4 School education

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| **Attachment tables** |
| Attachment tables are identified in references throughout this Indigenous Compendium by an ‘A’ prefix (for example, in this chapter, table 4A.1). As the data are directly sourced from the 2014 Report, the Compendium also notes where the original table, figure or text in the 2014 Report can be found. For example, where the Compendium refers to ‘2014 Report, p. 4.1’, this is page 1 of chapter 4 of the 2014 Report, and  ‘2014 Report, table 4A.1’ is table 1 of attachment 4A of the 2014 Report. A list of attachment tables referred to in the Compendium is provided at the end of this chapter, and the full attachment tables are available from the Review website at www.pc.gov.au/gsp. |
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The School education chapter (chapter 4) in the *Report on Government Services 2014* (2014 Report) reports on the performance of government funded school education in Australia. Reporting relates to government funding only, not to the full cost to the community of providing school education. Data are reported for Indigenous Australians for a subset of the performance indicators reported in that chapter — those data are compiled and presented here.

Descriptive information and performance indicators are variously reported for:

* government primary and secondary schools
* non-government primary and secondary schools
* school education as a whole (government plus non-government primary and secondary schools).

Data in this chapter mostly relate to the 2012 calendar year and the 2011-12 financial year.

Schooling aims to provide education for all young people. The main purposes of school education are to assist students in:

* attaining knowledge, skills and understanding in key learning areas
* developing their talents, capacities, self-confidence, self-esteem and respect for others
* developing their capacity to contribute to Australia’s social, cultural and economic development.

**Indigenous data in the School education chapter**

The School education chapter in the 2014 Report contains the following data items for Indigenous Australians:

* number and proportion of full time students
* reading performance in National Assessment Program — Literacy and Numeracy (NAPLAN) testing
* persuasive writing performance in NAPLAN testing
* numeracy performance in NAPLAN testing
* science literacy performance in the National Assessment Program (NAP) testing
* civics and citizenship performance (NAP testing)
* information and communication technologies literacy performance (NAP testing)
* Programme for International Student Assessment (PISA) assessment results
* Trends in International Mathematics and Science Study (TIMSS) assessment results
* 2011 Progress in International Reading Literacy Study (PIRLS) assessment results
* apparent retention rate from year 7 or 8 to years 10 and 12

• apparent retention rate from year 10 to year 12

* student attendance rate.

**Special needs groups**

Some groups of students in school education have been identified as having special needs. These special needs groups include:

* Indigenous students
* students from language backgrounds other than English (LBOTE)
* students with disability
* geographically remote students
* students from families of low socio-economic status.

Government schools provide education for a high proportion of students from special needs groups. In 2012, 84.7 per cent of Indigenous students and  
76.6 per cent of students with disability, attended government schools (tables 4A.29 and 2014 Report, table 4A.31). Further information on student body mix in government, non‑government and all schools is in tables 4A.32–34.

**Indigenous students**

The number and proportion of full time students who are Indigenous varies greatly across jurisdictions (table 4.1). In all jurisdictions, the proportion of full time Indigenous students was much higher in government schools than in non‑government schools. Nationally, the proportion of full time students who were Indigenous was 6.4 per cent in government schools and 2.1 per cent in non‑government schools in 2012 (table 4.1).

Table 4.1 Indigenous full time students, 2012

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | *NSW* | *Vic* | *Qld* | *WA* | *SA* | *Tas* | *ACT* | *NT* | *Aust* |
| Indigenous full time students **a** | | | | | | | | | | |
| Government schools | (‘000) | 47.0 | 9.7 | 43.2 | 20.0 | 9.0 | 4.7 | 1.2 | 13.1 | 147.9 |
| Non-government schools | (‘000) | 7.8 | 1.6 | 8.1 | 3.7 | 1.1 | 0.9 | 0.3 | 3.0 | 26.6 |
| **All schoolsb** | (‘000) | 54.8 | 11.3 | 51.3 | 23.8 | 10.1 | 5.6 | 1.5 | 16.1 | 174.5 |
| Indigenous full time students as a proportion of all full time students | | | | | | | | | | |
| Government schools | % | 6.3 | 1.8 | 8.7 | 8.2 | 5.4 | 8.4 | 3.3 | 44.5 | 6.4 |
| Non-government schools | % | 2.0 | 0.5 | 3.2 | 2.9 | 1.2 | 3.9 | 1.2 | 28.9 | 2.1 |
| **All schools** | % | 4.8 | 1.3 | 6.9 | 6.4 | 3.9 | 7.0 | 2.4 | 40.4 | 4.9 |

**a**  Students counted as Indigenous are those who have identified as being of Indigenous origin. It is possible that the number of Indigenous students may be under-represented in some jurisdictions. **b** Totals may not add as a result of rounding.

*Source*: ABS (2013) *Schools Australia 2012*, Cat. no. 4221.0; table 4A.29; 2014 Report, table 4.5, p. 4.11.

**Framework of performance indicators**

The School education performance indicator framework outlined in figure 4.1 identifies the performance indicators reported in the 2014 Report. Data for Indigenous Australians are reported for a subset of the performance indicators and are presented here. It is important to interpret these data in the context of the broader performance indicator framework. The framework shows which data are comparable. For data that are not considered directly comparable, the text includes relevant caveats and supporting commentary.

Indicator boxes presented throughout the chapter provide information about the reported indicators. As these are sourced directly from the 2014 Report, they might include references to data not reported for Indigenous Australians and therefore not included in this Compendium.

The National Education Agreement (NEA) covers the area of school education, and education and training indicators in the NIRA establish specific outcomes for reducing the level of disadvantage experienced by Indigenous Australians. Both agreements include sets of performance indicators, for which the Steering Committee collates performance information for analysis by the Council of Australian Governments (COAG) Reform Council (CRC). Performance indicators reported in this chapter are aligned with school education performance indicators in the NEA. The NEA was reviewed in 2011 and 2012, resulting in changes that have been reflected in this Report, as relevant.

The performance indicator framework provides information on equity, efficiency and effectiveness, and distinguishes the outputs and outcomes of school education services (figure 4.1). Chapter 1 discusses data comparability from a Report-wide perspective (see 2014 Report, section 1.6).

Different delivery contexts and locations influence the equity, effectiveness and efficiency of school education services. Results are also affected by the broader education environment (for example, availability of employment and further educational alternatives and population movements).

The Report’s Statistical context chapter contains data that may assist in interpreting the performance indicators presented in this chapter. These data cover a range of demographic and geographic characteristics, including age profile, geographic distribution of the population, income levels, education levels, tenure of dwellings and cultural heritage (including Indigenous and ethnic status) (chapter 2).

Figure 4.1 School education performance indicator framework

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| Figure 4.1 School education performance indicator framework  More details can be found within the text surrounding this image. |

*Source*: 2014 Report, figure 4.4, p. 4.17.

**Equity and effectiveness**

#### Attendance and participation

‘Attendance and participation’ is an indicator of governments’ objective to develop fully the talents and capacities of young people through equitable access to, and participation in, education and learning, to complete school education to year 12 or its equivalent (box 4.1). National and international research confirms a link between attendance and student achievement, although numerous interrelated factors influence attendance and achievement in complex ways.

In addition, attendance and participation rates for special needs groups are an indication of the equity of access to school education (box 4.1).

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| Box 4.1 Attendance and participation |
| ‘Attendance and participation’ is defined by four measures.  *Attendance*   * The number of actual full time equivalent ‘student days attended’ over the collection period as a percentage of the total number of possible student days attended over the collection period. A high student attendance rate is desirable.   Data on student attendance are collected for each State and Territory by school sector (government, Catholic and independent), sex, year level (1–10) and Indigenous status (Indigenous and non-Indigenous students).  Data reported for this measure are:   * not comparable across jurisdictions * complete for the current reporting period (subject to caveats). All required 2012 data are available for all jurisdictions providing the service.   It is intended to measure student attendance over a single consistent time period (the first semester) for all schools. However, current reporting against the measure is transitional, with most jurisdictions providing government school data for the first semester, and non‑government schools providing data over a period including the last 20 days in May.  *Participation*   * The total number of children aged 6–15 years and enrolled in school (full time and part time enrolments) as a proportion of the estimated resident population of the same age. * The number of full time and part time school students of a particular age expressed as a proportion of the estimated resident population of the same age, for each year for 14–19 year olds.   A higher or increasing participation rate suggests an improvement in educational outcomes through greater access to school education. Participation rates in school education need to be interpreted with care, because rates are influenced by jurisdictional differences in age/grade structures, and the participation rate is an age-based rate. The rate is comparable over time within a jurisdiction, but may not be directly comparable across jurisdictions where there are differences in the age/grade structure. |
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| Box 4.1 **(Continued)** |
| Proportions that exceed 100 per cent may reflect disparities between the sources of data for students and residential population, multiple enrolments by individual students or students residing in one jurisdiction enrolling in schools in another jurisdiction.  These measures do not provide information on young people who develop their talents and capacities through other options for delivering post-compulsory education and training — for example, work-based training and enrolment in technical and further education (TAFE) delivered programs. A broader participation indicator that accounts for some of these factors is reported in the Child care, education and training sector overview.   * The proportion of 15–19 year olds who have successfully completed at least one unit of competency as part of a VET qualification at Australian Qualifications Framework (AQF) Certificate II or above.   Data reported for these three measures are:   * comparable (subject to caveats) across jurisdictions and over time. * complete for the current reporting period (subject to caveats). All required 2011 and 2012 data are available for all jurisdictions providing the service.   Care should be exercised in relation to the data for Indigenous students, particularly in some jurisdictions and in the non-government sectors, due to small population sizes.  Information about data quality for this indicator is at www.pc.gov.au/gsp/reports/rogs/2014. |
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*Attendance*

School attendance is measured in a specific collection period during the school year (see box 4.1 for details), and results may not be representative of school attendance throughout the school year.

Non-Indigenous students in government schools had higher attendance rates than Indigenous students across all year levels in all jurisdictions (figure 4.2 and   
table 4A.131). The differences varied across states and territories. A similar pattern to the government schools was observed for non-government schools (independent and catholic schools) in most jurisdictions (tables 4A.133 and 4A.135).

Figure 4.2 Student attendance rate, Indigenous students, government schools, 2012a

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| Figure 4.2 Student attendance rate, Indigenous students, government schools, 2012  More details can be found within the text surrounding this image. |

**a** Attendance rates are the number of actual full time equivalent ‘student days’ attended as a percentage of the total number of possible student days attended over the period. Student attendance data are reported for full time students in years 1–10, but are not collected uniformly across jurisdictions and schooling sectors and therefore are not comparable.

*Source*: ACARA (unpublished); table 4A.131; 2014 Report, figure 4.6, p. 4.22.

#### Retention

‘Retention’ to the final years of schooling is an indicator of governments’ objective that all students have access to high quality education and training necessary to complete education to year 12 or its equivalent (box 4.2).

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| Box 4.2 Retention |
| ‘Retention’ (apparent retention rate) is defined as the number of full time school students in a designated level/year of education as a percentage of their respective cohort group (either at the commencement of their secondary schooling at year 7 or 8, or at year 10). Data are reported for:   * the proportion of students commencing secondary school at year 7 or 8 and continuing to year 10 * the proportion of students commencing secondary school at year 7 or 8 and continuing to year 12 * the proportion of year 10 students continuing to year 12.   Data are reported for all students, Indigenous and non-Indigenous students, and for students in government and non-government schools.  A higher or increasing apparent retention rate suggests that a larger proportion of students are continuing to participate in school education, which is likely to result in improved educational outcomes.  This indicator does not include part time students or provide information on students who pursue year 12 (or equivalent qualifications) through non-school pathways.  The term ‘apparent’ is used because the indicator is derived from total numbers of students in each of the relevant year levels, not by tracking the retention of individual students. Care needs be taken in interpretation because the apparent retention rate does 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.   Data reported for all measures in this indicator are:   * comparable (subject to caveats) across jurisdictions and over time * complete for the current reporting period (subject to caveats). All required 2012 data are available for all jurisdictions providing the service.   Information about data quality for this indicator is at www.pc.gov.au/gsp/reports/rogs/2014. |
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In most jurisdictions, in 2012, apparent retention rates from the commencement of secondary school at year 7 or 8 (2014 Report, figure 4.1 shows the starting years across jurisdictions) to year 10, were 98 per cent to 104 per cent, with a national rate of 101.3 per cent (figure 4.3). High rates are to be expected, because normal year level progression means students in year 10 are generally of an age at which schooling is compulsory.

Retention rates for Indigenous students provide one measure of the equity of access to schooling. Retention rates to year 10 for Indigenous students were lower than those for non-Indigenous students and all students in most jurisdictions, with a national retention rate for Indigenous students of 98.4 per cent, 3.0 percentage points lower than that for non-Indigenous students and 2.9 percentage points lower than that for all students (figure 4.3).

Figure 4.3 Apparent retention rate from year 7 or 8 to year 10, full time secondary students, all schools, 2012a, b, c, d, e

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| Figure 4.3 Apparent retention rate from year 7 or 8 to year 10, full time secondary students, all schools, 2012  More details can be found within the text surrounding this image. |

**a** 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 (see 2014 Report, figure 4.11). **b** Retention rates can exceed 100 per cent for a variety of reasons, including student transfers between jurisdictions. **c** The standard apparent retention rate calculation excludes part time students, which has implications for the interpretation of results for all jurisdictions   
(2014 Report, table 4.4). **d** Ungraded students are not included in the calculation of apparent retention rates. **e** Some students' Indigenous status is not stated. Consequently, the number of Indigenous students counted in the Indigenous rates may be under‑represented in some jurisdictions. Students for whom Indigenous status is not stated are included in the data for 'non-Indigenous students', and are included in the data for 'all students'.

*Source*: ABS (2013) *Schools Australia 2012*, Cat. no. 4221.0; table 4A.121; 2014 Report, figure 4.10, p. 4.27.

The national apparent retention rate from the commencement of secondary schooling at year 7 or year 8 (figure 4.1 shows the differences across jurisdictions) to year 10 for all full time students was 98.1 per cent in 2004, rising to 99.4 per cent in 2008 and 101.3 per cent in 2012 (2014 Report, figure 4.11). Data for intervening years and by Indigenous status are in table 4A.123. Data for government schools and non‑government schools are in tables 4A.124 and 4A.125.

The national apparent retention rate, from the commencement of secondary school at year 7 or 8 (2014 Report, figure 4.1 shows the differences across jurisdictions) to year 12, for all full time students was 75.7 per cent in 2004, rising to 79.9 per cent in 2012 (2014 Report, figure 4.12). Data for intervening years and by Indigenous status are in table 4A.123. Data for government schools and non-government schools are in tables 4A.124 and 4A.125.

Retention rates from year 7/8 to year 12 for Indigenous students in all schools were lower than those for non-Indigenous students and all students in all jurisdictions in 2012, with a national retention rate for Indigenous students of 51.1 per cent,   
30.2 percentage points lower than that for non-Indigenous students and   
28.8 percentage points lower than that for all students (table 4A.123).

For government and non-government schools, apparent rates of retention from   
year 10 to year 12 for Indigenous students in 2012 were consistently lower than rates for all students but varied across jurisdictions (figure 4.4 and 2014 Report, figure 4.14). In interpreting Indigenous apparent retention rates, it should be noted that, nationally, 1.6 per cent of Indigenous students left school before year 10 (figure 4.3 and table 4A.121), and so are not included in the base year for retention from year 10 to year 12. Further, Indigenous students made up 6.4 per cent of all students in government schools compared with 2.1 per cent in non-government schools and some jurisdictions have very low numbers of Indigenous students   
(table 4.1).

Nationally, Indigenous retention from year 10 to year 12 for all schools in 2012 was 53.3 per cent (figure 4.4), compared with 80.4 per cent for non-Indigenous students (table 4A.123). However, Indigenous retention from year 10 to year 12 for all schools has risen from 46.0 per cent in 2004, with the gap between Indigenous students and non-Indigenous students decreasing from 32.1 percentage points in 2004 to 27.1 percentage points in 2012 (table 4A.123).

Figure 4.4 Apparent retention rates from year 10 to year 12, Indigenous full time secondary students, 2012a, b, c, d

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| Figure 4.4 Apparent retention rates from year 10 to year 12, Indigenous full time secondary students, 2012  More details can be found within the text surrounding this image. |

**a** 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 (see tables 4A.123–125). **b** The standard apparent retention rate calculation excludes part time students, which has implications for the interpretation of results for all jurisdictions (2014 Report, table 4.4). **c**Ungraded students are not included in the calculation of apparent retention rates. **d** Some students' Indigenous status is not stated. Consequently, the number of Indigenous students counted in these rates may be under‑represented in some jurisdictions.

*Source*: ABS (2013) *Schools Australia 2012*, Cat. no. 4221.0; tables 4A.123–125; 2014 Report, figure 4.14,   
p. 4.31.

Nationally, apparent rates of retention for all full time students from year 10 to   
year 12 rose slightly from 77.2 per cent in 2004 to 79.3 per cent in 2012   
(2014 Report, figure 4.15). Data for intervening years and by Indigenous status are in table 4A.123. Data for government schools and non-government schools are in tables 4A.124 and 4A.125.

**Outcomes**

Outcomes are the impact of services on the status of an individual or group (while outputs are the actual services delivered) (see 2014 Report, chapter 1, section 1.5).

*Nationally comparable learning outcomes*

Learning outcomes measure students’ attainment of a range of skills, in literacy and numeracy, and in areas such as science literacy, information and communication technology, and civics and citizenship.

The ‘learning outcomes’ indicator examines outcomes in these areas and draws on two main sources of information:

* the National Assessment Program — Literacy and Numeracy (NAPLAN), and NAP sample assessments. These are SCSEEC‑endorsed tests developed to measure student performance in relation to the National Goals for Schooling
* Australia’s participation in three international tests — the Organisation for Economic Co-operation and Development (OECD) Programme for International Student Assessment (PISA); the Trends in International Mathematics and Science Study (TIMSS); and the Progress in International Reading Literacy Study (PIRLS).

*National Assessment Program*

This chapter reports proportions of students undertaking NAPLAN testing in   
years 3, 5, 7 and 9 achieving the national minimum standard, and mean scale score learning outcomes, for reading, persuasive writing and numeracy performance in 2012, including by Indigenous status and geolocation. Data comparing a range of outcomes from 2008 to 2012 and 2011 to 2012 for reading and numeracy and from 2011 to 2012 for persuasive writing are also included in the chapter.

Achieving (but not exceeding) the national minimum standard represents achievement of the basic elements of literacy or numeracy for the year level. Students who have not achieved the national minimum standard for that year need focused intervention and additional support to help them achieve the skills they require to progress in schooling (ACARA 2012). The chapter and attachment tables also include additional data on NAPLAN mean scale scores for 2012.

Detailed NAPLAN data for 2012, including outcomes by socio-economic status, are included in the attachment tables (tables 4A.36–37, 4A.39–40 and   
4A.42–43, 2014 Report, tables 4A.38 and 4A.41 for reading performance,   
tables 4A.54–55, 4A.57–58 and 4A.60–61, 2014 Report, tables 4A.56 and 4A.59 for persuasive writing performance and tables 4A.71–72, 4A.74–75 and 4A.77–78 and 2014 Report, tables 4A.73 and 4A.76 for numeracy performance). More detailed NAPLAN time series data for 2008–2011 and 2011–2012 are included in tables 4A.44–52 for reading performance and tables 4A.79–87 for numeracy performance. Time series data for 2011–2012 for persuasive writing are included in   
tables 4A.62–70. In 2011, NAPLAN writing testing changed from narrative to persuasive writing, leading to a break in the time series. Data for narrative writing (for 2008, 2009 and 2010) are included in the 2010–2012 Reports.

The NAP also undertakes triennial national sample assessments on a rotating basis. This chapter reports year 6 science literacy performance data for 2006, 2009 and 2012 (2012 data are available for the first time in this Report). The attachment tables include additional data on science literacy performance for 2006, 2009 and 2012 (table 4A.91 and 2014 Report, tables 4A.89–90); year 6 and year 10 civics and citizenship literacy performance for 2004, 2007 and 2010 (table 4A.92 and   
2014 Report, tables 4A.93–94) and year 6 and year 10 information and communication technologies literacy performance for 2005, 2008 and 2011   
(table 4A.96 and 2014 Report, table 4A.95).

*International tests*

This chapter reports outcomes of:

* triennial PISA assessments in reading literacy, mathematical literacy and scientific literacy for 15 year old students. Data from the 2012 assessments are included for the first time in this Report, as well as data from 2000, 2003, 2006 and 2009 (tables 4A.98, 4A.102 and 4A.106 and 2014 Report, tables 4A.97, tables 4A.99–101, tables 4A.103–105 and tables 4A.107–109)
* the four-yearly TIMSS assessments on mathematics and science achievement for year 4 and year 8. The attachment tables include additional information on the 2011 test, as well as data from 2003 and 2007 (table 4A.114 and 2014 Report,   
  tables 4A.110–113 and table 4A.115)
* the five-yearly PIRLS test for year 4, conducted in 2011, on reading literacy performance (2014 Report, tables 4A.116–117).

*Interpreting learning outcomes data*

To assist with making comparisons between jurisdictions, where appropriate,   
95 per cent confidence intervals are presented in charts and attachment tables. Confidence intervals are a standard way of expressing the degree of uncertainty associated with survey estimates or performance measurement. An estimate of   
80 per cent with a confidence interval of ± 2.0, for example, means that if another sample had been drawn, or if another combination of test items had been used, there is a 95 per cent chance that the result would lie between 78 per cent and 82 per cent. Each learning outcomes proportion can be thought of in terms of a range. If one jurisdiction’s rate ranges from 78–82 per cent and another’s from 77–81 per cent, then it is not possible to say with confidence that one differs from the other (because there is unlikely to be a statistically significant difference). Where ranges do not overlap, there is a high likelihood that there is a statistically significant difference. A statistically significant difference means there is a high probability that there is an actual difference; it does not imply that the difference is necessarily large or important.

*Participation in NAPLAN testing*

NAPLAN testing reports the number of assessed, exempt, absent and withdrawn students in years 3, 5, 7 and 9. Assessed students include all students who attempt the test and exempt students. Students with a language background other than English who arrived from overseas less than a year before the test, and students with significant intellectual disabilities may be exempted from testing. Participating students are those who were assessed or deemed exempt — other students were either absent or withdrawn. A higher or increasing proportion of students participating in NAPLAN testing suggests an improvement in that aspect of educational participation. The proportion of assessed, exempt, absent and withdrawn students in years 3, 5, 7 and 9 for reading, persuasive writing and numeracy in 2012 are in tables 4A.43, 4A.61 and 4A.78 respectively. Participation in the 2012 NAPLAN tests, by Indigenous status, for reading, writing and numeracy are included in tables 4A.42, 4A.60 and 4A.77 respectively. In all domains and year levels, a lower proportion of Indigenous students than non-Indigenous or all students participated in NAPLAN testing.

#### Learning outcomes

‘Learning outcomes’ is an indicator of governments’ objective that all students should attain a range of skills, including: English literacy, such that every student should be able to read, write, spell and communicate at an appropriate level; skills in numeracy; and skills and becoming informed in areas such as science literacy, information and communications technologies and civics and citizenship (box 4.3).

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| Box 4.3 Learning outcomes |
| ‘Learning outcomes’ is defined by six measures:   * the proportion of years 3, 5, 7 and 9 students achieving at or above the national minimum standard in NAPLAN testing for reading, persuasive writing and numeracy for a given year, reported by Indigenous status, sex, LBOTE, socio-economic status and MCEECDYA categories of geolocation (section 4.1 in 2014 Report identifies the profile of equity groups in each State and Territory). * the mean scale score (on the common national scale for Years 3, 5, 7 and 9, ranging from 0 to 1000) achieved by years 3, 5, 7 and 9 students in NAPLAN assessment for reading, persuasive writing and numeracy for a given year, reported by Indigenous status. This Report also includes a time series for student ‘gain’ for the cohort (for example, between year 3 in 2010 and year 5 in 2012) based on the mean scale score outcomes for reading and numeracy. * the proportion of sampled year 6 and year 10 students achieving at or above the proficient standard in civics and citizenship, information and communication technologies and science literacy (year 6 only). National data from the triennial National Assessment Program tests are reported by sex, Indigenous status, LBOTE status, MCEECDYA categories of geolocation and socio-economic status * the proportion of sampled 15 year old students achieving at or above the proficient standard on the OECD PISA combined reading, mathematical literacy and science literacy scales in a triennial international assessment. National data are also reported by sex, Indigenous status, socio-economic status and geolocation. * the proportion of sampled year 4 students achieving at or above the proficient standard on the 5 yearly PIRLS reading literacy test. National data are also reported by sex, Indigenous status and MCEECDYA categories of geolocation * the proportion of sampled students achieving at or above the proficient standard on the TIMSS mathematical literacy and science literacy scales in a quadrennial assessment (assessed year 4 and year 8 students who achieve at or above the proficient standard on the TIMSS mathematical literacy scale for a given year). National data are also reported by sex, Indigenous status and MCEECDYA categories of geolocation   A high or increasing proportion of students achieving at or above the national minimum standard or proficient standard, or a high or increasing mean scale score for learning outcomes is desirable.  Data reported for all measures in this indicator are:   * comparable (subject to caveats) across jurisdictions and over time * complete for the current reporting period (subject to caveats). All required 2012 data are available for all jurisdictions providing the service.   Information about data quality for this indicator is at www.pc.gov.au/gsp/reports/rogs/2014. |
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***NAPLAN Reading***

This section of the learning outcomes indicator provides key outcomes for NAPLAN testing (years 3, 5, 7 and 9) in the reading domain. Indigenous outcomes are highlighted, but outcomes for a range of other equity groups including male, female, LBOTE, geolocation and socio-economic status (parental education and parental occupation) are included in tables 4A.36–37, tables 4A.39–40 and   
tables 4A.42–53 and 2014 Report, tables 4A.38 and 4A.51.

*All students and Indigenous students*

The proportion of year 3 students who achieved at or above the reading national minimum standard in 2012 was 93.4–93.8 per cent nationally. The proportion for Indigenous students (72.6–75.8 per cent) was significantly lower than for non‑Indigenous students (94.5–94.9 per cent) (figure 4.5). These proportions varied across jurisdictions.

Figure 4.5 Proportion of year 3 students achieving at or above the reading national minimum standard, 2012a, b

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| Figure 4.5 Proportion of year 3 students achieving at or above the reading national minimum standard, 2012  More details can be found within the text surrounding this image. |

**a** Error bars represent the 95 per cent confidence interval associated with each point estimate. **b** For further information and caveats see table 4A.36.

*Source*: ACARA (2012 and unpublished) *NAPLAN Achievement in Reading, Writing, Language Conventions and Numeracy: National Report for 2012*; table 4A.36; 2014 Report, figure 4.23, p. 4.49.

The mean scale score for year 3 reading in 2012 for all students was 418.5–420.7 nationally. The mean scale score for Indigenous students (329.2–337.4) was significantly lower than for non-Indigenous students (423.2–425.2) (figure 4.6). Mean scale scores varied across jurisdictions.

Figure 4.6 Mean scale scores for year 3 students, reading, 2012a, b

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| Figure 4.24 Mean scale scores for year 3 students, reading, 2012  More details can be found within the text surrounding this image. |

**a** Error bars represent the 95 per cent confidence interval associated with each point estimate. **b** For further information and caveats see table 4A.39.

*Source*: ACARA (2012 and unpublished) *NAPLAN Achievement in Reading, Writing, Language Conventions and Numeracy: National Report for 2012*; table 4A.39; 2014 Report, figure 4.24, p. 4.50.

The proportion of year 5 students who achieved at or above the reading national minimum standard in 2012 was 91.3–91.9 per cent nationally. The proportion for Indigenous students (62.8–66.6 per cent) was significantly lower than for non‑Indigenous students (92.9–93.3 per cent) (figure 4.7). These proportions varied across jurisdictions.

Figure 4.7 Proportion of year 5 students achieving at or above the reading national minimum standard, 2012a, b

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| Figure 4.7 Proportion of year 5 students achieving at or above the reading national minimum standard, 2012  More details can be found within the text surrounding this image. |

**a** Error bars represent the 95 per cent confidence interval associated with each point estimate. **b** For further information and caveats see table 4A.36.

*Source*: ACARA (2012 and unpublished) *NAPLAN Achievement in Reading, Writing, Language Conventions and Numeracy: National Report for 2012*; table 4A.36; 2014 Report, figure 4.25, p. 4.51.

The mean scale score for year 5 reading in 2012 for all students was 492.5–494.7 nationally. The mean scale score for Indigenous students (403.5–414.5) was significantly lower than for non-Indigenous students (497.0–499.0) (figure 4.8). Mean scale scores varied across jurisdictions.

Figure 4.8 Mean scale scores for year 5 students, reading, 2012a, b

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| Figure 4.8 Mean scale scores for year 5 students, reading, 2012  More details can be found within the text surrounding this image. |

**a** Error bars represent the 95 per cent confidence interval associated with each point estimate. **b** For further information and caveats see table 4A.39.

*Source*: ACARA (2012 and unpublished) *NAPLAN Achievement in Reading, Writing, Language Conventions and Numeracy: National Report for 2012*; table 4A.39; 2014 Report, figure 4.26, p. 4.52.

The proportion of year 7 students who achieved at or above the reading national minimum standard in 2011 was 93.9–94.3 per cent nationally. The proportion for Indigenous students (73.8–77.0 per cent) was significantly lower than for non‑Indigenous students (94.9–95.3 per cent) (figure 4.9). These proportions varied across jurisdictions.

Figure 4.9 Proportion of year 7 students achieving at or above the reading national minimum standard, 2012a, b

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| Figure 4.9 Proportion of year 7 students achieving at or above the reading national minimum standard, 2012  More details can be found within the text surrounding this image. |

**a** Error bars represent the 95 per cent confidence interval associated with each point estimate. **b** For further information and caveats see table 4A.36.

*Source*: ACARA (2012 and unpublished) *NAPLAN Achievement in Reading, Writing, Language Conventions and Numeracy: National Report for 2012*; table 4A.36; 2014 Report, figure 4.27, p. 4.53.

The mean scale score for year 7 reading in 2012 for all students was 540.2–542.8 nationally. The mean scale score for Indigenous students (471.4–478.2) was significantly lower than for non-Indigenous students (543.7–546.3) (figure 4.10). Mean scale scores varied across jurisdictions.

Figure 4.10 Mean scale scores for year 7 students, reading, 2012a, b

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| Figure 4.10 Mean scale scores for year 7 students, reading, 2012  More details can be found within the text surrounding this image. |

**a** Error bars represent the 95 per cent confidence interval associated with each point estimate. **b** For further information and caveats see table 4A.39.

*Source*: ACARA (2012 and unpublished) *NAPLAN Achievement in Reading, Writing, Language Conventions and Numeracy: National Report for 2012*; table 4A.39; 2014 Report, figure 4.28, p. 4.54.

The proportion of year 9 students who achieved at or above the reading national minimum standard in 2012 was 91.0–91.8 per cent nationally. The proportion for Indigenous students (65.3–69.1 per cent) was significantly lower than for non‑Indigenous students (92.4–93.0 per cent) (figure 4.11). These proportions varied across jurisdictions.

Figure 4.11 Proportion of year 9 students achieving at or above the reading national minimum standard, 2012a, b

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| Figure 4.11 Proportion of year 9 students achieving at or above the reading national minimum standard, 2012  More details can be found within the text surrounding this image. |

**a** Error bars represent the 95 per cent confidence interval associated with each point estimate. **b** For further information and caveats see table 4A.36.

*Source*: ACARA (2012 and unpublished) *NAPLAN Achievement in Reading, Writing, Language Conventions and Numeracy: National Report for 2012*; table 4A.36; 2014 Report, figure 4.29, p. 4.55.

The mean scale score for year 9 reading in 2012 for all students was 573.3–576.3 nationally. The mean scale score for Indigenous students (506.6–513.0) was significantly lower than for non-Indigenous students (576.5–579.5) (figure 4.12). Mean scale scores varied across jurisdictions.

Figure 4.12 Mean scale scores for year 9 students, reading, 2012a, b

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| Figure 4.12 Mean scale scores for year 9 students, reading, 2012  More details can be found within the text surrounding this image. |

**a** Error bars represent the 95 per cent confidence interval associated with each point estimate. **b** For further information and caveats see table 4A.39.

*Source*: ACARA (2012 and unpublished) *NAPLAN Achievement in Reading, Writing, Language Conventions and Numeracy: National Report for 2012*; table 4A.39; 2014 Report, figure 4.30, p. 4.56.

*Geolocation*

Nationally, in 2012, reading outcomes tended to decline with remoteness. In year 3, for example, 94.6–95.0 per cent of students in metropolitan areas achieved at or above the reading national minimum standard, significantly higher than the proportions of provincial students (91.9–92.7 per cent), remote students   
(81.7–86.9 per cent) and very remote students (52.1–63.1 per cent) (figure 4.13).

For all geolocation categories across years 3, 5, 7 and 9, reading outcomes nationally for Indigenous students were lower than those for non-Indigenous students. Nationally, outcomes for Indigenous students generally declined as remoteness increased, and the gap in learning outcomes between Indigenous students and non-Indigenous students was generally greater in remote and very remote areas than in metropolitan and provincial areas.

State and Territory results by Indigenous status and geolocation for years 3, 5, 7 and 9 reading literacy are in table 4A.37. The general pattern in jurisdictions appears similar to the national results. However, due to relatively large confidence intervals, caution should be exercised when making comparisons for some data. Mean scale score results by Indigenous status and geolocation are provided in table 4A.40.

Figure 4.13 National proportion of year 3 students achieving at or above the reading national minimum standard, by Indigenous status and geolocation, 2012a, b

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| Figure 4.13 National proportion of year 3 students achieving at or above the reading national minimum standard, by Indigenous status and geolocation, 2012  More details can be found within the text surrounding this image. |

**a** Error bars represent the 95 per cent confidence interval associated with each point estimate. **b** Data for year 3 students are shown and may not be representative of students in years 5, 7 and 9 which are detailed in table 4A.37.

*Source*: ACARA (2012 and unpublished) *NAPLAN Achievement in Reading, Writing, Language Conventions and Numeracy: National Report for 2012*; table 4A.37; 2014 Report, figure 4.31, p. 4.57.

*Time series analysis of NAPLAN reading outcomes — statistical significance of differences between years*

Table 4.2 provides a summary of differences in achievement at year 5 for mean scale score and proportions at and above national minimum standard, by Indigenous status, on a national basis across various years.

There was no statistically significant difference in the proportions at and above national minimum standard, or in mean scale scores, for Indigenous students from 2008 to 2012 and 2011 to 2012. There was a statistically significant increase in the mean scale score for non-Indigenous students from 2008 to 2012, but no statistically significant difference from 2011 to 2012. There was no statistically significant difference in the proportions of year 5 non-Indigenous students achieving at or above the national minimum standard, from 2008 to 2012 or from 2011 to 2012 (table 4.2).

Table 4.2 Mean scale scores and proportion of students who achieved at or above the national minimum standard for year 5 reading, and statistical significance of differences, Australia**a, b**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  | Statistical significance of difference in average achievement | |
|  | *2008* | *2011* | *2012* | *2008 to 2012* | *2011 to 2012* |
| Indigenous students | |  |  |  |  |
| Mean scale score | 403.4 ± 4.1 | 409.8 ± 4.1 | 409.0 ± 5.5 | ● | ● |
| At or above NMS | 63.4 ± 1.8 | 66.4 ± 1.7 | 64.7 ± 1.9 | ● | ● |
| Non-Indigenous students | |  |  |  |  |
| Mean scale score | 488.7 ± 1.0 | 492.3 ± 1.0 | 498.0 ± 1.0 | ↑ | ● |
| At or above NMS | 92.6 ± 0.2 | 92.9 ± 0.2 | 93.1 ± 0.2 | ● | ● |
| All students | |  |  |  |  |
| Mean scale score | 484.4 ± 1.1 | 488.1 ± 1.1 | 493.6 ± 1.1 | ↑ | ● |
| At or above NMS | 91.0 ± 0.3 | 91.5 ± 0.3 | 91.6 ± 0.3 | ● | ● |

NMS = National Minimum Standard. **↑**= Average achievement significantly higher, statistically. ● = No significant difference, statistically.

**a** The mean scale scores and proportions at or above national minimum standard reported in this table include 95 per cent confidence intervals (for example, a mean scale score of 400.0 ± 2.7). The confidence intervals in this table are for the specific year applicable and do not provide an indication of statistically significant differences between years. See section 2.5 of the statistical context chapter for more information on confidence intervals. **b** For further information and caveats see table 4A.52.

*Source*: ACARA (2012 and unpublished) *NAPLAN Achievement in Reading, Writing, Language Conventions and Numeracy: National Report for 2012*, ACARA, Sydney; table 4A.52; 2014 Report, table 4.7, p. 4.59.

*Cohort gain*

Analysis of NAPLAN mean scale score data for the years 2008 to 2010 and 2010 to 2012 enables comparisons of outcomes for the same cohort of students over time (box 4.3). This chapter reports on gains in reading and numeracy from year 3 in 2008 to year 5 in 2010 and year 7 in 2012. Student gain for other cohorts (year 5 in 2008 to year 7 in 2010 and year 9 in 2012; and year 3 in 2010 to year 5 in 2012) are included in attachment tables. Data for cohort gain from 2009 to 2011 were included in the 2013 Report.

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| Box 4.3 **Achievement and gain** |
| For national reporting purposes, gain is the difference in mean scale scores in a domain for the same cohort of students between two testing years, for example between 2010 and 2012. The cohorts between the two years are not matched — that is, there will be differences between the exact composition of the student body in any given State or Territory.  A feature of gain in NAPLAN performance is that the size of the gain tends to be associated with the level of prior performance: the lower the prior performance, the more likely the possibility of greater gain. Further, for literacy and numeracy, student gain is greater in the early years. Few of the differences across states and territories in the gains made between 2008 and 2010 and between 2010 and 2012 are statistically significant. This report includes confidence intervals, which provide an indication of the level of uncertainty of the gain over the two year period. |
| *Source*: ACARA (2012). |
|  |
|  |

From year 3 in 2008 to year 5 in 2010, the gain in reading mean scale score (on the common national scale for Years 3, 5, 7 and 9, ranging from 0 to 1000) was between 79.0 and 94.8 points nationally. For the same cohort, from year 5 in 2010 to year 7 in 2012, the mean scale score gain was between 47.0 and 61.2 points nationally.

For Indigenous students, year 3 in 2008 to year 5 in 2010 the mean scale score gain was between 85.9 and 105.9 points and from year 5 in 2010 to year 7 in 2012, the mean scale score gain was between 56.6 and 73.8 points nationally. For non‑Indigenous students, year 3 in 2008 to year 5 in 2010 the mean scale score gain was between 78.5 and 94.3 points and from year 5 in 2010 to year 7 in 2012, the mean scale score was between 46.5 and 60.7 points nationally.

These mean scale score gains varied across jurisdictions (table 4.3). Data for other cohorts from 2008–2010 and 2010-2012 are in table 4A.53.

Table 4.3 Gain in mean scale score for reading: year 3 (2008) to year 5 (2010) to year 7 (2012)a, b

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | *NSW* | *Vic* | *Qld* | *WA* | *SA* | *Tas* | *ACT* | *NT* | *Aust* |
| **Indigenous students** | | | | | | | | | |
| 2008 Year 3 | 347.5  ± 3.6 | 368.9  ± 6.3 | 309.5  ± 7.6 | 292.7  ± 7.1 | 329.7  ± 8.7 | 376.6  ± 9.4 | 359.5  ± 17.6 | 208.1  ± 19.5 | 313.7  ± 4.9 |
| 2010 Year 5 | 433.3  ± 3.4 | 454.4  ± 6.5 | 411.3  ± 4.7 | 387.3  ± 6.1 | 408.8  ± 7.5 | 451.9  ± 8.8 | 430.6  ± 14.7 | 326.7  ± 18.8 | 409.6  ± 3.8 |
| 2012 Year 7 | 489.9  ± 3.2 | 504.3  ± 5.5 | 478.0  ± 4.0 | 462.0  ± 5.2 | 478.4  ± 7.6 | 505.0  ± 7.9 | 507.4  ± 14.2 | 397.3  ± 22.7 | 474.8  ± 3.4 |
| Gain 2008-2010 | 85.8  ± 9.2 | 85.5  ± 11.9 | 101.8  ± 11.8 | 94.6  ± 12.2 | 79.1  ± 13.9 | 75.3  ± 15.0 | 71.1  ± 24.1 | 118.6  ± 28.2 | 95.9  ± 10.0 |
| Gain 2010-2012 | 56.6  ± 8.4 | 49.9  ± 11.0 | 66.7  ± 9.3 | 74.7  ± 10.6 | 69.6  ± 12.8 | 53.1  ± 13.7 | 76.8  ± 21.6 | 70.6  ± 30.3 | 65.2  ± 8.6 |
| **Non-Indigenous students** | | | | | | | | | |
| 2008 Year 3 | 414.9  ± 1.7 | 420.6  ± 1.6 | 375.9  ± 2.4 | 394.5  ± 2.7 | 403.9  ± 3.1 | 403.4  ± 5.2 | 422.8  ± 5.7 | 382.5  ± 8.1 | 405.0  ± 1.1 |
| 2010 Year 5 | 498.7  ± 1.9 | 502.7  ± 1.7 | 473.4  ± 1.9 | 484.5  ± 2.6 | 479.1  ± 2.9 | 488.0  ± 5.3 | 510.4  ± 5.4 | 475.4  ± 6.1 | 491.4  ± 1.0 |
| 2012 Year 7 | 548.7  ± 2.9 | 549.1  ± 2.6 | 536.8  ± 1.9 | 543.3  ± 2.9 | 539.5  ± 2.8 | 542.8  ± 6.8 | 559.8  ± 8.3 | 530.8  ± 13.2 | 545.0  ± 1.3 |
| Gain 2008-2010 | 83.8  ± 8.2 | 82.1  ± 8.1 | 97.5  ± 8.4 | 90.0  ± 8.6 | 75.2  ± 8.9 | 84.6  ± 10.7 | 87.6  ± 11.0 | 92.9  ± 12.8 | 86.4  ± 7.9 |
| Gain 2010-2012 | 50.0  ± 7.8 | 46.4  ± 7.6 | 63.4  ± 7.4 | 58.8  ± 7.9 | 60.4  ± 8.0 | 54.8  ± 11.1 | 49.4  ± 12.1 | 55.4  ± 16.1 | 53.6  ± 7.1 |
| **All students** | | | | | | | | | |
| 2008 Year 3 | 412.3  ± 1.8 | 419.9  ± 1.6 | 371.1  ± 2.6 | 386.7  ± 3.1 | 400.5  ± 3.3 | 401.2  ± 4.9 | 421.0  ± 5.9 | 306.6  ± 19.9 | 400.5  ± 1.2 |
| 2010 Year 5 | 496.2  ± 1.9 | 502.2  ± 1.7 | 468.7  ± 2.1 | 477.5  ± 2.8 | 476.5  ± 3.0 | 484.6  ± 5.5 | 508.6  ± 5.5 | 412.1  ± 18.1 | 487.4  ± 1.1 |
| 2012 Year 7 | 546.1  ± 2.9 | 548.3  ± 2.6 | 532.7  ± 2.0 | 537.8  ± 3.0 | 537.0  ± 2.9 | 540.6  ± 7.4 | 558.6  ± 8.3 | 474.3  ± 22.2 | 541.5  ± 1.3 |
| Gain 2008-2010 | 83.9  ± 8.2 | 82.3  ± 8.1 | 97.6  ± 8.4 | 90.8  ± 8.8 | 76.0  ± 9.0 | 83.4  ± 10.7 | 87.6  ± 11.1 | 105.5  ± 27.7 | 86.9  ± 7.9 |
| Gain 2010-2012 | 49.9  ± 7.8 | 46.1  ± 7.6 | 64.0  ± 7.5 | 60.3  ± 8.1 | 60.5  ± 8.1 | 56.0  ± 11.6 | 50.0  ± 12.1 | 62.2  ± 29.5 | 54.1  ± 7.1 |

**a** The mean scale scores for 2008, 2010 and 2012 reported in this table include 95 per cent confidence intervals (for example, a mean scale score of 400.0 ± 2.7, or a gain from 2010 to 2012 of 80.1 ± 2.7). Confidence intervals for the gain provide an indication of the level of uncertainty of the gain over the two year period. b The confidence interval provided is for the specific jurisdictional gain and should not be used for comparisons between jurisdictions or between subgroups.

*Source*: ACARA (2012 and unpublished) *2012 National Assessment Program — Literacy and Numeracy: Achievement in Numeracy, Writing, Language Conventions and Numeracy*; table 4A.53; 2014 Report,   
table 4.8, p. 4.61.

***NAPLAN Numeracy***

This section of the learning outcomes indicator provides key outcomes for NAPLAN testing (years 3, 5, 7 and 9) in the numeracy domain. Indigenous outcomes are highlighted, but outcomes for a range of other equity groups, including male, female, LBOTE, geolocation and socio-economic status (parental education and parental occupation) are included in tables 4A.71–72, 4A.74–75, 4A.77–88 and 2014 Report, tables 4A.73 and 4A.76.

*All students and Indigenous students*

The proportion of year 3 students who achieved at or above the numeracy national minimum standard in 2012 was 93.7–94.1 per cent nationally. The proportion for Indigenous students (71.1–74.3 per cent) was significantly lower than for non‑Indigenous students (94.9–95.3 per cent) (figure 4.14). These proportions varied across jurisdictions.

Figure 4.14 Proportion of year 3 students achieving at or above the numeracy national minimum standard, 2012a, b

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| Figure 4.14 Proportion of year 3 students achieving at or above the numeracy national minimum standard, 2012  More details can be found within the text surrounding this image. |

**a** Error bars represent the 95 per cent confidence interval associated with each point estimate. **b** For further information and caveats see table 4A.71.

*Source*: ACARA (2011 and unpublished) *NAPLAN Achievement in Reading, Writing, Language Conventions and Numeracy: National Report for 2012*; table 4A.71; 2014 Report, figure 4.32, p. 4.62.

Nationally in 2012, the mean scale score for year 3 numeracy for all students was 394.5–396.5. The mean scale score for Indigenous students (316.9–323.3) was significantly lower than for non-Indigenous students (398.6–400.4). Mean scale scores varied across jurisdictions (figure 4.15).

Figure 4.15 Mean scale scores for year 3 students, numeracy, 2012a, b

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| Figure 4.15 Mean scale scores for year 3 students, numeracy, 2012  More details can be found within the text surrounding this image. |

**a** Error bars represent the 95 per cent confidence interval associated with each point estimate. **b** For further information and caveats see table 4A.74.

*Source*: ACARA (2012 and unpublished) *2012 National Assessment Program — Literacy and Numeracy: Achievement in Numeracy, Writing, Language Conventions and Numeracy*; table 4A.74; 2014 Report,   
figure 4.33, p. 4.63.

The proportion of year 5 students who achieved at or above the numeracy national minimum standard in 2012 was 93.1–93.5 per cent nationally. The proportion for Indigenous students (67.3–71.1 per cent) was significantly lower than for non‑Indigenous students (94.4–94.8 per cent) (figure 4.16). These proportions varied across jurisdictions.

Figure 4.16 Proportion of year 5 students achieving at or above the numeracy national minimum standard, 2012a, b

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| Figure 4.16 Proportion of year 5 students achieving at or above the numeracy national minimum standard, 2012  More details can be found within the text surrounding this image. |

**a** Error bars represent the 95 per cent confidence interval associated with each point estimate. **b** For further information and caveats see table 4A.71.

*Source*: ACARA (2012 and unpublished) *NAPLAN Achievement in Reading, Writing, Language Conventions and Numeracy: National Report for 2012*; table 4A.71; 2014 Report, figure 4.34, p. 4.64.

Nationally in 2012, the mean scale score for year 5 numeracy for all students was 487.7–489.7. The mean scale score for Indigenous students (410.3–417.7) was significantly lower than for non-Indigenous students (491.6–493.6) (figure 4.17). Mean scale scores varied across jurisdictions.

Figure 4.17 Mean scale scores for year 5 students, numeracy, 2012a, b

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| Figure 4.17 Mean scale scores for year 5 students, numeracy, 2012  More details can be found within the text surrounding this image. |

**a** Error bars represent the 95 per cent confidence interval associated with each point estimate. **b** For further information and caveats see table 4A.74.

*Source*: ACARA (2012 and unpublished) *NAPLAN Achievement in Reading, Writing, Language Conventions and Numeracy: National Report for 2012*; table 4A.74; 2014 Report, figure 4.35, p. 4.65.

The proportion of year 7 students who achieved at or above the numeracy national minimum standard in 2012 was 93.5–94.1 per cent nationally. The proportion of Indigenous students (72.9–75.9 per cent) was significantly lower than for non‑Indigenous students (94.7–95.1 per cent) (figure 4.18). These proportions varied across jurisdictions.

Figure 4.18 Proportion of year 7 students achieving at or above the numeracy national minimum standard, 2012a, b

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| Figure 4.18 Proportion of year 7 students achieving at or above the numeracy national minimum standard, 2012  More details can be found within the text surrounding this image. |

**a** Error bars represent the 95 per cent confidence interval associated with each point estimate. **b** For further information and caveats see table 4A.71.

*Source*: ACARA (2012 and unpublished) *NAPLAN Achievement in Reading, Writing, Language Conventions and Numeracy: National Report for 2012*; table 4A.71; 2014 Report, figure 4.36, p. 4.66.

Nationally in 2012, the mean scale score for year 7 numeracy for all students was 536.5–539.7. The mean scale score Indigenous students (466.8–472.0) was significantly lower than for non-Indigenous students (540.2–543.4) (figure 4.19). Mean scale scores varied across jurisdictions.

Figure 4.19 Mean scale scores for year 7 students, numeracy, 2012a, b

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| --- |
| Figure 4.19 Mean scale scores for year 7 students, numeracy, 2012  More details can be found within the text surrounding this image. |

**a** Error bars represent the 95 per cent confidence interval associated with each point estimate. **b** For further information and caveats see table 4A.74.

*Source*: ACARA (2012 and unpublished) *NAPLAN Achievement in Reading, Writing, Language Conventions and Numeracy: National Report for 2012*; table 4A.74; 2014 Report, figure 4.37, p. 4.67.

The proportion of year 9 students who achieved at or above the numeracy national minimum standard in 2012 was 93.4–94.0 per cent nationally. The proportion of Indigenous students (72.6–75.8 per cent) was significantly lower than for non‑Indigenous students (94.4–95.0 per cent) (figure 4.20). These proportions varied across jurisdictions.

Figure 4.20 Proportion of year 9 students achieving at or above the numeracy national minimum standard, 2012a, b

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| Figure 4.20 Proportion of year 9 students achieving at or above the numeracy national minimum standard, 2012  More details can be found within the text surrounding this image. |

**a** Error bars represent the 95 per cent confidence interval associated with each point estimate. **b** For further information and caveats see table 4A.71.

*Source*: ACARA (2012 and unpublished) *NAPLAN Achievement in Reading, Writing, Language Conventions and Numeracy: National Report for 2012*; table 4A.71; 2014 Report, figure 4.38, p. 4.68.

Nationally in 2012, the mean scale score for year 9 numeracy for all students was 582.3–586.1. The mean scale score for Indigenous students (515.8–520.6) was significantly lower than for non-Indigenous students (585.6–589.4) (figure 4.21). Mean scale scores varied across jurisdictions.

Figure 4.21 Mean scale scores for year 9 students, numeracy, 2012a, b

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| Figure 4.21 Mean scale scores for year 9 students, numeracy, 2012  More details can be found within the text surrounding this image. |

**a** Error bars represent the 95 per cent confidence interval associated with each point estimate. **b** For further information and caveats see table 4A.74.

*Source*: ACARA (2012 and unpublished) *NAPLAN Achievement in Reading, Writing, Language Conventions and Numeracy: National Report for 2012*; table 4A.74; 2014 Report, figure 4.39, p. 4.69.

*Geolocation*

Across all year levels, numeracy outcomes tended to decline with remoteness. For year 3, for example, 94.9–95.3 per cent of students in metropolitan areas achieved at or above the national minimum standard, higher than the proportion for provincial students 92.2–93.0 per cent), remote students (82.0–87.2 per cent) and very remote students (50.9–62.5 per cent) (figure 4.22).

For all geolocation categories across years 3, 5, 7 and 9, the numeracy outcomes nationally for Indigenous students were lower than those for non-Indigenous students. Nationally, outcomes for Indigenous students generally declined as remoteness increased, and the gap in learning outcomes between Indigenous students and non-Indigenous students was generally greater in remote and very remote areas than in metropolitan and provincial areas.

State and Territory results by Indigenous status and geolocation for years 3, 5, 7 and 9 numeracy literacy are in table 4A.72. The general pattern in jurisdictions appears similar to the national results. However, due to relatively large confidence intervals, caution should be exercised when making comparisons for some data. Mean scale score results by Indigenous status and geolocation are provided in table 4A.75.

Figure 4.22 National proportion of year 3 students achieving at or above the numeracy national minimum standard, by Indigenous status and geolocation, 2012a, b

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| Figure 4.22 National proportion of year 3 students achieving at or above the numeracy national minimum standard, by Indigenous status and geolocation, 2012  More details can be found within the text surrounding this image. |

**a** Error bars represent the 95 per cent confidence interval associated with each point estimate. **b** Data for year 3 students are shown and may not be representative of students in years 5, 7 and 9 which are detailed in table 4A.72.

*Source*: ACARA (2012 and unpublished) *NAPLAN Achievement in Reading, Writing, Language Conventions and Numeracy: National Report for 2012*; table 4A.72; 2014 Report, figure 4.40, p. 4.70.

*Time series analysis of NAPLAN numeracy outcomes — statistical significance of differences between years*

Nationally, there was no statistically significant difference in the proportions of year 5 students achieving at or above the national minimum standard, for numeracy, from 2008 to 2012 but a statistically significant decrease from 2011 to 2012. There was a statistically significant increase in the mean scale score for year 5 students from 2008 to 2012 but no statistically significant difference from 2011 to 2012 (table 4.4).

There was no statistically significant difference in the proportions at and above national minimum standard, or in mean scale scores, for Indigenous students from 2008 to 2012, but there was a statistically significant decrease in both from 2011 to 2012. There was a statistically significant increase in the mean scale score for non‑Indigenous students from 2008 to 2012, but no statistically significant difference from 2011 to 2012. There was no statistically significant difference in the proportions of year 5 non-Indigenous students achieving at or above the national minimum standard, from 2008 to 2012, but a statistically significant decrease from 2011 to 2012 (table 4.4).

Table 4.4 provides a summary of differences in achievement at year 5 for mean scale score and proportions at and above national minimum standard, by Indigenous status, on a national basis across various years. Data for states and territories are in tables 4A.79–86. These data are not comparable across jurisdictions and can only be used for a comparison across time for a jurisdiction, or nationally.

Table 4.4 Mean scale scores and proportion of students who achieved at or above the national minimum standard for year 5 numeracy, and statistical significance of differences, Australia**a, b**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  | Statistical significance of difference in average achievement | |
|  | *2008* | *2011* | *2012* | *2008 & 2012* | *2011 & 2012* |
| Indigenous students | |  |  |  |  |
| Mean scale score | 408.0 ± 2.8 | 421.1 ± 2.7 | 414.0 ± 3.7 | ● | ↓ |
| At or above NMS | 69.2 ± 1.7 | 75.2 ± 1.5 | 69.2 ± 1.9 | ● | ↓ |
| Non-Indigenous students | |  |  |  |  |
| Mean scale score | 479.5 ± 1.0 | 491.3 ± 1.0 | 492.6 ± 1.0 | ↑ | ● |
| At or above NMS | 94.0 ± 0.2 | 95.5 ± 0.2 | 94.6 ± 0.2 | ● | ↓ |
| All students | |  |  |  |  |
| Mean scale score | 475.9 ± 1.1 | 487.8 ± 1.1 | 488.7 ± 1.0 | ↑ | ● |
| At or above NMS | 92.7 ± 0.2 | 94.4 ± 0.2 | 93.3 ± 0.2 | ● | ↓ |

NMS = National Minimum Standard. **↑**= Average achievement significantly higher, statistically ● = No significant difference, statistically. ↓= Average achievement significantly lower, statistically.

**a** The mean scale scores and proportions at or above national minimum standard reported in this table include 95 per cent confidence intervals (for example, a mean scale score of 400.0 ± 2.7). The confidence intervals in this table are for the specific year applicable and do not provide an indication of statistically significant differences between years. See section 2.5 of the ‘statistical context’ chapter for more information on confidence intervals. **b** For further information and caveats see table 4A.87.

*Source*: ACARA (2012 and unpublished) *NAPLAN Achievement in Reading, Writing, Language Conventions and Numeracy: National Report for 2012*, ACARA, Sydney; table 4A.87; 2014 Report, table 4.9, p. 4.72.

*Cohort gain*

Analysis of NAPLAN mean scale score data for the years 2008 to 2010 and 2010 to 2012 enables comparisons of outcomes for the same cohort of students over time (2014 Report, box 4.9). From year 3 in 2008 to year 5 in 2010, the gain in numeracy mean scale score (on the common national scale for Years 3, 5, 7 and 9, ranging from 0 to 1000) was between 83.6 and 100.2 points nationally. For the same cohort, from year 5 in 2010 to year 7 in 2012, the mean scale score gain was between 43.3 and 55.3 points nationally.

For Indigenous students, year 3 in 2008 to year 5 in 2010 the mean scale score gain was between 80.0 and 98.6 points and from year 5 in 2010 to year 7 in 2012, the mean scale score gain was between 45.4 and 59.6 points nationally. For non‑Indigenous students, year 3 in 2008 to year 5 in 2010 the mean scale score gain was between 83.8 and 100.4 points and from year 5 in 2010 to year 7 in 2012, the gain was between 43.2 and 55.2 points nationally.

These mean scale score gains varied across jurisdictions (table 4.5). Data for other cohorts from 2008–2010 and 2010-2012 are in table 4A.88.

Table 4.5 Gain in mean scale score for numeracy: year 3 (2008) to year 5 (2010) to year 7 (2012)a, b

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | *NSW* | *Vic* | *Qld* | *WA* | *SA* | *Tas* | *ACT* | *NT* | *Aust* |
| **Indigenous students** | | | | | | | | | |
| 2008 Year 3 | 350.3  ± 3.1 | 376.9  ± 5.5 | 316.2  ± 6.4 | 313.9  ± 5.1 | 330.7  ± 6.5 | 377.1  ± 8.2 | 355.1  ± 16.2 | 275.0  ± 11.0 | 327.6  ± 3.3 |
| 2010 Year 5 | 435.8  ± 3.0 | 457.0  ± 5.8 | 419.5  ± 4.5 | 398.0  ± 6.0 | 406.9  ± 6.8 | 450.0  ± 8.0 | 434.7  ± 12.8 | 351.6  ± 13.0 | 416.9  ± 3.1 |
| 2012 Year 7 | 477.4  ± 3.2 | 494.6  ± 5.2 | 475.9  ± 3.7 | 461.0  ± 5.0 | 464.8  ± 6.3 | 491.0  ± 7.3 | 493.1  ± 12.2 | 410.1  ± 15.0 | 469.4  ± 2.6 |
| Gain 2008-2010 | 85.5  ± 9.2 | 80.1  ± 11.4 | 103.3  ± 11.3 | 84.1  ± 11.3 | 76.2  ± 12.4 | 72.9  ± 14.1 | 79.6  ± 22.1 | 76.6  ± 18.9 | 89.3  ± 9.3 |
| Gain 2010-2012 | 41.6  ± 7.2 | 37.6  ± 9.7 | 56.4  ± 8.2 | 63.0  ± 9.7 | 57.9  ± 10.9 | 41.0  ± 12.3 | 58.4  ± 18.6 | 58.5  ± 20.6 | 52.5  ± 7.1 |
| **Non-Indigenous students** | | | | | | | | | |
| 2008 Year 3 | 411.3  ± 1.6 | 417.5  ± 1.4 | 371.9  ± 2.1 | 387.4  ± 2.2 | 391.7  ± 2.5 | 401.6  ± 4.5 | 413.1  ± 5.0 | 386.9  ± 5.9 | 400.5  ± 1.0 |
| 2010 Year 5 | 501.0  ± 1.9 | 503.2  ± 1.6 | 478.5  ± 1.8 | 483.0  ± 2.4 | 475.2  ± 2.7 | 482.8  ± 4.6 | 500.2  ± 5.0 | 472.7  ± 5.0 | 492.6  ± 1.0 |
| 2012 Year 7 | 546.6  ± 3.8 | 545.3  ± 3.1 | 536.1  ± 2.0 | 540.3  ± 3.2 | 531.8  ± 3.1 | 528.6  ± 6.6 | 547.2  ± 9.7 | 522.7  ± 13.2 | 541.8  ± 1.6 |
| Gain 2008-2010 | 89.7  ± 8.5 | 85.7  ± 8.4 | 106.6  ± 8.6 | 95.6  ± 8.8 | 83.5  ± 9.0 | 81.2  ± 10.4 | 87.1  ± 10.7 | 85.8  ± 11.2 | 92.1  ± 8.3 |
| Gain 2010-2012 | 45.6  ± 7.2 | 42.1  ± 6.7 | 57.6  ± 6.3 | 57.3  ± 7.0 | 56.6  ± 7.1 | 45.8  ± 9.9 | 47.0  ± 12.3 | 50.0  ± 15.2 | 49.2  ± 6.0 |
| **All students** | | | | | | | | | |
| 2008 Year 3 | 408.9  ± 1.6 | 416.9  ± 1.4 | 367.9  ± 2.2 | 381.9  ± 2.4 | 388.8  ± 2.7 | 399.9  ± 4.2 | 411.5  ± 5.1 | 338.4  ± 12.4 | 396.9  ± 1.0 |
| 2010 Year 5 | 498.4  ± 2.0 | 502.7  ± 1.6 | 474.1  ± 1.9 | 476.8  ± 2.6 | 472.6  ± 2.8 | 479.4  ± 4.8 | 498.7  ± 5.1 | 421.5  ± 14.4 | 488.8  ± 1.0 |
| 2012 Year 7 | 543.4  ± 3.8 | 544.3  ± 3.1 | 532.0  ± 2.1 | 534.9  ± 3.3 | 529.1  ± 3.1 | 526.0  ± 7.1 | 545.9  ± 9.7 | 474.7  ± 18.4 | 538.1  ± 1.6 |
| Gain 2008-2010 | 89.5  ± 8.5 | 85.8  ± 8.4 | 106.2  ± 8.6 | 94.9  ± 8.9 | 83.8  ± 9.0 | 79.5  ± 10.3 | 87.2  ± 10.8 | 83.1  ± 20.5 | 91.9  ± 8.3 |
| Gain 2010-2012 | 45.0  ± 7.2 | 41.6  ± 6.7 | 57.9  ± 6.4 | 58.1  ± 7.1 | 56.5  ± 7.1 | 46.6  ± 10.3 | 47.2  ± 12.4 | 53.2  ± 24.1 | 49.3  ± 6.0 |

**a** The mean scale scores for 2008, 2010 and 2012 reported in this table include 95 per cent confidence intervals (for example, a mean scale score of 400.0 ± 2.7, or a gain from 2010 to 2012 of 80.1 ± 2.7). Confidence intervals for the gain provide an indication of the level of uncertainty of the gain over the two year period. b The confidence interval provided is for the specific jurisdictional gain and should not be used for comparisons between jurisdictions or between subgroups.

*Source*: ACARA (2012 and unpublished) *2012 National Assessment Program — Literacy and Numeracy: Achievement in Numeracy, Writing, Language Conventions and Numeracy*; table 4A.88; 2014 Report, table 4.10, p. 4.73.

***NAPLAN Persuasive Writing***

This section of the learning outcomes indicator provides key outcomes for NAPLAN testing (years 3, 5, 7 and 9) in the persuasive writing domain. Indigenous outcomes are highlighted, but outcomes for a range of other equity groups including male, female, LBOTE, geolocation and socio-economic status (parental education and parental occupation) for 2012 are included in 2014 Report, tables 4A.54–70.

The proportion of year 3 students who achieved at or above the persuasive writing national minimum standard in 2012 was 95.1–95.5 per cent nationally. The proportion of Indigenous students (76.6–80.0 per cent) was significantly lower than for non‑Indigenous students (96.3–96.5 per cent). These proportions varied across jurisdictions (figure 4.23).

Figure 4.23 Proportion of year 3 students achieving at or above the persuasive writing national minimum standard, 2012a, b

|  |
| --- |
| Figure 4.23 Proportion of year 3 students achieving at or above the persuasive writing national minimum standard, 2012  More details can be found within the text surrounding this image. |

**a** Error bars represent the 95 per cent confidence interval associated with each point estimate. **b** For further information and caveats see table 4A.54.

*Source*: ACARA (2012 and unpublished) *NAPLAN Achievement in Reading, Writing, Language Conventions and Numeracy: National Report for 2012*; table 4A.54; 2014 Report, figure 4.41, p. 4.74.

Nationally in 2012, the mean scale score for year 3 persuasive writing for all students was 414.9–416.7. The mean scale score for Indigenous students   
(335.0–344.6) was significantly lower than for non-Indigenous students   
(419.3–420.9). Mean scale scores varied across jurisdictions (figure 4.24).

Figure 4.24 Mean scale scores for year 3 students, persuasive writing, 2012a, b

|  |
| --- |
| Figure 4.24 Mean scale scores for year 3 students, persuasive writing, 2012  More details can be found within the text surrounding this image. |

**a** Error bars represent the 95 per cent confidence interval associated with each point estimate. **b** For further information and caveats see table 4A.57.

*Source*: ACARA (2012 and unpublished) *NAPLAN Achievement in Reading, Writing, Language Conventions and Numeracy: National Report for 2012*; table 4A.57; 2014 Report, figure 4.42, p. 4.75.

*Geolocation*

Across all year levels, persuasive writing outcomes tended to decline with remoteness. For year 3, for example, 96.0–96.4 per cent of students in metropolitan areas achieved at or above the national minimum standard, higher than the proportion for provincial students (94.3–94.9 per cent), remote students   
(85.2–90.2 per cent) and very remote students (52.8–65.6 per cent) (figure 4.25).

For all geolocation categories across years 3, 5, 7 and 9, the persuasive writing outcomes nationally for Indigenous students were lower than those for non‑Indigenous students. Nationally, outcomes for Indigenous students generally declined as remoteness increased, and the gap in learning outcomes between Indigenous students and non-Indigenous students was generally greater in remote and very remote areas than in metropolitan and provincial areas.

State and Territory results by Indigenous status and geolocation for years 3, 5, 7   
and 9 persuasive writing are in table 4A.55. The general pattern in jurisdictions appears similar to the national results. However, due to relatively large confidence intervals, caution should be exercised when making comparisons for some data. Mean scale score results by Indigenous status and geolocation are provided in   
table 4A.58.

Figure 4.25 National proportion of year 3 students achieving at or above the persuasive writing national minimum standard, by Indigenous status and geolocation, 2012**a, b**

|  |
| --- |
| Figure 4.25 National proportion of year 3 students achieving at or above the persuasive writing national minimum standard, by Indigenous status and geolocation, 2012   More details can be found within the text surrounding this image. |

**a** Error bars represent the 95 per cent confidence interval associated with each point estimate. **b** Data for year 3 students are shown and may not be representative of students in years 5, 7 and 9 which are detailed in table 4A.55.

*Source*: ACARA (2012 and unpublished) *NAPLAN Achievement in Reading, Writing, Language Conventions and Numeracy: National Report for 2012*; table 4A.55; 2014 Report, figure 4.43, p. 4.75.

***National Assessment Program***

*National Assessment Program — Science literacy*

The National Year 6 Science literacy assessment was conducted for the first time in 2003 and is repeated triennially. In 2012, 13 236 year 6 students from   
617 government and non‑government schools from all states and territories participated in the assessment (ACARA 2013a).

Nationally in 2012, 14.3–25.9 per cent of Indigenous year 6 students achieved at the proficient standard or above in science literacy performance, significantly lower than the proportion for non‑Indigenous students (50.8–54.8 per cent) (table 4A.91).

***PISA assessment***

The Programme for International Student Assessment (PISA) is a sample assessment undertaken every three years (box 4.4). Data from PISA 2012 are included for the first time in this Report.

|  |
| --- |
| Box 4.4 Programme for International Student Assessment |
| PISA provides learning outcomes data for 15 year olds in three core assessment domains: reading literacy, mathematical literacy and scientific literacy. In 2012, around 510 000 students from 65 countries and economies participated in the PISA assessment. From Australia, this included 14 481 students from 775 schools. Mathematical literacy was the major domain tested in PISA 2012.  Time series comparisons can only be made across PISA data once a subject has been a major assessment domain. All domains have now been the subject of a major assessment, but in different cycles.  The national proficient standard is set at Proficiency level 3.  Further information on PISA is available at the PISA website: www.acer.edu.au/ozpisa/reports. |
| *Source*: Australian Council for Educational Research (ACER) (2013). |
|  |
|  |

*PISA reading literacy*

The proportion who achieved level 3 or above for reading literacy in 2012 was 27.3–33.9 per cent for Indigenous students, compared with 64.1–66.7 per cent for non-Indigenous students.

*PISA mathematical literacy*

The proportion who achieved level 3 or above for mathematical literacy in PISA 2012 was 20.1–26.3 per cent for Indigenous students, compared to 58.2–61.2 per cent for non-Indigenous students.

*PISA scientific literacy*

The proportion who achieved level 3 or above for scientific literacy in PISA 2012 was 29.6–36.4 per cent for Indigenous students, compared to 64.6–67.4 per cent for non-Indigenous students.

**Future directions in performance reporting**

##### Nationally comparable reporting of learning outcomes

The National Summary Report of results from the 2013 NAPLAN was released in September 2013 (ACARA 2013b). Results from a second report with more detailed information (including disaggregation by Indigenous status and geolocation) will be included in the 2015 Report.

##### Nationally consistent definitions

Nationally consistent definitions of most student background characteristics have been adopted for national reporting on students’ educational achievement and outcomes. Ministers have endorsed standard definitions of sex, Indigenous status, disability, socio-economic background, language background and geographic location. Nationally consistent data on students with disability for students’ outcomes reporting is under development.

**Definitions of key terms**

|  |  |
| --- | --- |
| **Apparent retention rates** | The number of full time students in a designated year of schooling, expressed as a percentage of their respective cohort group at an earlier base year. For example, the year 12 retention rate is calculated by dividing the total number of full time students in year 12 in the target year by the total number of full time students in year 10 two years before the target year. |
| **Full time student** | 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. |
| **Indigenous student** | A student of Aboriginal or Torres Strait Islander origin who identifies 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. For NAPLAN data, a student is considered to be 'Indigenous' if he or she identifies as being of Aboriginal and/or Torres Strait Islander origin. |
| **Language background other than English (LBOTE) student** | A status that is determined by administrative processes that vary across jurisdictions. For NAPLAN data, a student is considered to be 'LBOTE' if either the student or parents/guardians speak a language other than English at home. Separately, data are also sourced from the 2011 Census of Population and Housing. |
| **Part time student** | A student undertaking a workload that is less than that specified as being full time in the jurisdiction |
| **Participation rate** | The number of full time and part time school students of a particular age (as at 1 July), expressed as a proportion of the estimated resident population of the same age (as at 30 June). |
| **Potential year 12 population** | An estimate of a single-year age group that could have participated in year 12 that year, defined as the estimated resident population aged 15–19 years, divided by 5. |
| **Science literacy** | 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. |
| **Socio-economic status** | As identified in footnotes to specific tables. |
| **Student** | 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. |
| **Ungraded student** | 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. |

**List of attachment tables**

Attachment tables for data within this chapter are contained in the attachment to the Compendium. These tables are identified in references throughout this chapter by a ‘4A’ prefix (for example, table 4A.1 is table 1 in the School education attachment). Attachment tables are on the Review website (www.pc.gov.au/gsp).

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**References**

ACARA (Australian Curriculum and Assessment Reporting Authority), 2012, *National Assessment Program — Literacy and Numeracy Achievement in Reading, Writing, Language Conventions and Numeracy: National Report for 2012,* Sydney.

—— 2013a, *National Assessment Program — Science literacy Year 6 Report 2012,* Sydney.

—— 2013b, *National Assessment Program — Literacy and Numeracy NAPLAN Summary Report: Preliminary results for achievement in Reading, Writing, Language Conventions and Numeracy 2013* http://www.nap.edu.au/\_Documents/PDF/2012%20NAPLAN%20Summary%20(Preliminary)%20Report.pdf (accessed 23 October 2013).

ACER (Australian Council for Educational Research), 2013, *PISA in Brief —Highlights from the full Australian Report: Challenges for Australian Education: Results from PISA 2012*, Melbourne.