

2000

# National Report on Schooling in Australia

Preliminary Paper

National Benchmark Results  
Reading and Numeracy  
Years 3 and 5



# 2000 year 3 and year 5 national benchmark results

# Reading

## Introduction

In March 1997, all State, Territory and Commonwealth Education Ministers agreed on a national goal which stated

“that every child leaving primary school should be numerate and be able to read, write and spell at an appropriate level.”

To provide focus to this goal, Ministers also agreed to a sub-goal that:

“every child commencing school from 1998 will achieve a minimum acceptable literacy and numeracy standard within four years”

To help support the achievement of these goals Ministers agreed to the implementation of a National Literacy and Numeracy Plan, the essential features of which are:

- Early assessment and intervention for students at risk of not achieving minimum required standards.
- Development of national benchmarks for each of years 3, 5 and 7.
- Assessment of student progress against these benchmarks.
- National reporting of benchmark data.
- Professional development for teachers.

Since its formulation, education authorities in all States and Territories, assisted by the Commonwealth, have been engaged in implementing these elements of the National Plan.

## Reading benchmark results

### Student achievement against benchmarks

This section of the report describes the results of testing conducted during 2000 in which the achievement of students in each of years 3 and 5 was measured against the national benchmarks for reading. These results build on those published for 1999 and will eventually be accompanied by results for writing and spelling. Benchmarks for these further aspects of literacy are available, but the assessment processes for their measurement are still under development.

### The reading benchmarks

The benchmarks that underpin the reporting of student achievement describe nationally agreed minimum acceptable standards for literacy at particular year levels. That is, they represent the minimum acceptable standard of literacy without which a student will have difficulty making sufficient progress at school.

The benchmarks have been developed with reference to current levels of achievement as demonstrated in national surveys and State assessment programs. There has been extensive consultation with stakeholders and with experts in the areas of literacy and educational measurement. As well, the benchmarks have been trialed in classrooms in all States and Territories.

Because the benchmarks represent minimum acceptable standards, education ministers meeting as the Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA), have determined that the national goal should be that all students will achieve at least the benchmark level of performance. Regular publication of benchmark results will enable them and others to monitor progress towards the attainment of that goal.

The standards described by the benchmarks for years 3, 5 and 7 represent increasingly demanding levels of proficiency against which the progress of students through school can be measured and followed. The benchmarks form three important markers along a continuum of increasing competence. The year 3 benchmark with the least demanding level of literacy is located in the early part of the achievement continuum, while the years 5 and 7 benchmarks, requiring more demanding understandings and skills, are at progressively higher levels. Students' locations on the achievement continuum can be estimated through the assessment procedures undertaken by the States and Territories.

Students who have achieved the year 3 reading benchmark can read and understand a range of texts that are suitable for this year level. These texts appear in, for example, picture books, illustrated chapter books, junior reference material and the electronic media. Typically, texts that these students are able to read use straightforward, everyday language and have predictable text and sentence structures. Words that may be unfamiliar are explained in the writing or through the illustrations.

When students read and understand texts like these, they can:

- identify the main purpose of the text (eg say that the purpose of a set of short simple instructions is to help you do something)
- identify a sequence of events in stories
- find directly stated information in the written text and/or illustrations
- make links between ideas stated directly and close together in different parts of a text (eg predict the end of a story; work out a character's feelings from an illustration; make links between a diagram and its label)
- work out the meaning of some unfamiliar phrases and words.

At the benchmark standard, year 5 students read and understand a range of texts that are suitable for this year level. These texts appear in, for example, chapter books, junior novels, junior reference material, magazines, newspapers and the electronic media.

Texts that these students are able to read may have:

- varied sentence beginnings (eg *After ploughing, the soil is raked and flattened*)
- a significant amount of new vocabulary, as long as this is explained by text and illustrations
- some long groups of words (eg *the largest planet so far discovered; a cute, well-trained dog; the edible seed of a type of pod-bearing plant*)
- some use of figurative language (eg *His legs were turning to rubber; The wire swung and bounced like a live thing*).

When students read and understand texts like these, they can:

- identify the main purpose of a text (eg choose a title for a text to highlight purpose)
- identify the main idea in a text
- identify the order of ideas and information in factual texts
- find directly stated information in the written text and/or illustrations
- make links between ideas in a text (eg link information from a heading, written text and diagram; work out a missing step in a set of instructions)

- work out the meaning of unfamiliar phrases and words (eg work out the meaning of some figurative language: *Her face was as white as a sheet*).

## The assessment process

All jurisdictions have in place State-based literacy monitoring programs. These programs are well established, understood and valued within the State educational communities and all States are keen to retain them. As well, they allow States and Territories to report (both publicly and to parents) on the range of performance demonstrated, including benchmark performance. As a result, ministers agreed that assessment against the national benchmarks should occur using the existing State-based programs.

A nationally agreed procedure was developed to equate State and Territory tests and to ensure that reporting of student achievement data against the literacy benchmarks was comparable. The committee that developed the procedure included several of Australia's leading educational measurement experts.

At each of years 3 and 5, equating the State and Territory tests is a three-stage process involving the construction of a common achievement scale for reading, determining the location of the benchmark on the common achievement scale, and calculating equivalent benchmark locations on State and Territory achievement scales.

The common achievement scales are constructed from results of testing students from a representative sample of schools in each State and Territory using the assessments of other States and Territories.

To establish the location of the benchmark at each year level, expert judges are required to envisage a student who is just able to demonstrate the skills described in the benchmark and to estimate the probability of this minimally competent student succeeding on each test item. The judges used in the benchmarking were from all States and Territories and included a range of literacy specialists and classroom teachers who were qualified to make decisions about the likelihood of students succeeding on the test items.

In the final phase of equating, an equivalent benchmark location is calculated for each jurisdiction's reading test. All three aspects of the process contribute to enhancing the comparability of the separate State tests and to ensuring that

any differences in State results are likely to be due to factors other than the tests.

## The results

Results of assessment against reading benchmarks were first published in the 1999 *National Report on Schooling in Australia*. Since that time a new method of calculating the national benchmark figures has been introduced to provide the most accurate picture of change in student achievement over time. The new methodology has been endorsed by the panel of measurement experts established to advise the benchmark committee and is the same as that used for a number of international assessment programs in which Australia is participating.

The change has affected only the 1999 Year 3 Reading and, for that reason, the revised 1999 Reading results are published in this edition of the *National Report*. The change has impacted similarly on all States and Territories and has been introduced to minimise fluctuations in results that are unrelated to changes in the achievements of students. The new methodology takes better account of the uncertainties associated with measuring student performance.

The data in Tables 1, 2 and 3 represent students who have achieved the benchmark as a percentage of the students participating in the State and Territory testing. The results reported here are for assessed students. This term has been used for students who sat the test and students who were formally exempted. Exempted students are reported as below benchmark and thus are included in the benchmark calculation. Students not included in the benchmark calculation are those who were absent or withdrawn by parents/caregivers from the testing and students attending a school not participating in the testing.

## Making comparisons

Tables 1, 2 and 3 highlight apparent differences between States and Territories in relation to the proportion of students achieving the benchmark. However caution needs to be applied when considering these differences. While the assessment and equating processes used have ensured the various tests are directly comparable, large differences remain in the characteristics of the population being assessed in each

State. For example, while ministers are keen that the monitoring against national benchmarks will soon include all students from both government and non-government schools, not all non-government schools participated in 2000 and this may have contributed to differences between States.

Other relevant issues include major differences between jurisdictions in school starting arrangements that result in variations in the time students would have spent in schooling prior to the testing. As well, there are large differences between States and Territories in relation to a number of factors that are known to influence measured literacy achievement.

For example, it is known that achievement in reading is strongly correlated with the socioeconomic circumstances of students being assessed. As well, students who do not usually speak English, or who have just begun to speak English, would be expected to be at some disadvantage during assessment. Not only are there variations in the proportion of such students between States and Territories, but there are also variations in the policies regarding inclusion in the testing programs.

Tables 4, 5 and 6, as well as the Explanatory Notes, attempt to describe and quantify some of the differences between the States and Territories.

The use of confidence intervals with the benchmark results provides a way of making inferences about the achievement of students that reflects the uncertainty associated with the measurement of student ability. It is anticipated that statistical tests of significance, that further assist readers make comparisons about students' achievements, will be incorporated into future reports. Until these technical improvements are implemented, readers are urged to be cautious when comparing results.

As shown in Tables 2 and 3 the majority of students from each of years 3 and 5 achieved the reading benchmark in 2000. As the benchmark represents the minimum level of competence deemed necessary to allow meaningful participation in the school learning program, this result is not surprising. However, it remains of concern that approximately 7 per cent of year 3 students and 13 per cent of year 5 students were unable to achieve the benchmark and their successful progress through schooling is, therefore, seriously compromised.

**Table 1 Percentage of year 3 students achieving the reading benchmark, by State and Territory, 1999 (revised)**

State/Territory 1 Average age <sup>(a)</sup> 2 Yrs of Schooling <sup>(b)</sup>	Percentage of students achieving the benchmark	Percentage of male students achieving the benchmark	Percentage of female students achieving the benchmark	Percentage of Indigenous <sup>(c)</sup> students achieving the benchmark	Percentage of LBOTE <sup>(c)</sup> students achieving the benchmark
<b>New South Wales</b>	93.7	92.6	94.8	85.1	93.9
1. 8yrs 9mths	± 1.8	± 2.1	± 1.5	± 4.3	± 1.9
2. 3yrs 7mths					
<b>Victoria</b>	89.1	86.2	92.0	73.8	85.1
1. 8yrs 11mths	± 2.4	± 2.9	± 2.0	± 6.9	± 3.2
2. 3yrs 7mths					
<b>Queensland<sup>(d)(e)</sup></b>	85.8	83.9	89.4	74.3	84.7
1. 8yrs 3mths	± 4.0	± 4.9	± 3.5	± 9.3	± 7.7
2. 2yrs 8mths					
<b>South Australia</b>	86.6	85.5	87.8	72.7	n.a.
1. 8yrs 6mths	± 2.8	± 3.2	± 2.4	± 5.5	
2. 3yrs 3mths					
<b>Western Australia</b>	88.8	86.8	90.8	60.5	86.4
1. 8yrs 2mths	± 2.1	± 2.5	± 1.8	± 5.0	± 2.4
2. 2yrs 7mths					
<b>Tasmania</b>	88.9	86.0	91.9	80.9	74.1
1. 9yrs 0mths	± 2.5	± 3.1	± 2.2	± 5.4	± 11.1
2. 3yrs 7mths					
<b>Northern Territory</b>	77.8	75.9	79.7	41.3	27.1
1. 8yrs 8mths	± 2.3	± 3.1	± 2.7	± 4.1	± 4.3
2. 3yrs 3mths					
<b>Australian Capital Territory</b>	95.3	94.2	96.3	90.5	86.1
1. 8yrs 9mths	± 1.0	± 1.5	± 1.3	± 11.4	± 4.8
2. 3yrs 6mths					
<b>Australia<sup>(f)</sup></b>	89.7	87.9	92.0	73.4	89.3
	± 2.5	± 3.0	± 2.2	± 6.2	± 2.8

n.a. not available

**Note:** The achievement percentages reported in this table include 95% confidence intervals, for example, 80.0% ± 2.7%.

(a) The typical average age of students at the time of testing, expressed in years and months.

(b) The typical average time students had spent in schooling at the time of testing, expressed in years and months.

(c) The methods used to identify Indigenous students and students with a language background other than English (LBOTE) varied between jurisdictions as outlined in the Explanatory Notes.

(d) Data from Queensland are based on a representative sample of approximately 10% of year 3 students from government and non-government schools.

(e) Data from Queensland for the percentage of male, female, Indigenous and LBOTE students do not include students who were formally exempted from the testing.

(f) Student sub-group data for Australia do not include Queensland students who were formally exempted from the testing.

**Table 2 Percentage of year 3 students achieving the reading benchmark, by State and Territory, 2000**

State/Territory	Percentage of students achieving the benchmark	Percentage of male students achieving the benchmark	Percentage of female students achieving the benchmark	Percentage of Indigenous <sup>(c)</sup> students achieving the benchmark	Percentage of LBOTE <sup>(c)</sup> students achieving the benchmark
<b>New South Wales</b>	93.1	91.5	94.8	83.1	92.8
1. 8yrs 9mths	± 1.9	± 2.3	± 1.5	± 4.9	± 2.1
2. 3yrs 7mths					
<b>Victoria</b>	93.0	91.1	95.1	78.4	90.9
1. 8yrs 11mths	± 1.9	± 2.3	± 1.5	± 6.1	± 2.5
2. 3yrs 7mths					
<b>Queensland<sup>(d)</sup></b>	92.6	90.8	94.4	81.0	92.2
1. 8yrs 4mths	± 3.5	± 4.4	± 3.2	± 10.1	± 6.0
2. 2yrs 8mths					
<b>South Australia</b>	86.8	84.4	89.3	59.2	82.4
1. 8yrs 6mths	± 2.6	± 3.0	± 1.7	± 4.2	± 3.1
2. 3yrs 3mths					
<b>Western Australia</b>	95.8	95.2	96.5	86.6	95.1
1. 8yrs 2mths	± 1.1	± 1.3	± 0.9	± 3.3	± 1.3
2. 2yrs 7mths					
<b>Tasmania</b>	91.2	88.7	93.6	82.5	89.8
1. 9yrs 1mth	± 2.3	± 2.9	± 2.0	± 5.5	± 5.1
2. 3yrs 8mths					
<b>Northern Territory</b>	65.3	62.2	68.6	25.6	39.7
1. 8yrs 8mths	± 3.2	± 3.8	± 3.7	± 4.0	± 3.9
2. 3yrs 3mths					
<b>Australian Capital Territory</b>	95.1	94.0	96.2	87.5	82.5
1. 8yrs 8mths	± 1.2	± 2.0	± 1.5	± 9.6	± 10.6
2. 3yrs 6mths					
<b>Australia</b>	92.5	90.9	94.3	76.9	90.8
	± 2.2	± 2.7	± 1.8	± 6.5	± 2.6

**Note:** The achievement percentages reported in this table include 95% confidence intervals, for example, 80.0% ± 2.7%.

(a) The typical average age of students at the time of testing, expressed in years and months.

(b) The typical average time students had spent in schooling at the time of testing, expressed in years and months.

(c) The methods used to identify Indigenous students and students with a language background other than English (LBOTE) varied between jurisdictions as outlined in the Explanatory Notes.

(d) Data from Queensland are based on a representative sample of approximately 10% of students from government and non-government schools.

**Table 3 Percentage of year 5 students achieving the reading benchmark, by State and Territory, 2000**

State/Territory	Percentage of students achieving the benchmark	Percentage of male students achieving the benchmark	Percentage of female students achieving the benchmark	Percentage of Indigenous <sup>(c)</sup> students achieving the benchmark	Percentage of LBOTE <sup>(c)</sup> students achieving the benchmark
<b>New South Wales</b>	89.1	87.1	91.2	70.9	86.7
1. 10yrs 9mths	± 1.7	± 1.9	± 1.5	± 3.9	± 2.2
2. 5yrs 7mths					
<b>Victoria</b>	92.1	90.6	93.7	75.1	89.0
1. 10yrs 11mths	± 1.9	± 2.2	± 1.7	± 7.5	± 2.8
2. 5yrs 7mths					
<b>Queensland</b>	78.5	75.1	81.7	54.4	74.4
1. 10yrs 4mths	± 3.6	± 3.9	± 3.5	± 6.1	± 4.9
2. 4yrs 8mths					
<b>South Australia</b>	84.4	82.2	86.7	55.9	81.9
1. 10yrs 6mths	± 1.4	± 1.5	± 1.4	± 3.1	± 1.5
2. 5yrs 3mths					
<b>Western Australia</b>	93.6	92.4	94.9	70.9	89.6
1. 10yrs 2mths	± 1.0	± 1.2	± 0.8	± 3.4	± 1.4
2. 4yrs 7mths					
<b>Tasmania</b>	81.4	78.7	84.3	66.1	78.6
1. 11yrs 0mths	± 2.9	± 3.3	± 2.8	± 7.8	± 9.2
2. 5yrs 8mths					
<b>Northern Territory</b>	71.2	69.3	73.1	34.2	46.0
1. 10yrs 8mths	± 2.8	± 3.4	± 3.3	± 4.1	± 4.1
2. 5yrs 3mths					
<b>Australian Capital Territory</b>	94.0	93.0	98.7	83.7	81.4
1. 10yrs 8mths	± 1.3	± 2.3	± 2.5	± 12.1	± 15.2
2. 5yrs 6mths					
<b>Australia</b>	87.4	85.2	89.6	62.0	84.9
	± 2.1	± 2.3	± 1.9	± 4.8	± 2.6

**Note:** The achievement percentages reported in this table include 95% confidence intervals, for example, 80.0% ± 2.7%.

(a) The typical average age of students at the time of testing, expressed in years and months.

(b) The typical average time students had spent in schooling at the time of testing, expressed in years and months.

(c) The methods used to identify Indigenous students and students with a language background other than English (LBOTE) varied between jurisdictions as outlined in the Explanatory Notes.

**Table 4 Years of schooling and level of participation, by State and Territory, 2000**

State or Territory	Average age at time of testing <sup>(a)</sup>		Years at school <sup>(b)</sup>		Percentage of students assessed <sup>(c)</sup>	
	Year 3	Year 5	Year 3	Year 5	Year 3	Year 5
New South Wales	8yrs,9mths	10yrs,9mths	3yrs,7mths	5yrs,7mths	93.2	93.5
Victoria	8yrs,11mths	10yrs,11mths	3yrs,7mths	5yrs,7mths	89.5	89.7
Queensland	8yrs,4mths	10yrs,4mths	2yrs,8mths	4yrs,8mths	8.7 <sup>(d)</sup>	97.1
South Australia	8yrs,6mths	10yrs,6mths	3yrs,3mths	5yrs,3mths	79.2	93.7
Western Australia	8yrs,2mths	10yrs,2mths	2yrs,7mths	4yrs,7mths	89.4	91.2
Tasmania	9yrs,1mth	11yrs,0mths	3yrs,8mths	5yrs,8mths	96.2	96.0
Northern Territory	8yrs,8mths	10yrs,8mths	3yrs,3mths	5yrs,3mths	80.0	85.1
Australian Capital Territory	8yrs,8mths	10yrs,8mths	3yrs,6mths	5yrs,6mths	68.3	67.2

(a) The typical average age of students at the time of testing, expressed in years and months.

(b) The typical average time students had spent in schooling at the time of the testing, expressed in years and months.

(c) The percentage of students from all schools who were assessed includes exempted students but not students absent or withdrawn by parents/caregivers from the testing and not students attending schools which did not participate in the testing at all. The figure is calculated as a percentage of the total number of full-time government and non-government students based on data from the *National Schools Statistics Collection*.

(d) Queensland assessed a representative sample of students at the year 3 level – if population testing had been undertaken it is estimated 95% of the year 3 students would have been assessed.

**Table 5 Participation by school sector, 2000**

State or Territory	Percentage of assessed government school students <sup>(a)</sup>		Percentage of assessed non-government school students <sup>(b)</sup>		Proportion of assessed students (per cent)			
	Year 3	Year 5	Year 3	Year 5	Government school students <sup>(c)</sup>		Non-government school students <sup>(d)</sup>	
	Year 3	Year 5	Year 3	Year 5	Year 3	Year 5	Year 3	Year 5
New South Wales	94.4	94.8	90.1	90.4	73.9	72.6	26.1	27.4
Victoria	88.4	88.5	92.4	92.6	70.2	69.2	29.8	30.8
Queensland	8.7 <sup>(e)</sup>	97.0	8.7 <sup>(e)</sup>	97.3	76.6	75.7	23.4	24.3
South Australia	94.1	93.8	39.7	93.4	86.3	73.0	13.7	27.0
Western Australia	89.0	91.1	90.7	91.7	75.4	74.7	24.6	25.3
Tasmania	96.3	96.3	95.8	95.0	78.8	76.7	21.2	23.3
Northern Territory	79.4	85.5	82.5	83.5	80.3	79.8	19.7	20.2
Australian Capital Territory	93.2	93.6	17.2	18.3	91.8	90.5	8.2	9.5

(a) The percentage of assessed students from government schools includes exempted students, but not students absent or withdrawn by parents/caregivers from the testing and not students attending schools that did not participate in testing at all. The figure is calculated as a percentage of the total number of full-time government students based on data from the *National Schools Statistics Collection*.

(b) The percentage of assessed students from non-government schools includes exempted students, but not students absent or withdrawn by parents/caregivers and not students attending schools which did not participate in testing at all. The figure is calculated as a percentage of the total number of full-time non-government students based on data from the *National Schools Statistics Collection*.

(c) The percentage of assessed government school students compared with all assessed students.

(d) The percentage of assessed non-government school students compared with all assessed students.

(e) Queensland assessed a representative sample of students at the year 3 level – if population testing had been undertaken it is estimated that approximately 95% of the year 3 students from both government and non-government schools would have been assessed.

**Table 6 Exemptions, absences and participation of equity groups, by State and Territory**

State or Territory	Percentage of students exempted from testing <sup>(a)</sup>		Percentage of students absent or withdrawn <sup>(b)</sup>		Percentage of assessed students			
					Indigenous students <sup>(c)</sup>		LBOTE students <sup>(d)</sup>	
	Year 3	Year 5	Year 3	Year 5	Year 3	Year 5	Year 3	Year 5
New South Wales	1.2	1.1	5.1	4.8	3.7	3.6	23.5	22.6
Victoria	n.a.	n.a.	10.5	10.3	0.7	0.7	13.5	13.4
Queensland	1.3	1.3	3.3	2.4	8.5	5.9	6.7	7.8
South Australia	3.3	2.5	5.4	6.3	3.6	3.0	13.8	15.0
Western Australia	1.1	1.0	8.6	6.8	4.3	5.1	13.5	13.9
Tasmania	1.0	0.6	3.8	4.0	5.5	5.4	2.9	2.8
Northern Territory	3.1	2.2	20.0	14.9	22.1	24.1	26.8	29.5
Australian Capital Territory	3.1	3.3	6.3	5.9	1.9	1.5	6.3	5.4

n.a. not available

(a) The percentage of students who were exempted from the testing program in the relevant State or Territory. Exempted students are reported as not achieving the benchmark. The percentage of exempted students is calculated as a percentage of the total number of full-time government students based on *National Schools Statistics Collection* data, together with the non-government students who participated in the relevant State and Territory testing programs.

(b) The percentage of students who were absent or were withdrawn by parents/caregivers from the testing program in the relevant State or Territory. These students are not included in the benchmark calculations. The percentage of absent/withdrawn students is calculated as a percentage of the total number of full-time government students based on *National Schools Statistics Collection* data, together with non-government students who participated in the relevant State and Territory testing programs.

(c) The percentage of assessed Indigenous students. The percentage of Indigenous students includes exempted students and is calculated as a percentage of the total number of full-time government students based on data from the *National Schools Statistics Collection* and non-government students who participated in the relevant testing programs. The specific ways in which Indigenous student information was collected and/or categorised were characterised by a degree of variation across the jurisdictions.

(d) The percentage of assessed students with a language background other than English (LBOTE). The percentage of LBOTE students includes exempted students and is calculated as a percentage of the total number of full-time government students based on data from the *National Schools Statistics Collection* and non-government students who participated in the relevant State or Territory testing programs. The specific ways in which LBOTE information was collected and/or categorised were characterised by a degree of variation across the jurisdictions.

### Changes over time

The year 2000 is only the second year for which reading benchmark data have been available, so there is insufficient evidence to indicate any clear trend. The overall results are summarised in Table 7. We will need to wait until the data for subsequent years are available before being in a position to make judgements about improvements in literacy standards.

### Gender differences

As indicated in Table 8, there were no measurable differences between the achievement of year 3 reading benchmarks by boys and girls in both 1999 and 2000. However, there was some evidence of potential differences between the achievement of the year 5 reading benchmarks between boys and girls in both 1999 and 2000.

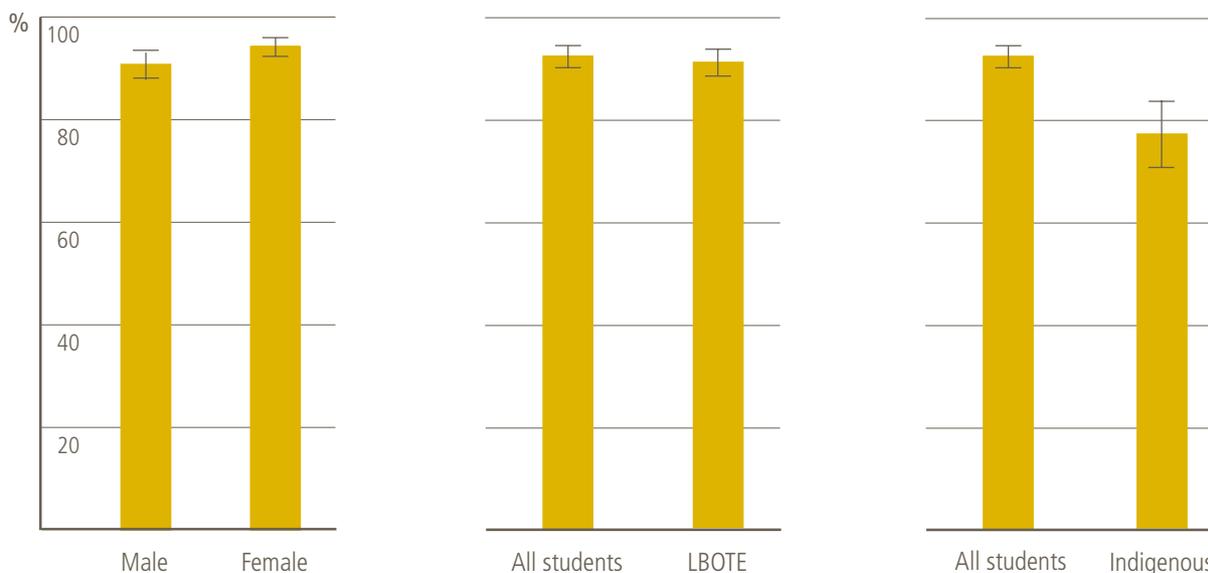
**Table 7 Percentage of students achieving the reading benchmark, Australia, years 3 and 5, 1999, 2000**

Year	Year 3	Year 5
1999	89.7±2.5	85.6±2.0
2000	92.5±2.2	87.4±2.1

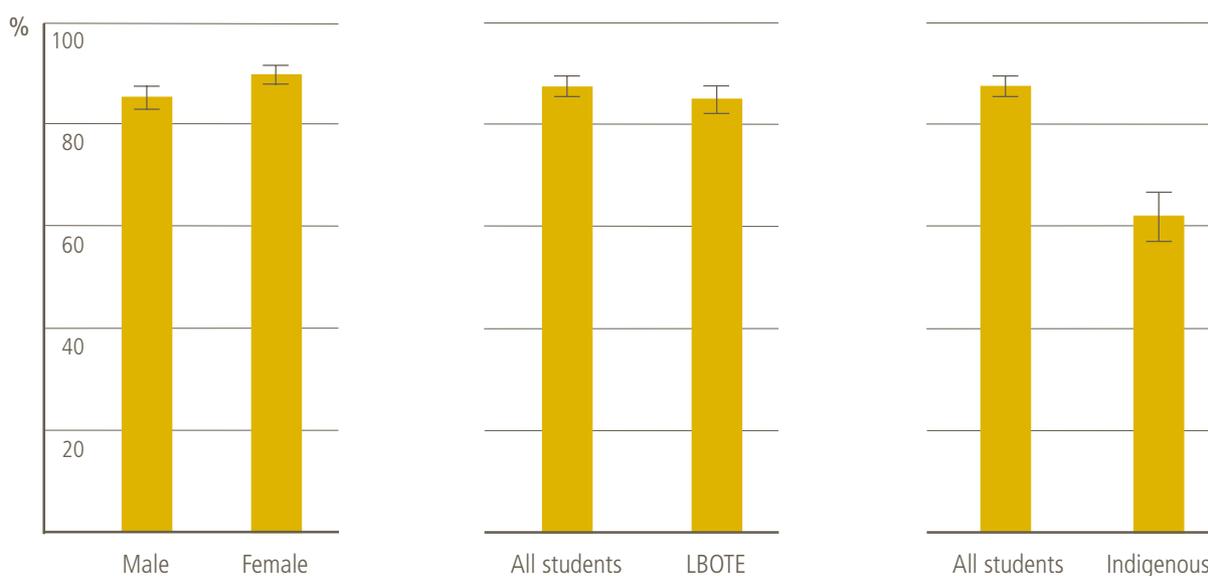
**Table 8 Percentage of students achieving the reading benchmark, by gender, years 3 and 5, Australia, 1999, 2000.**

Cohort	Male students	Female students
Year 3, 1999	87.9±3.0	92.0±2.2
Year 3, 2000	90.9±2.7	94.3±1.8
Year 5, 1999	83.4±2.3	88.4±1.8
Year 5, 2000	85.2±2.3	89.6±1.9

**Figure 1 Percentage of year 3 students achieving the reading benchmark, by sub-group, Australia, 2000**



**Figure 2 Percentage of year 5 students achieving the reading benchmark, by sub-group, Australia, 2000**



**Table 9 Percentage of Indigenous students achieving the reading benchmark, Australia, years 3 and 5, 1999 and 2000**

Cohort	Indigenous students	All students
Year 3, 1999	73.4±6.2	89.7±2.5
Year 3, 2000	76.9±6.5	92.5±2.2
Year 5, 1999	58.7±4.2	85.6±2.0
Year 5, 2000	62.0±4.8	87.4±2.1

### Indigenous students

The relative performance of Indigenous students is summarised in Table 9 and in Figures 1 and 2 where the gap between the performance of Indigenous students and all students is clearly observable. While there are no substantive changes in relative performance between 1999 and 2000, there is little in these results to indicate improvement for Indigenous students.

# Numeracy

## Numeracy benchmark results

### Student achievement against benchmarks

This section of the report describes the results of testing conducted during 2000 in which the achievement of students in each of years 3 and 5 was measured against the national benchmarks for numeracy. National benchmarks are also available for numeracy in year 7 and assessment programs for this year group are under development.

#### The numeracy benchmarks

The benchmarks that underpin the reporting of student achievement describe nationally agreed minimum acceptable standards for numeracy at particular year levels. That is, they represent the minimum acceptable standard of numeracy without which a student will have difficulty making sufficient progress at school.

The benchmarks have been developed with reference to current levels of achievement as demonstrated in national surveys and State assessment programs. There has been extensive consultation with stakeholders and with experts in the areas of numeracy and educational measurement. As well, the benchmarks have been trialed in classrooms in all States and Territories.

Because the benchmarks represent minimum acceptable standards, education ministers meeting as the Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA), have determined that the national goal should be that all students will achieve at least the benchmark level of performance. Regular publication of benchmark results will enable them and others to monitor progress towards the attainment of that goal.

The standards described by the benchmarks for years 3, 5 and 7 represent increasingly demanding levels of proficiency against which the progress of students through school can be measured and followed. The benchmarks form three important markers along a continuum of increasing competence. The year 3 benchmark with the least demanding level of numeracy is located in the early part of the achievement continuum, while the years 5 and 7 benchmarks, requiring more demanding understandings and skills, are at progressively higher levels. Students' locations on the achievement continuum can be estimated through the assessment procedures undertaken by the States and Territories.

The following are typical examples of the skills required of students who meet the year 3 benchmark:

- Read and write whole numbers up to 999.
- Demonstrate their knowledge of place value (eg know that 86 can also be written as 8 tens and 6 ones).
- Remember, or work out, basic addition facts to  $10+10$ , the matching subtraction facts (eg  $9+4=13$ ,  $13-9=4$ ) and extensions of those facts (eg  $23-9=14$ ).
- Add and subtract whole numbers to 99, by using mental and written methods or by using a calculator.
- Solve simple problems set in familiar situations (eg work out how many of the 26 children are left in the classroom if 12 go to the library).
- Add up coins (up to \$5.00) and know whether they have enough to buy a particular item.
- Tell the time in hours and minutes on digital clocks and hours and half-hours on analogue clocks.
- Collect and organise information, display it in simple bar graphs or picture graphs, and comment on the information.
- Recognise and name familiar 2D and 3D shapes and objects (ie triangle, square, rectangle, circle, cube and pyramid).
- Use language that shows they understand position and direction when using a simple grid, map or plan (eg "The tree is between the house and the fence").

The following are typical examples of the skills required of students who meet the year 5 benchmark:

- Read, write and use whole numbers up to 9999 and place them in order of size.
- Show understanding of simple fractions (eg work out one-third of the children in the group to form one of three equal teams).
- Show understanding and use decimals in familiar contexts (eg say that an amount of \$3.65 is less than another amount of \$3.70; explain that a 1.25L bottle holds more than a 1L bottle, but less than a 2L bottle).
- Work out the answers to addition and subtraction problems that involve three-digit whole numbers or money, and decide the most appropriate way to do that (ie mentally, by written methods or using a calculator).
- Perform simple multiplications and divisions with whole numbers such as  $34 \times 6$ , and  $36 \div 3$ , by using mental or written methods.

- Make mental and written calculations involving money (eg work out mentally the change from \$10.00 for an item worth \$2.90).
- Interpret measures expressed in decimal form (eg know that a measure of 1.5L is one and a half litres; know that a jump of 2.95 m is nearly three metres).
- Tell the time in hours and minutes on analogue and digital clocks.
- Describe and compare 2D and 3D shapes and objects according to their important features (eg say why a shape would be a cone rather than a cylinder).
- Use conventional terms such as *angle*, *face*, *edge* and *base* to name parts of 2D and 3D shapes.

## The assessment process

All jurisdictions have in place State-based numeracy monitoring programs. These programs are well established, understood and valued within the State educational communities and all States are keen to retain them. As well, they allow States and Territories to report (both publicly and to parents) on the range of performance demonstrated, including benchmark performance. As a result, ministers agreed that assessment against the national benchmarks should occur using the existing State-based programs.

A nationally agreed procedure was developed to equate State and Territory tests and to ensure that reporting of student achievement data against the numeracy benchmarks was comparable. The expert committee that developed the procedure included several of Australia's leading educational measurement experts.

At each of years 3 and 5, equating the State and Territory tests is a three-stage process involving the construction of a common achievement scale for numeracy, determining the location of the benchmark on the common achievement scale, and calculating equivalent benchmark locations on State and Territory achievement scales.

The common achievement scales are constructed from the results of testing students from a representative sample of schools in each State and Territory using the assessments of other States and Territories.

To establish the location of the benchmark at each year level, expert judges are required to envisage a student who is just able to demonstrate the skills described in the benchmark and to estimate the probability of this minimally competent student succeeding on each test item. The judges used in the benchmarking were from all

States and Territories and included a range of numeracy specialists and classroom teachers who were qualified to make decisions about the likelihood of students succeeding on the test items.

In the final phase of equating, an equivalent benchmark location is calculated for each jurisdiction's numeracy test. All three aspects of the process contribute to enhancing the comparability of the separate State tests and to ensuring that any differences in State results are likely to be due to factors other than the tests.

## The results

The data in Tables 1 and 2 represent students who have achieved the benchmark as a percentage of the students participating in the State and Territory testing. The results reported here are for assessed students. This term has been used for students who sat the test and students who were formally exempted. Exempted students are reported as below benchmark and thus are included in the benchmark calculation. Students not included in the benchmark calculation are those who were absent or withdrawn by parents/caregivers from the testing and students attending a school not participating in the testing.

## Making comparisons

Tables 1 and 2 highlight apparent differences between States and Territories in relation to the proportion of students achieving the benchmark. However caution needs to be applied when considering these differences. While the assessment and equating processes used have ensured the various tests are directly comparable, large differences remain in the characteristics of the population being assessed in each State. For example, while ministers are keen that the monitoring against national benchmarks will soon include all students from both government and non-government schools, not all non-government schools participated in 2000 and this may have contributed to differences between States.

Other relevant issues include major differences between jurisdictions in school starting arrangements that result in variations in the time students would have spent in schooling prior to the testing. As well, there are large differences between States and Territories in relation to a number of factors that are known to influence measured numeracy achievement.

For example, it is known that achievement in numeracy is correlated with the socioeconomic circumstances of students being assessed. As well, students who do not usually speak English, or who have just begun to speak English, would be

expected to be at some disadvantage during assessment. Not only are there variations in the proportion of such students between States and Territories, but there are also variations in the policies regarding inclusion in the testing programs.

Tables 3, 4 and 5, as well as the Explanatory Notes, attempt to describe and quantify some of the differences between States and Territories.

The use of confidence intervals with the benchmark results provides a way of making inferences about the achievement of students that reflects the uncertainty associated with the measurement of student ability. It is anticipated that statistical tests of significance, that further assist readers make comparisons about students' achievements, will be incorporated into future reports. Until these technical improvements are implemented, readers are urged to be cautious when comparing results.

**Table 1 Percentage of year 3 students achieving the numeracy benchmark, by State and Territory, 2000**

State/Territory 1 Average age <sup>(a)</sup> 2 Yrs of Schooling <sup>(b)</sup>	Percentage of students achieving the benchmark	Percentage of male students achieving the benchmark	Percentage of female students achieving the benchmark	Percentage of Indigenous <sup>(c)</sup> students achieving the benchmark	Percentage of LBOTE <sup>(c)</sup> students achieving the benchmark
<b>New South Wales</b>	93.2	93.1	93.3	83.4	91.9
1. 8yrs 9mths	± 1.7	± 1.7	± 1.7	± 4.2	± 2.1
2. 3yrs 7mths					
<b>Victoria</b>	96.5	96.7	96.1	89.1	94.9
1. 8yrs 11mths	± 1.3	± 1.3	± 1.5	± 5.7	± 1.7
2. 3yrs 7mths					
<b>Queensland<sup>(d)</sup></b>	91.4	91.5	91.8	71.0	88.0
1. 8yrs 4mths	± 3.2	± 3.6	± 3.4	± 12.4	± 7.4
2. 2yrs 8mths					
<b>South Australia</b>	85.3	84.9	85.8	56.8	80.0
1. 8yrs 6mths	± 2.3	± 2.3	± 2.4	± 5.0	± 3.0
2. 3yrs 3mths					
<b>Western Australia</b>	90.5	90.2	90.8	69.4	88.1
1. 8yrs 2mths	± 2.2	± 2.2	± 2.3	± 5.3	± 2.6
2. 2yrs 7mths					
<b>Tasmania</b>	92.8	92.3	93.2	85.6	85.8
1. 9yrs 1mth	± 1.7	± 2.0	± 1.9	± 4.7	± 5.7
2. 3yrs 8mths					
<b>Northern Territory</b>	81.4	80.6	82.4	48.1	56.8
1. 8yrs 8mths	± 2.0	± 2.5	± 2.6	± 4.5	± 3.9
2. 3yrs 3mths					
<b>Australian Capital Territory</b>	95.7	95.2	96.3	88.1	84.5
1. 8yrs 8mths	± 1.1	± 2.1	± 2.3	± 9.9	± 10.6
2. 3yrs 6mths					
<b>Australia</b>	92.7	92.7	92.8	73.7	90.3
	± 2.0	± 2.1	± 2.1	± 7.1	± 2.7

Note: The achievement percentages reported in this table include 95% confidence intervals, for example, 80.0% ± 2.7%.

(a) The typical average age of students at the time of testing, expressed in years and months.

(b) The typical average time students had spent in schooling at the time of testing, expressed in years and months.

(c) The methods used to identify Indigenous students and students with a language background other than English (LBOTE) varied between jurisdictions as outlined in the Explanatory Notes.

(d) Data from Queensland are based on a representative sample of approximately 10% of students from government and non-government schools.

**Table 2 Percentage of year 5 students achieving the numeracy benchmark, by State and Territory, 2000**

State/Territory 1 Average age <sup>(a)</sup> 2 Yrs of Schooling <sup>(b)</sup>	Percentage of students achieving the benchmark	Percentage of male students achieving the benchmark	Percentage of female students achieving the benchmark	Percentage of Indigenous <sup>(c)</sup> students achieving the benchmark	Percentage of LBOTE <sup>(c)</sup> students achieving the benchmark
<b>New South Wales</b>	91.1	90.8	91.5	73.5	89.7
1. 10yrs 9mths	± 1.4	± 1.4	± 1.4	± 3.5	± 1.6
2. 5yrs 7mths					
<b>Victoria</b>	94.3	94.1	94.4	82.2	92.4
1. 10yrs 11mths	± 1.4	± 1.4	± 1.4	± 6.2	± 1.8
2. 5yrs 7mths					
<b>Queensland</b>	86.2	86.0	87.0	58.9	82.1
1. 10yrs 4mths	± 2.2	± 2.4	± 2.4	± 5.2	± 3.5
2. 4yrs 8mths					
<b>South Australia</b>	83.0	83.1	82.7	50.4	80.2
1. 10yrs 6mths	± 2.3	± 2.2	± 2.6	± 4.2	± 2.8
2. 5yrs 3mths					
<b>Western Australia</b>	87.5	87.5	87.5	57.2	82.6
1. 10yrs 2mths	± 2.1	± 1.1	± 2.2	± 4.0	± 2.2
2. 4yrs 7mths					
<b>Tasmania</b>	87.6	87.9	87.2	76.6	84.1
1. 11yrs 0mths	± 1.8	± 2.1	± 2.1	± 6.9	± 7.5
2. 5yrs 8mths					
<b>Northern Territory</b>	74.1	74.5	73.7	37.0	50.4
1. 10yrs 8mths	± 2.5	± 3.0	± 3.4	± 4.2	± 3.9
2. 5yrs 3mths					
<b>Australian Capital Territory</b>	91.3	91.0	91.6	79.5	74.9
1. 10yrs 8mths	± 1.7	± 2.5	± 2.5	± 13.7	± 6.8
2. 5yrs 6mths					
<b>Australia</b>	89.6	89.4	89.8	62.8	87.1
	± 1.7	± 1.7	± 1.8	± 4.5	± 2.1

Note: The achievement percentages reported in this table include 95% confidence intervals, for example, 80.0% ± 2.7%.

(a) The typical average age of students at the time of testing, expressed in years and months.

(b) The typical average time students had spent in schooling at the time of testing, expressed in years and months.

(c) The methods used to identify Indigenous students and students with a language background other than English (LBOTE) varied between jurisdictions as outlined in the Explanatory Notes.

**Table 3 Years of schooling and level of participation, by State and Territory, 2000**

State or Territory	Average age at time of testing <sup>(a)</sup>		Years at school <sup>(b)</sup>		Percentage of students assessed <sup>(c)</sup>	
	Year 3	Year 5	Year 3	Year 5	Year 3	Year 5
New South Wales	8yrs,9mths	10yrs,9mths	3yrs,7mths	5yrs,7mths	93.3	93.5
Victoria	8yrs,11mths	10yrs,11mths	3yrs,7mths	5yrs,7mths	89.7	89.7
Queensland	8yrs,4mths	10yrs,4mths	2yrs,8mths	4yrs,8mths	8.7 <sup>(d)</sup>	97.7
South Australia	8yrs,6mths	10yrs,6mths	3yrs,3mths	5yrs,3mths	79.5	93.7
Western Australia	8yrs,2mths	10yrs,2mths	2yrs,7mths	4yrs,7mths	90.0	91.7
Tasmania	9yrs,1mth	11yrs,0mths	3yrs,8mths	5yrs,8mths	95.0	94.9
Northern Territory	8yrs,8mths	10yrs,8mths	3yrs,3mths	5yrs,3mths	80.9	85.1
Australian Capital Territory	8yrs,8mths	10yrs,8mths	3yrs,6mths	5yrs,6mths	69.7	68.1

- (a) The typical average age of students at the time of testing, expressed in years and months.
- (b) The typical average time students had spent in schooling at the time of the testing, expressed in years and months.
- (c) The percentage of students from all schools who were assessed includes exempted students but not students absent or withdrawn by parents/caregivers from the testing and not students attending schools which did not participate in the testing at all. The figure is calculated as a percentage of the total number of full-time government and non-government students based on data from the *National Schools Statistics Collection*.
- (d) Queensland assessed a representative sample of students at the year 3 level – if population testing had been undertaken it is estimated 95% of the year 3 students would have been assessed.

**Table 4 Participation by school sector, 2000**

State or Territory	Percentage of assessed government school students <sup>(a)</sup>		Percentage of assessed non-government school students <sup>(b)</sup>		Proportion of assessed students (per cent)			
	Year 3	Year 5	Year 3	Year 5	Government school students <sup>(c)</sup>		Non-government school students <sup>(d)</sup>	
	Year 3	Year 5	Year 3	Year 5	Year 3	Year 5	Year 3	Year 5
New South Wales	94.5	94.8	90.1	90.4	73.9	72.6	26.1	27.4
Victoria	88.6	88.6	92.6	92.4	70.2	69.3	29.8	30.7
Queensland	8.7 <sup>(e)</sup>	97.6	8.7 <sup>(e)</sup>	97.7	76.7	75.8	23.3	24.2
South Australia	94.4	93.8	40.4	93.3	86.1	73.0	13.9	27.0
Western Australia	89.5	91.6	91.4	92.1	75.3	74.7	24.7	25.3
Tasmania	95.0	94.8	94.9	95.3	78.7	76.4	21.3	23.6
Northern Territory	80.2	85.4	84.0	84.1	80.2	79.7	19.8	20.3
Australian Capital Territory	95.2	94.9	17.0	18.4	92.0	90.5	8.0	9.5

- (a) The percentage of assessed students from government schools includes exempted students, but not students absent or withdrawn by parents/caregivers from the testing and not students attending schools that did not participate in testing at all. The figure is calculated as a percentage of the total number of full-time government students based on data from the *National Schools Statistics Collection*.
- (b) The percentage of assessed students from non-government schools includes exempted students, but not students absent or withdrawn by parents/caregivers and not students attending schools which did not participate in testing at all. The figure is calculated as a percentage of the total number of full-time non-government students based on data from the *National Schools Statistics Collection*.
- (c) The percentage of assessed government school students compared with all assessed students.
- (d) The percentage of assessed non-government school students compared with all assessed students.
- (e) Queensland assessed a representative sample of students at the year 3 level – if population testing had been undertaken it is estimated that approximately 95% of the year 3 students from both government and non-government schools would have been assessed.

**Table 5 Exemptions, absences and participation of equity groups, by State and Territory, 2000**

State or Territory	Percentage of students exempted from testing <sup>(a)</sup>		Percentage of students absent or withdrawn <sup>(b)</sup>		Percentage of assessed students			
					Indigenous students <sup>(c)</sup>		LBOTE students <sup>(d)</sup>	
	Year 3	Year 5	Year 3	Year 5	Year 3	Year 5	Year 3	Year 5
New South Wales	1.2	1.1	5.0	4.8	3.7	3.6	23.5	22.6
Victoria	n.a.	n.a.	10.3	10.3	0.7	0.7	13.5	13.3
Queensland	1.4	1.3	2.9	1.9	8.7	6.0	6.8	7.8
South Australia	3.4	2.5	5.0	6.3	3.7	2.9	13.9	15.0
Western Australia	1.1	1.0	8.1	6.4	4.9	5.3	13.8	14.0
Tasmania	0.9	0.6	5.0	5.1	5.4	5.2	2.9	2.4
Northern Territory	3.7	2.2	19.1	14.9	23.0	23.9	27.6	29.4
Australian Capital Territory	3.0	3.4	4.4	4.6	2.0	1.3	6.5	5.5

n.a. not available

(a) The percentage of students who were exempted from the testing program in the relevant State or Territory. Exempted students are reported as not achieving the benchmark. The percentage of exempted students is calculated as a percentage of the total number of full-time government students based on *National Schools Statistics Collection* data, together with the non-government students who participated in the relevant State and Territory testing programs.

(b) The percentage of students who were absent or were withdrawn by parents/caregivers from the testing program in the relevant State or Territory. These students are not included in the benchmark calculations. The percentage of absent/withdrawn students is calculated as a percentage of the total number of full-time government students based on *National Schools Statistics Collection* data, together with non-government students who participated in the relevant State and Territory testing programs.

(c) The percentage of assessed Indigenous students. The percentage of Indigenous students includes exempted students and is calculated as a percentage of the total number of full-time government students based on data from the *National Schools Statistics Collection* and non-government students who participated in the relevant testing programs. The specific ways in which Indigenous student information was collected and/or categorised were characterised by a degree of variation across the jurisdictions.

(d) The percentage of assessed students with a language background other than English (LBOTE). The percentage of LBOTE students includes exempted students and is calculated as a percentage of the total number of full-time government students based on data from the *National Schools Statistics Collection* and non-government students who participated in the relevant State or Territory testing programs. The specific ways in which LBOTE information was collected and/or categorised were characterised by a degree of variation across the jurisdictions.

**Table 6 Percentage of students achieving the numeracy benchmark, by gender, years 3 and 5, Australia, 2000**

Cohort	Male students	Female students
Year 3	92.7±2.1	92.8±2.1
Year 5	89.4±1.7	89.8±1.8

The majority of students in each of years 3 and 5 attained the appropriate numeracy benchmark in 2000. As the benchmarks represent the minimum level required for a student to progress through schooling, this result is much as expected.

Since 2000 was the first year in which student performance was measured against numeracy benchmarks, it is not possible to

make comparisons with previous years, but future editions of the *National Report on Schooling* will be able to note progress in this regard.

### Gender comparisons

As indicated in Table 6, there is no measurable difference between the relative performances of boys and girls. This contrasts with the situation in reading, where girls' performance is marginally better than boys.

### Indigenous students

As indicated in Figures 1 and 2, there are substantial differences between the achievement of numeracy benchmarks by Indigenous students and all students.

Figure 1 Percentage of year 3 students achieving the numeracy benchmark, by sub-group, Australia, 2000

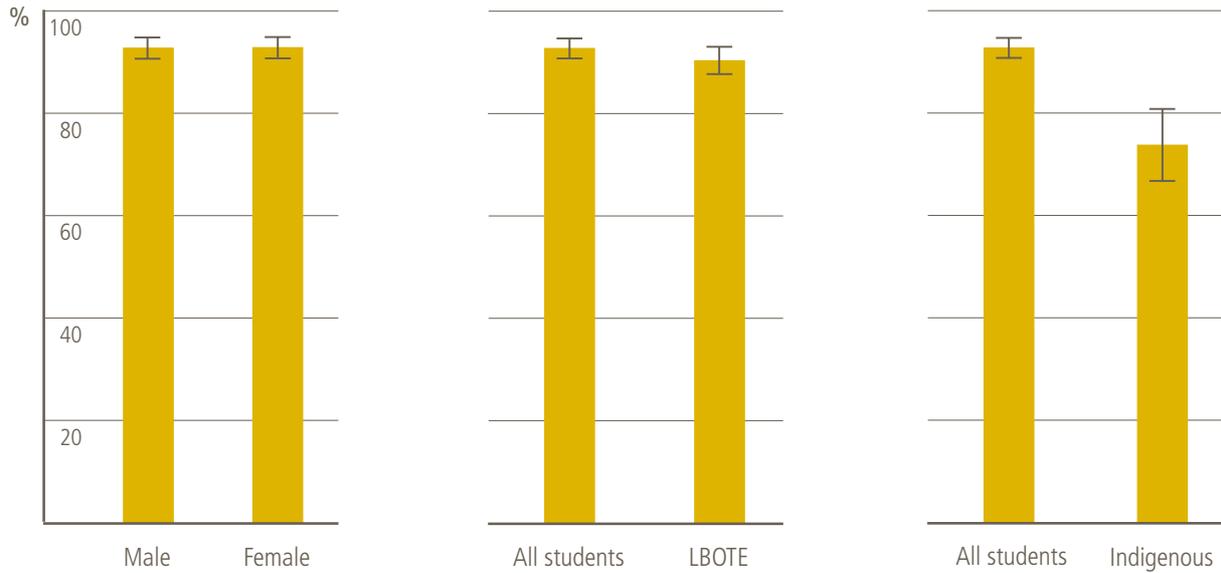
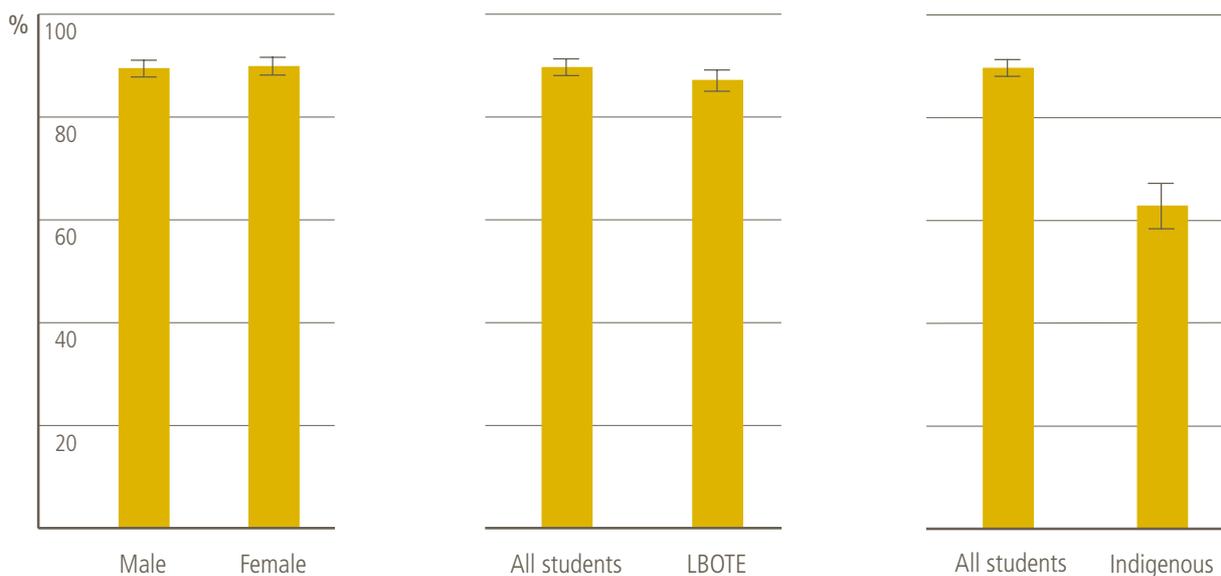


Figure 2 Percentage of year 5 students achieving the numeracy benchmark, by sub-group, Australia, 2000



# Explanatory Notes

## New South Wales

Exemption from Testing Policy	Students may be exempted from the test if, in consultation with parents, the school believes that participation in the test will be detrimental to the student. Reasons for exemption include: students from a non-English speaking background who have been enrolled in an English-speaking school for less than 12 months; students with high support needs; students with a medical condition that would affect well-being and test performance; students attending Stewart House on the test day; students attending Schools for Specific Purposes. (Note: as these students are ungraded, the age distribution of year 3/5 students doing the tests was used to estimate the notional number of year 3/5 students in these schools.)
Average Age Calculation Method	Average age at time of testing was determined from NSW Department of Education birth date data for government school years 3 and 5 students.
Years at School Calculation Method	Most year 3/5 students in NSW have completed 3/5 full years of schooling prior to the tests being held at the beginning of August. Years at school were thus taken to be 3 years, 7 months for year 3 students and 5 years, 7 months for year 5 students.
Definition, Identification of Indigenous Students	Indigenous students are those who answered "yes" to the question; "Are you an Aboriginal or Torres Strait Islander person?"
Definition, Identification of LBOTE Students	LBOTE students are those who answered "yes" to the question; "Does anyone speak a language other than English in your home?"

## Victoria

Exemption from Testing Policy	The principal may grant an exemption to students with disabilities and impairments and to students who have been learning English in Australia for less than two years. The decision is made at the school level. The principal should consult specialist staff and ensure that parents sign a document agreeing to the exemption.
Average Age Calculation Method	Students provide date of birth on test task books. Average age is calculated at August 2000 (or at August 1999 for the 1999 data) by using the month and year of birth and averaging the age of all students who participated in the test.
Years at School Calculation Method	Students commence schooling in the Preparatory year and the year of schooling is calculated as the three or five years from Prep to the beginning of year 3 or 5, and 7 months to the beginning of August to when testing takes place.
Definition, Identification of Indigenous Students	Schools were asked to answer the following question; "Is the student Aboriginal or a Torres Strait Islander?" on the front page of each student's test booklet. Students are identified as Indigenous on enrolment forms at the commencement of school.
Definition, Identification of LBOTE Students	Schools were asked to answer the following question; "Is this student of non-English speaking background?" on the front page of each student's test booklet. The generally accepted definition of a LBOTE student is one where the student or either parent was born in a non-English speaking country or has a home language other than English.

## Queensland

Exemption from Testing Policy	The following students may be exempted: students for whom English is not their first language and who are assessed by their ESL teacher and/or classroom teacher as achieving at or below Level 2 using the Draft Queensland ESL Proficiency Levels or Reading Level 3 and Writing Level 3 of the National Languages and Literacy Institute of Australia (NLLIA) ESL Band Scales; or those with intellectual impairment who have been identified as having educational needs at levels 5 or 6 through the systemic ascertainment process.
Average Age Calculation Method	The average ages are calculated on age distributions of the populations of years 3 and 5 students attending government and non-government schools based on 1 July census enrolment data, published in <i>ABS Schools Australia 2000</i> , 4221.0.
Years at School Calculation Method	Compulsory schooling commences at year 1. Students sat the test in late August. Year 3 students who sat the test would typically have been at school for two years and eight months. Year 5 students typically have been at school for 4 years and 8 months.
Definition, Identification of Indigenous Students	Students self-identify that they are Indigenous by answering "Yes" to either or both the questions: "Are you an Aboriginal person?" or "Are you a Torres Strait Islander person?". Teachers are required to check the accuracy of the students' responses.
Definition, Identification of LBOTE Students	LBOTE students are those who answer "Yes" to the question; "At home, do either of your parents/care-givers speak a language other than English MOST of the time?" and who are not classified as Indigenous. Students self-identify and teachers are required to check the accuracy of the students' responses.

## South Australia

Exemption from Testing Policy	A student may be exempted from the testing program by the school principal in consultation with the parent/care-giver. Reasons for exemptions include: students from a non-English speaking background who have been enrolled in an English-speaking school for less than 12 months; students with high support needs who would not be able to read the test.
Average Age Calculation Method	The average age of students at the time of testing is estimated from student enrolment information which schools collect.
Years at School Calculation Method	A student may begin school once they turn 5 years of age. Most students will spend between 10 and 13 terms in junior primary school classes (ie Reception, and years 1 and 2).
Definition, Identification of Indigenous Students	Indigenous students were identified through their response to a question on the test cover asking if they were an Aboriginal or Torres Strait Islander person.
Definition, Identification of LBOTE Students	LBOTE students were identified through their response to a question on the test cover asking if a language other than English is spoken in their home.

## Western Australia

Exemption from Testing Policy	Exemptions may be granted by the principal with the signed agreement of parent/caregivers on the following grounds: temporary or permanent disability or impairment; enrolment in specified intensive language centres; English as a Second Language (ESL) students in mainstream classes who have been in Australia for one year or less.
Average Age Calculation Method	Students provide date of birth on test booklets. Average age was calculated at the week of testing on the basis of this information.
Years at School Calculation Method	The figure given is an estimate based on the assumptions of: (a) continuous attendance of students in all years of schooling; (b) an equal number of students skipping a year of studies and repeating a year of studies, and; (c) that for these cohorts of year 3 and 5 students the pre-primary year was neither full-time nor compulsory and is therefore not included in the calculation.
Definition, Identification of Indigenous Students	Indigenous students were identified through their "yes" response to the question "Are you an Aboriginal or Torres Strait Islander person?" This question was included on the front of the student answer booklet.
Definition, Identification of LBOTE Students	Students from a language background other than English were identified by analysing their responses to the following questions: "Are you an Aboriginal or Torres Strait Islander person?" "Does anyone in your home usually speak in a language other than English?"

## Tasmania

Exemption from Testing Policy	Principals of government schools were able to exempt students on the following grounds: Category A students on the Department's intellectual disabilities register; and ESL students who the Principal Education Officer (ESL) identified as being unable to complete the test owing to the students' inability to comprehend English. Students in Catholic and independent schools were exempted at their Principal's discretion, under strict guidelines established by each sector.
Average Age Calculation Method	The average age of government and Catholic school students was calculated from date-of-birth records held in the data base of each sector. The average age of independent school students was provided by ACER. The average age reported is a weighted average for all three sectors.
Years at School Calculation Method	In Tasmania, most students enrol in Kindergarten for half a day per day, but compulsory schooling begins in Prep, followed by years 1, 2, 3 etc. Thus, the average number of years of compulsory schooling at the time of testing was approximately 3 years, 8 months (year 3) and 5 years, 8 months (year 5). Testing for government and Catholic school students occurred in late August of 2000, whereas in 1999 it occurred in early August (hence the one-month difference for the two years).
Definition, Identification of Indigenous Students	Indigenous students were identified by each school from information collected at enrolment, or through self-identification. If the Indigenous status was unknown, the student was not considered to be Indigenous.
Definition, Identification of LBOTE Students	Government schools identified LBOTE students from enrolment records and Catholic schools used new-arrival and special education applications to identify LBOTE students. Independent schools used self-identification. If the LBOTE status of a student was unknown, that student was considered not to have had a language background other than English.

## Northern Territory

Exemption from Testing Policy	A student is considered to be exempt from the reading test if they are unable to attempt, with teacher support, all questions at Pre-Level 2 in the reading test. Students are exempted from the mathematics test if they are unable to attempt any questions at Level 1 in the mathematics test.
Average Age Calculation Method	The date of birth of each student is recorded on the test cover. The age of the student relative to the official end of the testing period is then calculated as a decimal. The average age of all students in the cohort (eg year 3) is then calculated.
Years at School Calculation Method	Schooling begins at age 5 in Transition classes. The typical time in school for year 3 students was calculated as follows: 2 years, 8 months (years 1, 2 and 3 to time of testing) plus 7 months (Transition) equals 3 years, 3 months. For year 5 students, the calculation was as follows: 4 years, 8 months (years 1, 2, 3, 4 and 5 at time of testing) plus 7 months (Transition), equals 5 years and 3 months.
Definition, Identification of Indigenous Students	Indigenous students are identified by schools at the time of enrolment or by self-identification.
Definition, Identification of LBOTE Students	For reading, data represent students identified by teachers as being eligible for inclusion in the ESL program. For numeracy, if a student answers "yes" to the question, "Does anyone use a language other than English in your home?" or answers "Never/" Sometimes" to the question, "How often do you speak English in your home?", then they are considered to be an LBOTE student.

## Australian Capital Territory

Exemption from Testing Policy	Exempt students include mainstream ESL students who have been learning English in Australia for less than 2 years; students enrolled in Introductory English Centres; students enrolled in Learning Support Centres and Units; students with diagnosed communication disorders; mainstream students who have a temporary physical disability at the time of the assessments.
Average Age Calculation Method	From date of birth until August 1, year 3 or year 5, calculated through the MAZE student record keeping system.
Years at School Calculation Method	The years and months beginning February 1, in the Kindergarten year through to August 1, in year 3 or 5.
Definition, Identification of Indigenous Students	Indigenous students are identified at the time of enrolment by the parents/caregivers.
Definition, Identification of LBOTE Students	Data represent funded ESL students rather than the broader LBOTE category.

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further strengthening  
schools as learning  
communities

literacy, numeracy,  
indigenous education,  
science, the arts

australia's future depends on  
each citizen having the necessary  
knowledge, understanding,  
and values for a productive  
rewarding life in an educated  
just and open society



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