3 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 and 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 2006* (2006 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, 2004
- apparent retention rates of full time secondary students from year 7 or 8 to year 10, 2004
- apparent retention rates of full time secondary students from year 10 to year 12, 2004
- proportion of students achieving the years 3, 5 and 7 reading benchmark, 2001, 2002 and 2003

- proportion of students achieving the years 3, 5 and 7 writing benchmark, 2001, 2002 and 2003
- proportion of students achieving the years 3, 5 and 7 numeracy benchmark, 2001, 2002 and 2003
- proportion of year 6 students achieving at or above the proficient standard in science literacy, by equity group, 2003
- proportion of 15 year old secondary students achieving at or above the OECD mean for reading, mathematical, scientific literacy and problem solving
- proportion of 15 year old students achieving level 3 or above in the overall reading literacy scale, 2003.

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 as being from an Aboriginal and Torres Strait Islander background."

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

Information on Australian Government spending on Indigenous specific programs, can be found in table 3A.1.

Supporting tables

Supporting tables for data within the school education chapter of this compendium are contained in attachment 3A of the compendium. These tables are identified in references throughout this chapter by an 'A' suffix (for example, table 3A.3 is table 3 in the school education attachment). As the data are directly sourced from the 2006 Report, the compendium also notes where the original table, figure or text in the 2006 Report can be found. For example, where the compendium refers to '2006 Report, p. 3.15' this is page 15 of chapter 3 of the 2006 Report, and '2006 Report, table 3A.2' is attachment table 2 of attachment 3 of the 2006 Report.

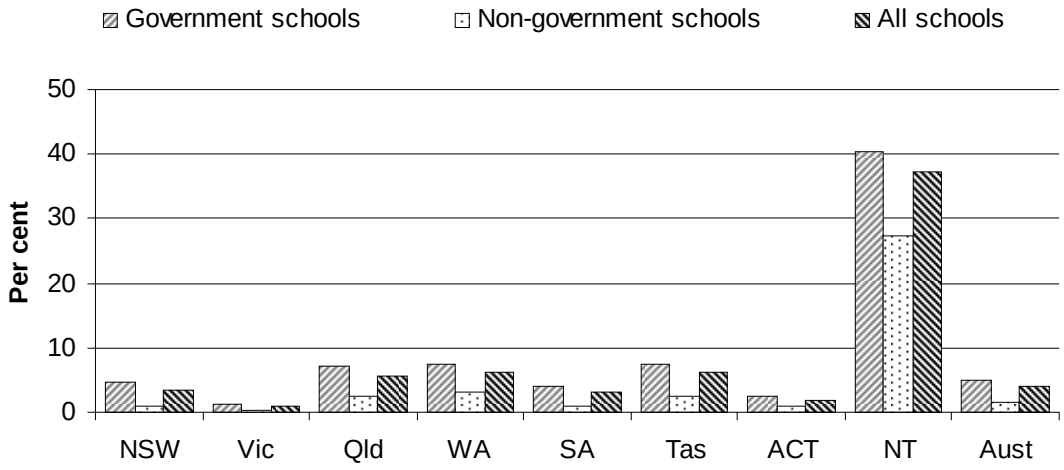
Indigenous full-time students, 2004

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 2004, 87.4 per cent of Indigenous students attended government schools (table 3A.2).

The proportion of full time Indigenous students in schools varies greatly across jurisdictions (figure 3.1). Table 3A.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 5.1 per cent for government schools and 1.5 per cent for non-government schools (figure 3.1).

Figure 3.1 **Indigenous students as a proportion of all students, 2004[a]**



	NSW	*Vic*	*Qld*	*WA*	*SA*	*Tas*	*ACT*	*NT*	*Aust*
Government schools	4.7	1.2	7.0	7.4	4.1	7.4	2.5	40.2	5.1
Non-government schools	1.0	0.2	2.5	3.2	0.9	2.5	0.9	27.3	1.5
All schools	**3.5**	**0.9**	**5.7**	**6.1**	**3.0**	**6.1**	**1.8**	**37.2**	**3.9**

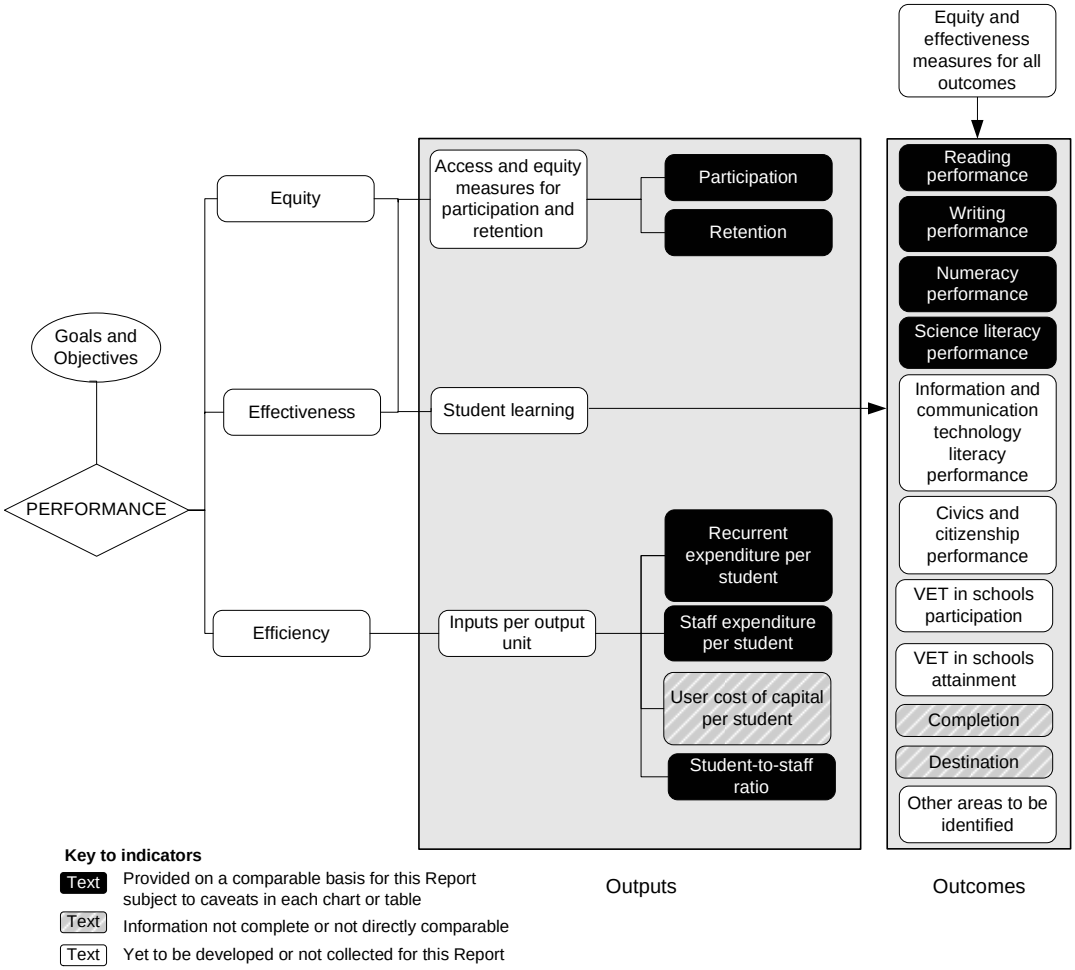
a Full time students.

Source: ABS (2005); table 3A.2; 2006 Report, p. 3.10, figure 3.2.

Framework of performance indicators

Data for Indigenous people are reported for a subset of the performance indicators for school education in the 2006 Report. It is important to interpret these data in the context of the broader performance indicator framework outlined in figure 3.2. The performance indicator framework shows which data are comparable in the 2006 Report. For data that are not considered directly comparable, the text includes relevant caveats and supporting commentary.

Figure 3.2 **Performance indicators for all schools**



Source: 2006 Report, p. 3.18, figure 3.6.

Retention

‘Retention’ is an output indicator of equity-effectiveness (box 3.1).

Box 3.1 **Retention**

'Retention' (apparent retention rate), to the final years of schooling, is an output-access 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 over their lives, which is likely to result in improved educational outcomes. 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 students individually. 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.

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.

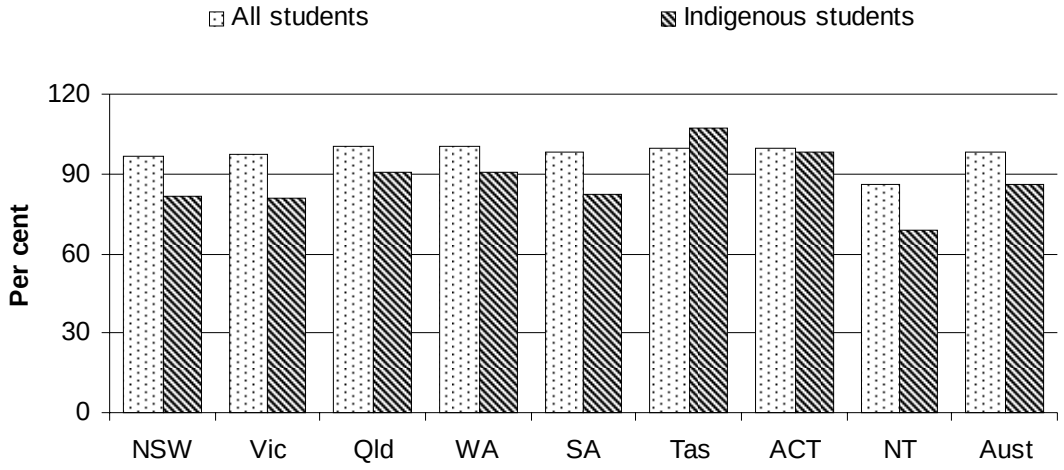
The indicator has been consistently reported over time, but does not reflect factors such as:

- 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 TAFE institutes.

Apparent rates of retention from the commencement of secondary school at year 7 or 8 to year 10 provide one measure of the equity of outcomes for Indigenous students. Apparent retention rates for all students in most jurisdictions were 97–100 per cent in 2004 with a national proportion of 98.1 (figure 3.3). 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.

Rates for Indigenous students were considerably lower than those for all students in most jurisdictions. The national retention rate for Indigenous students was 85.8 per cent, or 12.3 percentage points lower than that for all students.

Figure 3.3 **Apparent retention rate from year 7 or 8 to year 10, full time secondary students, all schools, by Indigenous status 2004[a, b, c, d]**



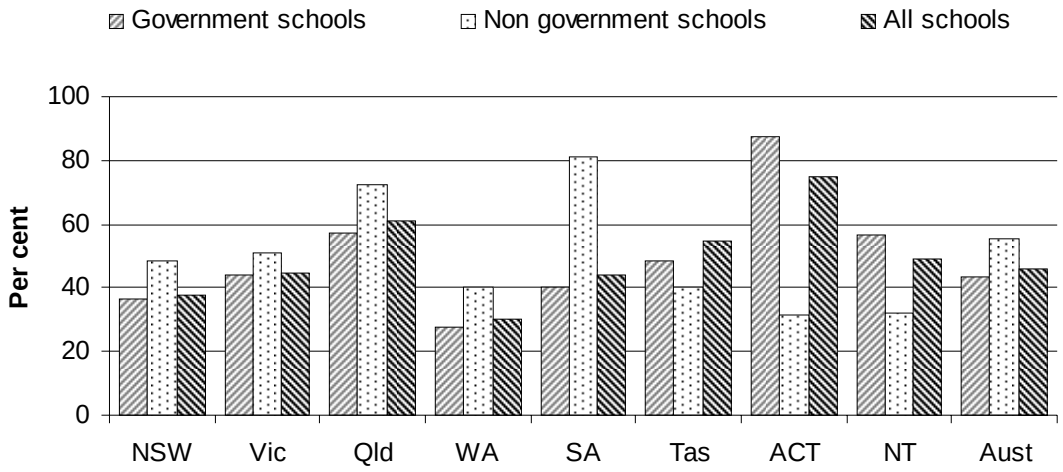
a Apparent retention rates are affected by factors that vary across jurisdictions. For this reason, variations in apparent retention rates over time within jurisdictions may be more useful than comparisons across jurisdictions. **b** Retention rates can exceed 100 per cent for a variety of reasons, including student transfers between jurisdictions and between government and non-government schools after the base year. **c** 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 (2006 Report, table 3.4). **d** Ungraded students are not included in the calculation of apparent retention rates. This exclusion has particular implications for the NT, where 34 per cent of Indigenous secondary students are ungraded (compared with an average of 6.9 per cent for the rest of Australia). As a result, Indigenous apparent retention rates may misrepresent the retention of students in secondary schooling in the NT.

Source: ABS (2005); table 3A.48; 2006 Report, p. 3.22, figure 3.8.

For all schools, apparent rates of retention from year 10 to year 12 for Indigenous students in 2004 varied across jurisdictions (figure 3.4). In interpreting this indicator, note that about 10–20 per cent of Indigenous students leave school before year 10 (figure 3.3) so are not included in the base year for retention from year 10 to year 12. Nationally, Indigenous retention from year 10 to year 12 for all schools in

2004 was 45.7 per cent (figure 3.4), or 31.4 percentage points lower than the rate for all students.

Figure 3.4 **Apparent retention rates from year 10 to year 12, Indigenous full time secondary students, 2004[a, b, c, d]**



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. **b** 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 (table 3.4, 2006 Report). **c** Some student number data for Tasmania have been revised by the Tasmanian Government, resulting in changes to some apparent retention rates, and these revisions may not be reflected in ABS, or other, publications. **d** Ungraded students are not included in the calculation of apparent retention rates. This exclusion has particular implications for the NT, where 34 per cent of Indigenous secondary students are ungraded (compared with an average of 6.9 per cent for the rest of Australia). As a result, Indigenous apparent retention rates may misrepresent the retention of students in secondary schooling in the NT.

Source: ABS (2005); Tasmanian Government (unpublished); table 3A.49; 2006 Report, p. 3.24, figure 3.10.

Nationally comparable learning outcomes

The Steering Committee has identified 'literacy' and 'numeracy' as outcome indicators of school education (boxes 3.2–3.4).

Reading performance

'Reading performance' is an outcome indicator (box 3.2).

Box 3.2 **Reading performance**

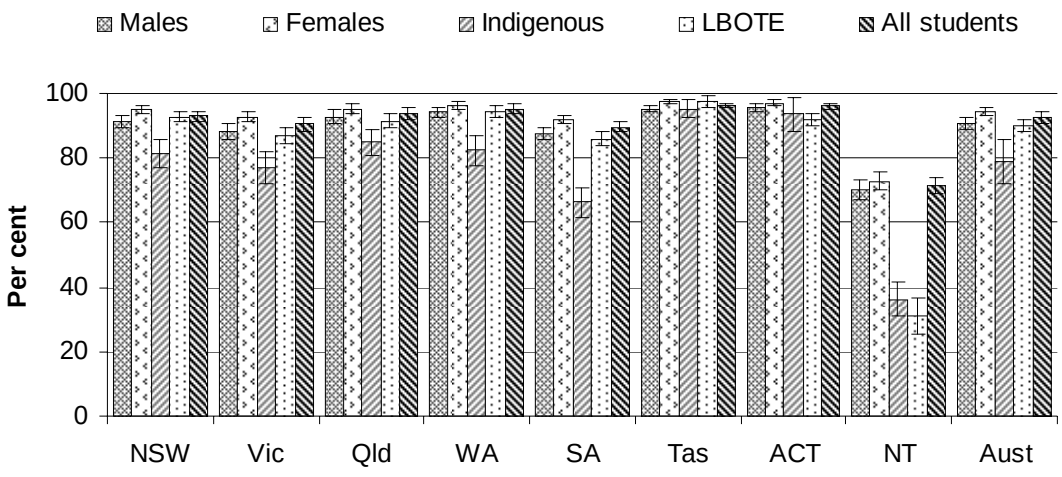
'Reading performance' is an outcome indicator of governments' objective that young Australians should attain high standards of knowledge, skill and understanding in core curriculum areas.

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 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 2003 was 90.7–94.1 per cent. The national proportion of Indigenous students who achieved the year 3 reading benchmark in 2003 was 71.9–85.7 per cent (figure 3.5).

Figure 3.5 **Proportion of year 3 students achieving the reading benchmark, by equity group, 2003[a, b]**

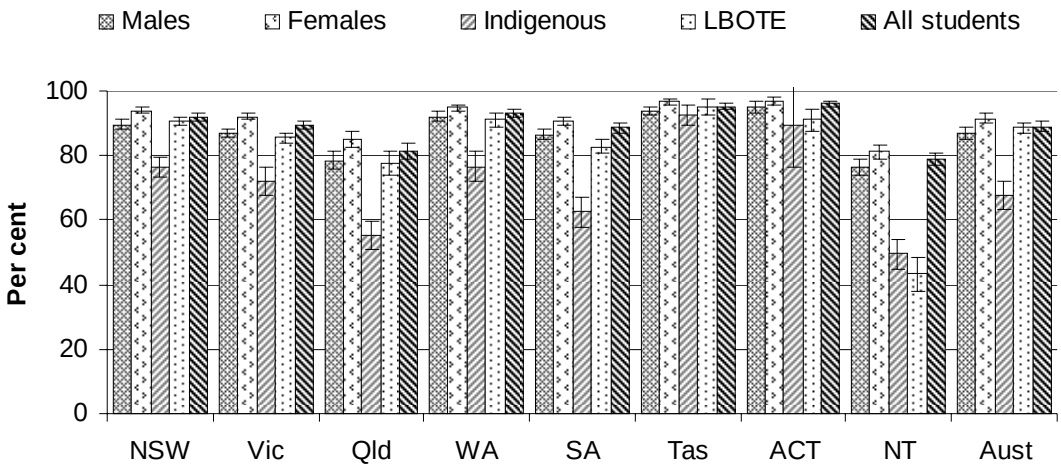


a Error bars represent the 95 per cent confidence interval associated with each point estimate. **b** For further information and caveats see table 3A.33.

Source: MCEETYA (2005a); table 3A.30; 2006 Report, p. 3.40, figure 3.20.

The proportion of assessed year 5 students who achieved the reading benchmark in 2003 was 87.5–90.5 per cent nationally. The national proportion of Indigenous students who achieved the year 5 reading benchmark in 2003 was 63.6–71.8 per cent (figure 3.6).

Figure 3.6 **Proportion of year 5 students achieving the reading benchmark, by equity group, 2003[a, b]**

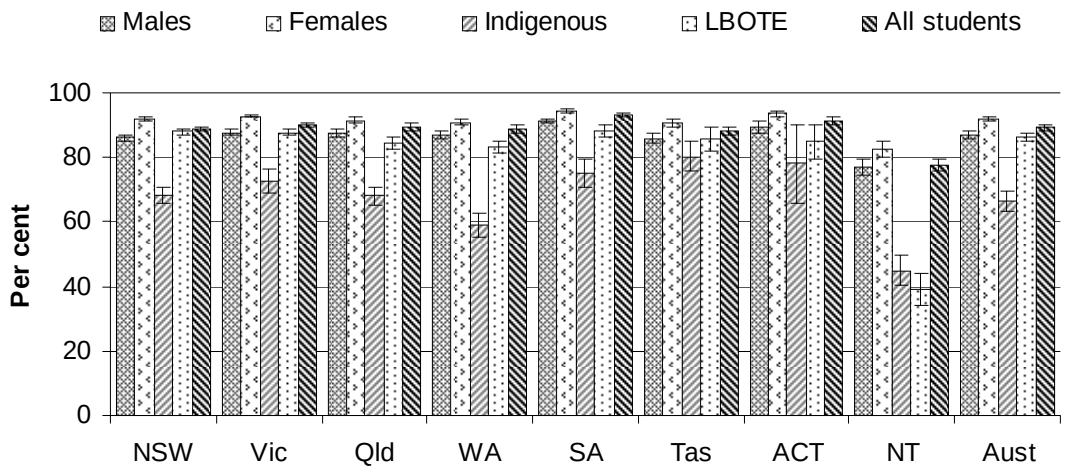


a Error bars represent the 95 per cent confidence interval associated with each point estimate. **b** For further information and caveats see tables 3A.9, 3A.21 and 3A.33.

Source: MCEETYA (2005a); table 3A.31; 2006 Report, p. 3.42, figure 3.22.

The proportion of assessed year 7 students who achieved the reading benchmark in 2003 was 88.5–90.3 per cent nationally. The national proportion of Indigenous students who achieved the year 7 reading benchmark in 2003 was 63.3–69.5 per cent (figure 3.7).

Figure 3.7 **Proportion of year 7 students achieving the reading benchmark, by equity group, 2003[a, b]**



a Error bars represent the 95 per cent confidence interval associated with each point estimate. **b** For further information and caveats see table 3A.33.

Source: MCEETYA (2005a); table 3A.32; 2006 Report, p. 3.43, figure 3.24.

Reading literacy was a domain tested in the PISA 2003 survey. Nationally, in 2003 the proportion of 15 year old Indigenous students who achieved at the OECD mean or above for reading literacy was 26.1–40.3 per cent (table 3A.43).

Results for reading literacy are also available as the percentage of students achieving proficiency level 3 or above in the overall reading literacy scale for both 2000 and 2003 (table 3A.44). Reading literacy is the only domain where data by proficiency level are currently available across two cycles.

The PISA 2003 results indicate that nationally, the proportion of 15 year old Indigenous students who achieved at level 3 or above in the overall reading literacy scale was 30.5–45.7 per cent (table 3A.44).

Writing performance

'Writing performance' is an outcome indicator (box 3.3).

Box 3.3 **Writing performance**

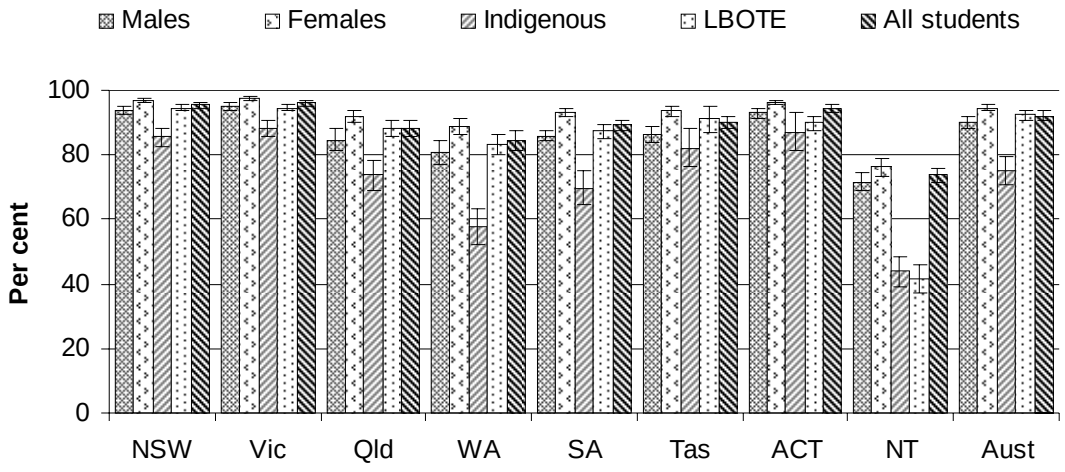
'Writing performance' is an outcome indicator of governments' objective that young Australians should attain high standards of knowledge, skill and understanding in core curriculum areas.

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 2003 was 90.7–93.7 per cent. The national proportion of Indigenous students who achieved the year 3 writing benchmark in 2003 was 71.1–79.3 per cent (figure 3.8).

Figure 3.8 **Proportion of year 3 students achieving the writing benchmark, by equity group, 2003[a, b]**

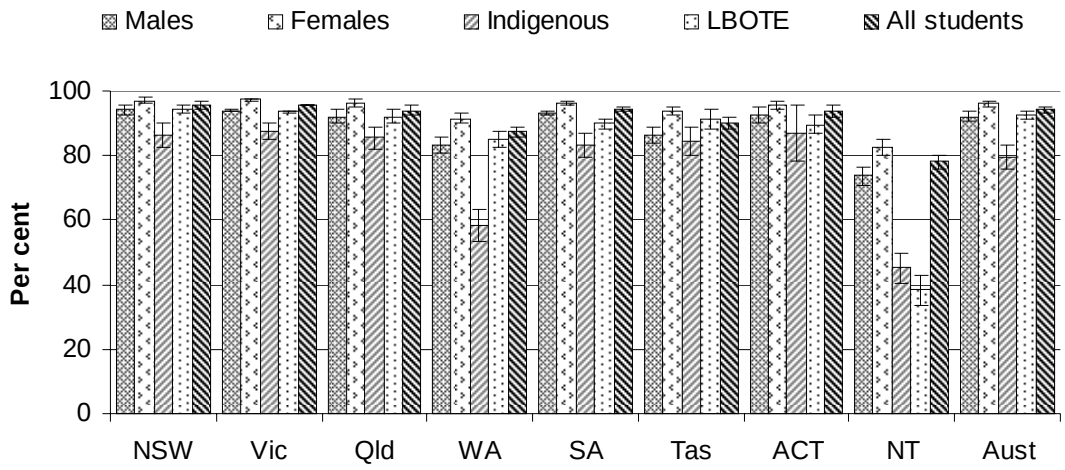


a Error bars represent the 95 per cent confidence interval associated with each point estimate. **b** For further information and caveats see table 3A.37.

Source: MCEETYA (2005a); table 3A.34; 2006 Report, p. 3.48, figure 3.29.

Nationally, the proportion of assessed year 5 students who achieved the writing benchmark in 2003 was 93.0–95.2 per cent. The national proportion of Indigenous students who achieved the year 5 writing benchmark in 2003 was 75.8–83.4 per cent (figure 3.9).

Figure 3.9 **Proportion of year 5 students achieving the writing benchmark, by equity group, 2003[a, b]**

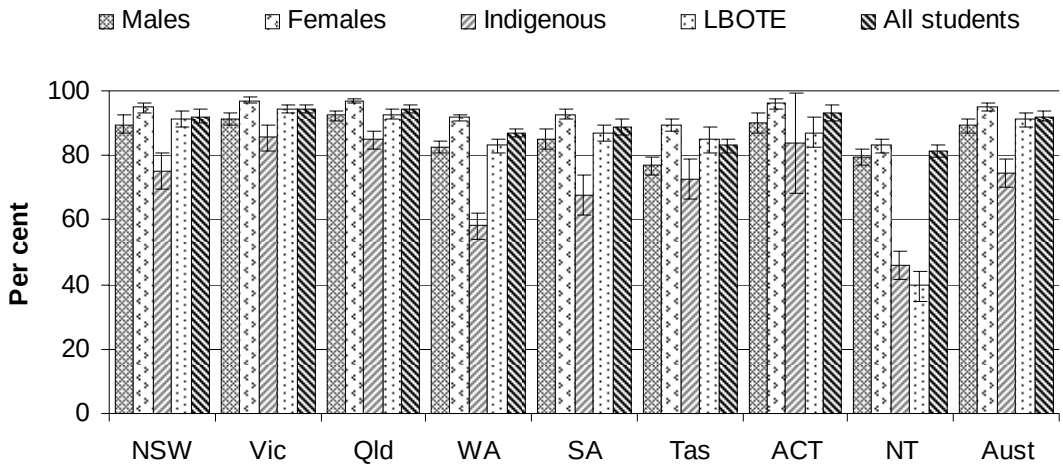


a Error bars represent the 95 per cent confidence interval associated with each point estimate. **b** For further information and caveats see table 3A.37.

Source: MCEETYA (2005a); table 3A.35; 2006 Report, p. 3.50, figure 3.31.

Nationally, the proportion of assessed year 7 students who achieved the writing benchmark in 2003 was 90.4–93.8 per cent. The national proportion of Indigenous students who achieved the year 7 writing benchmark in 2003 was 70.0–78.8 per cent (figure 3.10).

Figure 3.10 **Proportion of year 7 students achieving the writing benchmark, by equity group, 2003[a, b]**



a Error bars represent the 95 per cent confidence interval associated with each point estimate. **b** For further information and caveats see table 3A.37.

Source: MCEETYA (2005a); table 3A.36; 2006 Report, p. 3.51, figure 3.33.

Numeracy performance

'Numeracy performance' is an outcome indicator (box 3.4).

Box 3.4 **Numeracy performance**

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

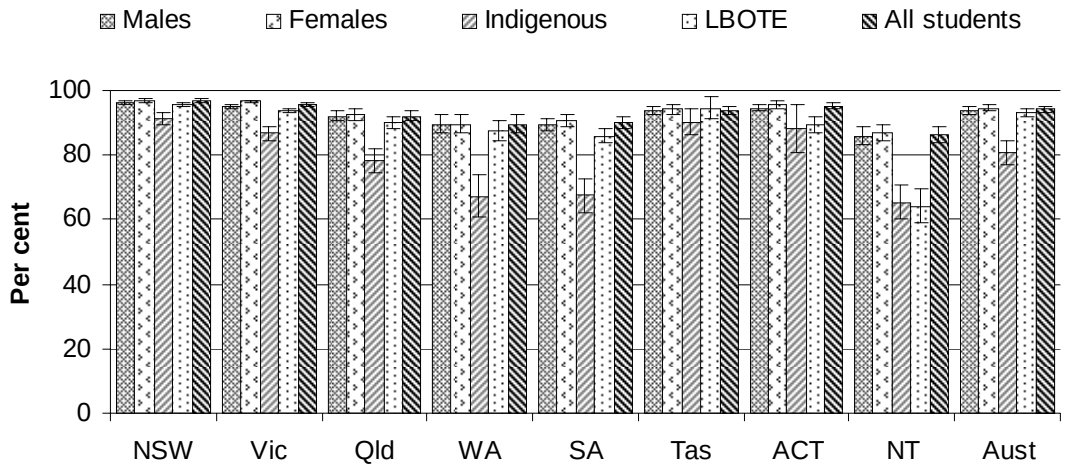
Numeracy performance is defined as the proportion of assessed years 3, 5 and 7 students who achieved the national numeracy benchmark for a given year, reported by sex, Indigenous status and LBOTE status. The benchmarks describe nationally agreed minimum acceptable standards for numeracy performance at 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 2003 was 93.1–95.3 per cent. The national proportion of Indigenous

students who achieved the year 3 numeracy benchmark in 2003 was 76.8–84.2 per cent (figure 3.11).

Figure 3.11 **Proportion of year 3 students achieving the numeracy benchmark, by equity group, 2003[a, b]**

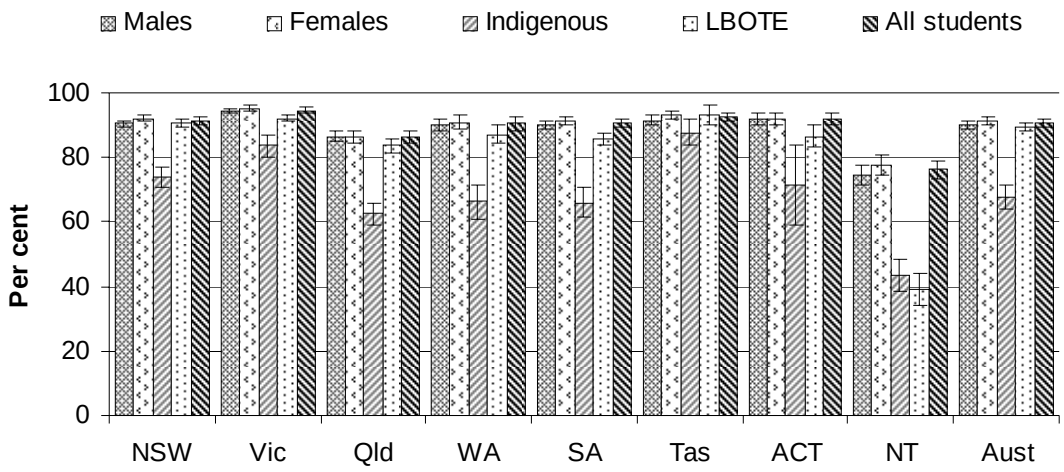


a Error bars represent the 95 per cent confidence interval associated with each point estimate. **b** For further information and caveats see table 3A.41.

Source: MCEETYA (2005a); table 3A.38; 2006 Report, p. 3.54, figure 3.36.

Nationally, the proportion of assessed year 5 students who achieved the numeracy benchmark in 2003 was 89.6–92.0 per cent. The national proportion of Indigenous students who achieved the year 5 numeracy benchmark in 2003 was 63.7–71.5 per cent (figure 3.12).

Figure 3.12 **Proportion of year 5 students achieving the numeracy benchmark, by equity group, 2003[a, b]**

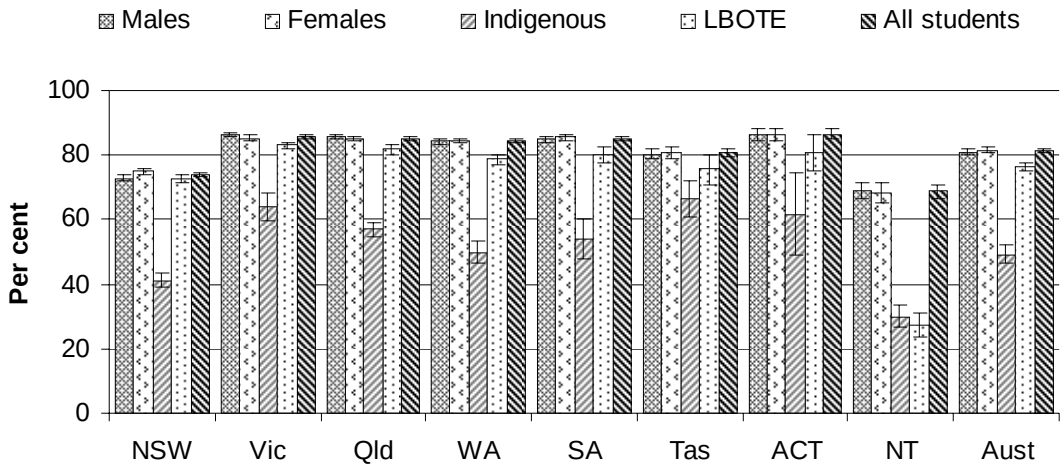


a Error bars represent the 95 per cent confidence interval associated with each point estimate. **b** For further information and caveats see table 3A.41.

Source: MCEETYA (2005a); table 3A.39; 2006 Report, p. 3.56, figure 3.38.

Nationally, the proportion of assessed year 7 students who achieved the numeracy benchmark in 2003 was 80.5–82.1 per cent. The national proportion of Indigenous students who achieved the year 7 numeracy benchmark in 2003 was 46.4–52.2 per cent (figure 3.13).

Figure 3.13 **Proportion of year 7 students achieving the numeracy benchmark, by equity group, 2003[a, b]**



a Error bars represent the 95 per cent confidence interval associated with each point estimate. **b** For further information and caveats see table 3A.41.

Source: MCEETYA (2005a); table 3A.40; 2006 Report, p. 3.57, figure 3.40.

Mathematical literacy was the major domain focused on in testing for the PISA 2003 survey. Nationally, in 2003 the proportion of 15 year old students who achieved at the OECD mean or above for mathematical literacy was 58.6–62.2 per cent for all students and 18.2–29.6 per cent for Indigenous students (table 3A.45).

Science literacy performance

'Science literacy performance' is an outcome indicator (box 3.5).

Box 3.5 **Science literacy performance**

'Science literacy performance' is an outcome 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 year 6 primary students achieving at or above the proficient standard in scientific literacy. The proficient standard for year 6 scientific literacy is set at proficiency level 3.2 (of levels 1 to 4 or above). This is a level of performance based on what 'well advanced' or 'expert' students should know and be able to do by the end of year 6. It 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 (MCEETYA 2005b). 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 proficient standard in scientific literacy is desirable. This indicator is affected by socioeconomic circumstances, age, length of time spent in schooling, and Indigenous status.

The National year 6 Science Assessment measures scientific literacy and was conducted for the first time in 2003, and will be conducted triennially. Approximately 6 per cent of the total year 6 student population was sampled randomly and assessed. The sample was drawn from all states and territories and both government and non-government schools participated. In 2003, 14 172 students from 650 government and non-government schools across states and territories participated in the national science literacy assessment (MCEETYA 2005b).

Year 6 scientific literacy 2003 results are reported as the proportion of Australian students from the sampled students (year 6 enrolled in participating schools) who achieved at the proficient standard or above. Nationally, the proportion of

participating year 6 students who achieved at the proficient standard or above in scientific literacy was 57.3–59.1 per cent. The national proportion of Indigenous students who achieved at the proficient standard or above in scientific literacy was 25.3–34.3 (table 3A.42).

Scientific literacy was a domain tested in the PISA 2003 survey. Nationally, in 2003 the proportion of 15 year old secondary students who achieved at the OECD mean or above for scientific literacy was 59.4–63.0 per cent for all students and 19.9–31.3 per cent for Indigenous students (table 3A.46). Data for PISA 2000 are also shown in table 3A.46.

Supporting tables

Supporting 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 3A.3 is table 3 in the school education attachment). The tables included in the attachment are listed below.

Table 3A.1	Australian Government specific purpose payments for schools, 2003-04
Table 3A.2	Indigenous full time students, 2004
Table 3A.3	Student body mix, government schools (per cent)
Table 3A.4	Student body mix, non-government schools (per cent)
Table 3A.5	Student body mix, all schools (per cent)
Table 3A.6	Proportion of year 3 students who achieved the reading benchmark, 2001 (per cent)
Table 3A.7	Proportion of year 5 students who achieved the reading benchmark, 2001 (per cent)
Table 3A.8	Proportion of year 7 students who achieved the reading benchmark, 2001 (per cent)
Table 3A.9	Exemptions, absences and participation of equity groups in reading testing, 2001 (per cent)
Table 3A.10	Proportion of year 3 students who achieved the writing benchmark, 2001 (per cent)
Table 3A.11	Proportion of year 5 students who achieved the writing benchmark, 2001 (per cent)
Table 3A.12	Proportion of year 7 students who achieved the writing benchmark, 2001 (per cent)
Table 3A.13	Exemptions, absences and participation of equity groups in writing testing, 2001 (per cent)
Table 3A.14	Proportion of year 3 students who achieved the numeracy benchmark, 2001 (per cent)
Table 3A.15	Proportion of year 5 students who achieved the numeracy benchmark, 2001 (per cent)
Table 3A.16	Proportion of year 7 students who achieved the numeracy benchmark, 2001 (per cent)
Table 3A.17	Exemptions, absences and participation of equity groups in numeracy testing, 2001 (per cent)
Table 3A.18	Proportion of year 3 students who achieved the reading benchmark, 2002 (per cent)
Table 3A.19	Proportion of year 5 students who achieved the reading benchmark, 2002 (per cent)
Table 3A.20	Proportion of year 7 students who achieved the reading benchmark, 2002 (per cent)

References

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MCEETYA (Ministerial Council on Education, Employment, Training and Youth Affairs) 2005a *National Report on Schooling in Australia 2003: Preliminary Paper National Benchmark Results Reading, Writing and Numeracy Years 3, 5 and 7*, 2003, Melbourne.

—— 2005b, *National Year 6 Science Assessment Report*, Melbourne.

SCRGSP (Steering Committee for the Review of Government Service Provision) 2005, *Overcoming Indigenous Disadvantage: Key Indicators 2005*, Productivity Commission, Canberra.