# 4 School education

This chapter focuses on performance information — equity, effectiveness and efficiency — for government funded school education in Australia. Reporting relates to government funding only, not to the full cost to the community of providing school education. 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).

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 *Report on Government Services* 2008 (2008 Report) contains the following data items on Indigenous people:

- the number of full time students (and as a proportion of all students) in government, non-government and all schools, 2006
- apparent retention rates from year 7 or 8 to year 10 of full time secondary students, all schools, 2006
- apparent retention rates from year 10 to year 12 of full time secondary students, by school type, 2006
- proportion of students achieving the years 3, 5 and 7 reading benchmark, 2005
- proportion of students achieving the years 3, 5 and 7 writing benchmark, 2005

• proportion of students achieving the years 3, 5 and 7 numeracy benchmark, 2005

Data have also been provided for the first time for Indigenous learning outcomes by geolocation (at a national level only for 2005). These data provide important information on Indigenous students through further disaggregation of the national learning outcomes data.

The school education attachment contains additional data relating to Indigenous people including:

- proportion of year 6 students achieving at or above the proficient standard in science literacy, 2003
- proportion of years 6 and 10 students achieving at or above the proficient standard in civics and citizenship performance, 2004
- proportion of 15 year old secondary students achieving level 3 or above in the overall reading literacy scale, by equity group — 2000, 2003 and 2006
- proportion of 15 year old secondary students achieving level 3 or above in the overall mathematical literacy scale, by equity group 2003 and 2006
- proportion of 15 year old secondary students achieving at or above the OECD mean for scientific literacy (2000 and 2003) and problem solving (2003), by equity group
- apparent retention rates from year 7 or 8 to year 10 of full time secondary students, by school type, 2002–2006
- information on Australian Government spending on Indigenous specific programs.

Throughout the chapter, the following definition is used for an 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."

It needs to be noted that administrative processes for determining Indigenous status vary across jurisdictions.

#### Attachment tables

Attachment tables for data within the school education chapter of this compendium are contained in attachment 4A of the compendium. These tables are identified in references throughout this chapter by an 'A' suffix (for example, table 4A.3 is

table 3 in the school education attachment). As the data are directly sourced from the 2008 Report, the compendium also notes where the original table, figure or text in the 2008 Report can be found. For example, where the compendium refers to '2008 Report, p. 4.15' this is page 15 of chapter 4 of the 2008 Report, and '2008 Report, table 4A.2' is attachment table 2 of attachment 4A of the 2008 Report.

# Indigenous full-time students, 2006

Certain groups of students, including Indigenous students, have been identified as having special needs in school education. Government schools provide education for a high proportion of students from special needs groups. In 2006, 86.6 per cent of Indigenous students attended government schools (tables 4A.2).

The proportion of full time Indigenous students in schools varies greatly across jurisdictions (table 4.1). Table 4A.2 provides additional information on Indigenous enrolments.

In all jurisdictions, the proportion of full time Indigenous students was higher in government schools than in non-government schools. Nationally, the proportion of full time Indigenous students was 5.4 per cent for government schools and 1.7 per cent for non-government schools in 2006 (table 4.1).

Table 4.1 Indigenous students as a proportion of all students, 2006a

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
Government schools	5.0	1.3	7.6	8.0	4.4	7.6	2.6	42.0	5.4
Non-government schools	1.2	0.3	2.6	3.2	1.0	2.7	0.9	29.3	1.7
All schools	3.7	1.0	6.1	6.5	3.2	6.3	1.9	38.9	4.2

**a** Absolute numbers of Indigenous and all full time students.

Source: ABS (2007); table 4A.2; 2008 Report, table 4.5, p. 4.10.

# Framework of performance indicators

Data for Indigenous people are reported for a subset of the performance indicators for school education in the 2008 Report. It is important to interpret these data in the context of the broader performance indicator framework outlined in figure 4.1. The performance indicator framework shows which data are comparable in the 2008 Report. For data that are not considered directly comparable, the text includes relevant caveats and supporting commentary.

Reading performance Attendance Access and equity measures for Writing performance Equity attendance, Participation participation and retention Numeracy Retention performance Science literacy Goals and performance Objectives Civics and Student learning Effectiveness citizenship performance Information and communication PERFORMANCE technology Recurrent literacy expenditure per performance student VET in schools Staff expenditure participation Inputs per output Efficiency per student unit VET in schools attainment User cost of capital per student Completion Destination Student-to-staff ratio Other areas to be identified Key to indicators Text Data for these indicators comparable, subject to Outputs Outcomes caveats to each chart or table Text Data for these indicators not complete or not directly Text These indicators yet to be developed or data not collected for this Report

Figure 4.1 **Performance indicators for all schools** 

Source: 2008 Report, figure 4.4, p. 4.18.

### **Outputs**

Outputs are the actual services delivered (while outcomes are the impact of these services on the status of an individual or group) (see 2008 Report, chapter 1, section 1.5).

### Equity and effectiveness

Access and equity measures for school education retention are reported. Data are not currently available on the participation of Indigenous students, nor for reporting against attendance measures (though the latter is anticipated to be available for the 2009 Report).

#### Attendance

'Attendance' is an indicator of the effectiveness of school education. Attendance rates for special needs groups are an indication of the equity of access to school education (box 4.1).

#### Box 4.1 Attendance

'Attendance' is an indicator of governments' objective to develop fully the talents and capacities of young people through education and learning. National and international research confirm a link between attendance and student achievement, although the factors influencing attendance and achievement are numerous and interrelated in complex ways.

Attendance is defined as the number of actual full time equivalent 'student days attended' over the period as a percentage of the total number of possible student days attended over the period.

Holding other factors equal, a high student attendance rate is desirable. Some of the interrelated factors affecting attendance and achievement include student engagement and connectedness, school climate, ethnicity, Indigenous status, socioeconomic status, sex and some demographic factors.

Data collections for student attendance at school are being developed according to the nationally agreed definition, and are anticipated to be available for reporting in the 2009 Report.

While all states and territories have agreed to collect and report attendance data from 2007, state and territory attendance data will not be fully nationally comparable for several years as each state and territory is progressively implementing the nationally agreed definition and collection methodology as new information technology systems come on-line.

Data on full time students will be collected:

- by school sector (government, Catholic and independent) within each state and territory
- for at least years 1–10 separately, by school sector and state/territory
- · for boys and girls separately by year level
- for Indigenous and non-Indigenous students separately, by year level.

Data will be collected from all schools with the exception of distance education schools, juvenile justice schools, intensive language centres, hospital schools and senior secondary colleges (years 11 and 12).

It has been agreed that student attendance should be measured over the whole of the first school semester, and that where this is not possible, the minimum acceptable period in the government sector be a school term encompassing the month of May, and in the non-government sector the last 20 days in May.

#### Retention

'Retention' is an indicator of the effectiveness of school education (box 4.2).

#### Box 4.2 Retention

'Retention' (apparent retention rate), to the final years of schooling, is an indicator of governments' objective to develop fully the talents and capacities of young people through increased participation to higher levels of schooling.

The 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 (which is either at the commencement of their secondary schooling — at year 7 or 8 — or at year 10). Data are reported for the proportion of:

- people commencing secondary school (at year 7 or 8) and continuing to year 10
- people commencing secondary school (at year 7 or 8) and continuing to year 12
- year 10 students continuing to year 12.

Data are reported for all students and Indigenous students, and for government and non-government schools. Holding other factors constant, a higher or increasing apparent retention rate suggests that students have greater exposure to schooling which is likely to result in improved educational outcomes.

Apparent retention to year 12 is a long standing measure that is presented as an indicator of the extent to which students progress to their final year of schooling.

The term 'apparent' is used because the indicator is derived from total numbers of students in each of the relevant year levels, rather than by tracking the retention of individual students.

The indicator has been consistently reported over time, but does not reflect factors such as:

- students repeating a year of education or returning to education after a period of absence
- interstate movement of students
- movement between the government school sector and the non-government school sector
- the impacts of migration and full fee paying overseas students
- varying enrolment patterns in which students choose to complete their secondary schooling in alternative pathways.

(Continued on next page)

# Box 4.2 (Continued)

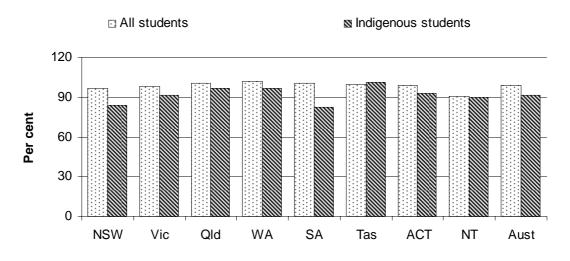
Apparent retention rates are influenced by a wide range of factors, including student perceptions of the benefits of schooling, the availability of employment and further educational alternatives, socioeconomic status and population movements. Care needs be taken in interpreting apparent retention rates in school education because rates are influenced by jurisdictional differences in:

- enrolment policies across jurisdictions, which contribute to different age/grade structures
- the extent of part time year 12 enrolment in schools.

Apparent retention rates, from the commencement of secondary school at year 7 or 8 (see 2008 Report, figure 4.1 which shows the differences across jurisdictions) to year 10, for all students in most jurisdictions were 98–100 per cent in 2006 with a national rate of 98.6 (figure 4.2). 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 all students in most jurisdictions. The national retention rate for Indigenous students was 91.4 per cent, or 7.2 percentage points lower than that for all students.

Figure 4.2 Apparent retention rate from year 7 or 8 to year 10, full time secondary students, all schools, 2006<sup>a, b, c, d</sup>



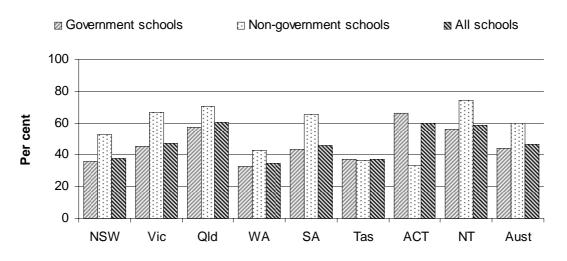
<sup>&</sup>lt;sup>a</sup> Apparent retention rates are affected by factors that vary across jurisdictions. For this reason, variations in apparent retention rates over time within jurisdictions may be more useful than comparisons across jurisdictions. <sup>b</sup> Retention rates can exceed 100 per cent for a variety of reasons, including student transfers between jurisdictions. <sup>c</sup> The exclusion of part time students from standard apparent retention rate calculations has implications for the interpretation of results for all jurisdictions, but particularly for SA, Tasmania and the NT where there are high proportions of part time students in government schools (2008 Report, table 4.4, p. 4.9). <sup>d</sup> Ungraded students are not included in the calculation of apparent retention rates. This exclusion has particular implications for the NT, where 11.1 per cent of Indigenous secondary students were ungraded (compared with an average of 4.2 per cent for the rest of Australia), in 2006, and this should be considered when interpreting the data.

Source: ABS (2007); table 4A.64; 2008 Report, figure 4.6, p. 4.23.

The apparent rate of retention from year 10 to year 12 has been derived by expressing the number of full time school students enrolled in year 12 in 2006 as a proportion of the number of full time school students enrolled in year 10 in 2004.

For government and non-government schools, apparent rates of retention from year 10 to year 12 for Indigenous students in 2006 varied across jurisdictions (figure 4.3). In interpreting this indicator, note that nationally 8.6 per cent of Indigenous students left school before year 10 (figure 4.2) — compared to 1.4 per cent of all students — so are not included in the base year for retention from year 10 to year 12. This baseline varies across jurisdictions. Further, Indigenous students as a proportion of all students was 5.4 per cent in government schools compared with 1.7 per cent in non-government schools and some jurisdictions have very low numbers of Indigenous students (table 4A.2). Nationally, Indigenous retention from year 10 to year 12 for all schools in 2006 was 46.7 per cent (figure 4.3), or 29.4 percentage points lower than the rate for all students.

Figure 4.3 Apparent retention rates from year 10 to year 12, Indigenous full time secondary students, 2006<sup>a, b, c</sup>



<sup>&</sup>lt;sup>a</sup> 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. <sup>b</sup> The exclusion of part time students from standard apparent retention rate calculations has implications for the interpretation of results for all jurisdictions, but particularly for SA, Tasmania and the NT where there are high proportions of part time students in government schools (2008 Report, table 4.4, p. 4.9).
<sup>c</sup> Ungraded students are not included in the calculation of apparent retention rates. This exclusion has particular implications for the NT, where 11.1 per cent of Indigenous secondary students are ungraded (compared with an average of 4.2 per cent for the rest of Australia), in 2006, and this should be considered when interpreting the data.

Source: ABS (2007); table 4A.61; 2008 Report, figure 4.8, p. 4.25.

Some historical data for apparent retention rates for Indigenous students is included in tables 4A.62–64.

#### **Outcomes**

Outcomes are the impact of services on the status of an individual or group (while outputs are the actual services delivered) (see 2008 Report, chapter 1, section 1.5).

### Nationally comparable learning outcomes

'Reading performance', 'writing performance', 'numeracy performance', 'science literacy performance' and 'civics and citizenship performance' have been identified as indicators of learning outcomes, and are able to be reported for Indigenous students (boxes 4.3–4.7).

To assist with making comparisons between jurisdictions, 95 per cent confidence intervals are presented in charts. For more information on interpreting learning

outcomes data please refer to pp. 4.36–37 in the 2008 Report.

Data on 2005 national Indigenous learning outcomes by geolocation are included in this Report. The Steering Committee anticipates being able to publish 2006 state/territory Indigenous learning outcomes by geolocation in the 2009 Report.

# Reading performance

'Reading performance' is an indicator of students' achievement in a core curriculum area (box 4.3).

# Box 4.3 Reading performance

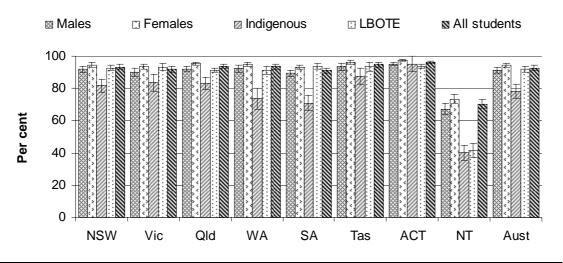
'Reading performance' is an indicator of governments' objective that young Australians should attain high standards of knowledge, skill and understanding in core curriculum areas.

Reading performance is defined as the proportion of assessed years 3, 5 and 7 students who achieved the national reading benchmark for a given year, reported by sex, Indigenous status and language backgrounds other than English (LBOTE) status. The benchmarks describe nationally agreed minimum acceptable standards for reading performance at years 3, 5 and 7. Student performance is measured (or assessed) by State-based testing programs which are equated by a national process designed to (or intended to) allow comparable reporting against the benchmarks.

Holding other factors equal, a high or increasing proportion of students achieving the reading benchmark is desirable. This indicator is affected by socioeconomic circumstances, age, length of time spent in schooling, and LBOTE and Indigenous status.

Nationally, the proportion of assessed year 3 students who achieved the reading benchmark in 2005 was 91.1–94.3 per cent. The national proportion of Indigenous students who achieved the year 3 reading benchmark in 2005 was 73.7–82.3 per cent (figure 4.4).

Figure 4.4 **Proportion of year 3 students achieving the reading benchmark,** by equity group, 2005<sup>a, b</sup>

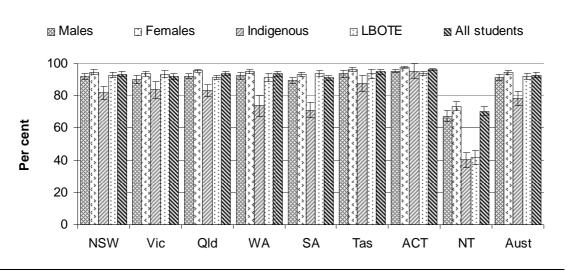


<sup>&</sup>lt;sup>a</sup> Error bars represent the 95 per cent confidence interval associated with each point estimate. <sup>b</sup> For further information and caveats see tables 4A.45 and 2008 Report, table 4A.81.

Source: MCEETYA (2007); table 4A.42; 2008 Report, figure 4.18, p. 4.39.

The proportion of assessed year 5 students who achieved the reading benchmark in 2005 was 85.7–89.3 per cent nationally. The national proportion of Indigenous students who achieved the year 5 reading benchmark in 2005 was 58.7–66.9 per cent (figure 4.5).

Figure 4.5 **Proportion of year 5 students achieving the reading benchmark,** by equity group, 2005<sup>a, b</sup>

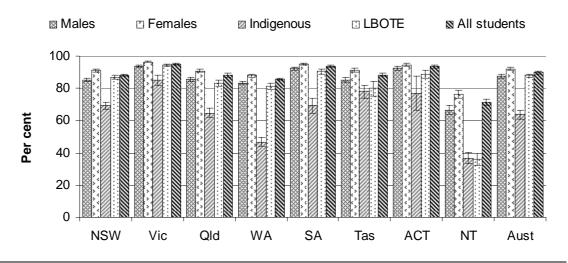


<sup>&</sup>lt;sup>a</sup> Error bars represent the 95 per cent confidence interval associated with each point estimate. <sup>b</sup> For further information and caveats see tables 4A.45 and 2008 Report, table 4A.81.

Source: MCEETYA (2007); table 4A.43; 2008 Report, figure 4.20, p. 4.40.

The proportion of assessed year 7 students who achieved the reading benchmark in 2005 was 89.0–90.6 per cent nationally. The national proportion of Indigenous students who achieved the year 7 reading benchmark in 2005 was 60.9–66.7 per cent (figure 4.6).

Figure 4.6 **Proportion of year 7 students achieving the reading benchmark,** by equity group, 2005<sup>a, b</sup>



<sup>&</sup>lt;sup>a</sup> Error bars represent the 95 per cent confidence interval associated with each point estimate. <sup>b</sup> For further information and caveats see tables 4A.45 and 2008 Report, table 4A.81.

Source: MCEETYA (2007); table 4A.44; 2008 Report, figure 4.22, p. 4.41.

National data on the proportion of assessed Indigenous students in years 3, 5 and 7 achieving the reading benchmark in 2005, by metropolitan, provincial, remote and very remote areas, are reported in table 4.2.

In PISA 2006 the proportion of 15 year old Australian students who achieved at level 3 or above in reading literacy was 63.8–67.4 per cent for all students and 28.5–38.5 per cent for Indigenous students (table 4A.56).

#### Writing performance

'Writing performance' is an indicator of students' achievement in a core curriculum area (box 4.4).

# Box 4.4 Writing performance

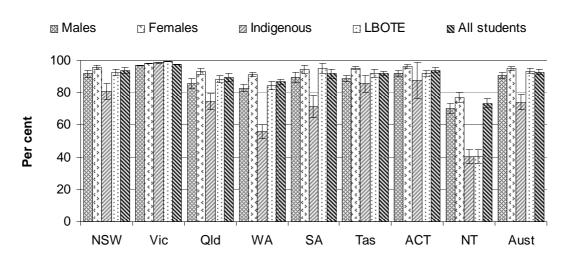
'Writing performance' is an indicator of governments' objective that young Australians should attain high standards of knowledge, skill and understanding in core curriculum areas.

Writing performance is defined as the proportion of assessed years 3, 5 and 7 students who achieved the national writing benchmark for a given year, reported by sex, Indigenous status and LBOTE status. The benchmarks describe nationally agreed minimum acceptable standards for writing performance at years 3, 5 and 7. Student performance is measured (or assessed) by State-based testing programs which are equated by a national process designed to (or intended to) allow comparable reporting against the benchmarks.

Holding other factors equal, a high or increasing proportion of students achieving the writing benchmark is desirable. This indicator is affected by socioeconomic circumstances, age, length of time spent in schooling, and LBOTE and Indigenous status.

Nationally, the proportion of assessed year 3 students who achieved the writing benchmark in 2005 was 91.2–94.4 per cent. The national proportion of Indigenous students who achieved the year 3 writing benchmark in 2005 was 69.3–78.7 per cent (figure 4.7).

Figure 4.7 **Proportion of year 3 students achieving the writing benchmark,** by equity group, 2005<sup>a, b</sup>

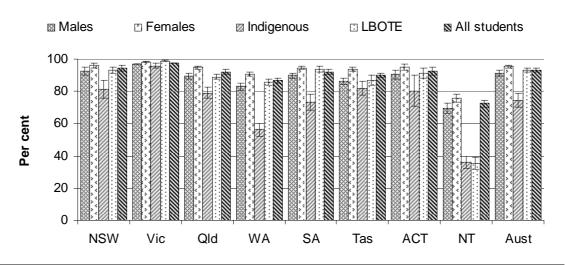


<sup>&</sup>lt;sup>a</sup> Error bars represent the 95 per cent confidence interval associated with each point estimate. <sup>b</sup> For further information and caveats see table 4A.49 and 2008 Report, table 4A.87.

Source: MCEETYA (2007); table 4A.46; 2008 Report, figure 4.26, p. 4.45.

Nationally, the proportion of assessed year 5 students who achieved the writing benchmark in 2005 was 92.0–94.6 per cent. The national proportion of Indigenous students who achieved the year 5 writing benchmark in 2005 was 70.0–78.6 per cent (figure 4.8).

Figure 4.8 **Proportion of year 5 students achieving the writing benchmark,** by equity group, 2005<sup>a, b</sup>

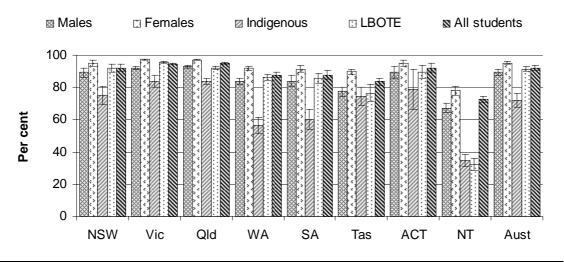


<sup>&</sup>lt;sup>a</sup> Error bars represent the 95 per cent confidence interval associated with each point estimate. <sup>b</sup> For further information and caveats see table 4A.49 and 2008 Report, table 4A.87.

Source: MCEETYA (2007); table 4A.47; 2008 Report, figure 4.28, p. 4.46.

Nationally, the proportion of assessed year 7 students who achieved the writing benchmark in 2005 was 90.7–93.7 per cent. The national proportion of Indigenous students who achieved the year 7 writing benchmark in 2005 was 68.0–76.6 per cent (figure 4.9).

Figure 4.9 **Proportion of year 7 students achieving the writing benchmark,** by equity group, 2005<sup>a, b</sup>



<sup>&</sup>lt;sup>a</sup> Error bars represent the 95 per cent confidence interval associated with each point estimate. <sup>b</sup> For further information and caveats see table 4A.49 and 2008 Report, table 4A.87.

Source: MCEETYA (2007); table 4A.48; 2008 Report, figure 4.30, p. 4.47.

National data on the proportion of assessed Indigenous students in years 3, 5 and 7 achieving the writing benchmark in 2005, by metropolitan, provincial, remote and very remote areas, are reported in table 4.2.

# Numeracy performance

'Numeracy performance' is an indicator of students' achievement in a core curriculum area (box 4.5).

# Box 4.5 **Numeracy performance**

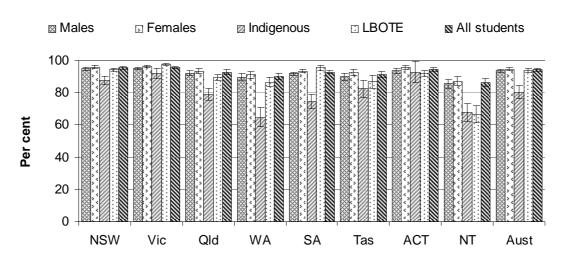
'Numeracy performance' is an indicator of governments' objective that young Australians should attain high standards of knowledge, skill and understanding in core curriculum areas.

Numeracy performance is defined as the proportion of assessed years 3, 5 and 7 students who achieved the national numeracy benchmark for a given year, reported by sex, Indigenous status and LBOTE status. The benchmarks describe nationally agreed minimum acceptable standards for numeracy performance at years 3, 5 and 7. Student performance is measured (or assessed) by State-based testing programs which are equated by a national process designed to (or intended to) allow comparable reporting against the benchmarks.

Holding other factors equal, a high or increasing proportion of students achieving the numeracy benchmark is desirable. This indicator is affected by socioeconomic circumstances, age, length of time spent in schooling, and LBOTE and Indigenous status.

Nationally, the proportion of assessed year 3 students who achieved the numeracy benchmark in 2005 was 93.0–95.2 per cent. The national proportion of Indigenous students who achieved the year 3 numeracy benchmark in 2005 was 76.6–84.2 per cent (figure 4.10).

Figure 4.10 **Proportion of year 3 students achieving the numeracy** benchmark, by equity group, 2005<sup>a, b</sup>

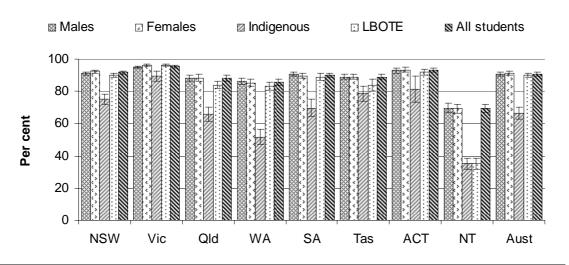


<sup>&</sup>lt;sup>a</sup> Error bars represent the 95 per cent confidence interval associated with each point estimate. <sup>b</sup> For further information and caveats see table 4A.53 and 2008 Report, table 4A.93.

Source: MCEETYA (2007); table 4A.50; 2008 Report, figure 4.33, p. 4.50.

Nationally, the proportion of assessed year 5 students who achieved the numeracy benchmark in 2005 was 89.5–92.1 per cent. The national proportion of Indigenous students who achieved the year 5 numeracy benchmark in 2005 was 62.6–70.4 per cent (figure 4.11).

Figure 4.11 **Proportion of year 5 students achieving the numeracy** benchmark, by equity group, 2005<sup>a, b</sup>

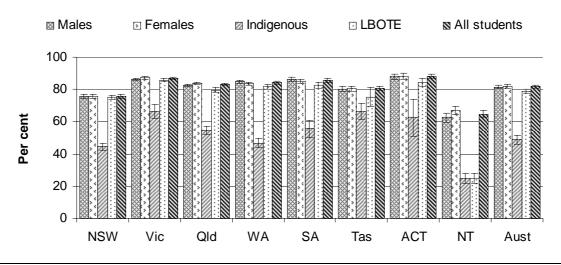


 $<sup>^{\</sup>bf a}$  Error bars represent the 95 per cent confidence interval associated with each point estimate.  $^{\bf b}$  For further information and caveats see table 4A.53 and 2008 Report, table 4A.93.

Source: MCEETYA (2007); table 4A.51; 2008 Report, figure 4.35, p. 4.51.

Nationally, the proportion of assessed year 7 students who achieved the numeracy benchmark in 2005 was 80.9–82.7 per cent. The national proportion of Indigenous students who achieved the year 7 numeracy benchmark in 2005 was 45.9–51.7 per cent (figure 4.12).

Figure 4.12 **Proportion of year 7 students achieving the numeracy** benchmark, by equity group, 2005<sup>a, b</sup>



<sup>&</sup>lt;sup>a</sup> Error bars represent the 95 per cent confidence interval associated with each point estimate. <sup>b</sup> For further information and caveats see table 4A.53 and 2008 Report, table 4A.93.

Source: MCEETYA (2007); table 4A.52; 2008 Report, figure 4.37, p. 4.53.

National data on the proportion of assessed Indigenous students in years 3, 5 and 7 achieving the numeracy benchmark in 2005, by metropolitan, provincial, remote and very remote areas, are reported in table 4.2. In reading, writing and numeracy, and across all year levels (years 3, 5 and 7), learning outcomes for students declined as the degree of remoteness increased. This decline in performance was particularly marked for Indigenous students.

Table 4.2 National learning outcomes for Indigenous and all students, by geolocation, 2005<sup>a, b</sup>

	Metropolitan		Provincial		Remote		Very remote	
	Indig	All	Indig	All	Indig	All	Indig	All
Per cent achieving benchmark	%	%	%	%	%	%	%	%
Reading								
Year 3	85.0	93.5	80.3	91.7	64.2	85.6	47.2	68.6
CI	<u>+</u> 4.3	<u>+</u> 1.4	<u>+</u> 5.1	<u>+</u> 2.0	<u>+</u> 9.8	<u>+</u> 3.9	<u>+</u> 8.4	<u>+</u> 5.8
Year 5	70.0	88.6	66.4	86.3	48.4	77.6	29.4	53.9
CI	<u>+</u> 5.5	<u>+</u> 1.7	<u>+</u> 5.0	<u>+</u> 2.0	<u>+</u> 9.1	<u>+</u> 3.8	<u>+</u> 6.9	<u>+</u> 5.5
Year 7	71.8	91.0	66.6	88.6	46.0	78.5	27.8	53.3
CI	<u>+</u> 6.8	<u>+</u> 0.8	<u>+</u> 4.1	<u>+</u> 1.1	<u>+</u> 8.7	<u>+</u> 3.5	<u>+</u> 6.4	<u>+</u> 5.2
Writing								
Year 3	81.6	93.7	77.4	92.1	55.9	82.5	38.9	62.3
CI	<u>+</u> 3.1	<u>+</u> 1.5	<u>+</u> 5.6	<u>+</u> 1.9	<u>+</u> 10.2	<u>+</u> 4.5	<u>+</u> 7.2	<u>+</u> 6.0
Year 5	82.4	94.2	78.9	92.7	57.1	82.3	36.6	60.2
CI	<u>+</u> 7.1	<u>+</u> 1.3	<u>+</u> 5.3	<u>+</u> 1.7	<u>+</u> 9.5	<u>+</u> 4.1	<u>+</u> 6.8	<u>+</u> 5.2
Year 7	81.1	93.3	75.7	90.7	54.6	82.1	36.1	59.1
CI	<u>+</u> 8.5	<u>+</u> 1.4	<u>+</u> 5.1	<u>+</u> 1.8	<u>+</u> 9.2	<u>+</u> 3.8	<u>+</u> 5.6	<u>+</u> 5.0
Numeracy								
Year 3	83.5	94.6	80.0	93.8	66.7	87.1	56.1	72.3
CI	<u>+</u> 5.4	<u>+</u> 1.0	<u>+</u> 5.4	<u>+</u> 1.3	<u>+</u> 10.2	<u>+</u> 3.7	<u>+</u> 8.1	<u>+</u> 5.6
Year 5	74.5	91.8	71.7	90.1	49.0	79.0	29.5	54.5
CI	<u>+</u> 6.3	<u>+</u> 1.2	<u>+</u> 4.8	<u>+</u> 1.5	<u>+</u> 8.5	<u>+</u> 3.8	<u>+</u> 6.3	<u>+</u> 5.2
Year 7	54.9	83.1	50.9	79.9	34.1	72.4	21.3	49.4
CI	<u>+</u> 7.5	<u>+</u> 0.9	<u>+</u> 4.4	<u>+</u> 1.2	<u>+</u> 7.8	<u>+</u> 3.7	<u>+</u> 5.5	<u>+</u> 4.7

CI = 95 per cent confidence interval Indig = Indigenous students AII = All students.

Source: MCEETYA, 2007, Supplementary 2005 table: Geolocation – Percentage of students achieving the benchmark, http://www.cms.curriculum.edu.au/anr2005/pdfs/2005\_Indigenous\_benchmarks.pdf (accessed 12 December 2007); 2008 Report, table 4.7, p. 4.54.

In PISA 2006 the proportion of 15 year old Australian students who achieved at level 3 or above in mathematical literacy was 64.7–68.3 per cent for all students and 27.2–37.6 per cent for Indigenous students (table 4A.57).

# Science literacy performance

'Science literacy performance' is an indicator of students' achievement in a core curriculum area (box 4.6).

**a** The achievement percentages reported in this table include 95 per cent confidence intervals (for example, 80.0 per cent <u>+</u> 2.7 per cent). **b** Geolocation data are based on the MCEETYA Schools Geographic Location Classification and represent school location.

# Box 4.6 **Science literacy performance**

'Science literacy performance' is an indicator of governments' objective that young Australians should attain high standards of knowledge, skill and understanding in core curriculum areas.

Science literacy performance is defined as the proportion of sampled year 6 primary students achieving at or above the proficient standard in scientific literacy, reported by sex, Indigenous status, LBOTE status and geolocation (national data only are available for subgroups).

The proficient standard for performance in scientific literacy is set at proficiency level 3.2 (of levels 1 to 4 or above) for year 6 (MCEETYA 2004). This is a reasonably challenging level of performance where to be regarded as having reached the proficient standard, students need to demonstrate more than the minimal or elementary skills expected of a student at that year level (PMRT unpublished).

This standard differs from the literacy and numeracy benchmark standards, where the focus is on identifying the minimum skill and knowledge requirements students would be expected to demonstrate to progress to the next level of schooling. Student performance is measured (or assessed) by a national sample assessment program resulting in comparable reporting against the standard.

Holding other factors equal, a high proportion of students achieving at or above the applicable proficient standard in scientific literacy is desirable.

This indicator is affected by socioeconomic circumstances, age, length of time spent in schooling, and LBOTE and Indigenous status.

The National Assessment Program — Science Literacy, Year 6 measures the scientific literacy of a sample of students and is conducted triennially. It was first conducted in 2003, and a second time in 2006. Results from the 2003 national science literacy sample assessment were discussed in detail in the 2006 Report (SCRGSP 2006, pages 4.59–62), with data reproduced in table 4A.54 of this Report and tables 4A.95–96 of the 2008 Report. Results from the 2006 national science literacy sample assessment will be included in the 2009 Report.

Scientific literacy was the major assessment in the PISA 2006 cycle. Analysis of the 2006 PISA results for scientific literacy is required prior to determining a proxy standard for this domain. Scientific literacy results from PISA 2006 will be presented in the 2009 Report.

### Civics and citizenship performance

'Civics and citizenship performance' is an indicator of students' understanding and appreciation of Australia's system of government and civic life (box 4.7).

# Box 4.7 Civics and citizenship performance

'Civics and citizenship performance' is an indicator of governments' objective that students be active and informed citizens with an understanding and appreciation of Australia's system of government and civic life.

Civics and citizenship performance is defined as the proportion of sampled year 6 and year 10 students achieving at or above the proficient standard in civic knowledge and understanding, reported by sex, Indigenous status, LBOTE status and geolocation (national data only are available for subgroups).

The proficient standard for performance in civics and citizenship is set at proficiency level 2 for year 6, and at level 3 for year 10 (of levels 1 to 5) (MCEETYA 2006b). This is a reasonably challenging level of performance where to be regarded as having reached the proficient standard, students need to demonstrate more than the minimal or elementary skills expected of a student at that year level (PMRT unpublished).

This standard differs from the literacy and numeracy benchmark standards, where the focus is on identifying the minimum skill and knowledge requirements students would be expected to demonstrate to progress to the next level of schooling. Student performance is measured (or assessed) by a national sample assessment program resulting in comparable reporting against the standard.

Holding other factors equal, a high proportion of students achieving at or above the applicable proficient standard in civics and citizenship performance is desirable.

This indicator is affected by socioeconomic circumstances, age, length of time spent in schooling, and LBOTE and Indigenous status.

The National Assessment Program — Civics and Citizenship, Years 6 and 10 measures the civics and citizenship performance of a sample of students and is conducted triennially (MCEETYA 2006b). It was conducted for the first time in 2004 and again in 2007. Results from the 2004 national civics and citizenship sample assessment were discussed in detail in the 2007 Report (SCRGSP 2007, pages 4.56–59), with data reproduced in table 4A.55 of this Report and tables 4A.98–99 of the 2008 Report. Results from the 2007 national civics and citizenship sample assessment will be included in the 2009 Report.

### Nationally comparable reporting of learning outcomes

The MCEETYA Performance Measurement and Reporting Taskforce (PMRT) has developed performance measures to assess outcomes in a range of learning areas. This work will provide additional nationally comparable data that will be incorporated into the Review's performance indicator framework.

National data for 2005 on Indigenous learning outcomes by geolocation were available for this Report. For the 2009 Report, 2006 data should be available disaggregated by state and territory.

#### Nationally consistent definitions

The collection of nationally comparable data requires the collection of nationally consistent information on student group background characteristics. National definitions have been developed and agreed for sex, Indigenous status, LBOTE students, geographic location and socioeconomic status. National definitions for all items have been applied to data collection instruments in 2005 for literacy and numeracy testing and the National Assessment Program sample assessments for science literacy, civics and citizenship, and information and communication technology literacy. The nationally agreed definitions will be applied to all new student enrolments from 2006 for all national reporting requirements on student outcomes. All jurisdictions have agreed, through the Australian Education Systems Officials Committee, that implementation of a definition of students with a disability for national reporting purposes is not feasible at the present time.

# **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 an 'A' suffix (for example, table 4A.3 is table 3 in the school education attachment). The tables included in the attachment are listed below.

Table 4A.1	Australian Government specific purpose payments for schools, 2005-06						
Table 4A.2	Indigenous full time students, 2006						
Table 4A.3	Student body mix, government schools (per cent)						
Table 4A.4	Student body mix, non-government schools (per cent)						
Table 4A.5	Student body mix, all schools (per cent)						
Table 4A.6	Proportion of year 3 students who achieved the reading benchmark, 2002 (per cent)						
Table 4A.7	Proportion of year 5 students who achieved the reading benchmark, 2002 (per cent)						
Table 4A.8	Proportion of year 7 students who achieved the reading benchmark, 2002 (per cent)						
Table 4A.9	Exemptions, absences and participation of equity groups in reading testing, 2002 (per cent)						
Table 4A.10	Proportion of year 3 students who achieved the writing benchmark, 2002 (per cent)						
Table 4A.11	Proportion of year 5 students who achieved the writing benchmark, 2002 (per cent)						
Table 4A.12	Proportion of year 7 students who achieved the writing benchmark, 2002 (per cent)						
Table 4A.13	Exemptions, absences and participation of equity groups in writing testing, 2002 (per cent)						
Table 4A.14	Proportion of year 3 students who achieved the numeracy benchmark, 2002 (per cent)						
Table 4A.15	Proportion of year 5 students who achieved the numeracy benchmark, 2002 (per cent)						
Table 4A.16	Proportion of year 7 students who achieved the numeracy benchmark, 2002 (per cent)						
Table 4A.17	Exemptions, absences and participation of equity groups in numeracy testing, 2002 (per cent)						
Table 4A.18	Proportion of year 3 students who achieved the reading benchmark, 2003 (per cent)						
Table 4A.19	Proportion of year 5 students who achieved the reading benchmark, 2003 (per cent)						
Table 4A.20	Proportion of year 7 students who achieved the reading benchmark, 2003 (per cent)						
Table 4A.21	Exemptions, absences and participation by equity group in reading testing, 2003 (per cent)						
Table 4A.22	Proportion of year 3 students who achieved the writing benchmark, 2003 (per cent)						

Table 4A.23	Proportion of year 5 students who achieved the writing benchmark, 2003 (per cent)
Table 4A.24	Proportion of year 7 students who achieved the writing benchmark, 2003 (per cent)
Table 4A.25	Exemptions, absences and participation by equity group in writing testing, 2003 (per cent)
Table 4A.26	Proportion of year 3 students who achieved the numeracy benchmark, 2003 (per cent)
Table 4A.27	Proportion of year 5 students who achieved the numeracy benchmark, 2003 (per cent)
Table 4A.28	Proportion of year 7 students who achieved the numeracy benchmark, 2003 (per cent)
Table 4A.29	Exemptions, absences and participation by equity group in numeracy testing, 2003 (per cent)
Table 4A.30	Proportion of year 3 students who achieved the reading benchmark, 2004 (per cent)
Table 4A.31	Proportion of year 5 students who achieved the reading benchmark, 2004 (per cent)
Table 4A.32	Proportion of year 7 students who achieved the reading benchmark, 2004 (per cent)
Table 4A.33	Exemptions, absences and participation by equity group in reading testing, 2004 (per cent)
Table 4A.34	Proportion of year 3 students who achieved the writing benchmark, 2004 (per cent)
Table 4A.35	Proportion of year 5 students who achieved the writing benchmark, 2004 (per cent)
Table 4A.36	Proportion of year 7 students who achieved the writing benchmark, 2004 (per cent)
Table 4A.37	Exemptions, absences and participation by equity group in writing testing, 2004 (per cent)
Table 4A.38	Proportion of year 3 students who achieved the numeracy benchmark, 2004 (per cent)
Table 4A.39	Proportion of year 5 students who achieved the numeracy benchmark, 2004 (per cent)
Table 4A.40	Proportion of year 7 students who achieved the numeracy benchmark, 2004 (per cent)
Table 4A.41	Exemptions, absences and participation by equity group in numeracy testing, 2004 (per cent)
Table 4A.42	Proportion of year 3 students who achieved the reading benchmark, 2005 (per cent)
Table 4A.43	Proportion of year 5 students who achieved the reading benchmark, 2005 (per cent)
Table 4A.44	Proportion of year 7 students who achieved the reading benchmark, 2005 (per cent)
Table 4A.45	Exemptions, absences and participation by equity group in reading testing, 2005 (per cent)
Table 4A.46	Proportion of year 3 students who achieved the writing benchmark, 2005 (per cent)

Table 4A.47 Proportion of year 5 students who achieved the writing benchmark, 2005 (per cent) Table 4A.48 Proportion of year 7 students who achieved the writing benchmark, 2005 (per cent) Table 4A.49 Exemptions, absences and participation by equity group in writing testing, 2005 (per cent) Table 4A.50 Proportion of year 3 students who achieved the numeracy benchmark, 2005 (per cent) Table 4A.51 Proportion of year 5 students who achieved the numeracy benchmark, 2005 (per cent) Proportion of year 7 students who achieved the numeracy benchmark, 2005 Table 4A.52 (per cent) Table 4A.53 Exemptions, absences and participation by equity group in numeracy testing, 2005 (per cent) Table 4A.54 Proportion of year 6 students achieving at or above the proficient standard in science literacy, by equity group, 2003 (per cent) Table 4A.55 Proportion of years 6 and 10 students achieving at or above the proficient standard in civics and citizenship performance, by equity group, Australia, 2004 (per cent) Proportion of students achieving level 3 or above in the overall reading literacy Table 4A.56 scale, by equity group (per cent) Table 4A.57 Proportion of students achieving level 3 or above in the overall mathematical literacy scale, by equity group (per cent) Table 4A.58 Proportion of 15 year old secondary students achieving at or above the OECD mean for scientific literacy, by equity group (per cent) **Table 4A.59** Proportion of 15 year old secondary students achieving at or above the OECD mean for problem solving, by equity group, 2003 (per cent) Table 4A.60 Apparent retention rates of full time secondary students to years 10-12, 2006 (per cent) Table 4A.61 Apparent retention rates of secondary students from years 10-12, 2006 (per ent) Table 4A.62 Apparent retention rates of full time secondary students, government schools (per cent) Table 4A.63 Apparent retention rates of full time secondary students, non-government schools (per cent) Table 4A.64 Apparent retention rates of full time secondary students, all schools (per cent)

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