# 4 School education

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

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

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

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

This year, the chapter has been enhanced by including nationally comparable learning outcomes data for:

- 15 year old students achieving at or above level 3 on the international reading literacy assessment, 2006
- 15 year old students achieving at or above level 3 on the international mathematical literacy assessment, 2006
- students in vocational education and training in schools for 2005.

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

Section 4.1 contains a profile of school education in Australia, and provides the context for assessing performance indicators in the subsequent sections. Section 4.2 describes the framework of performance indicators for school education, and section 4.3 presents and discusses the available data relating to this framework. In section 4.4, future directions in the development and reporting of performance indicators for school education are discussed. The chapter concludes with jurisdictions' comments in section 4.5, definitions of key terms and indicators in section 4.6, a list of attachment tables in section 4.7 and a list of references in section 4.8. Attachment tables are identified in references throughout this chapter by an 'A' suffix (for example, table 4A.3 is table 3 in the attachment). Attachment tables are available on the CD-ROM enclosed with the Report or from the Review website at <www.pc.gov.au/gsp>.

## 4.1 Profile of school education

#### Service overview

Schools are the institutions within which organised school education takes place. They are differentiated by the type and level of education they provide, their ownership and management, and the characteristics of their student body. The formal statistical definition of schools used for this chapter is:

an establishment (other than a special school) that satisfies all of the following criteria:

- its major activity is the provision of full time day primary or secondary education or the provision of primary or secondary distance education
- it is headed by a principal (or equivalent) responsible for its internal operation
- it is possible for students to enrol for a minimum of four continuous weeks, excluding breaks for school vacations (ABS 2007).

Student performance can be affected by factors that may be partly or totally outside the influence of the school system, such as student commitment, family environment (including socioeconomic status, parents' educational attainment and support for the child) and the proximity of the school to other educational facilities. It is beyond the scope of this Report to consider the effect of all such factors, but this section provides some context for the performance information presented later in the chapter. Further contextual information is provided in appendix A.

## Roles and responsibilities

Under constitutional arrangements, the State and Territory governments have responsibility to ensure the delivery of schooling to all children of school age. They determine curricula, regulate school activities and provide most of the funding. State and Territory governments are directly responsible for the administration of government schools, for which they provide the majority of government expenditure. Non-government schools operate under conditions determined by State and Territory government registration authorities and also receive State and Territory government funding.

The Australian Government provides supplementary funding for government and non-government schools through specific purpose payments provided directly to State and Territory governments, and other payments made directly to school communities, students, and other organisations to support schooling. The Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA) — comprising Australian, State and Territory, and New Zealand education ministers — is the principal forum for developing national priorities and strategies for schooling.

## **Funding**

Australian, State and Territory government recurrent expenditure on school education was \$32.4 billion in 2005-06 (table 4.1). Expenditure on government schools was \$25.4 billion, or 78.4 per cent of the total. Government schools account for most of the expenditure by State and Territory governments. These governments also contribute to the funding of non-government schools and provide services used by both government and non-government schools. More information, including Australian Government spending on Indigenous specific programs, can be found in tables 4A.6 and 4A.7.

Nationally, State and Territory governments provided 91.1 per cent of total government recurrent expenditure on government schools in 2005-06, and the Australian Government provided 8.9 per cent. In contrast, government expenditure on non-government schools in that year was mainly provided by the Australian Government (72.1 per cent), with State and Territory governments providing 27.9 per cent (table 4.1).

Table 4.1 Government recurrent expenditure on school education, 2005-06 (\$ million)<sup>a, b, c, d</sup>

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
Government schools									
Australian Government	755	503	455	246	164	61	32	53	2 267
State and territory governments	7 603	5 066	4 566	2 634	1 737	636	433	430	23 104
Total	8 358	5 569	5 021	2 879	1 900	696	464	483	25 371
Non-government schools									
Australian Government	1620	1 303	968	501	391	104	99	53	5 039
State and territory governments	697	335	492	213	109	37	38	33	1 954
Total	2 317	1 638	1 460	714	500	141	137	86	6 993
All schools									
Australian Government	2 375	1 805	1 423	747	555	165	130	105	7 305
State and territory government	8 300	5 402	5 058	2 846	1 846	673	471	463	25 058
Total	10 675	7 207	6 481	3 593	2 400	838	601	568	32 364

<sup>&</sup>lt;sup>a</sup> See notes to table 4A.9 for definitions and other data caveats. Data presented here are expenditure, including notional User Cost of Capital (UCC) and excluding capital grants (which equates to recurrent expenditure). <sup>b</sup> Based on accrual accounting. <sup>c</sup> Totals may not add due to rounding. <sup>d</sup> Depreciation and user cost of capital expenses relating to government schools have been attributed to States/Territories based on ownership of the underlying assets. A portion of these assets will have been acquired through Australian Government capital contributions, with states and territories responsible for maintenance costs. Australian Government expenditure data in this table include only Australian Government specific purpose payments. Other Australian Government funding for schools and students is not included.

Source: MCEETYA National Schools Statistics Collection (NSSC) (unpublished); Department of Education, Science and Training (DEST) (unpublished); Australian, State and Territory governments (unpublished); table 4A.9.

Some data are presented on government funding of non-government schools. Caution needs to be taken when comparing data on the relative efficiency of government and non-government schools because governments provide only part of the funding for non-government schools. Governments provided 57.7 per cent of non-government school funding in 2005-06, with the remaining 42.3 per cent sourced from private fees and fundraising (MCEETYA 2007b, statistical annex, p. 27). Section 4.3 contains additional information on government expenditure per student.

## Size and scope

Descriptive information on the numbers of students, staff and schools can be found in tables 4A.1–4A.4.

#### Structure

The structure of school education varies across states and territories. These differences can influence the interpretation of data presented under common classifications. Formal schooling consists of six to eight years of primary school education followed by five to six years of secondary school education, depending on the state or territory (figure 4.1). All states and territories divide school education into compulsory and non-compulsory components based primarily on age.

In 2006, the compulsory starting age for school education in states and territories was:

- 5 years of age (Tasmania)
- 6 years of age (NSW, Victoria, Queensland, SA, ACT and NT)
- the beginning of the year in which the child reaches the age of 6 years and 6 months (WA).

Students were required to stay at school until:

- reaching 15 years of age (NSW, Victoria, ACT and NT)
- reaching 16 years of age (SA and Tasmania)
- reaching 16 years of age or completing year 10 (Queensland)
- to the end of the year in which students turn 16 (WA).

### Schools

At the beginning of August 2006, there were 9612 schools in Australia (6559 primary schools, 1478 secondary schools and 1575 combined and special schools). The majority of schools were government owned and managed (71.8 per cent) (table 4.2). Settlement patterns (population dispersion), the age distribution of the population, and educational policy influence the distribution of schools by size and level in different jurisdictions. Nationally, 62.6 per cent of all secondary schools enrolled over 600 students (table 4A.16). A breakdown of primary and secondary schools by size for government, non-government and all schools is reported in tables 4A.14–16 respectively.

Figure 4.1 Structure of primary and secondary schooling, 2006

Level	NSW, Vic, Tas, ACT	Qld, WA, SA, NTª
Year 12		
Year 11		
Year 10	SECONDARY	SECONDARY
Year 9		
Year 8		
Year 7		
Year 6		
Year 5		DDIMADY
Year 4	PRIMARY	PRIMARY
Year 3		
Year 2		
Year 1		
Pre-year 1	Kindergarten (NSW, ACT)	Preparatory (Qld) b
	Preparatory (Vic, Tas)	Pre-primary (WA)
		Reception (SA) <sup>c</sup>
		Transition (NT) <sup>d</sup>

<sup>&</sup>lt;sup>a</sup> In some places in the NT, secondary schooling begins at year 7. <sup>b</sup> In QLD a preparatory year of schooling for pre-Year 1 (which will replace the part-time preschool program) is being progressively phased in prior to 2007 when a half cohort of students will commence to align with the change to the compulsory school starting age in 2008. <sup>c</sup> SA has an intake for each term. <sup>d</sup> The NT has an intake for terms 1–3 of its 4 terms. Source: Adapted from ABS (2007).

## Student body

There were 3.4 million full time equivalent (FTE) student enrolments in primary and secondary schools in August 2006 (see section 4.6 for a definition of FTE student). Nationally, 49.1 per cent of FTE students in all schools were female (table 4.3).

A higher proportion of FTE students was enrolled in primary schools (57.3 per cent) than in secondary schools (42.7 per cent) (table 4.3). Differences in schooling structures influence enrolment patterns. Primary school education in Queensland, WA, SA and the NT, for example, includes year 7 whereas all other jurisdictions include year 7 in secondary school (figure 4.1). The proportion of students enrolled in primary school education would be expected to be higher in jurisdictions that include year 7 in primary school (table 4.3).

Nationally, the proportion of FTE students enrolled in government schools was 66.8 per cent. A higher proportion of FTE students were enrolled in government

schools at primary level (70.5 per cent) than at secondary level (61.8 per cent) (table 4.3).

Table 4.2 Summary of school characteristics, August 2006

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
Government schools (no.)									
Primary	1 644	1 211	961	504	434	140	66	83	5 043
Secondary	370	263	181	98	73	39	21	11	1 056
Combined <sup>a</sup>	67	53	89	99	77	26	4	52	467
Special schools <sup>b</sup>	106	78	47	70	20	6	4	5	336
Combined and special schools	173	131	136	169	97	32	8	57	804
Total	2 187	1 605	1 278	771	604	211	95	151	6 902
Non-government schools (n	o.)								
Primary	508	431	239	153	112	29	27	17	1 516
Secondary	152	105	85	40	21	8	5	6	422
Combined <sup>a</sup>	220	141	134	101	65	29	11	12	713
Special schools <sup>b</sup>	32	17	3	2	3	1	1	_	59
Combined and special schools	252	158	137	103	68	30	12	12	772
Total	912	694	461	296	201	67	44	35	2 710
All schools (no.)									
Primary	2 152	1 642	1 200	657	546	169	93	100	6 559
Secondary	522	368	266	138	94	47	26	17	1 478
Combined <sup>a</sup>	287	194	223	200	142	55	15	64	1 180
Special schools <sup>b</sup>	138	95	50	72	23	7	5	5	395
Combined and special schools	425	289	273	272	165	62	20	69	1 575
Total	3 099	2 299	1 739	1 067	805	278	139	186	9 612
Proportion of schools that a	re govern	ment so	chools (9	%)					
Primary	76.4	73.8	80.1	76.7	79.5	82.8	71.0	83.0	76.9
Secondary	70.9	71.5	68.0	71.0	77.7	83.0	80.8	64.7	71.4
Combined <sup>a</sup>	23.3	27.3	39.9	49.5	54.2	47.3	26.7	81.3	39.6
Special schools <sup>b</sup>	76.8	82.1	94.0	97.2	87.0	85.7	80.0	100.0	85.1
Combined and special schools	40.7	45.3	49.8	62.1	58.8	51.6	40.0	82.6	51.0
All schools	70.6	69.8	73.5	72.3	75.0	75.9	68.3	81.2	71.8
Proportion of primary schoo	ls (%)								
Government	75.2	75.5	75.2	65.4	71.9	66.4	69.5	55.0	73.1
Non-government	55.7	62.1	51.8	51.7	55.7	43.3	61.4	48.6	55.9
All schools	69.4	71.4	69.0	61.6	67.8	60.8	66.9	53.8	68.2

**a** Combined primary and secondary schools. **b** Special schools provide special instruction for students with a physical and/or mental disability or impairment, or those with social problems. Students must exhibit one or more of the following characteristics before enrolment is allowed: mental or physical disability or impairment, slow learning ability, social or emotional problems, and in custody, on remand or in hospital. – Nil or rounded to zero.

Source: ABS (2007); ABS (unpublished) Schools Australia 2006; tables 4A.1, 4A.2 and 4A.3.

Table 4.3 FTE student enrolments, August 2006a, b

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
Total FTE student enrol	ments at	level of e	education	า ('000)					
Primary schools	620	454	395	209	157	46	31	25	1 937
Secondary schools	490	378	264	134	96	38	29	13	1 441
All schools	1 110	832	659	343	253	83	60	38	3 379
Proportion of FTE stude	nts who v	vere enr	olled in g	jovernm	ent scho	ols (%)			
Primary schools	70.0	68.9	73.2	71.6	68.1	76.1	61.9	79.0	70.5
Secondary schools	62.5	59.5	63.6	60.3	62.3	69.4	55.6	70.4	61.8
All schools	66.7	64.6	69.3	67.2	65.9	73.1	58.9	76.1	66.8
Proportion of FTE stude	nts who v	vere fem	ale (all s	chools)	(%)				
Primary schools	48.7	48.6	48.7	48.3	48.8	48.6	49.0	48.2	48.6
Secondary schools	49.6	49.8	49.8	49.6	49.9	50.5	49.1	49.1	49.7
All schools	49.1	49.2	49.2	48.8	49.2	49.5	49.0	48.5	49.1
Proportion of FTE stude	nts who v	vere enr	olled in p	rimary e	ducation	ı (%)			
Government schools	58.7	58.2	63.2	65.0	64.0	57.1	54.7	68.8	60.5
Non-government	50.3	48.0	52.4	52.7	58.0	48.6	48.3	58.3	50.9
schools									
All schools	55.9	54.6	59.9	60.9	62.0	54.8	52.1	66.3	57.3

<sup>&</sup>lt;sup>a</sup> Students enrolled in special schools are included, with special school students of primary school age and/or year level included in the primary figures and those of secondary school age and/or year level included in the secondary figures. <sup>b</sup> Results of calculations may vary from the table due to rounding differences.

Source: ABS (2007); ABS (unpublished) Schools Australia 2006; tables 4A.1-4.

Total full time student enrolments in schools in Australia were relatively stable over the five years to 2006, increasing by approximately 0.5 per cent each year between August 2002 and August 2006 (table 4A.18).

The proportion of full time students enrolled in non-government schools increased between 2002 and 2006 in all states and territories. Total non-government school enrolments expanded by an average of 1.8 per cent per year, while full time government school enrolments decreased by an average of 0.1 per cent per year (table 4A.18). The expansion of full time enrolments in non-government schools was from a lower base than that for government schools. In absolute terms, full time students in government schools decreased from 2 257 337 in 2002 to 2 248 229 in 2006. Full time students in non-government schools increased from 1 044 412 in 2002 to 1 119 807 in 2006 (table 4A.17).

Part time secondary students form a significant proportion of enrolments in some jurisdictions (table 4.4). Part time courses are available to secondary students, including mature age students attending colleges and those studying years 11 or 12 or short courses (lasting five to 22 weeks). The proportion of secondary school students who were enrolled part time in 2006 varied considerably across jurisdictions, partly because jurisdictions' education authorities have different policy and organisational arrangements for part time study, as well as different

definitions of what constitutes part time study. The number of part time courses available also varied considerably across jurisdictions.

Table 4.4 Part time secondary school students in government schools

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust		
Part time secondary school students in government schools (no.) <sup>a</sup>											
2002	2 455	3 029	4 096	4 880	7 099	2 684	10	1 052	25 305		
2003	2 647	3 093	3 786	2 583	6 623	2 578	48	888	22 246		
2004	2 441	3 106	3 764	2 925	6 818	2 260	25	1 043	22 382		
2005	2 404	2 898	3 836	2 824	6 435	1 870	36	1 084	21 387		
2006	2 425	2 802	3 635	2 492	6 630	1 762	8	1 109	20 863		
Proportion of	secondary so	chool stud	ents in go	vernment	schools v	who were	part tim	e stude	nts (%) <sup>b</sup>		
2002	0.8	1.4	2.6	5.6	11.0	9.6	0.1	11.7	2.8		
2003	0.9	1.4	2.3	3.1	10.3	9.3	0.3	9.6	2.5		
2004	0.8	1.4	2.3	3.5	10.7	8.3	0.2	10.9	2.5		
2005	0.8	1.3	2.3	3.4	10.1	6.9	0.2	11.2	2.4		
2006	0.8	1.2	2.1	3.0	10.4	6.5	0.1	11.4	2.3		

**a** Absolute number of part time secondary students. **b** Absolute number of part time secondary students divided by absolute number of full time and part time secondary students. – Nil or rounded to zero.

Source: ABS (2003, 2004, 2005, 2006, 2007); ABS (unpublished) Schools Australia (various years); table 4A.1.

## Special needs groups

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

- Indigenous students
- students from language backgrounds other than English (LBOTE)
- students with disabilities
- geographically remote students
- students from families of low socioeconomic status.

Government schools provide education for a high proportion of students from special needs groups. In 2006, 86.6 per cent of Indigenous students and 80.9 per cent of students with disabilities, for example, attended government schools (tables 4A.19 and 4A.21). This chapter reports on the proportions of Indigenous students, LBOTE students, students with disabilities and students who are geographically remote. Further information on student body mix is in tables 4A.22–24. Care needs to be taken in interpreting this information because some definitions of special needs students differ across states and territories.

## Indigenous students

The proportion of full time Indigenous students in schools varies greatly across jurisdictions (table 4.5). Table 4A.19 provides additional information on Indigenous enrolments.

In all jurisdictions, the proportion of full time Indigenous students was higher in government schools than in non-government schools. Nationally, the proportion of full time Indigenous students was 5.4 per cent for government schools and 1.7 per cent for non-government schools in 2006 (table 4.5).

Table 4.5 Indigenous students as a proportion of all students, 2006<sup>a</sup>

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

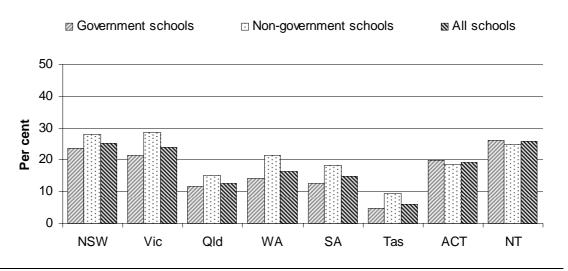
a Absolute numbers of Indigenous and all full time students.Source: ABS (2007); table 4A.19.

### LBOTE students

The proportion of LBOTE students is based on data from the ABS 2006 Census of Population and Housing. Students are counted as having a language background other than English if their home language is not English or if they (or at least one parent) were born in a non-English speaking country.

The proportion of LBOTE students in government and non-government schools varied across jurisdictions in 2006 (figure 4.2).

Figure 4.2 Students from a language background other than English as a proportion of all students, 2006<sup>a, b</sup>



a Absolute numbers of LBOTE students are sourced from the 2006 Census of Population and Housing, whilst data on all full time students are sourced from the ABS Schools Australia collection.
b See table 4A.20 for details of LBOTE definitions.

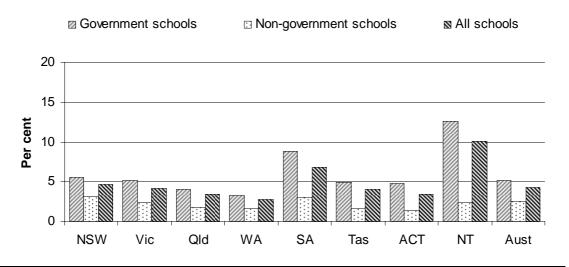
Source: DEST (unpublished) based on the ABS 2006 Census of Population and Housing; table 4A.20.

### Students with disabilities

Students with disabilities are educated in both mainstream and special schools. Students with disabilities are those students who satisfy the criteria for enrolment in special education services or programs provided in the State or Territory in which they are enrolled. These criteria vary across jurisdictions.

Nationally, the proportion of students with disabilities for all schools was 4.3 per cent and more than twice as high in government schools (5.2 per cent), compared with non-government schools (2.5 per cent) in 2006 (figure 4.3).

Figure 4.3 Funded students with disabilities as a proportion of all students, 2006<sup>a, b, c</sup>



<sup>a</sup> The ABS total student data refer to the absolute number of full time students. <sup>b</sup> To be an eligible student with disabilities, the student (among other things) must satisfy the criteria for enrolment in special education services or special education programs provided by the government of the State or Territory in which the student resides. Data should be used with caution as these criteria vary across jurisdictions; for example, SA data include a large number of students in the communication and language impairment category. This subset of students is not counted by other states/territories under funded students with disabilities. Other states/territories fund these students with other specific programs. <sup>c</sup> The 'funded' student data used by DEST refer to the FTE number of students that qualify for DEST recurrent funding. This excludes Full Fee Paying Overseas students from both the government and non-government sectors as well as a number of schools in the NT (these are funded through the Grants Commission process), and on Christmas and Cocos Islands (funded through the Department of Transport and Regional Services). The DEST funded figures also include Pre year 1 students in part time programmes in Queensland schools.

Source: ABS (2007); DEST (unpublished); table 4A.21.

## Geographically remote students

Identification of geographically remote students is based on the school location according to the metropolitan zone, provincial zone, remote areas and very remote areas as defined in the MCEETYA agreed classification.<sup>1</sup> The proportion of students attending schools in remote areas varies greatly across jurisdictions (table 4.6).

Nationally, the proportion of students enrolled in schools in remote areas was 1.5 per cent and more than twice as high in government schools (1.8 per cent),

<sup>&</sup>lt;sup>1</sup> To investigate the possibility that these data may understate the proportion of students in remote areas as a result of relying on school location rather than students' home location, the 2001 MCEETYA data were compared with data derived from the 2001 Census. The two data sets were found to be similar, except that Tasmania had about one third more remote area students in the Census data. This result may be indicative for the 2006 data.

compared with non-government schools (0.8 per cent) in 2006. Nationally, the proportion of students enrolled in schools in very remote areas was 0.9 per cent and four times as high in government schools (1.2 per cent), compared with non-government schools (0.3 per cent) in 2006 (table 4.6).

Table 4A.25 includes data relating to students attending primary and secondary schools located in metropolitan and provincial zones, as well as remote and very remote areas (see section 4.6 for a definition of the geographic classification used).

Students attending schools in remote and very remote areas as Table 4.6 a proportion of all students, all schools, 2006a

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
Remote areas									
Government schools	0.6	0.1	2.2	5.9	4.0	1.0		18.0	1.8
Non-government schools	0.2	_	0.9	2.1	1.2	0.6		31.9	8.0
All schools	0.5	0.1	1.8	4.6	3.0	0.9		21.3	1.5
Very remote areas									
Government schools	0.1		1.7	3.3	1.1	0.5		28.1	1.2
Non-government schools	0.1		0.3	1.4	0.2	-		11.4	0.3
All schools	0.1		1.3	2.7	8.0	0.4		24.1	0.9

a Victoria has no very remote areas. The ACT has no remote or very remote areas. .. Not applicable. - Nil or rounded to zero.

Source: DEST (unpublished); table 4A.25.

#### 4.2 Framework of performance indicators

This chapter provides performance indicators on the equity, effectiveness and efficiency of government expenditure on all schools in Australia.

Governments own and operate government schools, and have a direct interest in the equity, efficiency and effectiveness of their operation. In addition, governments are committed to providing access to education for all students and contribute to the funding of non-government schools. However, this chapter does not report on non-government sources of funding, and so does not compare the efficiency of government and non-government schools.

Box 4.1 describes the national goals for schooling, as endorsed by the MCEETYA.

## Box 4.1 National goals for schooling in the 21st century

The MCEETYA endorsed in April 1999 the following set of national goals for school education.

#### **Preamble**

Australia's future depends upon each citizen having the necessary knowledge, understanding, skills and values for a productive and rewarding life in an educated, just and open society. High quality schooling is central to achieving this vision.

This statement of national goals for schooling provides broad directions to guide schools and education authorities in securing these outcomes for students.

It acknowledges the capacity of all young people to learn, and the role of schooling in developing that capacity. It also acknowledges the role of parents as the first educators of their children and the central role of teachers in the learning process.

Schooling provides a foundation for young Australians' intellectual, physical, social, moral, spiritual and aesthetic development. By providing a supportive and nurturing environment, schooling contributes to the development of students' sense of self-worth, enthusiasm for learning and optimism for the future.

Governments set the public policies that foster the pursuit of excellence, enable a diverse range of educational choices and aspirations, safeguard the entitlement of all young people to high quality schooling, promote the economic use of public resources, and uphold the contribution of schooling to a socially cohesive and culturally rich society.

Common and agreed goals for schooling establish a foundation for action among State and Territory governments with their constitutional responsibility for schooling, the Australian Government, non-government school authorities and all those who seek the best possible educational outcomes for young Australians, to improve the quality of schooling nationally.

The achievement of these common and agreed national goals entails a commitment to collaboration for the purposes of:

- further strengthening schools as learning communities where teachers, students and their families work in partnership with business, industry and the wider community
- enhancing the status and quality of the teaching profession
- continuing to develop curriculum and related systems of assessment, accreditation and credentialling that promote quality and are nationally recognised and valued
- increasing public confidence in school education through explicit and defensible standards that guide improvement in students' levels of educational achievement and through which the effectiveness, efficiency and equity of schooling can be measured and evaluated.

## Box 4.1 (Continued)

These national goals provide a basis for investment in schooling to enable all young people to engage effectively with an increasingly complex world. This world will be characterised by advances in information and communication technologies, population diversity arising from international mobility and migration, and complex environmental and social challenges.

The achievement of the national goals for schooling will assist young people to contribute to Australia's social, cultural and economic development in local and global contexts. Their achievement will also assist young people to develop a disposition towards learning throughout their lives so that they can exercise their rights and responsibilities as citizens of Australia.

#### Goals

Schooling should develop fully the talents and capacities of all students. In particular, when students leave schools they should:

- 1. have the capacity for, and skills in, analysis and problem solving and the ability to communicate ideas and information, to plan and organise activities and to collaborate with others
- 2. have qualities of self-confidence, optimism, high self-esteem, and a commitment to personal excellence as a basis for their potential life roles as family, community and workforce members
- 3. have the capacity to exercise judgment and responsibility in matters of morality, ethics and social justice, and the capacity to make sense of their world, to think about how things got to be the way they are, to make rational and informed decisions about their own lives and to accept responsibility for their own actions
- 4. be active and informed citizens with an understanding and appreciation of Australia's system of government and civic life
- 5. have employment related skills and an understanding of the work environment, career options and pathways as a foundation for, and positive attitudes towards, vocational education and training, further education, employment and life-long learning
- 6. be confident, creative and productive users of new technologies, particularly information and communication technologies, and understand the impact of those technologies on society
- 7. have an understanding of, and concern for, stewardship of the natural environment, and the knowledge and skills to contribute to ecologically sustainable development and
- 8. have the knowledge, skills and attitudes necessary to establish and maintain a healthy lifestyle, and for the creative and satisfying use of leisure time.

## Box 4.1 (Continued)

### In terms of curriculum, students should have:

- 1. attained high standards of knowledge, skills and understanding through a comprehensive and balanced curriculum in the compulsory years of schooling encompassing the agreed eight key learning areas
  - (a) the arts
  - (b) English
  - (c) health and physical education
  - (d) languages other than English
  - (e) mathematics
  - (f) science
  - (g) studies of society and environment
  - (h) technology
- 2. attained the skills of numeracy and English literacy, such that every student should be numerate, able to read, write, spell and communicate at an appropriate level
- participated in programs of vocational learning during the compulsory years and have had access to vocational education and training programs as part of their senior secondary studies and
- 4. participated in programs and activities which foster and develop enterprise skills, including those skills which will allow them maximum flexibility and adaptability in the future.

## Schooling should be socially just so that:

- students' outcomes from schooling are free from the effects of negative forms of discrimination based on sex, language, culture and ethnicity, religion or disability; and of differences arising from students' socioeconomic background or geographic location
- 2. the learning outcomes of educationally disadvantaged students improve and, over time, match those of other students
- 3. Aboriginal and Torres Strait Islander students have equitable access to, and opportunities in, schooling so that their learning outcomes improve and, over time, match those of other students
- 4. all students understand and acknowledge the value of Aboriginal and Torres Strait Islander cultures to Australian society and possess the knowledge, skills and understanding to contribute to, and benefit from, reconciliation between Indigenous and non-Indigenous Australians

## Box 4.1 (Continued)

- 5. all students understand and acknowledge the value of cultural and linguistic diversity, and possess the knowledge, skills and understanding to contribute to, and benefit from, such diversity in the Australian community and internationally and
- all students have access to the high quality education necessary to enable the completion of school education to year 12 or its vocational equivalent and that provides clear and recognised pathways to employment and further education and training.

Source: Adapted from MCEETYA (1999).

The performance of school education is reported against the indicator framework in figure 4.4. This framework is consistent with the national goals for schooling (box 4.1). The performance indicator framework shows which data are comparable in the 2008 Report. For data that are not considered directly comparable, the text includes relevant caveats and supporting commentary. Chapter 1 discusses data comparability from a Report-wide perspective (see section 1.6).

## 4.3 Key performance indicator results

Different delivery contexts and locations influence the equity, effectiveness and efficiency of school education services. Appendix A contains short statistical profiles on each state and territory, which may assist in interpreting the performance indicators presented in this chapter.

The effectiveness indicators for school education in this chapter are based on achievement against the national goals for schooling. Access and equity objectives of school education can be assessed by comparing outcomes for special needs groups, such as Indigenous and LBOTE students, with those for all students. Outcomes are compared for special needs groups for indicators such as reading, writing and numeracy performance, completion rates, retention rates and participation rates, where possible.

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

Figure 4.4 **Performance indicators for all schools** 

## **Outputs**

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

## Equity and effectiveness

Access and equity measures for school education participation and retention are reported. Data are not currently available for reporting against attendance measures.

## Attendance

'Attendance' is an indicator of the effectiveness of school education. Attendance rates for special needs groups are an indication of the equity of access to school education (box 4.2).

## Box 4.2 **Attendance**

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

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

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

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

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

Data on full time students will be collected:

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

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

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

## **Participation**

'Participation' is an indicator of the effectiveness of school education (box 4.3).

## Box 4.3 **Participation**

'Participation' (school education participation rate) is an indicator of governments' objective to develop fully the talents and capacities of young people through participation in post-compulsory schooling.

The school education participation rate is defined as the number of 15–19 year old full time school students as a proportion of the estimated resident population of the same age.

Holding other factors constant, a higher or increasing participation rate suggests an improvement in educational outcomes through greater access to school education. Participation rates in school education need to be interpreted with care because rates are influenced by jurisdictional differences in, for example:

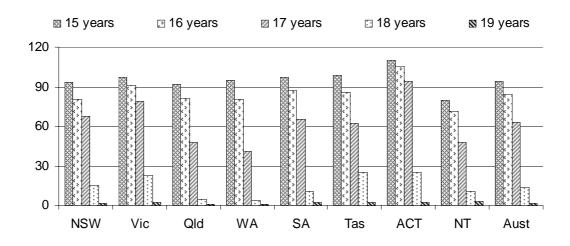
- enrolment policies across jurisdictions, which contribute to different age/grade structures
- school starting ages, year level at which secondary education commences (year 7 or year 8) and the age to which schooling is compulsory
- the extent of part time enrolment in schools (tables 4.4 and 4A.1–3).

This indicator does not provide information on young people who develop their talents and capacities through other options for delivering post-compulsory education and training — for example, work-based training and enrolment in technical and further education (TAFE) delivered programs. This indicator also does not provide information on the contribution of participation in schooling to the development of the students' talents and capacities.

A broader participation indicator that accounts for some of these factors is reported in the 'Early childhood, education and training preface'.

Nationally, 51.6 per cent of 15–19 year olds were enrolled in schools in 2006 (table 4A.114). Participation rates varied by jurisdiction, age and sex. Participation rates for females (52.9 per cent) were 2.6 percentage points higher than those for males (50.3 per cent). Participation rates declined as students exceeded the maximum compulsory school age (figure 4.5).

Figure 4.5 Participation rate of people aged 15–19 in school education, all schools, 2006<sup>a, b, c</sup>



a Proportion of the population who were not of compulsory school age in some jurisdictions, but who were enrolled as full time students in August 2006. b Refer to section 4.1 for information on school age requirements. c Participation rates in the ACT exceed 100 per cent as a result of NSW residents from surrounding areas enrolling in ACT schools.

Source: ABS (2007); table 4A.114.

## Retention

'Retention' is an indicator of the effectiveness of school education (box 4.4).

#### Box 4.4 Retention

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

The apparent retention rate is defined as the number of full time school students in a designated level/year of education as a percentage of their respective cohort group (which is either at the commencement of their secondary schooling — at year 7 or 8 — or at year 10). Data are reported for the proportion of:

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

### Box 4.4 Continued

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

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

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

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

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

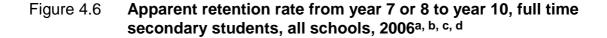
Apparent retention rates are influenced by a wide range of factors, including student perceptions of the benefits of schooling, the availability of employment and further educational alternatives, socioeconomic status and population movements. Care needs be taken in interpreting apparent retention rates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

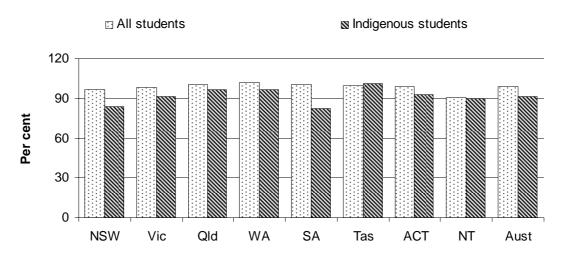
- enrolment policies across jurisdictions, which contribute to different age/grade structures
- the extent of part time year 12 enrolment in schools.

Apparent retention rates, from the commencement of secondary school at year 7 or 8 (figure 4.1 shows the differences across jurisdictions) to year 10, for all students in most jurisdictions were 98–100 per cent in 2006 with a national rate of 98.6 (figure 4.6). High rates are to be expected because normal year level progression means students in year 10 are generally of an age at which schooling is compulsory.

Retention rates for Indigenous students provide one measure of the equity of access to schooling. Retention rates to year 10 for Indigenous students were lower than those for all students in most jurisdictions. The national retention rate for

Indigenous students was 91.4 per cent, or 7.2 percentage points lower than that for all students.





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

Source: ABS (2007); table 4A.120.

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

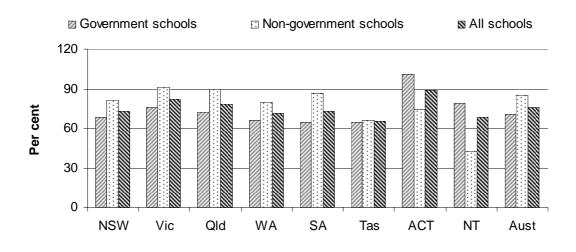
Factors affecting apparent retention can combine to result in a year 12 cohort that is substantially different in composition from the corresponding year 10 cohort — for example:

- in SA, if part time students are included in the 2006 year 12 total, then the apparent retention rate becomes 87.0 per cent, compared with 72.7 per cent for full time students only (table 4A.117)
- in some jurisdictions, young people may choose to complete their post compulsory education in the TAFE system rather than continue at school. In NSW, for example, 3581 students aged 15–19 years undertook their Higher

School Certificate or other tertiary preparation studies through TAFE institutes in 2006 (NSW Government unpublished).

Nationally, the apparent retention rate from year 10 to year 12 for all schools was 76.1 per cent in 2006. The apparent retention rate from year 10 to year 12 for government schools was 70.8 per cent, and for non-government schools was 84.9 per cent. The apparent retention rates for both government schools and non-government schools varied across jurisdictions (figure 4.7).

Figure 4.7 Apparent retention rate from year 10 to year 12, full time secondary students, by school type, 2006<sup>a, b, c</sup>

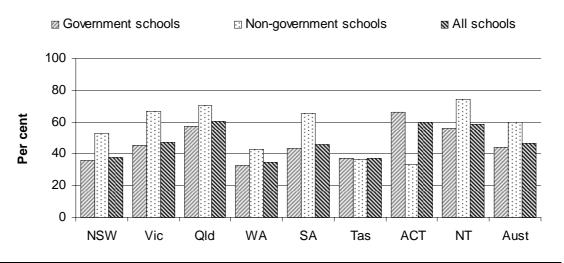


<sup>&</sup>lt;sup>a</sup> Apparent retention rates are affected by factors that vary across jurisdictions. For this reason, variations in apparent retention rates over time within jurisdictions may be more useful than comparisons across jurisdictions. <sup>b</sup> Retention rates can exceed 100 per cent for a variety of reasons, including student transfers between jurisdictions and government and non-government schools after the base year. <sup>c</sup> The exclusion of part time students from standard apparent retention rate calculations has implications for the interpretation of results for all jurisdictions, but particularly for SA, Tasmania and the NT where there are high proportions of part time students in government schools (table 4.4).

Source: ABS (2007); table 4A.117.

For government and non-government schools, apparent rates of retention from year 10 to year 12 for Indigenous students in 2006 varied across jurisdictions (figure 4.8). In interpreting this indicator, note that nationally 8.6 per cent of Indigenous students left school before year 10 (figure 4.6) — compared to 1.4 per cent of all students — so are not included in the base year for retention from year 10 to year 12. This baseline varies across jurisdictions. Further, Indigenous students as a proportion of all students was 5.4 per cent in government schools compared with 1.7 per cent in non-government schools and some jurisdictions have very low numbers of Indigenous students (table 4A.19). Nationally, Indigenous retention from year 10 to year 12 for all schools in 2006 was 46.7 per cent (figure 4.8), or 29.4 percentage points lower than the rate for all students.

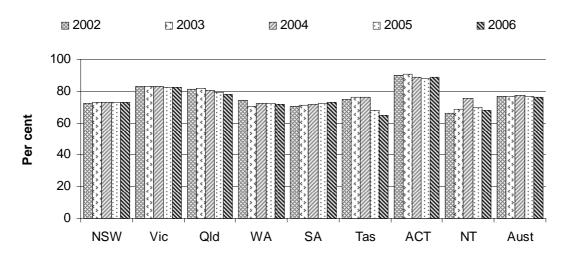
Figure 4.8 Apparent retention rates from year 10 to year 12, Indigenous full time secondary students, 2006<sup>a, b, c</sup>



<sup>&</sup>lt;sup>a</sup> Apparent retention rates are affected by factors that vary across jurisdictions. For this reason, variations in apparent retention rates over time within jurisdictions may be more useful than comparisons across jurisdictions. <sup>b</sup> The exclusion of part time students from standard apparent retention rate calculations has implications for the interpretation of results for all jurisdictions, but particularly for SA, Tasmania and the NT where there are high proportions of part time students in government schools (table 4.4). <sup>c</sup> Ungraded students are not included in the calculation of apparent retention rates. This exclusion has particular implications for the NT, where 11.1 per cent of Indigenous secondary students are ungraded (compared with an average of 4.2 per cent for the rest of Australia), in 2006, and this should be considered when interpreting the data. Source: ABS (2007); table 4A.117.

Apparent rates of retention for all full time students from year 7 or 8 to year 10 were steady around 98-99 per cent between 2002 and 2006, and the rate of retention from year 10 to year 12 was steady around 76-77 per cent (figure 4.9).

Figure 4.9 Apparent rates of retention from year 10 to year 12, full time secondary students, all schools<sup>a, b, c</sup>



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

Source: ABS (2005, 2007); table 4A.120.

## **Efficiency**

Governments have an interest in achieving the best results from their expenditure on schooling, both as owners and operators of government schools, and as major providers of funds to the non-government school sector. An objective of the Steering Committee is to publish comparable estimates of costs. Ideally, such comparison should include the full range of costs to government. Where the full costs cannot be measured, estimating costs on a consistent basis is the best approach.

Table 4A.12 shows information on the comparability of the source expenditure data for government schools used for this chapter.

### Recurrent expenditure per student

'Recurrent expenditure per student' is an indicator of the efficiency with which resources are used to provide school education services (box 4.5).

## Box 4.5 **Recurrent expenditure per student**

'Recurrent expenditure per student' (government recurrent expenditure per student) is an indicator of governments' objective to fund and/or provide education in an efficient manner.

Government recurrent expenditure per student is defined as government recurrent expenditure per FTE student. It is reported for in-school primary, in-school secondary and out-of-school services, and for government and non-government schools.

Holding other factors constant, a low or decreasing government recurrent expenditure per FTE student represents better or improved efficiency. Efficiency data are difficult to interpret. While high or increasing government recurrent expenditure per student may reflect deteriorating efficiency, it may also reflect changes in aspects of schooling (broader curricula, higher quality education or increased accessibility), or the characteristics of the education environment (such as population dispersion). Similarly, low or decreasing expenditure per student may reflect improving efficiency or lower quality (less effective education) or more narrowly defined curricula. Efficiency data need to be interpreted within the context of the effectiveness and equity indicators to derive an holistic view of performance.

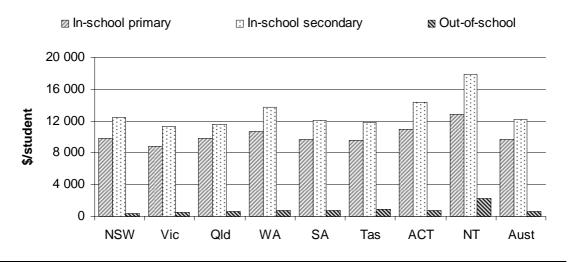
A number of factors may influence government recurrent expenditure per student (see Commonwealth Grants Commission reference in chapter 1, section 1.5 for further details). This Report does not, however, make any cost adjustments based on these or any of the following factors. Differences in the costs of educating students can be driven by:

- influences beyond the control of governments, such as a high proportion of geographically remote students and/or a dispersed population, as well as migration between states and territories
- policy changes in education
- various approaches that education departments and schools apply in managing resources
- · economies of scale.

These factors may need to be considered when examining each jurisdiction's expenditure per student.

A proxy indicator of efficiency is the level of government inputs per unit of output (unit cost). Nationally, in-school government expenditure per FTE student in government primary schools was \$9699 and in-school government expenditure per FTE student in government secondary schools was \$12 148 in 2005-06. Out-of-school government expenditure per FTE student in government schools was \$580 in 2005-06 (figure 4.10).

Figure 4.10 Government recurrent expenditure per FTE student, government schools, 2005-06<sup>a, b</sup>

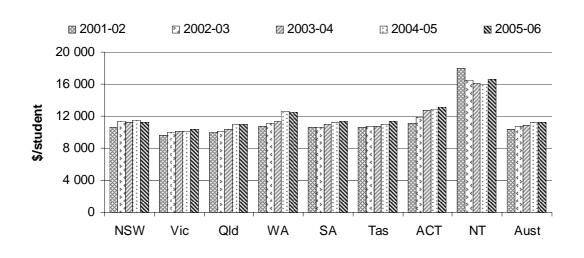


<sup>&</sup>lt;sup>a</sup> See notes to tables 4A.7 and 4A.8 for definitions and data caveats. <sup>b</sup> Payroll tax estimates have been included for WA and the ACT for comparability reasons.

Source: ABS (2007); MCEETYA NSSC (unpublished); table 4A.8.

Nationally, government expenditure per FTE student in all government schools was \$11 243 in 2005-06. It increased (in average annual real terms) between 2001-02 and 2005-06 by 2.1 per cent per year (figure 4.11).

Figure 4.11 Government real recurrent expenditure per FTE student, government schools (2005-06 dollars)<sup>a, b, c</sup>

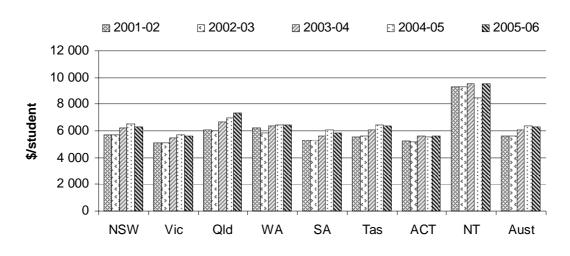


<sup>&</sup>lt;sup>a</sup> See notes to tables 4A.7 and 4A.8 for definitions and data caveats. <sup>b</sup> Data for 2001-02 to 2004-05 have been adjusted to 2005-06 dollars using the gross domestic product (GDP) price deflator. <sup>c</sup> Payroll tax estimates have been included for WA and the ACT for comparability reasons.

Source: ABS (2003, 2004, 2005, 2006, 2007); MCEETYA NSSC (unpublished); table 4A.9.

Nationally, government expenditure per FTE student in all non-government schools was \$6287 in 2005-06. It increased (in average annual real terms) between 2001-02 and 2005-06 (figure 4.12) by 2.8 per cent per year (table 4A.9).

Figure 4.12 Government real recurrent expenditure per FTE student, non-government schools (2005-06 dollars)<sup>a, b, c</sup>



<sup>&</sup>lt;sup>a</sup> See notes to tables 4A.7–9 for definitions and data caveats. <sup>b</sup> Data for 2001-02 to 2004-05 have been adjusted to 2005-06 dollars using the gross domestic product (GDP) price deflator. <sup>c</sup> The sum of Australian Government specific purpose payments for non-government schools, and State and Territory government payments to non-government schools. Data on State and Territory government payments to non-government schools are not fully comparable across jurisdictions.

Source: ABS (2003, 2004, 2005, 2006, 2007); DEST (unpublished); State and Territory governments (unpublished); table 4A.9.

## Staff expenditure per student

'Staff expenditure per student' is an indicator of the efficiency with which resources are used to provide school education services (box 4.6).

## Box 4.6 Staff expenditure per student

'Staff expenditure per student' (government recurrent expenditure on staff per student) is an indicator of governments' objective to provide education in an efficient manner.

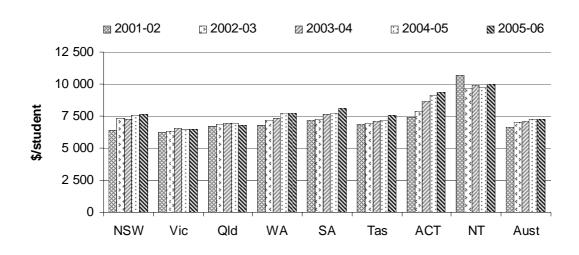
Government recurrent expenditure on staff per student is defined as government expenditure on staff per FTE student in government schools. Expenditure on staff is the major component of spending on schools.

## Box 4.6 Continued

Holding other factors constant, low or decreasing government expenditure on staff per FTE student represents better or improved efficiency. Efficiency data are difficult to interpret and this indicator in particular is partial in nature as it does not reflect the full cost per student. While high or increasing government expenditure on staff per student may reflect deteriorating efficiency, it may also reflect improvements in schooling (through higher quality teachers), or the characteristics of the education environment (broader curricula such as information technology and the need for teachers with new skills). Similarly, a low or decreasing expenditure on staff per student may reflect improving efficiency or lower quality (less effective education) or more narrowly defined curricula. Efficiency data need to be interpreted within the context of the effectiveness and equity indicators to derive an holistic view of performance.

Expenditure on staff is the major component of government recurrent expenditure on government schools (\$16.5 billion), accounting for 65.0 per cent of the national total, in 2005-06. Of this expenditure, 79.8 per cent was on in-school teachers and 20.2 per cent was on other staff (table 4A.7). The average annual real increase in expenditure on staff per FTE student between 2001-02 and 2005-06 was 2.5 per cent per year (figure 4.13).

Figure 4.13 Real government recurrent expenditure on staff per FTE student, government schools (2005-06 dollars)<sup>a, b</sup>



**a** See notes to tables 4A.7 and 4A.8 for definitions and data caveats. **b** Data for 2001-02 to 2004-05 have been adjusted to 2005-06 dollars using the gross domestic product (GDP) price deflator.

Source: ABS (2003, 2004, 2005, 2006, 2007); MCEETYA NSSC (unpublished); table 4A.8.

User cost of capital per student

'UCC per student' is an indicator of the efficiency with which capital resources are used (box 4.7).

## Box 4.7 User cost of capital per student

'UCC per student' (notional UCC per student) is an indicator of governments' objective to provide education in an efficient manner.

Notional UCC per student is defined as the dollars of UCC per FTE student.

The notional UCC for government services is the cost of funds tied up in capital used to produce services (for example, land and buildings owned by government schools). The notional UCC makes explicit the opportunity cost of using the funds to provide services rather than investing elsewhere or retiring debt. When comparing the costs of government services, it is important to account for the notional UCC because it is:

- often a significant component of the cost of services
- often treated inconsistently (that is, included in the costs of services delivered by most non-government service providers, but effectively costed at zero for many government service providers).

The UCC reflects the annual UCC per student, and is set at 8 per cent of the value of non-current physical assets (for example, land, buildings, plant and equipment).

Holding other factors constant, a low or decreasing UCC per student represents better or improved efficiency. Efficiency data are difficult to interpret and this indicator in particular is only partial in nature as it does not reflect the full cost per student. While high or increasing UCC per student may reflect deteriorating efficiency, it may also reflect changes in aspects of schooling (broader curricula, enhanced facilities), or the characteristics of the education environment (such as population dispersion). Similarly, low or decreasing UCC per student may reflect improving efficiency or lower quality (less effective education) or fewer facilities or reduced capital maintenance. Efficiency data need to be interpreted within the context of the effectiveness and equity indicators to derive an holistic view of performance.

The Steering Committee accepts that the asset valuation data, from which the notional UCC has been calculated, were not fully comparable across jurisdictions until 2003-04 (table 4A.11). It also recognises that the treatment of costs in the past has not fully recognised the cost of public capital used by agencies to deliver services — that is, capital has generally been considered 'free'. This can lead to significant underestimation of costs of those services for which government capital is a major input. Using an imperfect costing of government capital, therefore, is preferable to not costing it at all, and also provides an incentive to improve data over time. The data definitions for asset reporting and valuation methods applied

from 2003-04 are nationally consistent resulting in comparable asset values data across jurisdictions which are used to calculate the notional UCC.

The notional UCC per FTE government school student in 2005-06 averaged \$1484 nationally (figure 4.14).

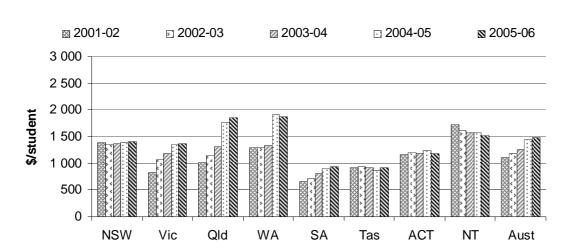


Figure 4.14 Notional UCC per FTE student, government schools<sup>a</sup>

Source: ABS (2003, 2004, 2005, 2006, 2007); MCEETYA NSSC (unpublished); tables 4A.9-10.

Student-to-staff ratio

'Student-to-staff ratio' is an indicator of the efficient use of staff resources (box 4.8).

### Box 4.8 Student-to-staff ratio

The 'student-to-staff ratio' is an indicator of governments' objective to provide education in an efficient manner.

The student-to-staff ratio is defined as the number of FTE students per FTE staff. Data are reported for primary, secondary and all schools, and for teaching and non-teaching staff. The student-to-teacher ratio presents the number of students per teacher where teachers are classified in a way that can be compared across jurisdictions. A low ratio means there are a small number of students per teacher. (The ratio is not a measure of class size.)

<sup>&</sup>lt;sup>a</sup> See notes to tables 4A.9-10 for definitions and data caveats.

## Box 4.8 (Continued)

Holding other factors constant, a high or increasing student-to-teacher ratio represents better or improved efficiency, but only when output quality and outcomes are the same as (or higher than) those in the other systems being compared. A low or decreasing student-to-teacher ratio may reflect decreasing efficiency, but may also reflect a higher quality education system, if it is assumed that teachers have more time for each student and that this results in better student outcomes. There is, however, no clear agreement in international literature that smaller class sizes, particular in later year levels, necessarily improve outcomes.

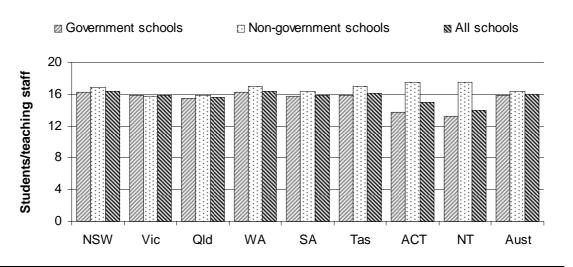
The ratio needs to be interpreted with care because it is aggregated across all subjects and year levels, so it does not reflect the fact that a lower ratio may be more important for certain subjects and/or year levels and it does not account for learning outcomes, teacher quality, experience and qualifications. Further, it can be affected by a number of factors, including:

- the proportion of small rural schools for example, a large proportion of small rural schools can significantly lower the overall average student-to-teacher ratio, while a large proportion of students in metropolitan schools can increase the ratio
- the proportion of special needs students for example, special schools catering for students with disabilities generally have significantly lower student to teacher ratios than those of mainstream schools and additional resources are also required in mainstream schools where special needs students attend
- the degree to which administrative work is undertaken by people classified as teachers (such as principals, deputy principals and senior teachers)
- other inputs to school education (for example, non-teaching staff, computers, books and laboratory equipment).

Efficiency data need to be interpreted within the context of the effectiveness and equity indicators to derive an holistic view of performance.

Nationally, for government primary schools, the student-to-teacher ratio was 15.8 in 2006. For non-government primary schools, the student-to-teacher ratio was 16.4 in 2006. For all primary schools, the student-to-teacher ratio was 16.0 in 2006 (figure 4.15).

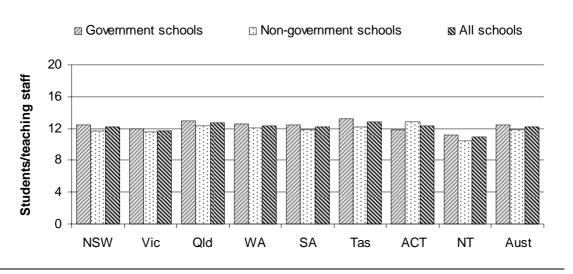
Figure 4.15 Ratio of FTE students to FTE teaching staff, primary schools, 2006<sup>a</sup>



a See notes to table 4A.13 for definitions and data caveats. Source: ABS (2007); table 4A.13.

Nationally, for government secondary schools, the student-to-teacher ratio was 12.4 in 2006. For non-government secondary schools, the student-to-teacher ratio was 11.8 in 2006. For all secondary schools, the student-to-teacher ratio was 12.2 in 2006 (figure 4.16).

Figure 4.16 Ratio of FTE students to FTE teaching staff, secondary schools, 2006<sup>a</sup>



a See notes to table 4A.13 for definitions and data caveats.
Source: ABS (2007); table 4A.13.

Nationally, for all government schools, the student-to-teacher ratio was 14.3 in 2006. For all non-government schools, the student-to-teacher ratio was 13.8 in 2006. For all schools, the student-to-teacher ratio was 14.1 in 2006 (table 4A.13).

Refer to table 4A.13 for further detail on student-to-staff ratios, including those for non-school staff and all staff, for all jurisdictions.

#### **Outcomes**

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

## Nationally comparable learning outcomes

'Reading performance', 'writing performance', 'numeracy performance', 'science literacy performance', 'civics and citizenship performance', and 'information and communication technology literacy performance' have been identified as indicators of learning outcomes (boxes 4.9–4.14) and are discussed in this section. The outcomes for VET in schools participation and attainment, completion rates, and school leaver destination (boxes 4.15–4.18) are discussed in the following section.

Years 3, 5 and 7 nationally comparable learning outcomes data for reading, writing and numeracy performance for 2005 (and earlier years) are reported. Details of these learning outcomes data and accompanying information from the national collection are reported in tables 4A.26–94. Limitations of national learning outcomes data are detailed in the 2004 Report on Government Services (box 3.1, pages 3.36-7).

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

The international triennial Programme for International Student Assessment (PISA) provides learning outcomes data for 15 year olds in three core assessment domains: reading literacy, mathematical literacy and scientific literacy.

In 2006, approximately 400 000 students from 57 countries participated in the PISA Assessment. From Australia this included over 14 170 students from 356 schools. Scientific literacy was the major domain tested in the PISA 2006 cycle. Detailed information about PISA 2006 is available in Thomson et al. (2007) and OECD (2007).

Data on reading literacy and mathematical literacy from PISA 2006 have been included in this chapter. The nationally agreed standard for reading literacy is the proportion of students who achieve at or above proficiency level 3. At this stage, there is no nationally agreed standard for mathematical literacy. This chapter reports the proxy standard of the proportion of students who achieve at or above proficiency level 3 for mathematical literacy. Scientific literacy results will be included in the 2009 Report.

Results from PISA 2003 and PISA 2000 were included in the 2006 Report (SCRGSP 2006, pages 3.37-38, 3.44–46, 3.58-59 and 3.61-62) and 2003 Report (SCRGSP 2003, pages 3.19, 3.22-23 and 3.26–28) respectively. Information and data on PISA 2000 and 2003 are available in Lokan et al. (2001), Thomson et al. (2004a, 2004b) and tables 4A.101–109.

Triennial year 6 and year 10 information and communication technology literacy performance was assessed in 2005, but data were not available for publication in this Report. Triennial year 6 and year 10 civics and citizenship performance data for 2004 are reported in tables 4A.98–100. Triennial year 6 science literacy performance data for 2003 are reported in tables 4A.95–97.

Years 4 and 8 Trends in International Mathematics and Science Study (TIMSS) learning outcomes data for 2002-03 are also reported. TIMSS focuses on the mathematics and science curriculum, identifying the concepts and processes students have learned, the factors which are linked to students' opportunity to learn, and how these factors influence students' achievements. Detailed information about TIMSS 2002-03 is available in Thomson and Fleming (2004a, 2004b) and tables 4A.110–113.

## Interpreting learning outcomes data

To assist with making comparisons between jurisdictions, 95 per cent confidence intervals are presented in charts, calculated from the standard errors in accompanying tables (tables 4A.26-100). Confidence intervals are a standard way of expressing the degree of uncertainty associated with survey estimates or performance measurement. An estimate of 80 with a confidence interval of  $\pm$  2, for example, means that if another sample had been drawn, or if another combination of test items had been used, there is a 95 per cent chance that the result would lie between 78 and 82. The learning outcomes proportion for a jurisdiction, therefore, can be thought of in terms of a range. If one jurisdiction's rate ranges from 78–82 and another's from 77–81, then it is not possible to say with confidence that one differs from the other (because there is unlikely to be a statistically significant difference). Where ranges do not overlap, there is a high likelihood that there is a

statistically significant difference. To say that there is a statistically significant difference means there is a high probability that there is an actual difference; it does not imply that the difference is necessarily large or important.

Care should be taken when making comparisons in the results across the three PISA cycles. Comparisons should only be made between a major and minor assessment domain once the domain has become the major assessment domain for the first time. For example:

- Reading literacy was the major assessment domain in PISA 2000. Therefore, PISA 2000 is able to be compared with PISA 2003 and PISA 2006 for reading literacy results.
- Mathematical literacy was the major assessment domain in PISA 2003. Therefore, PISA 2003 is able to be compared with PISA 2006 for mathematical literacy results.
- Scientific literacy was the major assessment domain in PISA 2006 (results to be included in the 2009 Report). Therefore, PISA 2006 is not able to be compared with previous cycles for scientific literacy.

### Reading performance

'Reading performance' is an indicator of students' achievement in a core curriculum area (box 4.9).

### Box 4.9 **Reading performance**

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

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

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

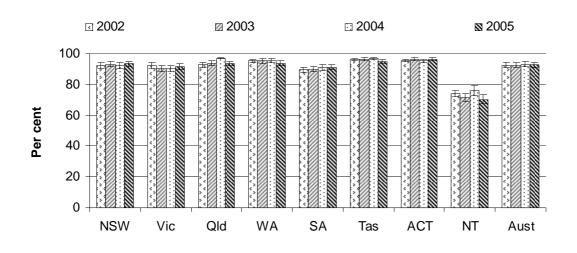
Nationally, the proportion of assessed year 3 students who achieved the reading benchmark in 2005 was 91.1–94.3 per cent (figure 4.17). The national proportion of students by equity group who achieved the year 3 reading benchmark in 2005 was:

- 93.1–95.7 per cent for female students, higher than the proportion for male students (89.3–93.1 per cent)
- 73.7–82.3 per cent for Indigenous students
- 90.2–93.8 per cent for LBOTE students (figure 4.18).

The proportion of assessed year 5 students who achieved the reading benchmark in 2005 was 85.7–89.3 per cent nationally (figure 4.19). The proportion of students by equity group who achieved the year 5 reading benchmark in 2005 was:

- 88.5–91.7 per cent for female students, higher than the proportion for male students (83.1–87.1 per cent)
- 58.7–66.9 per cent for Indigenous students
- 84.1–88.3 per cent for LBOTE students (figure 4.20).

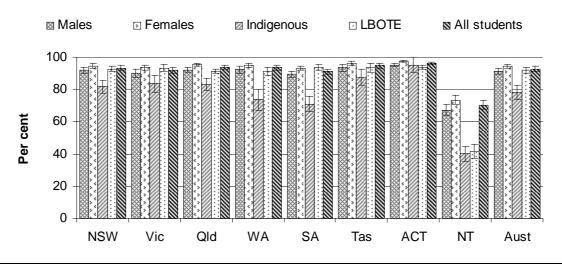
Figure 4.17 Proportion of year 3 students achieving the reading benchmark<sup>a, b</sup>



<sup>&</sup>lt;sup>a</sup> Error bars represent the 95 per cent confidence interval associated with each point estimate. <sup>b</sup> For further information and caveats see tables 4A.29-30, 4A.45-46, 4A.63-64, 4A.81-82.

Source: MCEETYA (2005a, 2005b, 2006a, 2007a); tables 4A.26, 4A.41, 4A.59 and 4A.77.

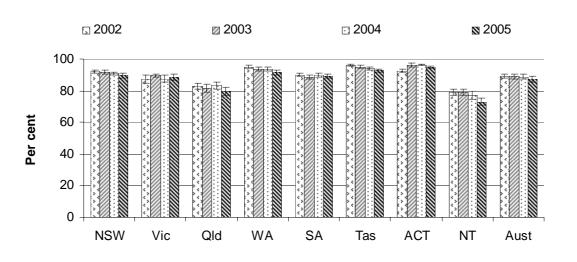
Figure 4.18 **Proportion of year 3 students achieving the reading benchmark,** by equity group, 2005<sup>a, b</sup>



<sup>&</sup>lt;sup>a</sup> Error bars represent the 95 per cent confidence interval associated with each point estimate. <sup>b</sup> For further information and caveats see tables 4A.81-82.

Source: MCEETYA (2007a); table 4A.77.

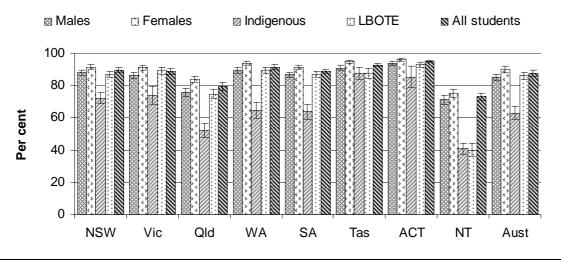
Figure 4.19 **Proportion of year 5 students achieving the reading** benchmark<sup>a, b</sup>



**a** Error bars represent the 95 per cent confidence interval associated with each point estimate. **b** For further information and caveats see tables 4A.29-30, 4A.45-46, 4A.63-64, 4A.81-82.

Source: MCEETYA (2005a, 2005b, 2006a, 2007a); tables 4A.27, 4A.42, 4A.60 and 4A.78.

Figure 4.20 Proportion of year 5 students achieving the reading benchmark, by equity group, 2005<sup>a, b</sup>

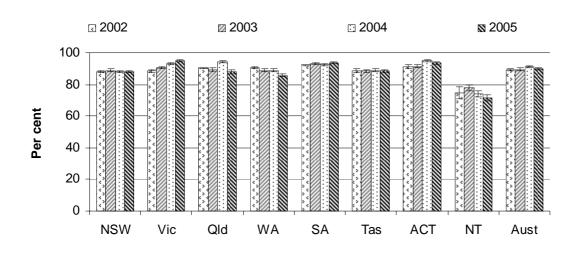


<sup>&</sup>lt;sup>a</sup> Error bars represent the 95 per cent confidence interval associated with each point estimate. <sup>b</sup> For further information and caveats see tables 4A.81-82.

Source: MCEETYA (2007a); table 4A.78.

The proportion of assessed year 7 students who achieved the reading benchmark in 2005 was 89.0–90.6 per cent nationally (figure 4.21).

Figure 4.21 Proportion of year 7 students achieving the reading benchmark<sup>a, b</sup>



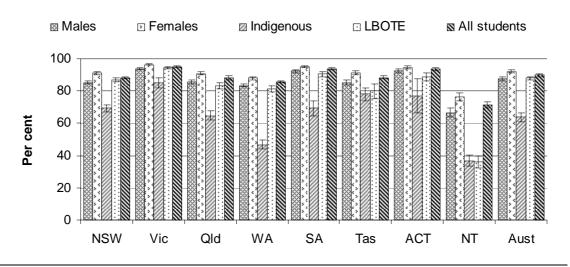
<sup>&</sup>lt;sup>a</sup> Error bars represent the 95 per cent confidence interval associated with each point estimate. <sup>b</sup> For further information and caveats see tables 4A.29-30, 4A.45-46, 4A.63-64, 4A.81-82.

Source: MCEETYA (2005a, 2005b, 2006a, 2007a); tables 4A.28, 4A.43, 4A.61 and 4A.79.

The proportion of students by equity group who achieved the year 7 reading benchmark in 2005 was:

- 91.4–93.0 per cent for female students, higher than the proportion for male students (86.6–88.6 per cent)
- 60.9–66.7 per cent for Indigenous students
- 86.7–89.1 per cent for LBOTE students (figure 4.22).

Figure 4.22 **Proportion of year 7 students achieving the reading benchmark**, **by equity group, 2005**<sup>a, b</sup>



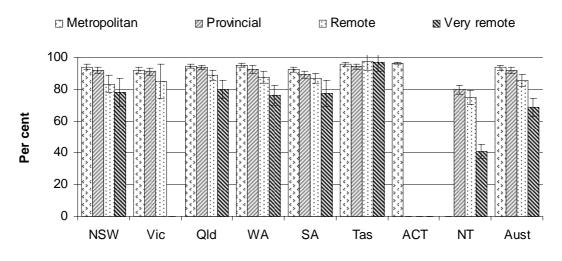
<sup>&</sup>lt;sup>a</sup> Error bars represent the 95 per cent confidence interval associated with each point estimate. <sup>b</sup> For further information and caveats see tables 4A.81-82.

Source: MCEETYA (2007a); table 4A.79.

Nationally, the proportion of assessed students from metropolitan areas who achieved the reading benchmark in 2005 was:

- 92.1–94.9 per cent for year 3 students, no different to the proportion for provincial students (89.7–93.7 per cent), and above the proportion for remote students (81.7–89.5 per cent) and very remote students (62.8–74.4 per cent) (figure 4.23)
- 86.9–90.3 per cent for year 5 students, no different to the proportion for provincial students (84.3–88.3 per cent), and above the proportion for remote (73.8–81.4 per cent) and very remote students (48.4–59.4 per cent) (table 4A.80)
- 90.2–91.8 per cent for year 7 students, above the proportion for provincial (87.5-89.7 per cent), remote (75.0–82.0 per cent) and very remote students (47.9–58.5 per cent) (table 4A.80).

Figure 4.23 Proportion of year 3 students achieving the reading benchmark, by geolocation, 2005<sup>a, b, c</sup>



<sup>&</sup>lt;sup>a</sup> Error bars represent the 95 per cent confidence interval associated with each point estimate. <sup>b</sup> Data for year 3 students are shown and may not be representative of students in years 5 and 7 which are detailed in table 4A.80. <sup>c</sup> Insufficient or no students in an area of geographic classification are not included. There are no very remote areas in Victoria. There are no provincial, remote or very remote areas in the ACT. There is no metropolitan zone in the NT.

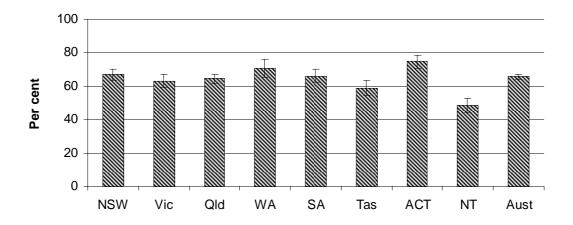
Source: MCEETYA (2007a); table 4A.80.

National data on the proportion of assessed Indigenous students in years 3, 5 and 7 achieving the reading benchmark in 2005, by metropolitan, provincial, remote and very remote areas, are reported in table 4.7.

In PISA 2006 the proportion of 15 year old students who achieved at level 3 or above in reading literacy was:

- 63.8–67.4 per cent for all Australian students (figure 4.24)
- 71.5–75.5 per cent for female students, higher than the proportion for male students (55.6–60.4 per cent)
- 28.5–38.5 per cent for Indigenous students, 33.2–64.6 per cent for geographically remote students and 45.6–50.0 per cent for students from low socioeconomic status families (table 4A.102).

Figure 4.24 Proportion of 15 year old students achieving level 3 or above, overall reading literacy scale, 2006<sup>a, b</sup>



<sup>&</sup>lt;sup>a</sup> Error bars represent the 95 per cent confidence intervals associated with each point estimate. <sup>b</sup> The PISA overall reading literacy scale has five defined proficiency levels, from level 5 (the highest) to level 1 (the lowest) with an additional level referred to as 'Below level 1' which covers those students who are unable to reach even the first threshold of the skills that PISA seeks to measure. Level 3 or above can be described as a level of achievement that is reasonably challenging and which requires students to demonstrate more than minimal or elementary skills to be regarded as reaching it.

Source: ACER (unpublished); table 4A.101.

### Writing performance

'Writing performance' is an indicator of students' achievement in a core curriculum area (box 4.10).

### Box 4.10 Writing performance

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

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

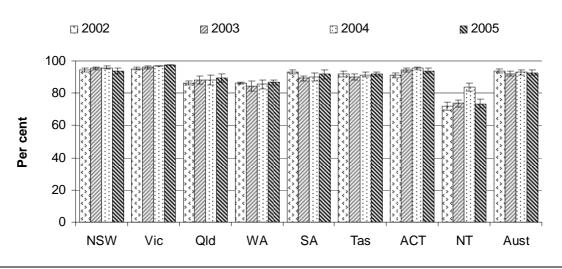
(Continued on next page)

### Box 4.10 (Continued)

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

• Nationally, the proportion of assessed year 3 students who achieved the writing benchmark in 2005 was 91.2–94.4 per cent (figure 4.25).

Figure 4.25 Proportion of year 3 students achieving the writing benchmark<sup>a, b</sup>



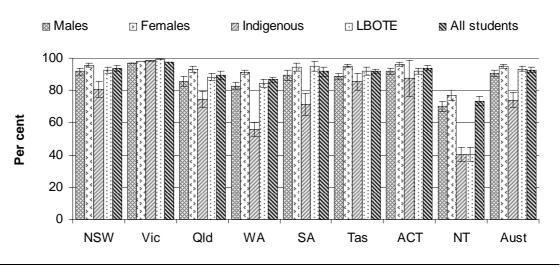
**a** Error bars represent the 95 per cent confidence interval associated with each point estimate. **b** For further information and caveats see tables 4A.34-35, 4A.51-52, 4A.69-70 and 4A.87-88.

Source: MCEETYA (2005a, 2005b, 2006a, 2007a); tables 4A.31, 4A.47, 4A.65 and 4A.83.

The national proportion of students by equity group who achieved the year 3 writing benchmark in 2005 was:

- 93.8–96.4 per cent for female students, higher than the proportion for male students (88.7–92.7 per cent)
- 69.3–78.7 per cent for Indigenous students
- 91.9–94.9 per cent for LBOTE students (figure 4.26).

Figure 4.26 **Proportion of year 3 students achieving the writing benchmark,** by equity group, 2005<sup>a, b</sup>

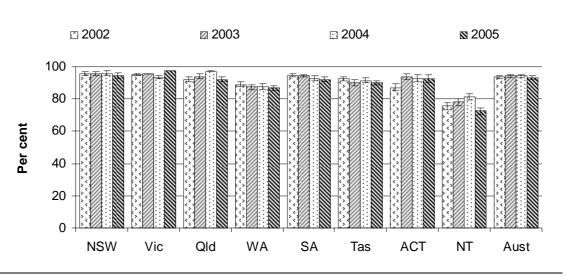


<sup>&</sup>lt;sup>a</sup> Error bars represent the 95 per cent confidence interval associated with each point estimate. <sup>b</sup> For further information and caveats see tables 4A.87-88.

Source: MCEETYA (2007a); table 4A.83.

Nationally, the proportion of assessed year 5 students who achieved the writing benchmark in 2005 was 92.0–94.6 per cent (figure 4.27).

Figure 4.27 Proportion of year 5 students achieving the writing benchmark<sup>a, b</sup>



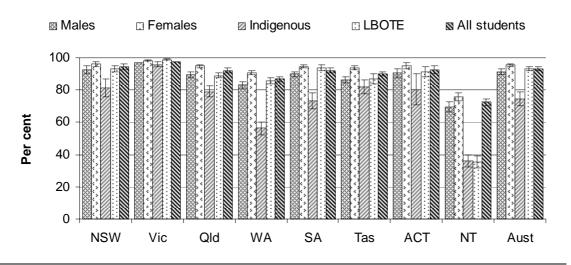
**a** Error bars represent the 95 per cent confidence interval associated with each point estimate. **b** For further information and caveats see tables 4A.34-35, 4A.51-52, 4A.69-70 and 4A.87-88.

Source: MCEETYA (2005a, 2005b, 2006a, 2007a); tables 4A.32, 4A.48, 4A.66 and 4A.84.

The national proportion of students by equity group who achieved the year 5 writing benchmark in 2005 was:

- 94.4–96.4 per cent for female students, higher than the proportion for male students (89.6–93.0 per cent)
- 70.0–78.6 per cent for Indigenous students
- 91.7–94.5 per cent for LBOTE students (figure 4.28).

Figure 4.28 **Proportion of year 5 students achieving the writing benchmark,** by equity group, 2005<sup>a, b</sup>



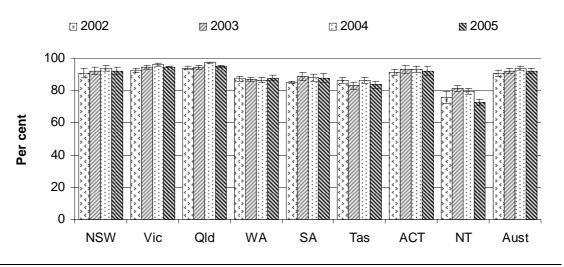
<sup>&</sup>lt;sup>a</sup> Error bars represent the 95 per cent confidence interval associated with each point estimate. <sup>b</sup> For further information and caveats see tables 4A.87-88.

Source: MCEETYA (2007a); table 4A.84.

Nationally, the proportion of assessed year 7 students who achieved the writing benchmark in 2005 was 90.7–93.7 per cent (figure 4.29). The national proportion of students by equity group who achieved the year 7 writing benchmark in 2005 was:

- 94.1–96.3 per cent for female students, higher than the proportion for male students (87.3–91.3 per cent)
- 68.0–76.6 per cent for Indigenous students
- 89.8–93.4 per cent for LBOTE students (figure 4.30).

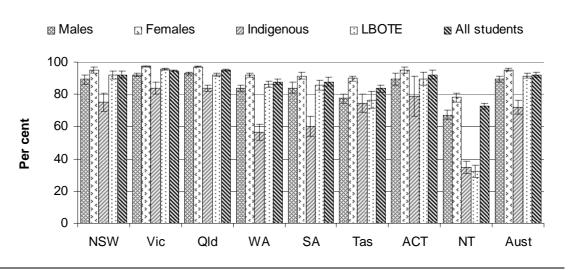
Figure 4.29 Proportion of year 7 students achieving the writing benchmark<sup>a, b</sup>



**a** Error bars represent the 95 per cent confidence interval associated with each point estimate. **b** For further information and caveats see tables 4A.34-35, 4A.51-52, 4A.69-70 and 4A.87-88.

Source: MCEETYA (2005a, 2005b, 2006a, 2007a); tables 4A.33, 4A.49, 4A.67 and 4A.85.

Figure 4.30 **Proportion of year 7 students achieving the writing benchmark,** by equity group, 2005<sup>a, b</sup>



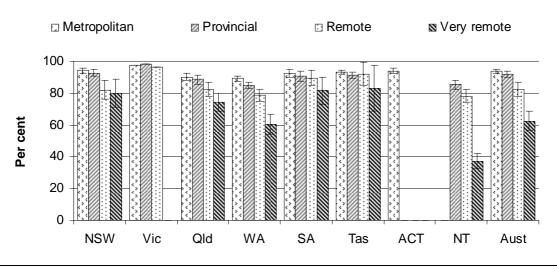
<sup>&</sup>lt;sup>a</sup> Error bars represent the 95 per cent confidence interval associated with each point estimate. <sup>b</sup> For further information and caveats see tables 4A.87-88.

Source: MCEETYA (2007a); table 4A.85.

Nationally, the proportion of assessed students from metropolitan areas who achieved the writing benchmark in 2005 was:

- 92.2–95.2 per cent for year 3 students, no different to the proportion for provincial students (90.2–94.0 per cent), and above the proportion for remote (78.0–87.0 per cent) and very remote students (56.3–68.3 per cent) (figure 4.31)
- 92.9–95.5 per cent for year 5 students, no different to the proportion for provincial students (91.0–94.4 per cent), and above the proportion for remote (78.2–86.4 per cent) and very remote students (55.0–65.4 per cent) (table 4A.86)
- 91.9–94.7 per cent for year 7 students, no different to the proportion for provincial students (88.9–92.5 per cent), and above the proportion for remote (78.3–85.9 per cent) and very remote students (54.1–64.1 per cent) (table 4A.86).

Figure 4.31 Proportion of year 3 students achieving the writing benchmark, by geolocation, 2005<sup>a, b, c</sup>



<sup>&</sup>lt;sup>a</sup> Error bars represent the 95 per cent confidence interval associated with each point estimate. <sup>b</sup> Data for year 3 students are shown and may not be representative of students in years 5 and 7 which are detailed in table 4A.86. <sup>c</sup> Insufficient or no students in an area of geographic classification are not included. There are no very remote areas in Victoria. There are no provincial, remote or very remote areas in the ACT. There is no metropolitan zone in the NT.

Source: MCEETYA (2007a); table 4A.86.

National data on the proportion of assessed Indigenous students in years 3, 5 and 7 achieving the writing benchmark in 2005, by metropolitan, provincial, remote and very remote areas, are reported in table 4.7.

### Numeracy performance

'Numeracy performance' is an indicator of students' achievement in a core curriculum area (box 4.11).

### Box 4.11 **Numeracy performance**

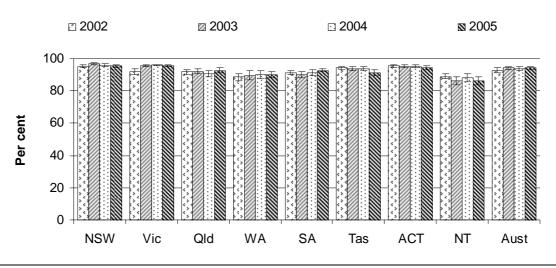
'Numeracy performance' is an indicator of governments' objective that young Australians should attain high standards of knowledge, skill and understanding in core curriculum areas.

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

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

Nationally, the proportion of assessed year 3 students who achieved the numeracy benchmark in 2005 was 93.0–95.2 per cent (figure 4.32).

Figure 4.32 Proportion of year 3 students achieving the numeracy benchmark<sup>a, b</sup>



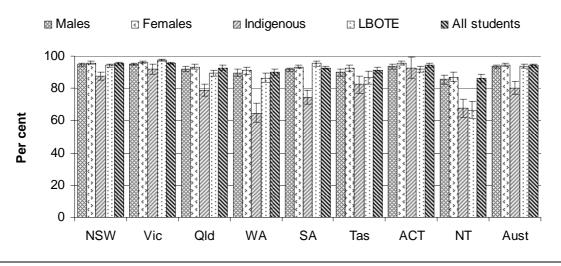
<sup>&</sup>lt;sup>a</sup> Error bars represent the 95 per cent confidence interval associated with each point estimate. <sup>b</sup> For further information and caveats see tables 4A.39-40, 4A.56-57, 4A.75-76 and 4A.93-94.

Source: MCEETYA (2005a, 2005b, 2006a, 2007a); tables 4A.36, 4A.53, 4A.71 and 4A.89.

The national proportion of students by equity group who achieved the year 3 numeracy benchmark in 2005 was:

- 93.6–95.8 per cent for female students, no different to the proportion for male students (92.4–94.6 per cent)
- 76.6–84.2 per cent for Indigenous students
- 92.8–95.2 per cent for LBOTE students (figure 4.33).

Figure 4.33 **Proportion of year 3 students achieving the numeracy** benchmark, by equity group, 2005<sup>a, b</sup>



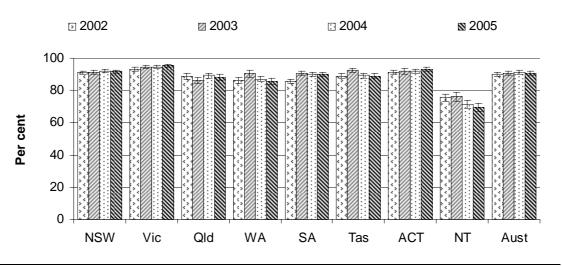
<sup>&</sup>lt;sup>a</sup> Error bars represent the 95 per cent confidence interval associated with each point estimate. <sup>b</sup> For further information and caveats see tables 4A.93-94.

Source: MCEETYA (2007a); tables 4A.89.

Nationally, the proportion of assessed year 5 students who achieved the numeracy benchmark in 2005 was 89.5–92.1 per cent (figure 4.34). The national proportion of students by equity group who achieved the year 5 numeracy benchmark in 2005 was:

- 89.8–92.6 per cent for female students, no different to the proportion for male students (89.2–91.8 per cent)
- 62.6–70.4 per cent for Indigenous students
- 88.6–91.4 per cent for LBOTE students (figure 4.35).

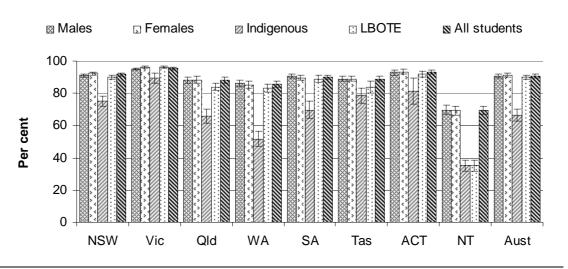
Figure 4.34 Proportion of year 5 students achieving the numeracy benchmark<sup>a, b</sup>



<sup>&</sup>lt;sup>a</sup> Error bars represent the 95 per cent confidence interval associated with each point estimate. <sup>b</sup> For further information and caveats see tables 4A.39-40, 4A.56-57, 4A.75-76 and 4A.93-94.

Source: MCEETYA (2005a, 2005b, 2006a, 2007a); tables 4A.37, 4A.54, 4A.72 and 4A.90.

Figure 4.35 **Proportion of year 5 students achieving the numeracy** benchmark, by equity group, 2005<sup>a, b</sup>

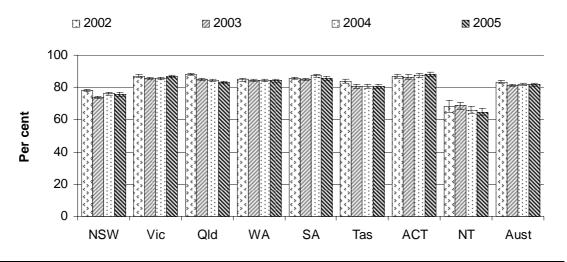


<sup>&</sup>lt;sup>a</sup> Error bars represent the 95 per cent confidence interval associated with each point estimate. <sup>b</sup> For further information and caveats see tables 4A.93-94.

Source: MCEETYA (2007a); table 4A.90.

Nationally, the proportion of assessed year 7 students who achieved the numeracy benchmark in 2005 was 80.9–82.7 per cent (figure 4.36).

Figure 4.36 Proportion of year 7 students achieving the numeracy benchmark<sup>a, b</sup>



<sup>&</sup>lt;sup>a</sup> Error bars represent the 95 per cent confidence interval associated with each point estimate. <sup>b</sup> For further information and caveats see tables 4A.39-40, 4A.56-57, 4A.75-76 and 4A.93-94.

Source: MCEETYA (2005a, 2005b, 2006a, 2007a); tables 4A.38, 4A.55, 4A.73 and 4A.91.

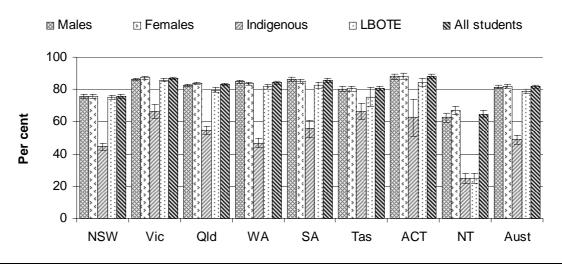
The proportion of students by equity group who achieved the year 7 numeracy benchmark in 2005 was:

- 81.0–83.0 per cent for female students, no different to the proportion for male students (80.7–82.5 per cent)
- 45.9–51.7 per cent for Indigenous students
- 77.5–80.1 per cent for LBOTE students (figure 4.37).

Nationally, the proportion of assessed students from metropolitan areas who achieved the numeracy benchmark in 2005 was:

- 93.6–95.6 per cent for year 3 students, no different to the proportion for provincial students (92.5–95.1 per cent), and above the proportion for remote (83.4–90.8 per cent) and very remote students (66.7–77.9 per cent) (figure 4.38)
- 90.6–93.0 per cent for year 5 students, no different to the proportion for provincial students (88.6–91.6 per cent), and above the proportion for remote (75.2–82.8 per cent) and very remote students (49.3–59.7 per cent) (table 4A.92)
- 82.2–84.0 per cent for year 7 students, above the proportion for provincial (78.7-81.1 per cent), remote (68.7–76.1 per cent) and very remote students (44.7–54.1 per cent) (table 4A.92).

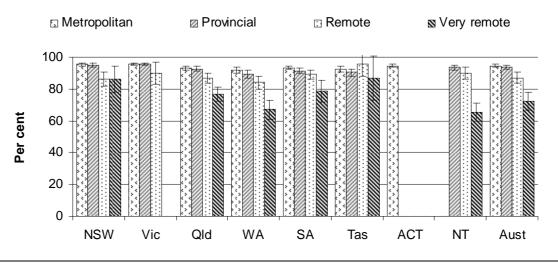
Figure 4.37 **Proportion of year 7 students achieving the numeracy** benchmark, by equity group, 2005<sup>a, b</sup>



<sup>&</sup>lt;sup>a</sup> Error bars represent the 95 per cent confidence interval associated with each point estimate. <sup>b</sup> For further information and caveats see tables 4A.93-94.

Source: MCEETYA (2007a); table 4A.91.

Figure 4.38 **Proportion of year 3 students achieving the numeracy** benchmark, by geolocation, 2005<sup>a, b, c</sup>



<sup>&</sup>lt;sup>a</sup> Error bars represent the 95 per cent confidence interval associated with each point estimate. <sup>b</sup> Data for year 3 students are shown and may not be representative of students in years 5 and 7 which are detailed in table 4A.92. <sup>c</sup> Insufficient or no students in an area of geographic classification are not included. There are no very remote areas in Victoria. There are no provincial, remote or very remote areas in the ACT. There is no metropolitan zone in the NT.

Source: MCEETYA (2007a); table 4A.92.

National data on the proportion of assessed Indigenous students in years 3, 5 and 7 achieving the numeracy benchmark in 2005, by metropolitan, provincial, remote

and very remote areas, are reported in table 4.7. In reading, writing and numeracy, and across all year levels (years 3, 5 and 7), learning outcomes for students declined as the degree of remoteness increased. This decline in performance was particularly marked for Indigenous students.

Table 4.7 National learning outcomes for Indigenous and all students, by geolocation, 2005<sup>a, b</sup>

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

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

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

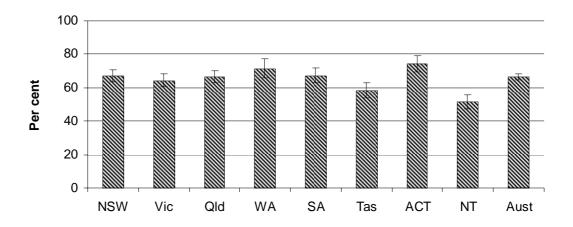
In PISA 2006 the proportion of 15 year old students who achieved at level 3 or above in mathematical literacy was:

- 64.7–68.3 per cent for all Australian students (figure 4.39)
- 66.2–71.0 per cent for male students and 62.1–66.5 per cent for female students

 $<sup>^{\</sup>mathbf{a}}$  The achievement percentages reported in this table include 95 per cent confidence intervals (for example, 80.0 per cent  $\pm$  2.7 per cent).  $^{\mathbf{b}}$  Geolocation data are based on the MCEETYA Schools Geographic Location Classification and represent school location.

• 27.2–37.6 per cent for Indigenous students, 32.6–55.3 per cent for geographically remote students and 47.8–52.6 per cent for students from low socioeconomic status families (table 4A.104).

Figure 4.39 Proportion of 15 year old students achieving level 3 or above, overall mathematical literacy scale, 2006<sup>a, b</sup>



<sup>&</sup>lt;sup>a</sup> Error bars represent the 95 per cent confidence intervals associated with each point estimate. <sup>b</sup> The PISA overall mathematical literacy scale has six defined proficiency levels, from level 6 (the highest) to level 1 (the lowest) with an additional level referred to as 'Below level 1' which covers those students who are unable to reach even the first threshold of the skills that PISA seeks to measure. Level 3 or above can be described as a level of achievement that is reasonably challenging and which requires students to demonstrate more than minimal or elementary skills to be regarded as reaching it.

Source: ACER (Unpublished); table 4A.103.

### Science literacy performance

'Science literacy performance' is an indicator of students' achievement in a core curriculum area (box 4.12).

### **Science literacy performance**

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

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

(Continued on next page)

### Box 4.12 (Continued)

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

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

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

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

The National Assessment Program — Science Literacy, Year 6 measures the scientific literacy of a sample of students and is conducted triennially. It was first conducted in 2003, and a second time in 2006. Results from the 2003 national science literacy sample assessment were discussed in detail in the 2006 Report (SCRGSP 2006, pages 3.59–62), with data reproduced in tables 4A.95–97 of this Report. Results from the 2006 national science literacy sample assessment will be included in the 2009 Report.

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

### Civics and citizenship performance

'Civics and citizenship performance' is an indicator of students' understanding and appreciation of Australia's system of government and civic life (box 4.13).

### **Box 4.13 Civics and citizenship performance**

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

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

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

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

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

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

The National Assessment Program — Civics and Citizenship, Years 6 and 10 measures the civics and citizenship performance of a sample of students and is conducted triennially (MCEETYA 2006b). It was conducted for the first time in 2004 and again in 2007. Results from the 2004 national civics and citizenship sample assessment were discussed in detail in the 2007 Report (SCRGSP 2007a, pages 3.56–59), with data reproduced in tables 4A.98–100 of this Report. Results from the 2007 national civics and citizenship sample assessment will be included in the 2009 Report.

Information and communication technology literacy performance

'Information and communication technology literacy performance' is an indicator of students' knowledge and use of new technologies (box 4.14).

# Box 4.14 Information and communication technology literacy performance

'Information and communication technology literacy performance' is an indicator of governments' objective that young Australians should be confident, creative and productive users of new technologies.

Information and communication technology (ICT) literacy performance is defined as the proportion of sampled year 6 and year 10 students achieving at or above the proficient standard in ICT literacy.

Data collections for information and communication technology literacy indicators have been developed (see section 4.4 for details). Although assessments were undertaken in 2005, data were not available for this Report. Data for 2005 are anticipated to be available for the 2009 Report.

#### Other outcomes

*Vocational education and training (VET) in schools participation* 

'VET in schools participation' is an indicator of students' access to a broad range of post-school options and pathways(box 4.15).

### Box 4.15 **VET in schools participation**

'VET in schools participation' is an indicator of governments' objective to provide vocational education and training in schools to assist all young people to secure their own futures by enhancing their transition to a broad range of post-school options and pathways.

The VET in schools participation rate is defined as the number of school students undertaking VET (with new apprenticeships and traineeships disaggregated) as part of their senior secondary school certificate in a calendar year, as a proportion of all school students undertaking a senior secondary school certificate in that year.

Holding other factors constant, a higher or increasing VET in schools participation rate may suggest an improvement in educational outcomes, through greater access to alternate pathways than traditional school education.

From 2005, the MCEETYA agreed that the Australian Vocational Education and Training Management Information Statistical Standard (AVETMISS) is the standard for reporting VET in Schools activity in Australia. MCEETYA further agreed that these data would be collected by the senior secondary assessment authority in each State and Territory and reported through State Training

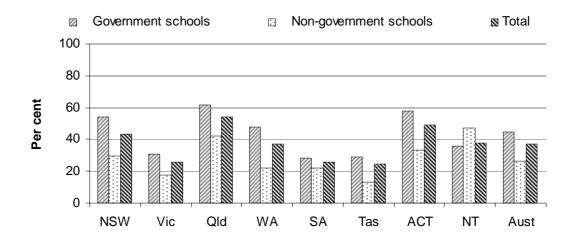
Authorities to the national VET database compiled by the National Centre for Vocational Education Research (NCVER).

As a result of collecting AVETMISS compliant data for the first time, the 2005 VET in Schools statistics are subject to some data quality problems, and caution should be exercised in drawing any conclusions or interpreting comparative trends across jurisdictions.

In 2005, 37.4 per cent of students undertaking a senior secondary school certificate undertook at least one unit of competency/module of VET in schools and 2.6 per cent of students undertaking a senior secondary school certificate undertook at least one unit of competency/module in a school-based apprenticeship or traineeship (table 4A.124).

Information on students participating in VET in schools by jurisdiction is presented in figure 4.40.

Figure 4.40 Proportion of school students enrolled in a senior secondary school certificate who undertook at least one VET unit of competency/module, 2005<sup>a, b</sup>



<sup>&</sup>lt;sup>a</sup> Total includes other providers such as TAFE, community education and private providers. Due to small numbers these are not presented separately. <sup>b</sup> As a result of collecting AVETMISS compliant data for the first time, the 2005 MCEETYA VET in Schools statistics are subject to some data quality problems. These fall into four kinds: the number of student records provided to NCVER may be incomplete; there may be some fields that are intended to be used in producing the tables where no data are reported because, for example, it is not captured in school enrolment processes; the use of secondary data sources to determine some measures — for example, data to be obtained on the number of school students undertaking a senior secondary certificate — may not be sufficiently reliable or comparable to the AVETMISS compliant data; and differences in definitional and compilation practices used by states and territories to populate some fields, for example, the nominal hours field, resulting in anomalies between states and territories.

Source: NCVER (2007) 2005 VET in Schools preliminary data; table 4A.125.

Vocational education and training (VET) in schools attainment

'VET in schools attainment' is an indicator of students' success in achieving competency in the area of VET (box 4.16).

### Box 4.16 VET in schools attainment

'VET in schools attainment' is an indicator of governments' objective to provide vocational education and training in schools to assist all young people to secure their own futures by enhancing their transition to a broad range of post-school options and pathways.

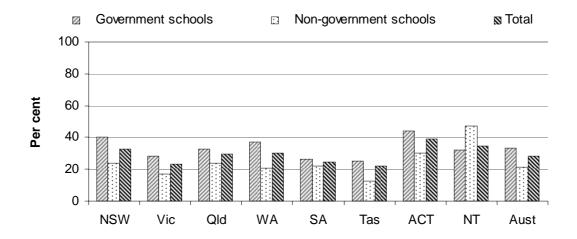
The VET in schools attainment rate is defined as the number of school students enrolled in a senior secondary school certificate in a calendar year who have completed at least one VET unit of competency/module as a proportion of all school students undertaking a senior secondary school certificate in that year.

Holding other factors constant, a higher or increasing VET in schools attainment rate, suggests a positive educational outcome.

VET in schools attainment data for 2005 should be used with caution due to data quality issues identified below box 4.15.

In 2005, while 37.4 per cent of students undertaking a senior secondary school certificate were enrolled in at least one unit of competency/module (figure 4.40), only 28.4 per cent of students undertaking a senior secondary school certificate successfully completed at least one unit of competency/module of VET in schools (table 4A.126). Information on students attainment of VET in schools by jurisdiction is presented in figure 4.41.

Figure 4.41 Proportion of school students enrolled in a senior secondary school certificate who successfully completed at least one VET unit of competency/module, 2005<sup>a, b</sup>



<sup>&</sup>lt;sup>a</sup> Total includes other providers such as TAFE, community education and private providers. Due to small numbers these are not presented separately. <sup>b</sup> As a result of collecting AVETMISS compliant data for the first time, the 2005 MCEETYA VET in Schools statistics are subject to some data quality problems. These fall into four kinds: the number of student records provided to NCVER may be incomplete; there may be some fields that are intended to be used in producing the tables where no data are reported because, for example, it is not captured in school enrolment processes; the use of secondary data sources to determine some measures — for example, data to be obtained on the number of school students undertaking a senior secondary certificate — may not be sufficiently reliable or comparable to the AVETMISS compliant data; and, differences in definitional and compilation practices used by states and territories to populate some fields, for example, the nominal hours field, resulting in anomalies between states and territories.

Source: NCVER (2007) 2005 VET in Schools preliminary data; table 4A.126.

### Completion

'Completion' is an indicator of students' success at the year 12 level (box 4.17).

### Box 4.17 Completion

'Completion' rate is an indicator of governments' objectives to develop fully the talents and capacities of young people through participation in schooling and for students to attain high standards of knowledge, skills and understanding through a comprehensive and balanced curriculum in the higher years of schooling.

The completion rate is defined as the number of students who meet the requirements of a year 12 certificate or equivalent expressed as a percentage of the potential year 12 population.

(Continued on next page)

### Box 4.17 (Continued)

The potential year 12 population is an estimate of a single year age group which could have attended year 12 that year, calculated as the estimated resident population aged 15–19 divided by five. The criteria for obtaining a year 12 or equivalent certificate vary across jurisdictions. The completion rate is reported by socioeconomic status, location and sex.

Holding other factors constant, a higher or increasing completion rate suggests an improvement in educational outcomes. The aggregation of all postcode locations into three socioeconomic status categories — high, medium and low deciles — means there may be significant variation within the categories. Low deciles, for example, will include locations ranging from those of extreme disadvantage to those of moderate disadvantage.

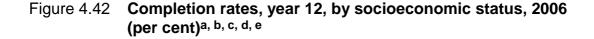
Completion rates are primarily used as indicators of trends and are used, in part, because information on participation and retention rates is generally not available by socioeconomic background or geographic location. Comparisons across jurisdictions are not recommended and need to be made with care, for the following reasons:

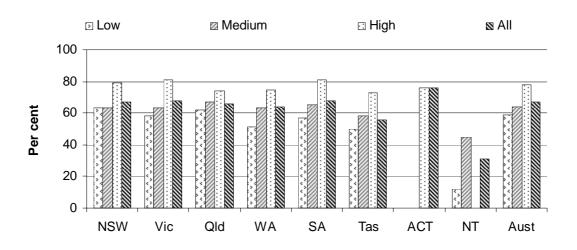
- assessment, reporting and requirements for obtaining year 12 certificates or equivalent vary across states and territories for example, from moderated school-based assessment to a mix including external and internal assessment, and from completion of a pattern of study to a prescribed level of attainment
- inaccuracies arise from using both home postal address and school location address in compiling completion rates data
- small changes in population or completions can affect the estimates of completion rates, particularly for smaller states and territories
- students completing their secondary education in TAFE institutes are included in reporting for some jurisdictions and not in others, and the proportion of these students also varies across jurisdictions.

Nationally, the year 12 completion rate for all students was 67 per cent in 2006. The completion rate for male students was 60 per cent compared with 73 per cent for females (table 4A.121).

Socioeconomic status is determined according to the ABS Index of Disadvantage on the basis of postcode of students' home addresses. Low socioeconomic status is the average of the three lowest deciles, medium socioeconomic status is the average of the four medium deciles and high socioeconomic status is the average of the three highest deciles.

Nationally, year 12 completion rates for students from low (59 per cent) and medium socioeconomic backgrounds (64 per cent) were 19 percentage points and 14 percentage points respectively below those for students from a high (78 per cent) socioeconomic background in 2006 (figure 4.42). Completion rates were higher for female students than for male students in all socioeconomic categories (table 4A.121).





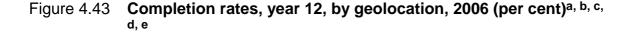
Completion rates are estimated by calculating the number of students who meet the requirements of a year 12 certificate or equivalent expressed as a percentage of the potential year 12 population. The potential year 12 population is an estimate of a single year age group which could have attended year 12 that year, calculated as the estimated resident population aged 15–19 divided by five. The ABS Index of Disadvantage has been used to calculate socioeconomic status on the basis of postcode of students' home addresses.
C Low socioeconomic status is the average of the three lowest deciles, medium socioeconomic status is the average of the four middle deciles and high socioeconomic status is the average of the three highest deciles.
d A common total for socio-economic status and geolocation is selected for reporting all students' rates and this may mean totals for socioeconomic status differ slightly to those in other publications. The populations in the high socioeconomic deciles of the NT and the low and medium socioeconomic deciles of the NT have been combined in the medium, and the low and medium socioeconomic deciles of the NT have been combined in the high.

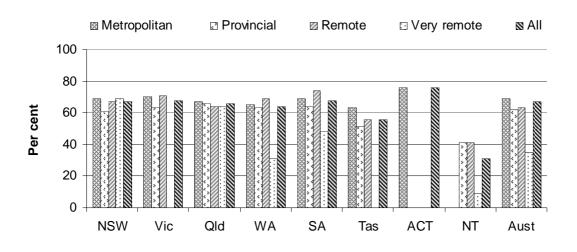
Source: DEST (unpublished); table 4A.121.

Geographic isolation is determined using the agreed MCEETYA Geographic Location Classification.

Nationally, the completion rate was higher in the metropolitan zone (69 per cent) than in all areas (67 per cent). The completion rate was lower in the provincial zone (62 per cent), remote areas (63 per cent) and very remote areas (35 per cent), than for all areas (figure 4.43).

Gender differences are also evident with completion rates higher for females for all localities. In the metropolitan zone, the female completion rate was 74 per cent compared with 64 per cent for males. In the remote zone, the female completion rate was 75 per cent compared with 53 per cent for males (table 4A.122). Time series data on national completion rates are shown in tables 4A.121 and 4A.122.





a Completion rates are estimated by calculating the number of students who meet the requirements of a year 12 certificate or equivalent expressed as a percentage of the potential year 12 population. The potential year 12 population is an estimate of a single year age group which could have attended year 12 that year, calculated as the estimated resident population aged 15–19 divided by five. 
b Definitions are based on the agreed MCEETYA Geographic Location Classification.
c The ACT is included in the metropolitan zone.
d Darwin is included in the provincial zone.
e There are no very remote areas in Victoria and the ACT. The very remote population in Tasmania is too small to give meaningful results and has been combined with the remote.

Source: DEST (unpublished); table 4A.122.

#### Destination

'Destination' is an indicator of students' post-school education and training (box 4.18).

#### Box 4.18 **Destination**

'Destination' (school leaver destination) is an indicator of governments' objective to develop fully the talents and capacities of young people through schooling. The aim is to provide information about what happens to students after they leave school.

(Continued on next page)

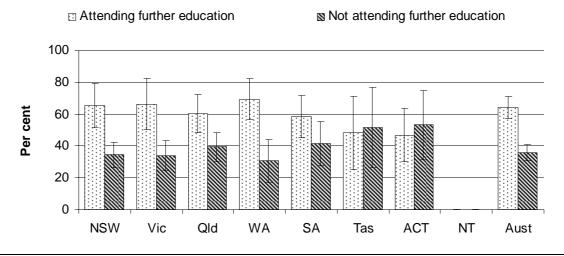
### Box 4.18 (Continued)

School leaver destination is defined as the number of school leavers who left school in a given year and who in May the following year were attending post-school education and training, as a percentage of all school leavers in the given year. It is reported by highest level of schooling completed (year 12 or year 11 and below).

Holding other factors constant, a higher or increasing estimated proportion of school leavers attending post-school study suggests that school leavers have greater exposure to further study, which is likely to result in improved educational and employment outcomes. Destination of school leavers is influenced by a number of factors including the level of unemployment.

School leaver destination data disaggregated by jurisdiction need to be used with caution, especially for the smaller jurisdictions, due to the large confidence intervals associated with these survey data. Nationally, in 2006, 63.9 per cent of year 12 school leavers were enrolled in further study, with 42.8 per cent attending higher education and 21.1 per cent attending TAFE courses or other study (figure 4.44, table 4A.123). For year 11 and below school leavers, 33.3 per cent were attending further education, almost all in TAFE or other study (table 4A.123).

Figure 4.44 Destination of year 12 students, 2006a, b, c, d, e, f



<sup>&</sup>lt;sup>a</sup> Data are for year 12 students who left school in 2006. <sup>b</sup> Error bars represent the 95 per cent confidence interval associated with each point estimate. <sup>c</sup> The categories for employment and enrolment are not exclusive. That is, for example, people enrolled may also be employed. <sup>d</sup> 'Not attending' includes people in full time employment and 'other', which includes part time workers, unemployed people and people not in the labour force. <sup>e</sup> Estimates for Tasmania and ACT have relative standard errors greater than 25 per cent and should be used with caution. <sup>f</sup> The estimate for NT is greater than 50 per cent and is therefore not included in this figure as it is considered too unreliable for general use.

Source: ABS survey of Education and Work (unpublished); table 4A.123.

Of the 36.1 per cent of year 12 school leavers who were not attending further education, 16.0 per cent were employed full time and 20.1 per cent were either employed part time, unemployed or not in the labour force (table 4A.123). Detailed information relating to year 12, year 11 and below and all school leavers across jurisdictions is in table 4A.123.

The Early childhood, education and training preface of this Report includes 2006 destination data of 2005 year 12 and year 11 and below school leavers at the national level, and examines the proportions of male and female students attending other educational institutions in 2006 after leaving school in the previous year (table BA.8).

The school leaver destination survey results reported in box 4.19 are from five jurisdictions' state-specific surveys, using different research methods and data collection instruments. The individual jurisdictional surveys were developed for various purposes, such as to assist with operational, strategic and planning functions, as distinct from being designed for comparative national reporting. These data are presented as supplementary information to the national ABS data, providing some context, until nationally comparable data become available (box 4.19).

### Box 4.19 **School leaver destination survey results**

#### **Victoria**

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

The 2007 *On Track Survey* contacted 34 395 (70 per cent) of the eligible 2006 year 12 or equivalent cohort from both government and non-government schools. Of these students, 74.5 per cent were in further education and training (47.4 per cent were enrolled at university, 19.0 per cent were TAFE enrolled and 8.1 per cent had taken up apprenticeships or traineeships). Of the 25.5 per cent who were not in further education and training, 13.7 per cent were in full or part time employment, 8.9 per cent had deferred a tertiary place and 2.9 per cent were looking for work.

#### Queensland

The annual Queensland *Next Step* student destination survey, first conducted in 2005, targets all students who completed year 12 in government and non-government schools. Responses are predominately collected by computer-assisted telephone interview, between March and May in the year after completion of year 12.

(Continued on next page)

### Box 4.19 (Continued)

In its third year, the 2007 *Next Step* survey collected responses from 32 948 year 12 graduates (81.2 per cent) from 419 schools. The results showed that 63.6 per cent of respondents continued in some recognised form of education or training in the year after they left school. The most likely destination was university studies (36.5 per cent), followed by VET (27.1 per cent) which includes apprenticeships (9.3 per cent) and traineeships (5.9 per cent). One in three year 12 completers (36.4 per cent) did not enter post-school education or training, but were either employed (29.3 per cent), seeking work (5.3 per cent) or neither studying nor in the labour force (1.8 per cent).

#### WA

The WA School Leaver Destinations survey has been conducted annually since 1996. This telephone survey is designed to collect destinations data from public school year 12 completers and year 10 and 11 early leavers. The 2007 collection resulted in destinations being obtained for 9497 (90.9 per cent) of the 10 452 eligible year 12 public school students.

The majority of students 7117 (74.9 per cent) were in either education or training. Of these students, 3731 (39.3 per cent) were enrolled in university studies, 2120 (22.3 per cent) were enrolled in TAFE studies and 1117 (11.8 per cent) had taken up either an apprenticeship or a traineeship. The remainder were either repeating year 12 studies or engaged in other training. Of the students in neither education nor training, 1000 (10.5 per cent) were in full time, and 635 (6.7 per cent) were in part time employment, 287 (3.0 per cent) were looking for a work or a study opportunity, 201 (2.1 per cent) were neither working nor seeking work and 257 (2.7 per cent) declined to participate.

### ACT

Conducted in 2007, 2006 ACT College graduates: where are they now? is a survey of students who successfully completed year 12 in the ACT in 2006. The survey was conducted by phone throughout July and August 2007, with the population defined as those students who were awarded a year 12 certificate from an ACT college (government and non-government) or the Canberra Institute of Technology in 2006. A total of 2216 students were surveyed from a total population of 3544 in-scope students, providing a response rate of 63 per cent. The survey questions were based on the core dataset developed by the MCEETYA Performance Measurement and Reporting Taskforce for post-school destination surveys, and covered current employment and study options, along with satisfaction with their college experience. It is anticipated that this survey will be conducted annually.

(Continued on next page)

#### Box 4.19 (Continued)

The results from the survey indicated that 93 per cent of all students were employed or studying in 2007. Just over half (57 per cent) of all students were undertaking further study and 48 per cent of these indicated that their main reason for undertaking the study was because 'it was a course that interested me', with 26 per cent indicating it was to 'get/start a job or business' and a further 11 per cent stated that it was 'part of an apprenticeship/traineeship'. Over eight in 10 students (81 per cent) were employed, 38 per cent full time and 41 per cent part time.

#### NT

The first comprehensive Northern Territory school leaver destination survey, *Down the Track*, was conducted in 2007 and targeted all year 10, 11 and 12 students in the Northern Territory who left school in 2006. The 2007 survey involved a cohort of approximately 3200 school leavers from both government and non-government schools and collected data using telephone and face-to-face interviews. The study achieved a post-school destination response rate of 76 per cent.

Down the Track 2007 results showed that since leaving school in 2006, 35 per cent of the students had enrolled in a VET or university course with the vast majority of these students (85 per cent) choosing to study full time. Of all respondents, 14 per cent had returned to school and 15 per cent had started an apprenticeship or traineeship. At the time of the survey, 60 per cent of the surveyed school leavers were engaged in paid employment and 11 per cent of the respondents were looking for work.

Source: State and Territory governments (unpublished).

# 4.4 Future directions in performance reporting

### Participation, retention and completion rates

The year 12 completion rate included in this Report is not affected by whether or not students are part time or complete year 12 in TAFE, as these young people are included in this measure. However, the 15–19 year old participation rate and the traditional year 7/8 to year 12 apparent retention rate, which are also reported in this Report, are based on full time school students only. These measures are under examination, and supplementary participation measures are reported in the Early childhood, education and training preface of this Report.

### Nationally comparable reporting of learning outcomes

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

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

### Enhanced literacy and numeracy measures

Education ministers have agreed to pursue a broadening of the national reporting framework to enhance reporting of literacy and numeracy outcomes at the years 3, 5 and 7 levels, and from 2008 to include Year 9 students in the National Assessment Program. Ministers identified three areas for potential enhancement to the reporting of literacy and numeracy outcomes: reporting an extended range of student achievement, consistent with information from the national sample assessments; reporting against a common scale, to improve understanding of student development; and development of a more nationally consistent approach, to improve national comparability of test results. A trial of the new common national literacy and numeracy tests has been completed, and further work is being undertaken in preparation for implementation in 2008. The Steering Committee anticipates reporting 2008 results in the 2010 Report.

#### VET in schools

Participation and attainment data for VET in schools were collected annually in 2005 and 2006 and were originally anticipated for publication in the 2007 Report. Although data for 2005 are included in this Report, there are still a number of issues affecting consistency and comparability that require resolution. Improved data for 2006 are anticipated to be included in the 2009 Report.

#### Information and communication technology

Education ministers have agreed to a national information and communication technology literacy assessment of students at years 6 and 10 every three years. The MCEETYA PMRT has developed a definition of information and communication technology literacy, and the first assessment was undertaken in 2005, with further assessments to be undertaken at three year intervals. The Steering Committee

anticipates reporting information and communication technology literacy assessment data from 2005 in the 2009 Report.

#### Attendance measures

The Steering Committee has identified school attendance as an important area for future reporting. Attendance at school has a significant impact on later academic success and if attendance is erratic then children are unable to reach educational benchmarks (SCRGSP 2007b). The MCEETYA PMRT has developed a key performance measure for student attendance at school which will ensure nationally consistent and comparable reporting. The first data collection commenced in 2007 for reporting in 2008, and subsequent inclusion in the 2009 Report.

## Nationally consistent definitions

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

#### Other areas to be identified

Additional indicators may be added to the school education performance indicator framework as further developments occur.

#### **Jurisdiction comments** 4.5

This section provides comments from each jurisdiction on the services covered in this chapter. Appendix A contains data that may assist in interpreting the performance indicators presented in this chapter. These data cover a range of demographic and geographic characteristics, including age profile, geographic distribution of the population, income levels, education levels, tenure of dwellings and cultural heritage (such as Indigenous and ethnic status).

### **Australian Government comments**



The Australian Government's priorities for schooling aim to deliver national consistency, high standards and values and parent focused schooling. Significant funding, including specifically targeted funding, is provided to enhance the learning outcomes of all school students.

Indigenous education is one of the Australian Government's highest education priorities. Over the 2005–2008 quadrennium funds are being allocated to areas of greatest need, especially to regional and remote Australia where gaps in educational outcomes are at their widest. The Government's response for the quadrennium focuses on the early childhood years; primary schooling (especially literacy/numeracy achievement and attendance); retention of students in schooling to year 12; and their transition from schooling to further education and employment.

In 2007 the Australian Government continued to fund Career Advice Australia, a national career development and transitions support system for all young Australians aged 13–19 years. This initiative supports all young people in mainstream schooling and targets those at risk of leaving school and those who have left school before completing year 12 or its equivalent. Two national industry career advice networks have been established to provide high quality national and regional career information.

The Australian Government has continued its support for the introduction of common national testing for literacy and numeracy in 2008. Following the Australian Education Systems Officials Committee (AESOC) decision for Curriculum Corporation to manage the National Assessment Program — Literacy and Numeracy, the Australian Government has provided 50 per cent of funding for the development of the national reading, writing, language conventions and numeracy tests for 2008.

As part of the Australian Government's approach to providing direct help for children struggling with reading, it implemented the Reading Assistance Voucher Programme in 2007. The programme supported parents and caregivers of students who did not meet the year 3 national reading benchmark in 2006 by providing \$700 worth of one-on-one reading tuition. Support was arranged by working with schools in partnership with parents.

The Australian Government supported initiatives aimed at ensuring that children receive quality teaching at school. The Australian Government Quality Teacher Programme (AGQTP) and the Australian Government Summer Schools for Teachers Programme support professional learning for school teachers and leaders. In addition, AGQTP improves the professional standing of school teachers and leaders, through assistance to Teaching Australia — the Australian Institute for Teaching and School Leadership.

The Australian Government is working with states and territories to establish National Teacher Training and Registration Standards which articulate the knowledge, skills and abilities required of teacher graduates nationally.



### **New South Wales Government comments**



The NSW Education and Training budget for 2007-08 will reach \$11 billion. This includes funding for a range of initiatives specifically targeting improved student learning and performance. The excellent results achieved by NSW students in state and national testing are a testimony to the high quality teaching and support services in our schools. NSW is positioning its education and training system to support higher levels of attainment for all students. The NSW Government is committed to further improvements and has undertaken a major review of assessment programs in NSW schools in the context of national tests in years 3, 5, 7 and 9.

In 2005, NSW established the NSW Institute of Teachers to retain and support high quality teachers and promote professional development. A career-long framework of professional teaching standards was developed to enhance the status of the profession and facilitate teacher accreditation. Other NSW strategies focussing on improving student outcomes include:

- investing \$267 million to attract and retain new and experienced teachers and drive higher teaching standards across all New South Wales public schools
- investing an additional \$82 million over four years to give our youngest students in NSW Public Schools the best start to their education with a stronger focus on literacy and numeracy
- designating a specialist teacher at each school to lead and coordinate literacy and numeracy learning from Kindergarten to year 6
- upgrading 800 science laboratories to modernise facilities and encourage student interest in science, and to help fight the national skills shortage.

NSW is addressing the performance gap between Aboriginal students and all students. Following a major review of Aboriginal Education, a number of initiatives are being implemented, including personalised learning plans for Aboriginal students and the Schools in Partnership program. Under this initiative selected school communities with high proportions of Aboriginal students develop targets and strategies to improving outcomes for Aboriginal students. \$65 million is being invested in this program over four years.

Measures to improve year 12 attainment include:

- the establishment of 25 Trade schools within existing schools and TAFE colleges to enable students to commence a Certificate III vocational education and VET qualification while still at school
- the extension of VET options to years 9 and 10 to engage students that otherwise might leave school early
- a learning guarantee to ensure that young people up to the age of 18 who do not complete year 12 and are unemployed have a guaranteed training place at TAFE NSW to undertake a VET qualification up to Certificate III. An extra 12 580 VET places between 2007 and 2010 will support this initiative.



### **Victorian Government comments**



The Victorian Government believes education is the key to productive and successful lives and to Victoria's future economic and social prosperity. Education is our number one priority. The *Education and Training Reform Act 2006*, which updates and replaces twelve separate education Acts, came into effect on 1 July 2007 following a three year process of development, consultation and implementation. The Act represents an undertaking by the Victorian Government to ensure that Victoria has a robust and modern legislative framework for education and training. The Education and Training Reform Regulations 2007 were also introduced on 1 July 2007, following an extensive public consultation process, to support provisions within the new Act.

The Government's continuing investment in education is clearly paying dividends for young Victorians. The proportion of students in years 3, 5 and 7 achieving national benchmark levels in reading, writing and numeracy was above the national average. The percentage of young people completing year 12 or equivalent was 86.6 per cent, an increase of 3.7 percentage points since 1999.

The Victorian Certificate of Applied Learning (VCAL) provides an alternative pathway to the Victorian Certificate of Education for students. In 2006, 12 326 students enrolled in the VCAL with 401 providers, an increase from 10 675 students and 380 providers in 2005.

Average class sizes from Prep to year 2 have decreased from 24.3 in 1999 to 20.7 in 2007. There is now an average of 1 teacher to every 11.9 students in secondary schools, surpassing the target of 1:12.1. 7300 extra teachers and staff were employed in schools, including primary welfare officers, and professional development for teachers was boosted. 24 new youth transition workers were employed across the state to help disengaged 15–19 year-olds re-engage in education, training or employment.

Key initiatives from the Blueprint for Government Schools continue to be implemented by the Government with a focus on improved curriculum. All schools are now implementing the Victorian Essential Learning Standards, with all domains to be reported on by 2008. All schools are also using the new plain English Student report cards with their focus on past performance and future development needs, A–E assessment and progress against the Standards.

Significant support continues to be provided to develop the capability of the education workforce through programs including Building Leadership Capacity, Creating and Supporting a Performance and Development Culture and Teacher Professional Leave. Training in anaphylaxis management was delivered to more than 5000 teachers in 400 government schools.

The Department is undertaking work to improve the delivery of VET in Schools that will assist in formulating advice to improve the quality of and access to VET in Schools programs for students, and to better align VET in Schools provision with industry skill needs.



### **Queensland Government comments**



Education and training in Queensland are characterised by strong enrolment growth, substantial investment in new facilities, reforms in senior schooling and the recent introduction of the compulsory prep year in 2007.

The \$1 billion Queensland Skills Plan has provided a blueprint to build the skills to support the most sustained period of growth in Queensland's history. Record expenditure on school and TAFE infrastructure is being undertaken to modernise and build schools and training facilities. The \$1 billion Tomorrow's Schools package focuses on modernising schools that are in need of major renewal, and giving Queenslanders the chance to shape the future of education in their local community.

A major commitment is the establishment of the new Academy for Health Sciences in 2008 to complement the existing Academies for Creative Industries, and for Science, Mathematics and Technology to enable the State's best and brightest high school students to pursue excellence in their chosen field.

Throughout 2007 significant progress has been made in implementing the Queensland Curriculum Assessment and Reporting (QCAR) framework. The framework aims to improve student learning and increase comparability of assessment and reporting across all Queensland schools from the year 1 to year 10, through defining the essential learnings for all Queensland school students to achieve; setting new standards to measure student achievement, including rigorous comparable assessment; and specifying a common framework for reporting student achievement against the essential learnings.

2008 marks the introduction of the new senior schooling qualification the Queensland Certificate of Education (QCE). The QCE recognises a wide range of learning, including traditional school subjects, vocational education and training, workplace learning and university subjects. To be awarded a QCE, students will need to achieve a significant amount of learning at a set standard, including literacy and numeracy requirements.

Improving literacy and numeracy is a priority goal and in 2007 a new Numeracy Action Plan was introduced to complement the introduction of the Literacy Action Plan introduced in 2006.

Under the Smart State Strategy, Queensland is committed to improving education and skills in science, technology, engineering and mathematics (STEM) and is undertaking wide consultations to support the development of a 10 year plan for STEM in Queensland.

Encouraging ways to better engage Indigenous students in learning and training in order to improve education outcomes is being pursued through increased support from Professional Support Teachers and Learning Support Teams.

Queensland is growing its teaching workforce with an extra 192 teachers and teacher aides being employed and more than \$44 million will be invested in professional development for staff in schools and TAFE institutes.

### **Western Australian Government comments**



The Western Australian Government supports a strong public school system that earns the respect of the community for the quality of education it offers. The Department of Education and Training is committed to an education environment characterised by successful students, effective teachers and good schools. This commitment is embodied in the Classroom First strategy which contains six key elements to directly target improved instructional practice and focus on learning in classrooms.

The senior secondary curriculum has been restructured and 47 new courses are being progressively introduced. In 2006, a further 89 Teacher Development Centres were established to support teachers with the implementation of new senior secondary courses to be introduced in 2007-08. It is expected that all the new courses will be operational by 2009.

The legislative changes in the leaving age for young people turning 16 years old in 2006 resulted in their participating in education, training or employment to a greater extent than previously. Retention in schools of students to year 11 in 2006 was 91.7 per cent compared with an average of 86.7 per cent in the previous five years. From January 2008, the legislation will extend to 17 year olds.

A key initiative during the year was a renewed focus on literacy and numeracy following a review which provided the impetus for change, particularly in the early years of school and for Aboriginal students.

The Getting it Right literacy and numeracy strategy was extended to public secondary schools as part of an \$8.4 million commitment over four years. It provided for 26 full time equivalent staff with 30 literacy and 15 numeracy teachers working in 37 secondary schools. This was in addition to the 177 literacy and 160 numeracy teachers working in 268 primary and 33 district high schools.

Aboriginal enrolments continue to rise and now represent 8.3 per cent of all public school enrolments in Western Australia. There is continuing focus on improving the performance of Aboriginal students, with a growing number of initiatives to help improve educational outcomes. These include: the Aboriginal Literacy Strategy, Follow the Dream, In-School Tuition, Dare to Lead, Leading from the Front, the Parent School partnership, Walk Right In and Happy Kids.

The Behaviour Management and Discipline Strategy provided additional staff and funding to reduce class sizes in years 4 to 9 and develop strategies for managing student behaviour more effectively. The Government currently provides \$16.5 million per annum enabling 277 public schools to be involved.



### **South Australian Government comments**



The State Government believes it is critical that all young South Australians have the best opportunity to reach their full potential in life by providing them with the highest standard of education, training, and skills for work and careers.

During 2007 the Department of Education and Children's Services focused on creating pathways for all children and students to either learn or earn, improving literacy, numeracy and science levels and increasing the participation, wellbeing and achievement of Aboriginal young people.

A two stage, \$216 million 'Education Works' initiative was launched which involves the creation of six new schools in the metropolitan area, as well as more innovative ways to improve schools which find creative, smarter, and more efficient ways to offer education. These new schools will ensure all children and students have access to broad and diverse curriculum pathways for future training and employment. Extensive community consultation with the 18 schools and preschools involved in the project was undertaken and all voted to close and become part of the new schools.

In addition the State Government has invested in a School to Work initiative which includes creating a statewide network of Trade Schools for the Future, a new more flexible South Australian Certificate of Education (SACE), and raising the compulsory school leaving age. These programs complement existing initiatives such as the student mentoring program, the School Retention Action Plan, industry partnerships and school based apprenticeships.

Collectively these strategies not only provide pathways for all to engage in further education, training and/or employment, but they also are producing positive results in terms of participation, wellbeing, learning and career and life opportunities for young South Australians.

The quality and skills of our teachers continued to develop with 167 skilled teachers placed into 139 schools to work alongside classroom teachers part time to mentor, model and guide effective literacy teaching. Reading Recovery tutors also provided intensive professional learning for 46 teachers who are training as Reading Recovery teachers.

The Premier's Industry Awards saw 90 teachers undertake industry placements in over 70 businesses or industries with the aim of improving the link between school based science and mathematics and its application in the community.

More than 600 students have also been involved in several career expopresentations connecting science and mathematics to possible career pathways. Action Learning Grants were provided to more than 40 schools to boost the profile of Maths and Science in the classroom.



### **Tasmanian Government comments**



The Department's focus has centred on achieving the Tasmanian Government's priorities for education, training and information services. The Department is committed to the provision of high quality, lifelong learning opportunities for all Tasmanians. Emphasis has been on the priority areas of early years, literacy and numeracy, retention, skills development and building a knowledge-based society.

To support the strategic vision of the Tasmanian Government education forms the centrepiece of the 2007-08 State Budget, and is geared to encouraging growth in the Tasmanian economy. A key initiative is the Qualifications and Skills for Tasmania Tomorrow, which aims to address post year 10 retention rates by realigning post-school education and training to provide clear pathways for students as well as mature-aged adults seeking further training, and to meet the needs of business.

Under this initiative three new organisations will be created from the eight senior secondary colleges and TAFE Tasmania, each focused on a specific role, using these working titles:

- an 'academy' focused on academic learning, with a curriculum and academic pathway for Year 11 and 12 students seeking university entrance
- a 'polytechnic' focused on practical learning, with a vocational pathway, supported by academic courses as well, for both Year 11/12 and mature-age students seeking employment outcomes or university articulation
- a training enterprise focused on skills development for employees in enterprises, in line with their enterprise's skills needs.

This is a significant reform of post-compulsory education and training which will enable more young and mature-age Tasmanians to take a course that meets their aspirations and suits their learning style.

The 2007-08 Budget also provided increased funding to important initiatives including: reducing class sizes in years 2 to 7; literacy support to improve literacy outcomes; and learning support for students with high and/or additional needs. These initiatives support the priority areas of the Tasmanian Government to increase student performance in literacy and numeracy and to provide appropriate pathways for students beyond post-compulsory education.

Implementation of the Student at the Centre plan continued and saw the creation of Learning Services to support schools in four regions of the state. Support includes professional learning across teaching, curriculum and assessment as well as human resource, finance and facilities support. Learning Services work collaboratively with schools and through School Improvement Boards appointed by the Minister.



## **Australian Capital Territory Government comments**



The ACT Department of Education and Training is working with the community to provide world-class education and training that is innovative, responsive and inspires all students to succeed. Departmental services include: the provision of early intervention education programs; government school education at preschool, primary school, high school and senior secondary college levels; registration of non-government schools and home education; and the planning and coordination of vocational education and training.

The ACT Government undertook a comprehensive community consultation on the Towards 2020: Renewing our Schools proposal in the second half of 2006, to reinvigorate the public school system. After significant community consultation, the Minister announced, at the end of 2006, a package of reforms that included a funding injection of \$90 million for school infrastructure upgrades and \$20 million for information technology over the next four years.

In line with the Government's continued focus on early intervention, the Department works across government to provide early intervention programs for young children with a development delay or disability. The programs include playgroups, early intervention groups for three to five year olds, language preschools and autism specific early intervention units. Recognising the social and educational benefits to children of early learning experiences, the hours of free preschool education for eligible four year olds was maintained at 12 hours per week.

Work continued on the new ACT curriculum framework for all government and non-government schools, preschool to year 10, before its release in November 2007. For implementation from 2008, the framework will provide a foundation for all ACT schools to plan their curriculum based on clear expectations of the opportunities all students should be given to learn.

The ACT is unique in having a years 11 and 12 college system, so transition from high school is very important. In 2006, a trial program was run with 30 students at one college, in conjunction with its cluster high schools, to improve the quality of student transition and ensure students' educational needs were appropriately met. Students in the trial reported a smooth transition to college with 90 per cent continuing after the first semester.

In 2006, the Australian National University (ANU) College — a joint initiative between ANU and the ACT Government — offered students in years 11 and 12 an opportunity to study advanced courses in mathematics, physics and chemistry, using facilities and staff located on the ANU campus. At the start of 2007 the ANU College was expanded to include non-government students.

Participation in Australian School-based Apprenticeships, especially in skill shortage areas, increased by 10.5 per cent from 2002, with 324 commencements in 2006, 113 within the local building and construction industry.



### **Northern Territory Government comments**



The Northern Territory Government has committed an additional \$70.68 million over five years through its Closing the Gap Generational Plan to close the gap in education outcomes between Indigenous and non-Indigenous Territorians.

The Department of Employment, Education and Training recognises that starting school early, improving attendance rates, providing high quality teaching and leaving school later are essential to improving literacy and numeracy skills and therefore providing a good start in life. Preschool and early education programs have been associated with increased levels of school completion and improved literacy and social skills necessary for school success.

A record 933 year 12 students in government and non-government schools achieved their NT Certificates of Education (NTCE) in 2006. Among them were a record 30 Indigenous students who achieved their NTCE in remote communities.

The implementation of the Middle Years and Senior Years of schooling has progressed with year 10 students joining year 11 and year 12 students in NT senior schools in 2007. Work continued to prepare students, staff and school facilities for year 7 students to join year 8 and 9 students in middle schools in the Top End in 2008.

An Accountability and Performance Improvement Framework has been introduced to improve employment, education and training outcomes by establishing a system of accountability for schools and the Department and setting clear expectations and performance standards. The Department is also working with remote communities to develop local school and community partnership agreements. By December 2008, remote learning partnership agreements will be in place between 15 townships and the NT Government with the aim of achieving quantum improvements in education, employment and training outcomes.

The Department is on track to meet the nationally agreed target for the role out of the Accelerated Literacy program by the end of 2008. Conscious of the gap between Indigenous and non-Indigenous English literacy outcomes and the impact of geolocation on outcomes, the Department embarked on a four year longitudinal evaluation of literacy research project. The project, now at the half way point, is evaluating the effectiveness of literacy programs and interventions used in the NT with Indigenous students from non-English speaking backgrounds. The results from the research will provide the Department with data to make informed decisions on the most effective approaches to literacy.



# 4.6 Definitions of key terms and indicators

Apparent retention rates

The number of full time students in a designated year of schooling, expressed as a percentage of their respective cohort group at an earlier base year. For example, the year 12 retention rate is calculated by dividing the total number of full time students in year 12 in the target year by the total number of full time students in year 10 two years before the target year.

Full time equivalent student

The FTE of a full time student is 1.0. The method of converting part time student numbers into FTEs is based on the student's workload compared with the workload usually undertaken by a full time student.

Full time student

A person who satisfies the definition of a student and undertakes a workload equivalent to, or greater than, that usually undertaken by a student of that year level. The definition of full time student varies across jurisdictions.

Geographic classification

Geographic categorisation is based on the agreed MCEETYA Geographic Location Classification which, at the highest level, divides Australia into three zones (the metropolitan, provincial and remote zones). A further disaggregation comprises five categories: metropolitan and provincial zones each subdivided into two categories, and the remote zone. Further subdivisions of the two provincial zone categories and the remote zone category provide additional, more detailed, classification options. When data permit, a separate very remote zone can be reported along with the metropolitan, provincial and remote zones, as follows.

#### A. Metropolitan zone

- Mainland State capital city regions (Statistical Divisions (SDs)): Sydney, Melbourne, Brisbane, Adelaide and Perth SDs.
- Major urban Statistical Districts (100 000 or more population): ACT— Queanbeyan, Cairns, Gold Coast—Tweed, Geelong, Hobart, Newcastle, Sunshine Coast, Townsville, Wollongong.

#### B. Provincial zone (non-remote)

- Provincial city Statistical Districts plus Darwin SD.
- Provincial city statistical districts and Darwin statistical division (50 000–99 999 population): Albury–Wodonga, Ballarat, Bathurst–Orange, Burnie-Devonport, Bundaberg, Bendigo, Darwin, Launceston, La Trobe Valley, Mackay, Rockhampton, Toowoomba, Wagga Wagga.
- Provincial City Statistical Districts (25 000–49 999 population): Bunbury, Coffs Harbour, Dubbo, Geraldton, Gladstone, Shepparton, Hervey Bay, Kalgoorlie–Boulder, Lismore, Mandurah, Mildura, Nowra–Bomaderry, Port Macquarie, Tamworth, Warrnambool.
- Other provincial areas (CD ARIA Plus score ≤ 5.92)
- Inner provincial areas (CD ARIA Plus score < 2.4)
- Outer provincial areas (CD ARIA Plus score > 2.4 and ≤ 5.92)

#### C. Remote zone

- Remote zone (CD ARIA Plus score > 5.92)
- Remote areas (CD ARIA Plus score > 5.92 and < 10.53)</li>
- Very remote areas (CD ARIA Plus score > 10.53)

Government recurrent expenditure per full

Total government recurrent expenditure divided by the total number of FTE students. Expenditure is based on the National School Statistics Collection (MCEETYA unpublished), with adjustments for notional

time equivalent student UCC charges and payroll tax. Notional UCC is included for all jurisdictions and payroll tax estimates are included for those jurisdictions not subject to it (WA and the ACT). Expenditure figures are in financial years and student numbers are in calendar years, so the total number of students is taken as the average of the two years spanned by the calendar year. When calculating the 2005-06 average expenditure per student, for example, the total expenditure figure is at 2005-06 but the total student number figure is the average of student numbers from 2005 and 2006.

#### Indigenous student

A student of Aboriginal or Torres Strait Islander origin who identifies as being an Aboriginal or Torres Strait Islander or from an Aboriginal and Torres Strait Islander background. Administrative processes for determining Indigenous status vary across jurisdictions.

#### In-school costs

Costs relating directly to schools. Staff, for example, are categorised as being either in-school or out-of-school. They are categorised as inschool if they usually spend more than half of their time actively engaged in duties at one or more schools or ancillary education establishments. In-school employee related expenses, for example. represent all salaries, wages awards, allowances and related on costs paid to in-school staff.

### Language background other than English (LBOTE) student

A status that is determined by administrative processes that vary across jurisdictions.

#### **Out-of-school costs**

Costs relating indirectly to schools. Staff, for example, are categorised as being either in-school or out-of-school. They are categorised as out-of-school if they do not usually spend more than half of their time actively engaged in duties at one or more schools or ancillary education establishments. Out-of-school employee related expenses, for example, represent all salaries, wages awards, allowances and related on costs paid to out-of-school staff.

#### Part time student

A student undertaking a workload that is less than that specified as being full time in the jurisdiction

#### Participation rate

The number of full time school students of a particular age, expressed as a proportion of the estimated resident population of the same age at June.

### Potential year 12 population

An estimate of a single-year age group that could have participated in year 12 that year, defined as the estimated resident population aged 15-19 years, divided by 5.

### Real expenditure

Nominal expenditure adjusted for changes in prices, using the GDP price deflator and expressed in terms of final year prices.

### **Science literacy**

Science literacy and scientific literacy: the application of broad conceptual understandings of science to make sense of the world, understand natural phenomena, and interpret media reports about scientific issues. It also includes asking investigable questions, conducting investigations, collecting and interpreting data and making decisions.

#### Socioeconomic status

As per footnotes to table 4A.121, which provide definitions specific to that table. Elsewhere in the Report, socioeconomic status data are presented that are not fully comparable across jurisdictions because administrative processes for determining socioeconomic status vary across jurisdictions.

### Source of income

In this chapter, income from either the Australian Government or State

and Territory governments. Australian Government expenditure is derived from specific purpose payments (current and capital) for schools. This funding indicates the level of monies allocated, not necessarily the level of expenditure incurred in any given financial year. The data therefore provide only a broad indication of the level of Australian Government funding.

Student-to-staff ratios

The number of FTE students per FTE teaching and non-teaching staff. Students at special schools are allocated to primary and secondary (see below). The FTE of staff includes those who are generally active in schools and ancillary education establishments.

Student

A person who is formally (officially) enrolled or registered at a school, and is also active in a primary, secondary or special education program at that school. Students at special schools are allocated to primary and secondary on the basis of their actual grade (if assigned); whether or not they are receiving primary or secondary curriculum instruction; or, as a last resort, whether they are of primary or secondary school age.

Student, primary

A student in primary education, which covers pre-year 1 to year 6 in NSW, Victoria, Tasmania and the ACT, pre-year 1 to year 7 in WA, SA and the NT, and year 1 to year 7 in Queensland.

Student, secondary

A student in secondary education, which commences at year 7 in NSW, Victoria, Tasmania and the ACT, and at year 8 in Queensland, SA, WA and the NT.

Students with a disability

Students included in the annual system reports to DEST. The definitions of students with disabilities are based on individual State and Territory criteria, so data are not comparable across jurisdictions.

**Teacher** 

Teaching staff have teaching duties (that is, they are engaged to impart the school curriculum) and spend the majority of their time in contact with students. They support students, either by direct class contact or on an individual basis. Teaching staff include principals, deputy principals and senior teachers mainly involved in administrative duties, but not specialist support staff (who may spend the majority of their time in contact with students but are not engaged to impart the school curriculum).

**Ungraded student** 

A student in ungraded classes who cannot readily be allocated to a year of education. These students are included as either ungraded primary or ungraded secondary, according to the typical age level in each jurisdiction.

# 4.7 Attachment tables

Attachment tables are identified in references throughout this appendix by an 'A' suffix (for example, table 4A.3 is table 3 in the attachment). Attachment tables are provided on the CD-ROM enclosed with the Report and on the Review website (www.pc.gov.au/gsp). On the CD-ROM, the files containing the attachment tables are provided in Microsoft Excel format as \Publications\Reports\2008\Attach4A.xls and in Adobe PDF format as \Publications\Reports\2008\Attach4A.pdf. Users without access to the CD-ROM or the website can contact the Secretariat to obtain the attachment tables (see contact details on the inside front cover of the Report).

Table 4A.1	Government schools: students, staff and school numbers
Table 4A.2	Non-government schools: students, staff and school numbers
Table 4A.3	All schools: students, staff and school numbers
Table 4A.4	All schools: students time series, by sex
Table 4A.5	Students as a proportion of the population, 2006 (per cent)
Table 4A.6	Australian Government specific purpose payments for schools, 2005-06
Table 4A.7	Real Australian, State and Territory government recurrent expenditure on government schools (2005-06 \$'000)
Table 4A.8	Real Australian, State and Territory government recurrent expenditure per student, government schools (2005-06 \$ per FTE student)
Table 4A.9	Real Australian, State and Territory government recurrent expenditure
Table 4A.10	Value of capital stock, government schools (\$'000)
Table 4A.11	Treatment of assets by school education agencies
Table 4A.12	Comparability of government expenditure on government schools — items included, 2005-06 $$
Table 4A.13	Students-to-staff ratios, 2006
Table 4A.14	Distribution of school sizes — government schools, 2006 (per cent)
Table 4A.15	Distribution of school sizes — non-government schools, 2006 (per cent)
Table 4A.16	Distribution of school sizes — all schools, 2006 (per cent)
Table 4A.17	Full time student enrolments and schools (number)
Table 4A.18	Change in number of schools and number of students, 2002-06 (per cent)
Table 4A.19	Indigenous full time students, 2006
Table 4A.20	Students from language backgrounds other than English as a proportion of all students (per cent)
Table 4A.21	Funded students with disabilities, 2006
Table 4A.22	Student body mix, government schools (per cent)
Table 4A.23	Student body mix, non-government schools (per cent)

Table 4A.24	Student body mix, all schools (per cent)
Table 4A.25	Proportion of students attending schools in metropolitan, provincial and remote zones, 2006 (per cent)
Table 4A.26	Proportion of year 3 students who achieved the reading benchmark, 2002 (per cent)
Table 4A.27	Proportion of year 5 students who achieved the reading benchmark, 2002 (per cent)
Table 4A.28	Proportion of year 7 students who achieved the reading benchmark, 2002 (per cent)
Table 4A.29	Participation in reading testing by school sector, 2002 (per cent)
Table 4A.30	Exemptions, absences and participation of equity groups in reading testing, 2002 (per cent)
Table 4A.31	Proportion of year 3 students who achieved the writing benchmark, 2002 (per cent)
Table 4A.32	Proportion of year 5 students who achieved the writing benchmark, 2002 (per cent)
Table 4A.33	Proportion of year 7 students who achieved the writing benchmark, 2002 (per cent)
Table 4A.34	Participation in writing testing by school sector, 2002 (per cent)
Table 4A.35	Exemptions, absences and participation of equity groups in writing testing, 2002 (per cent)
Table 4A.36	Proportion of year 3 students who achieved the numeracy benchmark, 2002 (per cent)
Table 4A.37	Proportion of year 5 students who achieved the numeracy benchmark, 2002 (per cent)
Table 4A.38	Proportion of year 7 students who achieved the numeracy benchmark, 2002 (per cent)
Table 4A.39	Participation in numeracy testing by school sector, 2002 (per cent)
Table 4A.40	Exemptions, absences and participation of equity groups in numeracy testing, 2002 (per cent)
Table 4A.41	Proportion of year 3 students who achieved the reading benchmark, 2003 (per cent)
Table 4A.42	Proportion of year 5 students who achieved the reading benchmark, 2003 (per cent)
Table 4A.43	Proportion of year 7 students who achieved the reading benchmark, 2003 (per cent)
Table 4A.44	Proportion of year 3, 5 and 7 students achieving the reading benchmark, by geolocation, 2003 (per cent)
Table 4A.45	Participation in reading testing by school sector, 2003 (per cent)
Table 4A.46	Exemptions, absences and participation by equity group in reading testing, 2003 (per cent)
Table 4A.47	Proportion of year 3 students who achieved the writing benchmark, 2003
Table 4A.48	(per cent) Proportion of year 5 students who achieved the writing benchmark, 2003 (per cent)

Table 4A.49	Proportion of year 7 students who achieved the writing benchmark, 2003 (per cent)
Table 4A.50	Proportion of year 3, 5 and 7 students achieving the writing benchmark, by geolocation, 2003 (per cent)
Table 4A.51	Participation in writing testing by school sector, 2003 (per cent)
Table 4A.52	Exemptions, absences and participation by equity group in writing testing, 2003 (per cent)
Table 4A.53	Proportion of year 3 students who achieved the numeracy benchmark, 2003 (per cent)
Table 4A.54	Proportion of year 5 students who achieved the numeracy benchmark, 2003 (per cent)
Table 4A.55	Proportion of year 7 students who achieved the numeracy benchmark, 2003 (per cent)
Table 4A.56	Proportion of year 3, 5 and 7 students achieving the numeracy benchmark, by geolocation, 2003 (per cent)
Table 4A.57	Participation in numeracy testing by school sector, 2003 (per cent)
Table 4A.58	Exemptions, absences and participation by equity group in numeracy testing, 2003 (per cent)
Table 4A.59	Proportion of year 3 students who achieved the reading benchmark, 2004 (per cent)
Table 4A.60	Proportion of year 5 students who achieved the reading benchmark, 2004 (per cent)
Table 4A.61	Proportion of year 7 students who achieved the reading benchmark, 2004 (per cent)
Table 4A.62	Proportion of year 3, 5 and 7 students achieving the reading benchmark, by geolocation, 2004 (per cent)
Table 4A.63	Participation in reading testing by school sector, 2004 (per cent)
Table 4A.64	Exemptions, absences and participation by equity group in reading testing, 2004 (per cent)
Table 4A.65	Proportion of year 3 students who achieved the writing benchmark, 2004
Table 4A.66	(per cent) Proportion of year 5 students who achieved the writing benchmark, 2004 (per cent)
Table 4A.67	Proportion of year 7 students who achieved the writing benchmark, 2004 (per cent)
Table 4A.68	Proportion of year 3, 5 and 7 students achieving the writing benchmark, by geolocation, 2004 (per cent)
Table 4A.69	Participation in writing testing by school sector, 2004 (per cent)
Table 4A.70	Exemptions, absences and participation by equity group in writing testing, 2004 (per cent)
Table 4A.71	Proportion of year 3 students who achieved the numeracy benchmark, 2004 (per cent)
Table 4A.72	Proportion of year 5 students who achieved the numeracy benchmark, 2004 (per cent)

-	
Table 4A.73	Proportion of year 7 students who achieved the numeracy benchmark, 2004 (per cent)
Table 4A.74	Proportion of year 3, 5 and 7 students achieving the numeracy benchmark, by geolocation, 2004 (per cent)
Table 4A.75	Participation in numeracy testing by school sector, 2004 (per cent)
Table 4A.76	Exemptions, absences and participation by equity group in numeracy testing, 2004 (per cent)
Table 4A.77	Proportion of year 3 students who achieved the reading benchmark, 2005 (per cent)
Table 4A.78	Proportion of year 5 students who achieved the reading benchmark, 2005 (per cent)
Table 4A.79	Proportion of year 7 students who achieved the reading benchmark, 2005 (per cent)
Table 4A.80	Proportion of year 3, 5 and 7 students achieving the reading benchmark, by geolocation, 2005 (per cent)
Table 4A.81	Participation in reading testing by school sector, 2005 (per cent)
Table 4A.82	Exemptions, absences and participation by equity group in reading testing, 2005 (per cent)
Table 4A.83	Proportion of year 3 students who achieved the writing benchmark, 2005 (per cent)
Table 4A.84	Proportion of year 5 students who achieved the writing benchmark, 2005 (per cent)
Table 4A.85	Proportion of year 7 students who achieved the writing benchmark, 2005 (per cent)
Table 4A.86	Proportion of year 3, 5 and 7 students achieving the writing benchmark, by geolocation, 2005 (per cent)
Table 4A.87	Participation in writing testing by school sector, 2005 (per cent)
Table 4A.88	Exemptions, absences and participation by equity group in writing testing, 2005 (per cent)
Table 4A.89	Proportion of year 3 students who achieved the numeracy benchmark, 2005 (per cent)
Table 4A.90	Proportion of year 5 students who achieved the numeracy benchmark, 2005 (per cent)
Table 4A.91	Proportion of year 7 students who achieved the numeracy benchmark, 2005 (per cent)
Table 4A.92	Proportion of year 3, 5 and 7 students achieving the numeracy benchmark, by geolocation, 2005 (per cent)
Table 4A.93	Participation in numeracy testing by school sector, 2005 (per cent)
Table 4A.94	Exemptions, absences and participation by equity group in numeracy testing, 2005 (per cent)
Table 4A.95	Proportion of year 6 students achieving at or above the proficient standard in science literacy, 2003 (per cent)
Table 4A.96	Proportion of year 6 students achieving at or above the proficient standard in science literacy, by geolocation, 2003 (per cent)

Table 4A.97	Proportion of year 6 students achieving at or above the proficient standard in science literacy, by equity group, 2003 (per cent)
Table 4A.98	Proportion of years 6 and 10 students achieving at or above the proficient standard in civics and citizenship performance, 2004 (per cent)
Table 4A.99	Proportion of years 6 and 10 students achieving at or above the proficient standard in civics and citizenship performance, by geolocation, Australia, 2004 (per cent)
Table 4A.100	Proportion of years 6 and 10 students achieving at or above the proficient standard in civics and citizenship performance, by equity group, Australia, 2004 (per cent)
Table 4A.101	Proportion of students achieving level 3 or above in the overall reading literacy scale (per cent)
Table 4A.102	Proportion of students achieving level 3 or above in the overall reading literacy scale, by equity group (per cent)
Table 4A.103	Proportion of students achieving level 3 or above in the overall mathematical literacy scale (per cent)
Table 4A.104	Proportion of students achieving level 3 or above in the overall mathematical literacy scale, by equity group (per cent)
Table 4A.105	Proportion of 15 year old secondary students achieving at or above the OECD mean for scientific literacy, 2000 (per cent)
Table 4A.106	Proportion of 15 year old secondary students achieving at or above the OECD mean for scientific literacy, 2003 (per cent)
Table 4A.107	Proportion of 15 year old secondary students achieving at or above the OECD mean for scientific literacy, by equity group (per cent)
Table 4A.108	Proportion of 15 year old secondary students achieving at or above the OECD mean for problem solving, 2003 (per cent)
Table 4A.109	Proportion of 15 year old secondary students achieving at or above the OECD mean for problem solving, by equity group, 2003 (per cent)
Table 4A.110	Proportion of year 4 students achieving at or above the intermediate international level in mathematics achievement, 2002–03 (per cent)
<b>Table 4A.111</b>	Proportion of year 8 students achieving at or above the intermediate international level in mathematics achievement, 2002–03 (per cent)
<b>Table 4A.112</b>	Proportion of year 4 students achieving at or above the intermediate international level in science achievement, 2002-03 (per cent)
Table 4A.113	Proportion of year 8 students achieving at or above the intermediate international level in science achievement, 2002-03 (per cent)
Table 4A.114	School participation rates by age and sex of students, all schools, 2006
Table 4A.115	(per cent) School participation rates by age of students, all students, all schools (per
Table 4A.116	cent) Apparent retention rates of full time secondary students to years 10–12, 2006 (per cent)
Table 4A.117	Apparent retention rates of secondary students from years 10–12, 2006 (per cent)

Table 4A.118	Apparent retention rates of full time secondary students, government schools (per cent)
<b>Table 4A.119</b>	Apparent retention rates of full time secondary students, non-government schools (per cent)
Table 4A.120	Apparent retention rates of full time secondary students, all schools (per cent)
Table 4A.121	Completion rates, year 12, by socioeconomic status and sex, all schools (per cent)
<b>Table 4A.122</b>	Completion rates, year 12, by locality and sex, all schools (per cent)
Table 4A.123	School leaver destination by highest level of school completed and labour force status (15-24 year olds), 2006
<b>Table 4A.124</b>	Participation in VET in Schools, with apprenticeships and traineeships disaggregated, 2005
Table 4A.125	Participation in VET in Schools, by school sector, 2005
<b>Table 4A.126</b>	Attainment in VET in Schools, by school sector, 2005

# 4.8 References

- ABS (Australian Bureau of Statistics) 2003, Schools Australia, 2002, Cat. no. 4221.0, Canberra. — 2004, Schools Australia, 2003, Cat. no. 4221.0, Canberra. —— 2005, *Schools Australia*, 2004, Cat. no. 4221.0, Canberra. — 2006, Schools Australia, 2005, Cat. no. 4221.0, Canberra. – 2007, Schools Australia, 2006, Cat. no. 4221.0, Canberra. Lokan, J., Greenwood, L. and Cresswell, J. 2001, 15-up and Counting, Reading, Writing, Reasoning: How Literate Are Australian Students? The PISA 2000 Survey of Students' Reading, Mathematical and Scientific Literacy Skills, Australian Council for Educational Research, Melbourne. MCEETYA (Ministerial Council on Education, Employment, Training and Youth Affairs) 1999, The Adelaide Declaration: National Goals for Schooling in the Twenty-First Century, Melbourne. – 2004, National Year 6 Science Assessment Report 2003, Melbourne. – 2005a, National Report on Schooling in Australia 2002: Preliminary Paper National Benchmark Results Reading, Writing and Numeracy Years 3, 5 and 7 2002, Melbourne. — 2005b, National Report on Schooling in Australia 2003: Preliminary Paper National Benchmark Results Reading, Writing and Numeracy Years 3, 5 and 7, 2003, Melbourne. —— 2006a, National Report on Schooling in Australia 2004: Preliminary Paper National Benchmark Results Reading, Writing and Numeracy Years 3, 5 and 7 2004. Melbourne. —— 2006b, National Assessment Program Civics and Citizenship Years 6 and 10 Report 2004, Melbourne. —— 2007a, National Report on Schooling in Australia 2005, Preliminary Paper National Benchmark Results Reading, Writing and Numeracy Years 3, 5 and 7, Melbourne.
- —— 2007b, National Report on Schooling in Australia 2005, Melbourne.
- OECD (Organisation for Economic Co-operation and Development) 2007, PISA 2006: Science competencies for tomorrow's world, Paris, OECD.
- SCRGSP (Steering Committee for the Review of Commonwealth/State Service Provision) 2003, *Report on Government Services* 2003, Productivity Commission, Canberra.

- 2006, Report on Government Services 2006, Productivity Commission, Canberra.
- 2007a, Report on Government Services 2007, Productivity Commission, Canberra.
- —— 2007b, Overcoming Indigenous Disadvantage: Key indicators 2007, Productivity Commission, Canberra.
- Thomson. S, Cresswell. J and De Bortoli. L. 2004a, *Facing the Future: A Focus on Mathematical Literacy among Australian 15-year-old Students in PISA 2003*, Camberwell, Australian Council for Educational Research.
- —— 2004b, PISA in Brief from Australia's Perspective: Highlights from the full Australian Report, Camberwell, Australian Council for Educational Research.
- Thomson. S and De Bortoli. L. 2007, *Exploring scientific literacy: How Australia measures up*, Camberwell, Australian Council for Educational Research.
- Thomson. S and Fleming. N. 2004a, *Examining the Evidence: Mathematics Achievement in Australian Schools in TIMSS 2002*, Monograph no. 6, Camberwell, Australian Council for Educational Research.
- 2004b, Examining the Evidence: Science Achievement in Australian Schools in TIMSS 2002, Monograph no. 7, Camberwell, Australian Council for Educational Research.