

In Victoria, a survey of post-school destinations (On Track) has been conducted annually since 2003. Consenting Year 12 or equivalent completers and Year 12 non completers (from Years 10, 11 and 12) from all Victorian schools participate in a telephone or online survey early in the year after they leave school.

The 2019 On Track Survey 26 851 (46 per cent participation rate) of the eligible 2018 Year 12 or equivalent completers cohort and 2130 students who had left school in Years 10, 11 or 12 (13 per cent participation rate of the Year 12 non-completer cohort), from government and non-government schools, as well as TAFE and Adult Community Education providers.

Of the 26 851 Year 12 Completers, 75 per cent were in further education and training (54 per cent were enrolled at university, 13 per cent were TAFE enrolled and 8 per cent had taken up apprenticeships or training). Of the 25 per cent not in education and training, 20 per cent were in full or part time employment, 10 per cent had deferred a tertiary place, 4 per cent were looking for work.

Of the 2386 Year 12 non-completers, 54 per cent in education and training (one per cent enrolled at university, 20 per cent were TAFE enrolled and 33 per cent undertaking apprenticeships and training). Of the 46 per cent not in education and training, 27 per cent were in full or part time employment, 15 per cent were looking for work and 5 per cent were not in the labour force, education and training.

On Track survey information and data can be accessed from the Victorian Department of Education website: <https://www.education.vic.gov.au/about/research/pages/ontrack.aspx>

**Queensland**

Since 2005, Queensland's annual Next Step survey has captured information about the journey from school to further study and employment. The survey takes place approximately six months after the end of the school year, timed to occur after tertiary education places have been accepted. All students who completed Year 12 at government and non-government schools in Queensland are included. The 2020 survey collected responses from 28 451 Year 12 completers, a 75.5 per cent response rate.

In 2020, 80.5 per cent were engaged in education, training or employment in the year after completing Year 12. A further 13.9 per cent were seeking work, while 5.6 per cent were not in the labour force, education or training.

<https://qed.qld.gov.au/publications/reports/statistics/schooling/learning-outcomes/next-step/year-12-completers>

**Western Australia**

A post school destination survey of WA government school Year 12 students from the previous year is conducted in March and April each year. The survey data are combined with university and TAFE data to build a comprehensive understanding of Year 12 students' destinations.

In March and April 2020, post-school destination information was collected for 9480 students (65.8 per cent of the total WA government school Year 12 student population in Semester 2, 2019).

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Of these students, 67.6 per cent were in either education or training, with 41.7 per cent at university, 3.1 per cent studying an apprenticeship or a traineeship, 10.1 per cent studying another type of nationally accredited training qualification, 1.6 per cent repeating year 12 studies or engaged in non-accredited training and 11.1 per cent who had deferred their education or training. In addition, 3.8 per cent were engaged exclusively in full time employment, 13.9 per cent in part time employment, and 14.7 per cent were neither working nor studying. The figures may sum to more than 100 per cent due to rounding.

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#### **South Australia**

SA does not currently conduct a post-school destination survey.

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#### **Tasmania**

Tasmania does not currently conduct a systemic post-school destination survey.

Recognising that continuing education equates to improved employment and life outcomes for students, on 10 July 2017, the Education Act 2016 (passed by Parliament in November 2016) commenced. The Act requires that from 2020:

- All children and youths must be enrolled in school for thirteen years, from Prep to Year 12.
- The education and training leaving requirements will be raised so that students must participate in education and training until they complete Year 12, attain a Certificate III, or they turn 18 years of age (whichever occurs first).
- The minimum work hours for exemption from the requirement to participate in education and training due to employment increases from 25 hours a week to 35 hours a week.

To support the leaving requirements included in the Education Act 2016 the department's Youth Participation Database is a system that captures information about Tasmanians in Years 10 to 12 or equivalent. It brings together enrolment data from education and training providers across the state in order to identify young people who require follow-up, essentially those not appearing in any datasets as having current enrolments or exemptions.

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#### **Australian Capital Territory**

Since 2007, the ACT has conducted a telephone-based survey of all government and non-government students who successfully completed an ACT Senior Secondary Certificate in the preceding year, as well as students who left school before completing Year 12. The survey seeks information on the destinations of young people six months after completion of Year 12 and on satisfaction with their experience in years 11 and 12. In 2018 this survey became multimodal with online self-completion and telephone interviews being utilised. In 2020, responses were received from 51 per cent of the 2019 Year 12 graduates who were sent a Primary Approach Letter.

The 2020 survey (conducted in the last three weeks of May and first week of June) found that 88 per cent of 2019 Year 12 graduates were employed and/or studying in 2020 and overall 86 per cent found Years 11 and 12 worthwhile. Of the 59 per cent of 2019 graduates studying in 2020, 71 per cent reported that they were studying at the higher education (advanced diploma or higher) level and 25 per cent at the Vocational Education and Training (Certificate I-IV and Diploma) level. Of the 41 per cent of graduates who were not studying in 2020, 69 per cent intended to start some study in the next two years. Year 12 graduates who speak a language other than English at home were more likely to be studying (71 per cent) than those who did not (56 per cent).

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#### **Northern Territory**

The NT does not conduct a post-school destination survey.

*Source:* State and Territory governments (unpublished).

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## **4.2 Definitions of key terms**

<b>Aboriginal and Torres Strait Islander students</b>	Students are considered to be Aboriginal or Torres Strait Islander origin if they identify as being an Aboriginal or Torres Strait Islander or from an Aboriginal and Torres Strait Islander background. Administrative processes for determining Indigenous status vary across jurisdictions.
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<b>Comparability</b>	Data are considered comparable if (subject to caveats) they can be used to inform an assessment of comparative performance. Typically, data are considered comparable when they are collected in the same way and in accordance with the same definitions. For comparable indicators or measures, significant differences in reported results allow an assessment of differences in performance, rather than being the result of anomalies in the data.
<b>Completeness</b>	Data are considered complete if all required data are available for all jurisdictions that provide the service.
<b>Confidence interval</b>	A confidence interval is a specified interval, with the sample statistic at the centre, within which the corresponding population value can be said to lie with a given level of confidence (section 2).
<b>Confidence intervals (for NAPLAN and NAP sample)</b>	<p>The NAPLAN and NAP sample confidence intervals are calculated by ACARA and take into account two factors:</p> <ul style="list-style-type: none"> <li>• <i>Sampling error</i> — The sampling error accounts for adjustments for non-response and measures the variance across students.</li> <li>• <i>Measurement error</i> — The NAPLAN assessments can only sample a small part of the literacy or numeracy curriculum so as not to place too much burden on each students' time. Consequently, the result of the NAPLAN assessments will contain some uncertainty <i>for each student</i>. This uncertainty is referred to as measurement error.</li> </ul> <p>Estimates of sampling and measurement errors are combined to obtain final standard errors and confidence intervals to determine statistical significance of mean differences and percentage differences in NAPLAN and NAP sample performance <i>within a report year</i>.</p> <p>For analysing difference across years, a further source of error needs to be accounted for:</p> <ul style="list-style-type: none"> <li>• <i>Equating error</i> — The equating error measures the variance related to the impact of changes to the NAPLAN secure equating tests between years. That is, how closely the equating tests align between years.</li> </ul> <p>To evaluate statistical significance of mean and percentage differences between years taking into account the equating, sampling and measurement errors. However, the equating error is not represented within the reported confidence interval.</p>
<b>Foundation year (pre-year 1)</b>	<p>The first year of primary school.</p> <p>Naming conventions for the foundation year differ between states and territories. Foundation year is known as:</p> <ul style="list-style-type: none"> <li>• Kindergarten in New South Wales and the Australian Capital Territory</li> <li>• Preparatory in Victoria, Queensland and Tasmania</li> <li>• Reception in South Australia</li> <li>• Pre-primary in Western Australia</li> <li>• Transition in the Northern Territory, and</li> <li>• Foundation year in the Australian Curriculum.</li> </ul>
<b>Full time equivalent student</b>	The FTE of a full time student is 1.0. The method of converting part time student numbers into FTEs is based on the student's workload compared with the workload usually undertaken by a full time student.
<b>Full time student</b>	A person who satisfies the definition of a student and undertakes a workload equivalent to, or greater than, that usually undertaken by a student of that year level. The definition of full time student varies across jurisdictions.

<b>Geographic classification (ASGS)</b>	<p>From 2016, Student remoteness is based on the Australian Statistical Geography Standard (ASGS) Remoteness Structure. The extended version of the Accessibility/Remoteness Index of Australia (ARIA+), developed by the University of Adelaide's Australian Population and Migration Research Centre, is the standard ABS-endorsed measure of remoteness on ABS postal areas. Student remoteness (ARIA+) regions use the same ARIA+ ranges as the ABS remoteness areas and are therefore an approximation of the ABS remoteness areas. For more details of ARIA+ refer to &lt;<a href="http://www.abs.gov.au/websitedbs/d3310114.nsf/home/remoteness+structure">www.abs.gov.au/websitedbs/d3310114.nsf/home/remoteness+structure</a>&gt;.</p> <p>The remoteness categories are:</p> <ul style="list-style-type: none"> <li>• Major cities of Australia</li> <li>• Inner regional areas of Australia</li> <li>• Outer regional areas of Australia</li> <li>• Remote areas of Australia</li> <li>• Very remote areas of Australia.</li> </ul> <p>Geographic classifications prior to 2016 are based on the Ministerial Council for Education, Early Childhood Development and Youth Affairs (MCEECDYA) standard. Data are not directly comparable. (The exception is Census and survey data which were already using the ASGS, and prior to that the Australian Standard Geographic Classification).</p>
<b>Geographic classification (MCEECDYA)</b>	<p>Prior to 2016, Geographic categorisation is based on the agreed MCEECDYA Geographic Location Classification which, at the highest level, divides Australia into three zones (the metropolitan, provincial and remote zones).</p> <ul style="list-style-type: none"> <li>• <i>Metropolitan zone</i>: Mainland State capital city regions and Major urban Statistical Districts (100 000 or more population).</li> <li>• <i>Provincial zone</i>: Provincial city statistical districts and Darwin statistical division (25 000–99 999 population); and Other provincial areas (Collection District [CD] ARIA+ score ≤ 5.92). <ul style="list-style-type: none"> <li>- Inner provincial areas (CD ARIA+ score &lt; 2.4)</li> <li>- Outer provincial areas (CD ARIA+ score &gt; 2.4 and &lt; 5.92).</li> </ul> </li> <li>• <i>Remote zone</i>: Remote zone (CD ARIA+ score &gt; 5.92) <ul style="list-style-type: none"> <li>- Remote areas (CD ARIA+ score &gt; 5.92 and ≤ 10.53)</li> <li>- Very remote areas (CD ARIA+ score &gt; 10.53).</li> </ul> </li> </ul>
<b>In-school expenditure</b>	<p>Costs relating directly to schools. Staff, for example, are categorised as being either in-school or out-of-school. They are categorised as in-school if they usually spend more than half of their time actively engaged in duties at one or more schools or ancillary education establishments. In-school employee related expenses, for example, represent all salaries, wages awards, allowances and related on costs paid to in-school staff.</p>
<b>Low socio-educational background</b>	<p>Students in the lowest quartile of the Index of Community Socio-Educational Advantage (ICSEA).</p> <p>The ICSEA is a student level score constructed by ACARA from information (obtained from school enrolment records) relating to parents': occupation; school education; and non-school education.</p>
<b>Out-of-school expenditure</b>	<p>Costs relating indirectly to schools. (See in-school expenditure).</p>
<b>Pre-year 1</b>	<p>See 'foundation year'.</p>
<b>Part time student</b>	<p>A student undertaking a workload that is less than that specified as being full time in the jurisdiction.</p>
<b>Real expenditure</b>	<p>Nominal expenditure adjusted for changes in prices, using the General Government Final Consumption Expenditure chain price deflator and expressed in terms of final year prices.</p>

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<b>School</b>	<p>A school is an establishment which satisfies all of the following criteria.</p> <ul style="list-style-type: none"> <li>• Its major activity is the provision of full time day primary or secondary education or the provision of primary or secondary distance education.</li> <li>• It is headed by a principal (or equivalent) responsible for its internal operation.</li> <li>• It is possible for students to enrol for a minimum of four continuous weeks, excluding breaks for school vacations.</li> </ul>
<b>Science literacy</b>	<p>Science literacy and scientific literacy: the application of broad conceptual understandings of science to make sense of the world, understand natural phenomena, and interpret media reports about scientific issues. It also includes asking investigable questions, conducting investigations, collecting and interpreting data and making decisions.</p>
<b>Socioeconomic status</b>	<p>As identified in footnotes to specific tables.</p>
<b>Socio-educational background</b>	<p>See 'Low socio-educational background'.</p>
<b>Source of income</b>	<p>In this chapter, income from either the Australian Government or State and Territory governments. Australian Government expenditure is derived from specific purpose payments (current and capital) for schools. This funding indicates the level of monies allocated, not necessarily the level of expenditure incurred in any given financial year. The data therefore provide only a broad indication of the level of Australian Government funding.</p>
<b>Special school</b>	<p>A special school satisfies the definition of a school and requires one or more of the following characteristics to be exhibited by the student before enrolment is allowed:</p> <ul style="list-style-type: none"> <li>• mental or physical disability or impairment</li> <li>• slow learning ability</li> <li>• social or emotional problems</li> <li>• in custody, on remand or in hospital (ABS 2020).</li> </ul>
<b>Student-to-staff ratios</b>	<p>The number of FTE students per FTE teaching staff. Students at special schools are allocated to primary and secondary (see below). The FTE of staff includes those who are generally active in schools and ancillary education establishments.</p>
<b>Student</b>	<p>A person who is formally (officially) enrolled or registered at a school, and is also active in a primary, secondary or special education program at that school. Students at special schools are allocated to primary and secondary on the basis of their actual grade (if assigned); whether or not they are receiving primary or secondary curriculum instruction; or, as a last resort, whether they are of primary or secondary school age.</p>
<b>Students with disability</b>	<p>Students are counted in the Nationally Consistent Collection of Data on School Students with Disability where:</p> <ul style="list-style-type: none"> <li>• the student's impairment meets the Disability Discrimination Act 1992 (DDA); AND</li> <li>• the functional impact of the student's disability results in the school actively addressing or supporting the student's specific individual education needs arising from their disability.</li> </ul> <p>The DDA provides a broad definition of disability. The DDA covers individuals with disability, associates of a person with a disability, people who do not have a disability but who may face disability discrimination in the future, people who are not in fact impaired in functioning but treated as impaired, and people with conditions such as obesity, mild allergies or physical sensitivities, and those who wear glasses.</p>

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<b>Teaching staff</b>	Teaching staff have teaching duties (that is, they are engaged to impart the school curriculum) and spend the majority of their time in contact with students. They support students, either by direct class contact or on an individual basis. Teaching staff include principals, deputy principals and senior teachers mainly involved in administrative duties, but not specialist support staff (who may spend the majority of their time in contact with students but are not engaged to impart the school curriculum). For the NT, Assistant Teachers in Homeland Learning Centres and community school are included as teaching staff.
<b>Ungraded student</b>	A student in ungraded classes who cannot readily be allocated to a year of education. These students are included as either ungraded primary or ungraded secondary, according to the typical age level in each jurisdiction.
<b>VET in Schools</b>	VET in Schools refers to nationally recognised VET qualifications or accredited courses undertaken by school students as part of the senior secondary certificate. The training that students receive reflects specific industry competency standards and is delivered by an external Registered Training Organisation (RTO), the school or school sector as an RTO and/or the school in partnership with an RTO. VET courses may require structured work placements and may be undertaken as a school-based apprenticeship or traineeship.

### 4.3 References

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