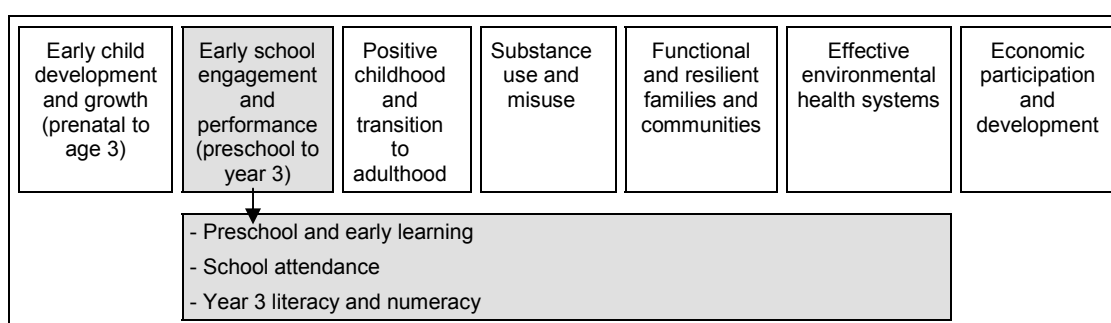


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## 6 Early school engagement and performance (preschool to year 3)

### Strategic areas for action



The indicators in this chapter concentrate on the early years of schooling. Actions to improve early years school attendance and learning can improve outcomes in the immediate, medium and long term for Indigenous children.

As a result of consultation after the 2005 Report, the preschool and school attendance indicator from the 2005 Report has been split into two separate indicators — one for preschool and early learning and the other for school attendance. The change better reflects the importance of preschool as preparation for later schooling.

There is a growing recognition that early access to early childhood education and care provides young children, particularly from low-income and second-language groups, with a good start in life (OECD 2006). One of the findings from the Program for International Student Assessment (PISA) 2003 was that children who attended preschool for more than a year showed a statistically significant performance advantage in later school achievement over those without preschool attendance (OECD 2004). As no data are available on attendance, participation rates for preschool are contained in section 6.1.

Regular school attendance is critical to successful student outcomes. Children who are regularly absent from school are at the greatest risk of dropping out of school early, becoming long-term unemployed, being caught in the poverty trap, depending on welfare and being involved in the justice system (House of Representatives

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Standing Committee on Employment, Education and Training 1996). As no data are available on attendance, participation rates for school (year 1 to year 3) are contained in section 6.2.

Australian and international research since the 1960s has examined the link between poverty and poor educational outcomes with increasing recognition of the complexity of the individual, family, community, social, cultural, political and economic factors involved (see Connell et al 1982; Connell, White and Johnston 1991; Fine 1991; Thomson 2002). This relationship between student performance and socio-economic status may explain in part the lower literacy and numeracy achievement of Indigenous primary school students compared with non-Indigenous students. Achievements against literacy and numeracy benchmarks are examined in sections 6.3 and 7.1.

Providing high quality schooling that children attend regularly, can help Indigenous children gain the best educational start. Learning outcomes also depend on a safe learning environment, good health and family and community support.

#### *Attachment tables*

Attachment tables for this chapter are identified in references throughout this chapter by an 'A' suffix (for example, table 6A.2.3). A list of attachment tables is in section 6.5. These tables can be found on the Review web page ([www.pc.gov.au/gsp](http://www.pc.gov.au/gsp)). Users can also contact the Secretariat to obtain the attachment tables.

## **6.1 Preschool and early learning**

### **Box 6.1.1 Key messages**

- Preschool participation was slightly higher for Indigenous three year olds (18.6 per cent), than non-Indigenous three year olds (16.7 per cent) (table 6.1.1). However, preschool participation rates for Indigenous four and five year olds were lower than for non-Indigenous children in these age groups (table 6.1.1).
- Between 2002 and 2005, the number of Indigenous children aged three to five years old enrolled in preschool increased slightly, from 8729 to 9015 (from 24.2 per cent to 25.1 per cent of Indigenous children aged three to five) (table 6A.1.2).

Children who have access to, and attend, good quality early childhood (0–8 years) education programs have a head start at school (Elliott 2006; Frigo and Adams

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2002). Gaps that appear in children's basic skills for life and learning that appear at age five or six are often difficult to close, even with targeted school interventions (Elliott 2006). This indicator examines preschool participation for Indigenous children aged 3–5 years.

In Australia, preschool attendance is not compulsory. There are some barriers to access to preschool in the forms of fees and program availability, particularly in remote and very remote regions (ANAO 2002; HREOC 2000; NTDE 1999). Overall, Indigenous children are less likely to participate in preschool than their non-Indigenous peers (MCEETYA 2001). In 2006, the COAG National Reform Agenda identified the importance of closing the gap between Indigenous and non-Indigenous children in the proportion of children who commence school with the basic skills for life and learning (COAG 2006).

Comparable attendance data for preschool were unavailable for this Report. Instead, data in this section present participation rates, which are based on enrolments as a proportion of children in the population. Participation rates do not reflect whether a child actually attends preschool on a regular basis. Zubrick et al (2006) contains data on pre-primary school and school attendance in Western Australia. Of the 970 Indigenous pre-primary school children in the sample, roughly half missed 26 or more pre-primary school days per year.

The impact of remoteness on preschool attendance is not explored in this Report, as data are not available by geographic regions. However, given that a higher proportion of Indigenous than non-Indigenous people live in rural and remote areas, any effect location might have on attendance would probably be more pronounced for Indigenous children.

**Box 6.1.2 'Things that work' — increasing preschool attendance and learning outcomes**

**NT mobile preschool program**

In the NT, a mobile preschool program is provided to Indigenous 3–5 year olds in the Eastern Plenty and Sandover Highways region, which has increased preschool access for Indigenous children in this remote area. The Australian Government is funding this project until 30 June 2007. The mobile service delivery model had been piloted in three hubs of up to six sites. During 2006, staff were recruited and playgroup coordinators commenced services at Engawala, Alparra, Mulga Bore, Harts Range and Ampilatwatja. The long term goal is to transfer service delivery to local community councils.

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Box 6.1.2 (continued)

### **Yappera Children's Service Cooperative, Victoria**

Yappera Children's Service Cooperative Ltd, based in Thornbury in metropolitan Melbourne (Victoria), is a Multifunctional Aboriginal Children's Service that provides a variety of services and assists Koori families in the surrounding area to participate in childcare as well as kindergarten. The centre supports 60 children per day and is linked to organisations that provide additional services such as speech therapy, exercise programs, drama workshops, parent/carer activities and programs, dental visits, audiology visits, optometry testing and support services for a smooth transition to primary school. The committee members are all Koori, and their approach to management and support enables strong links with the local community and promotes a philosophy of strengthening culture and participation.

### **Preschools in SA**

For over 30 years, the South Australian preschool policy has enabled Aboriginal three year olds to access state preschools. Qualified teachers and early childhood workers emphasise working with families and communities to develop shared understandings, positive relationships and culturally inclusive practices. Programs are guided by the South Australian Curriculum, Standards and Accountability Framework, which supports ongoing learning across children's services and schools. Eight broad outcomes for children aged 0–5 years include trust and confidence, personal and group identity, positive relationships with others, effective communication, intellectual inquisitiveness, physical competencies and wellbeing. In the last four years, enrolments have increased, and reached 1156 in 2006. This is the highest ever number of Aboriginal children accessing preschool education in South Australia.

The number of children enrolled in preschool in 2005 was obtained from the National Indigenous Preschool Census (NIPC). As the definition of a preschool varies between jurisdictions, the NIPC uses the generic sense of the term 'preschool' to include all such State and Territory specific terminology. For example, what is termed a preschool in NSW, ACT and the NT, can also be called a kindergarten in Victoria, Queensland, WA and Tasmania, and a Child Parent Centre in SA (DEST 2006). At the time these data were collected, the term 'preschool' was used in Queensland. The term 'kindergarten' is also used in Queensland, mainly for the year before preschool.

Table 6.1.1 shows the participation rates in preschool for Indigenous and non-Indigenous 3, 4 and 5 year olds. The data do not include preschool services delivered in long day care centres.

**Table 6.1.1 Participation rates in preschool for Indigenous and non-Indigenous children, 2005<sup>a, b, c, d</sup>**

	<i>Three year olds<sup>e</sup></i>		<i>Four year olds</i>		<i>Five year olds<sup>e</sup></i>	
	<i>Indigenous children (%)</i>	<i>Non-Indigenous children (%)</i>	<i>Indigenous children (%)</i>	<i>Non-Indigenous children (%)</i>	<i>Indigenous children (%)</i>	<i>Non-Indigenous children (%)</i>
NSW	26.1	21.4	41.2	40.4	10.6	16.7
Victoria <sup>f</sup>	5.8	25.6	41.9	64.6	30.6	40.1
Queensland <sup>g</sup>	6.3	9.1	11.3	16.0	3.8	3.2
WA	13.8	2.3	93.0	87.0	4.1	2.9
SA	63.3	12.2	91.3	97.8	5.3	4.6
Tasmania	–	2.6	36.9	46.1	47.2	45.8
ACT	38.5	6.4	66.7	71.3	19.2	22.1
NT	25.7	9.6	70.3	82.5	16.1	8.1
Australia <sup>h</sup>	18.6	16.7	46.2	51.0	10.5	18.3

<sup>a</sup> The participation rate was derived by dividing enrolments for three, four and five year olds by the respective population of 3, 4 and 5 year olds in the jurisdiction. In practice, most children who attend preschool do so for one year, often when they are four years old, although some three year olds and five year olds attend preschool as well. Preschool programs in different jurisdictions target different age groups. <sup>b</sup> Calculations of rates for the Indigenous population are based on ABS Experimental Projections, Aboriginal and Torres Strait Islander Australians (low series, 2001 base). There are no comparable population data for the non-Indigenous population. Calculations of rates for the non-Indigenous population are based on data derived by subtracting Indigenous population projections from total population estimates and should be used with care. <sup>c</sup> The data exclude some children in preschool whose ages were unknown. <sup>d</sup> Preschool enrolments and participation rates reported in this table may include activities not funded by states and territories. <sup>e</sup> A small number of two year olds may be in the three year olds category and a small number of six year olds may be in the five year olds category. <sup>f</sup> The Victorian Government funds a kindergarten year for all children in the year before school entry. The cohort comprises four and five year old children, shown in two separate columns in this table. <sup>g</sup> Prior to 2007, the Queensland Government offered free non-compulsory, non-universal preschool in preschool centres attached to state primary schools, usually on a 0.5 week basis. From 2003 to 2006, a preparatory year was also offered to some students instead of preschool, on a trial basis. From 2007, all Queensland children will have access to a full-time preparatory (Prep) year of education before starting year 1. Children born between 1 January and 30 June 2002 are eligible to enrol in Prep in 2007. In 2008, the compulsory school starting age will increase so that children must be six by 30 June in the year they enrol in year 1. <sup>h</sup> The enrolment estimates for Australia exclude other territories. However, the population estimates for Australia include other territories, which reduces the comparability of the datasets. – Nil or rounded to zero.

Source: DEST 2006; ABS 2005 ERP (unpublished); table 6A.1.2.

- Table 6.1.1 shows that nationally in 2005, preschool participation was slightly higher for Indigenous 3 year olds (18.6 per cent), compared to non-Indigenous 3 year olds (16.7 per cent) Preschool participation rates for Indigenous 4 year olds and 5 year olds were lower than for non-Indigenous children in these age group.
- Overall, 25.1 per cent of Indigenous children aged 3–5 years were enrolled in preschools, compared to 28.8 per cent of non-Indigenous children aged 3-5 years. (table 6A.1.2).

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- Total Indigenous preschool enrolment numbers increased slightly between 2002 and 2005, from 8729 to 9019 (from 24.2 per cent to 25.1 per cent of all Indigenous 3–5 year olds) (tables 6A.1.1, 6A.1.3).

## 6.2 School attendance (year 1 to year 3)

### Box 6.2.1 Key message

- In 2006, the school participation rate for Indigenous five to eight year old children (96.9 per cent) was similar to that for non-Indigenous children (93.8 per cent) (figure 6.2.1, table 6A.2.1).

In Australia, school attendance is compulsory for children between 6 and 15 years of age (extending to 16 years of age in SA and from 5 to 16 in Tasmania). The Western Australian Aboriginal Child Health Survey has shown a direct relationship between the number of days absent from school and academic performance (Zubrick et al. 2006).

Studies have found that Australia's Indigenous children have lower school enrolment rates and lower school attendance rates than non-Indigenous children (UNICEF Innocenti Research Centre 2004; Schwab and Sutherland 2004; Taylor 2004). Further, Indigenous school children are less likely to have parental support, for example, help with homework, compared with non-Indigenous children (UNICEF Innocenti Research Centre 2004). This indicator examines school participation for years 1–3.

Comparable attendance data for school students in years 1–3 were unavailable for this Report. Instead, data in this section present participation rates, which are based on enrolments for five to eight year olds. These rates may identify whether there are children in the community who are not enrolled at school, however, they do not reflect whether a child actually attends school on a daily basis. Zubrick et al. (2006) presented comprehensive data and discussion on school attendance in WA. This survey found that the levels of school attendance of Aboriginal students were well below the levels of non-Aboriginal students.

Recently, the 'mutual obligation' approach has been a prominent policy tool to increase attendance rates at school. For example the 'no school, no pool' strategy has been used successfully in many areas throughout Australia to encourage attendance at school. During 2005, the Australian Government trialled a scheme in Hall's Creek in WA that docked welfare payments for parents, if their children were regularly absent from school. The trial was stopped due to concerns about whether

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this approach was legal (DEWR 2006). In evaluating the trial, DEWR found three main contributing factors to low school attendance:

- lack of parental insistence that children go to school in the morning
- teacher quality
- bullying and teasing (DEWR 2006).

Examples of initiatives that have been found to increase attendance for Indigenous children at school are outlined in box 6.2.2.

**Box 6.2.2 ‘Things that work’ — increasing school attendance**

**Ngaripirliga’ajirri program, Tiwi Islands, NT**

The Ngaripirliga’ajirri program is an early intervention program for Tiwi children of primary school age and their parents. Ngaripirliga’ajirri was implemented between 2000 and 2004 in three Tiwi primary schools.

Children were referred by teachers and other practitioners to attend the program, in groups of 6–8 children with one parent each, over a school term. The program included concurrent groups for children and parents. The work with children focused on social skills, while the work with parents focused on the formulation of behaviour management strategies for them to implement at home. Ngaripirliga’ajirri was redeveloped for the circumstances of Tiwi culture and its complex family structures.

An evaluation of the program found that children participated in more than 95 per cent of sessions, while parental participation was a little lower, with a mean of 66 per cent of sessions attended.

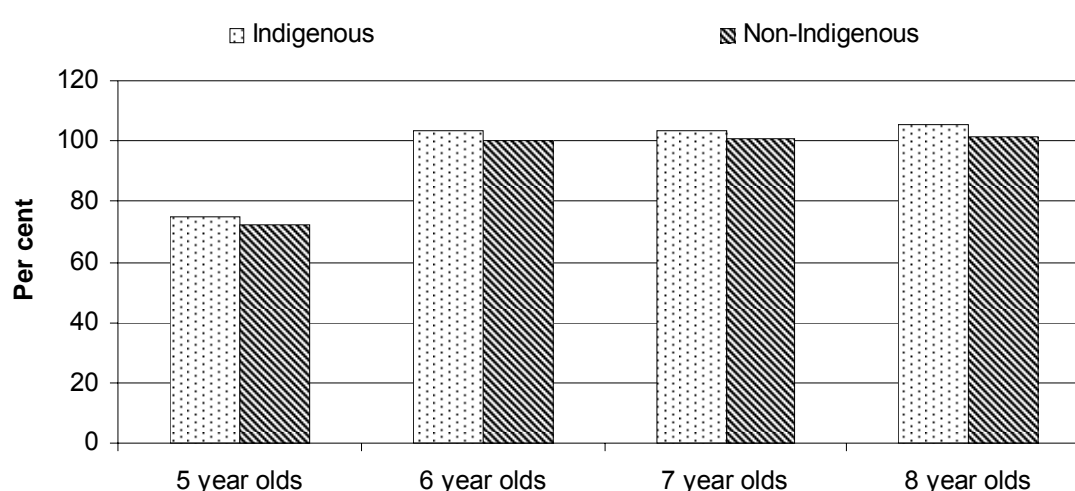
According to qualitative reports from teachers and parents, the outcomes of the program were:

- approximately 80 per cent of children showed a decline in problem behaviours at school, during and after attendance in the program, which were sustained at six months for 40 per cent of those children
- parents of between 60 to 80 per cent of children reported improved communication with their children
- parents of 50 per cent of children reported some improvement in child behaviour at home
- school attendance improved for children upon referral to the program, although this was not sustained for all children (Robinson and Tyler 2006).

The number of children enrolled in primary school in 2006 was based on the National Schools Statistics Collection (NSSC). The NSSC considered students enrolled in year one minus one (or pre-year one) to be in primary school.

In interpreting these data, readers should note that participation rates have been derived by dividing the number of children enrolled at school with the population projection for that age group. For 2006, the Indigenous population projections are likely to be less reliable because they were projected from the Census figures from 2001. For this reason, only the national figures are presented in figure 6.2.1. However, even at the national level, many of the estimates of school participation exceed 100 per cent. The data need to be interpreted with caution.

Figure 6.2.1 **School participation rates for Australian full time students, 2006<sup>a</sup>**



<sup>a</sup> Calculations of rates for the Indigenous population are based on ABS Experimental Projections, Aboriginal and Torres Strait Islander Australians (low series, 2001 base). There are no comparable population data for the Non-Indigenous population. Calculations of rates for the Non-Indigenous population are based on data derived by subtracting Indigenous population projections from total population estimates and should be used with care.

Source: ABS NSSC (unpublished); ABS 2006 ERP (unpublished); table 6A.2.1.

- The projected 2001 Census figures result in participation rates exceeding 100 per cent for some age groups in figure 6.2.1. Overall, it appears that most or all Indigenous and non-Indigenous children of school age are enrolled at school. The estimates are lower for 5 year olds. Some of these children would have been in preschool, or may not have started school as it is not compulsory until six years of age in most states and territories (see table 6.1.1).
- In 2006, the national school participation rate for Indigenous five to eight year old children (96.9 per cent) was similar to that for non-Indigenous children (93.8 per cent) (figure 6.2.1 and table 6A.2.1).
- School enrolment numbers for Indigenous five to eight year olds increased from 45 069 students in 2005 to 46 428 students in 2006 (tables 6A.2.1 and 6A.2.2).



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- School participation rates are based on enrolment numbers and do not measure whether enrolled children attend school.

## 6.3 Year 3 literacy and numeracy

### Box 6.3.1 Key messages

- Between 1999 and 2005, Indigenous students' performance against the national reading, writing and numeracy benchmarks fluctuated, with no statistically significant trend (figures 6.3.1, 6.3.3 and 6.3.5).
- In 2005, the proportion of Indigenous year 3 students who did not achieve the national benchmark was substantially higher than the proportion of all students, for:
  - reading (22.0 per cent compared to 7.3 per cent) (figure 6.3.2)
  - writing (26.0 per cent compared to 7.2 per cent) (figure 6.3.4)
  - numeracy (19.6 per cent compared to 5.9 per cent) (figure 6.3.6).

The disparity in academic performance between Indigenous students and non-Indigenous students is evident from year 1 onwards, and is maintained until the mid high school years (Zubrick et al. 2006). Studies have shown that, unless preschool learning and early primary school assistance are provided, underperforming students are rarely able to catch up (Ou and Reynolds 2004; Reynolds et al. 2001; Schweinhart 2005). Section 6.1 has more information on preschool and early learning.

Indigenous children in remote areas have, on average, much lower rates of school attendance, achievement and retention than Indigenous children in urban areas and other Australian children (Storry 2006). In remote areas of the NT, only 3 to 4 per cent of Indigenous students achieved the national reading benchmark in 1999 (ANAO 2002). More timely data on the effect of remoteness for Indigenous students is not available.

The Trends in International Mathematics and Science Study (TIMSS) is an initiative of the International Association for the Evaluation of Educational Achievement. TIMSS assesses performance at year 4 and year 8 and focuses on the mathematics and science curriculum, identifying what concepts and processes students have learned, what factors are linked to students' opportunity to learn, and how these factors influence students' achievements. Australia has participated in each TIMSS (conducted in 1994-95, 1998-99 and 2002-03) (Thomson and Fleming 2004).

Some of the findings from the TIMSS 2002-03 for year 4 students include:

- 
- overall, the mathematics and science achievement of Indigenous students was significantly lower than that of non-Indigenous students
  - the difference in scores between Indigenous and non-Indigenous students was slightly larger in the TIMSS 2002-03 than in TIMSS 1994-95 (Thomson and Fleming 2004).

This indicator presents nationally comparable learning outcomes data for 2005 for year 3 reading, writing and numeracy. Nationally comparable learning outcomes data for year 3 for 2003 and 2004 are reported in the attachment tables.

In March 1997, national benchmarks for use in reporting years 3, 5 and 7 students' reading, writing and numeracy performance were developed. These benchmarks describe the nationally agreed minimum acceptable standard in each area of study at particular year levels. That is, a student who does not achieve the benchmark standard will have difficulty making sufficient progress at school.

Care needs to be taken in interpreting the learning outcomes data, because differences in student achievement may sometimes be the result of sampling or measurement error. The publication of confidence intervals with the benchmark results reflects the uncertainty associated with the measurement of student achievement and provides a way of making improved inferences about the achievement of students. The tables reporting benchmark achievement percentages include 95 per cent confidence intervals. For example, a result of 80 per cent with a confidence interval of  $\pm 2.7$  per cent means that we can say with 95 per cent confidence that 77.3 to 82.7 per cent of the students achieved the benchmark.

Some examples of initiatives that are improving educational outcomes for Indigenous students can be found in box 6.3.2.

**Box 6.3.2 'Things that work' — early literacy engagement**

**MULTILIT Tutorial Centre, Coen, Queensland**

In July 2005, a MULTILIT (Making Up Lost Time In Literacy) Tutorial Centre was established at Coen State School in Cape York. Coen is a remote Indigenous community about 500 kilometres from Cairns. The program involved taking the 15 least proficient readers and giving them intensive, systematic instruction in phonics for 17 to 18 weeks by specialist teachers. The children, whose reading ability had been three to four years behind the Australian average, gained an average 21.4 months in reading accuracy (IRUA 2006; Devine 2006).

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Box 6.3.2 (continued)

### **Scaffolding Literacy Program, Noonkanbah, WA**

The 2005 Report included a discussion on the Scaffolding Literacy Program. The scaffolding program improved the literacy levels of Indigenous children at the Kulkarriya Community School on Noonkanbah station in the Kimberley region of WA. Scaffolding sessions require students to study one quality written text per term. The text is broken down into smaller parts in a group learning environment until students can think like the writer and imitate language (DEST 2005).

The scaffolding program has been modified and enhanced over 5 years. It is now an established aspect of the school program with regular professional development and evaluation from consultants who visit the school frequently to demonstrate and reinforce the programme. The National Accelerated Literacy Program provides children with access to the scaffolding process for 1.5 to 2 hours per school day. This has led to improvements at school, with the numbers of non reading students dropping from 25 to 19 in 2006.

Since the initial implementation of the scaffolding program at the Kulkarriya Community School, the program has been introduced into a number of schools in the Kimberley region. This enables children to continue their participation in the scaffolding program when their families move between communities.

### **Yachad Accelerated Literacy Project**

The Yachad Accelerated Learning Project (YALP) is a professional tuition programme underway in five locations: Shepparton (Victoria), Aurukun (Queensland), Halls Creek (WA), North Adelaide (SA), Alice Springs (NT). YALP is a three-year educational intervention program which will conclude in December 2007. The program targets the lowest performing students with after hours tutoring (DEST 2006).

The program describes itself as 'based on whole of community educational approaches developed by the Hebrew University of Jerusalem'. The program's stakeholder report includes anecdotal evidence of the positive outcomes of the program:

- improvements in student literacy and numeracy skills
- increases in self-confidence for students and educators
- advances in teaching approaches and strategies
- expansion of co-operation and engagement between schools and Indigenous communities (YALP 2006).

### **Accelerated Literacy Program, NT**

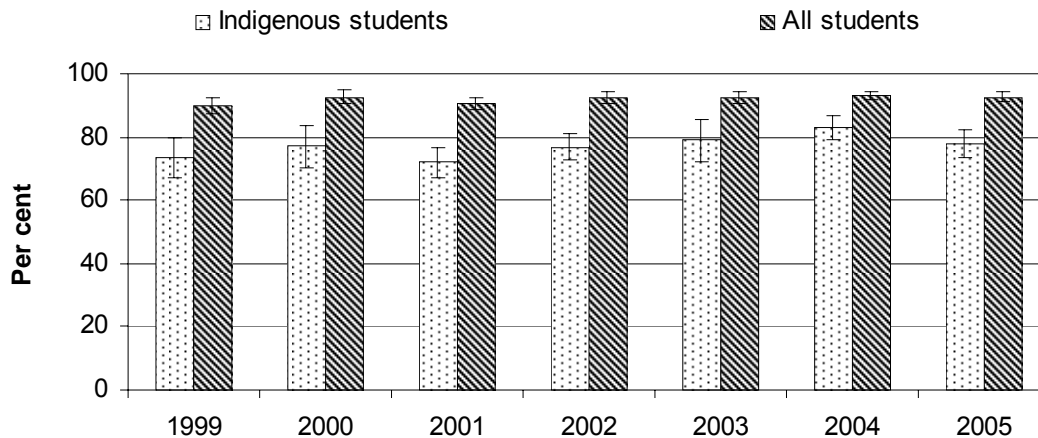
Sixty-two schools in the NT participate in the Accelerated Literacy Program. There have been significant improvements in literacy outcomes for the students involved in the program. An evaluation by the Charles Darwin University found that the 2006 average progress rate for NT Accelerated Literacy students was 1.74 reading year levels per year (on average one reading level per year is expected of students).

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## Reading

Figure 6.3.1 Proportion of year 3 students who achieved the reading benchmark, 1999–2005<sup>a, b</sup>

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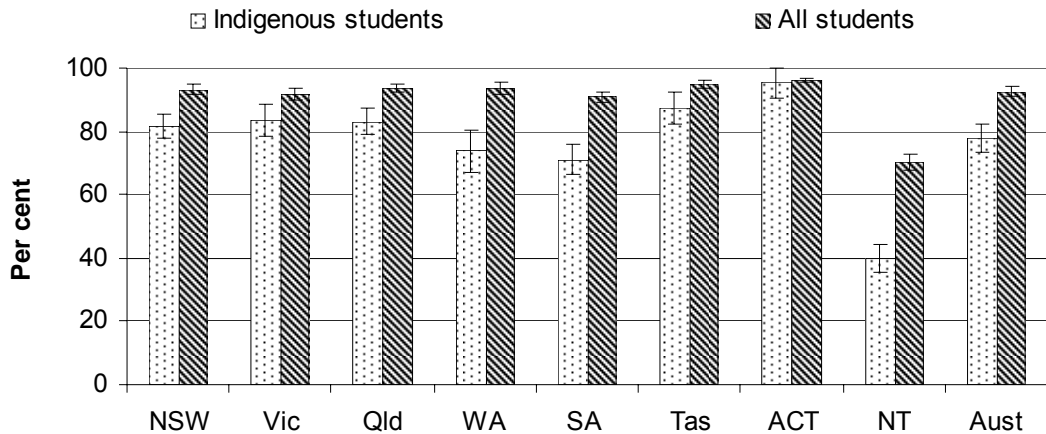


<sup>a</sup> The achievement percentages reported in this table include 95 per cent confidence intervals, for example, 80 per cent  $\pm$  2.7 per cent. <sup>b</sup> Students who were absent or withdrawn from testing are not classified as assessed students and are not included in the benchmark calculations.

Source: MCEETYA (2007); table 6A.3.1.

- Figure 6.3.1 shows that from 1999 to 2005 there was no clear trend (and no statistically significant difference) in the proportion of year 3 Indigenous students who achieved the reading benchmark.
- The proportion of students who achieved the reading benchmark was consistently lower for Indigenous students for all years between 1999 and 2005 (figure 6.3.1).

Figure 6.3.2 Proportion of year 3 students who achieved the reading benchmark, by State and Territory, 2005<sup>a, b, c, d</sup>



<sup>a</sup> The achievement percentages reported in this table include 95 per cent confidence intervals, for example, 80 per cent  $\pm$  2.7 per cent. <sup>b</sup> Students who were absent or withdrawn from testing are not classified as assessed students and are not included in the benchmark calculations. The proportion of absent and withdrawn students varies across jurisdictions, as shown in table 6A.3.44. Readers are urged to be cautious when comparing results. <sup>c</sup> Some movements in the results over time might have occurred because of State/Territory equating processes, and may not reflect actual improvements in student performance. <sup>d</sup> The methods used to identify Indigenous students varied across jurisdictions.

Source: MCEETYA (2007); table 6A.3.40.

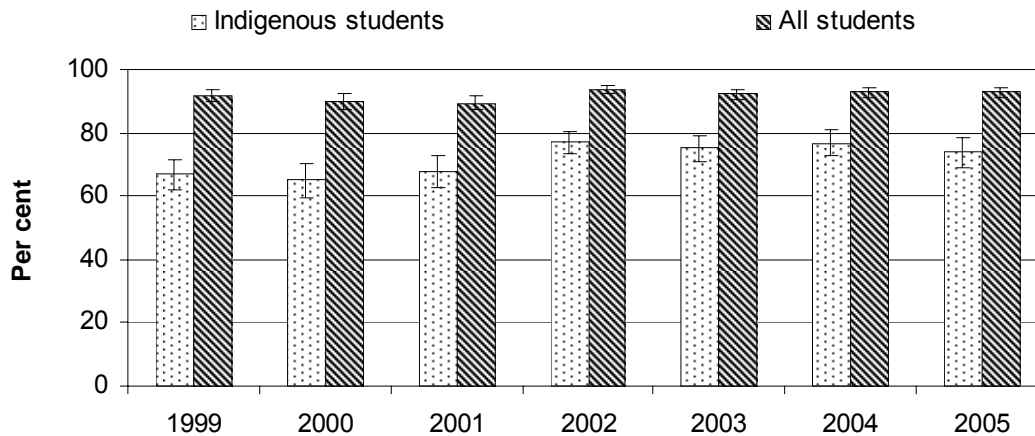
- Nationally in 2005, 22.0 per cent of Indigenous students did not achieve the reading benchmark compared to 7.3 per cent of all students (table 6A.3.40). Students who do not achieve the reading benchmark standard will have difficulty making sufficient progress at school.

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## Writing

Figure 6.3.3 Proportion of year 3 students who achieved the writing benchmark, 1999–2005<sup>a, b</sup>

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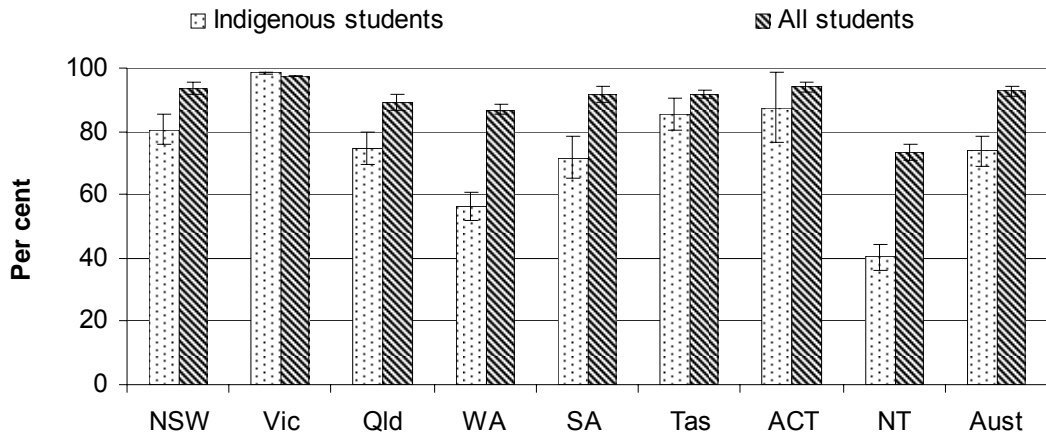


<sup>a</sup> The achievement percentages reported in this table include 95 per cent confidence intervals, for example, 80 per cent  $\pm$  2.7 per cent. <sup>b</sup> Students who were absent or withdrawn from testing are not classified as assessed students and are not included in the benchmark calculations.

Source: MCEETYA (2007); table 6A.3.2.

- The proportion of year 3 Indigenous students who achieved the writing benchmark fluctuated over the period 1999 to 2005 (figure 6.3.3). In each of these years, a lower proportion of Indigenous students than all students achieved the benchmark.

Figure 6.3.4 Proportion of year 3 students who achieved the writing benchmark, by State and Territory, 2005<sup>a, b, c, d</sup>



<sup>a</sup> The achievement percentages reported in this table include 95 per cent confidence intervals, for example, 80 per cent  $\pm$  2.7 per cent. <sup>b</sup> Students who were absent or withdrawn from testing are not classified as assessed students and are not included in the benchmark calculations. The proportion of absent and withdrawn students varies across jurisdictions, as shown in table 6A.3.49. Readers are urged to be cautious when comparing results. <sup>c</sup> Some movements in the results over time might have occurred because of State/Territory equating processes, and may not reflect actual improvements in student performance. <sup>d</sup> The methods used to identify Indigenous students varied across jurisdictions.

Source: MCEETYA (2007); table 6A.3.45.

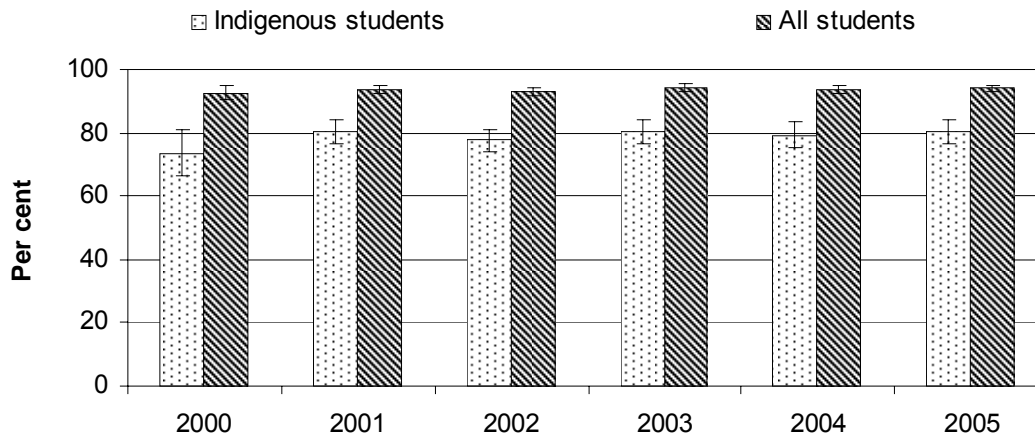
- The proportion of Indigenous students who achieved the writing benchmark varied significantly across states and territories in 2005 (figure 6.3.4).
- Nationally in 2005, 26.0 per cent of Indigenous students did not achieve the writing benchmark compared to 7.2 per cent of all students (table 6A.3.45). Students who do not achieve the writing benchmark standard will have difficulty making sufficient progress at school.

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## Numeracy

Figure 6.3.5 Proportion of year 3 students who achieved the numeracy benchmark, 2000–2005<sup>a, b</sup>

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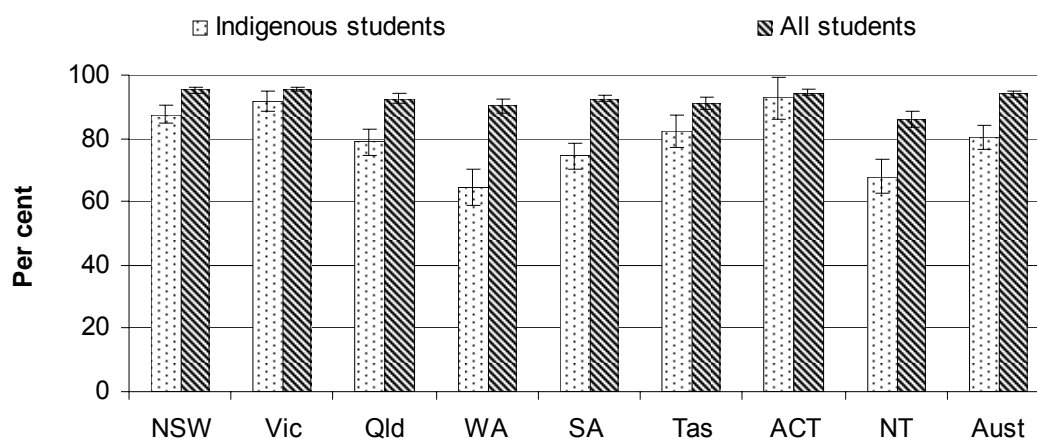
<sup>a</sup> The achievement percentages reported in this table include 95 per cent confidence intervals, for example, 80 per cent  $\pm$  2.7 per cent. <sup>b</sup> Students who were absent or withdrawn from testing are not classified as assessed students and are not included in the benchmark calculations.

Source: MCEETYA (2007); table 6A.3.3.

- There was no statistically significant change over time (from 2000 to 2005) in the proportion of year 3 Indigenous students who achieved the numeracy benchmark (figure 6.3.5).



Figure 6.3.6 **Proportion of year 3 students who achieved the numeracy benchmark, by State and Territory, 2005<sup>a, b, c, d</sup>**



<sup>a</sup> The achievement percentages reported in this table include 95 per cent confidence intervals, for example, 80 per cent  $\pm$  2.7 per cent. <sup>b</sup> Students who were absent or withdrawn from testing are not classified as assessed students and are not included in the benchmark calculations. The proportion of absent and withdrawn students varies across jurisdictions, as shown in table 6A.3.54. Readers are urged to be cautious when comparing results. <sup>c</sup> Some movements in the results over time might have occurred because of State/Territory equating processes, and may not reflect actual improvements in student performance. <sup>d</sup> The methods used to identify Indigenous students varied across jurisdictions.

Source: MCEETYA (2007); table 6A.3.50.

- The proportion of Indigenous students who achieved the numeracy benchmark varied significantly across states and territories (figure 6.3.4).
- Nationally in 2005, 19.6 per cent of Indigenous students did not achieve the numeracy benchmark compared to 5.9 per cent of all students (table 6A.3.50). Students who do not achieve the numeracy benchmark standard will have difficulty making sufficient progress at school.

## 6.4 Future directions in data

### Preschool and early learning

In 2007, the National Preschool Census (formerly the National Indigenous Preschool Census) will collect attendance data for Indigenous and non-Indigenous children in non-government preschools. The data should be available by 2008.

### School attendance (year 1 to year 3)

The Steering Committee has identified school attendance as an important area for future reporting. Attendance at school has a significant impact on later academic

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success and if attendance is erratic then children are unable to reach educational benchmarks (SCRGSP 2005).

There has been no improvement in the availability of data since the 2003 Report. Some jurisdictions collect data on attendance rates at all levels (preschool to year 12). However, lack of uniformity across jurisdictions has created a barrier to national reporting.

COAG made a commitment to improved attendance data in 2006. The MCEETYA Performance Measurement and Reporting Taskforce is developing key performance measures for attendance which may be ready for implementation in 2007.

### **Year 3 literacy and numeracy**

Indigenous learning outcomes data in future reports will need to be improved through the inclusion of more timely data and breakdowns by geographic regions. MCEETYA publishes data by geographic regions for all students, but these are not yet available for Indigenous students.

## **6.5 Attachment tables**

Attachment tables are identified in references throughout this chapter by an 'A' suffix (for example, table 6A.3.2 is table 2 in the attachment tables for section 6.3). The files containing the attachment tables can also be found on the Review web page ([www.pc.gov.au/gsp](http://www.pc.gov.au/gsp)). Users without access to the Internet can contact the Secretariat to obtain the attachment tables (see contact details on the inside front cover of the Report).

### **6.1 Preschool and early learning**

**Table 6A.1.1** Total number of children enrolled in preschool, 2005

**Table 6A.1.2** Indigenous and non-Indigenous children enrolled in preschool and participation rate, 2005

**Table 6A.1.3** Indigenous children enrolled in preschool and participation rate, 2002, 2003

### **6.2 School attendance (year 1 to year 3)**

**Table 6A.2.1** Children enrolled in school and participation rate, 2006

**Table 6A.2.2** Children enrolled in school and participation rate, 2005

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### 6.3 Year 3 literacy and numeracy

<b>Table 6A.3.1</b>	Proportion of year 3 students who achieved the reading benchmark, 1999–2005 (per cent)
<b>Table 6A.3.2</b>	Proportion of year 3 students who achieved the writing benchmark, 1999–2005 (per cent)
<b>Table 6A.3.3</b>	Proportion of year 3 students who achieved the numeracy benchmark, 2000–2005 (per cent)
<b>Table 6A.3.4</b>	Proportion of year 5 students who achieved the reading benchmark, 1999–2005 (per cent)
<b>Table 6A.3.5</b>	Proportion of year 5 students who achieved the writing benchmark, 1999–2005 (per cent)
<b>Table 6A.3.6</b>	Proportion of year 5 students who achieved the numeracy benchmark, 2000–2005 (per cent)
<b>Table 6A.3.7</b>	Proportion of year 7 students who achieved the reading benchmark, 2001–2005 (per cent)
<b>Table 6A.3.8</b>	Proportion of year 7 students who achieved the writing benchmark, 2001–2005 (per cent)
<b>Table 6A.3.9</b>	Proportion of year 7 students who achieved the numeracy benchmark, 2001–2005 (per cent)
<b>Table 6A.3.10</b>	Proportion of year 3 students who achieved the reading benchmark, 2003 (per cent)
<b>Table 6A.3.11</b>	Proportion of year 5 students who achieved the reading benchmark, 2003 (per cent)
<b>Table 6A.3.12</b>	Proportion of year 7 students who achieved the reading benchmark, 2003 (per cent)
<b>Table 6A.3.13</b>	Participation in reading testing by school sector, 2003 (per cent)
<b>Table 6A.3.14</b>	Exemptions, absences and participation by equity group in reading testing, 2003 (per cent)
<b>Table 6A.3.15</b>	Proportion of year 3 students who achieved the writing benchmark, 2003 (per cent)
<b>Table 6A.3.16</b>	Proportion of year 5 students who achieved the writing benchmark, 2003 (per cent)
<b>Table 6A.3.17</b>	Proportion of year 7 students who achieved the writing benchmark, 2003 (per cent)
<b>Table 6A.3.18</b>	Participation in writing testing by school sector, 2003 (per cent)
<b>Table 6A.3.19</b>	Exemptions, absences and participation by equity group in writing testing, 2003 (per cent)
<b>Table 6A.3.20</b>	Proportion of year 3 students who achieved the numeracy benchmark, 2003 (per cent)
<b>Table 6A.3.21</b>	Proportion of year 5 students who achieved the numeracy benchmark, 2003 (per cent)
<b>Table 6A.3.22</b>	Proportion of year 7 students who achieved the numeracy benchmark, 2003 (per cent)

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<b>Table 6A.3.23</b>	Participation in numeracy testing by school sector, 2003 (per cent)
<b>Table 6A.3.24</b>	Exemptions, absences and participation by equity group in numeracy testing, 2003 (per cent)
<b>Table 6A.3.25</b>	Proportion of year 3 students who achieved the reading benchmark, 2004 (per cent)
<b>Table 6A.3.26</b>	Proportion of year 5 students who achieved the reading benchmark, 2004 (per cent)
<b>Table 6A.3.27</b>	Proportion of year 7 students who achieved the reading benchmark, 2004 (per cent)
<b>Table 6A.3.28</b>	Participation in reading testing by school sector, 2004 (per cent)
<b>Table 6A.3.29</b>	Exemptions, absences and participation by equity group in reading testing, 2004 (per cent)
<b>Table 6A.3.30</b>	Proportion of year 3 students who achieved the writing benchmark, 2004 (per cent)
<b>Table 6A.3.31</b>	Proportion of year 5 students who achieved the writing benchmark, 2004 (per cent)
<b>Table 6A.3.32</b>	Proportion of year 7 students who achieved the writing benchmark, 2004 (per cent)
<b>Table 6A.3.33</b>	Participation in writing testing by school sector, 2004 (per cent)
<b>Table 6A.3.34</b>	Exemptions, absences and participation by equity group in writing testing, 2004 (per cent)
<b>Table 6A.3.35</b>	Proportion of year 3 students who achieved the numeracy benchmark, 2004 (per cent)
<b>Table 6A.3.36</b>	Proportion of year 5 students who achieved the numeracy benchmark, 2004 (per cent)
<b>Table 6A.3.37</b>	Proportion of year 7 students who achieved the numeracy benchmark, 2004 (per cent)
<b>Table 6A.3.38</b>	Participation in numeracy testing by school sector, 2004 (per cent)
<b>Table 6A.3.39</b>	Exemptions, absences and participation by equity group in numeracy testing, 2004 (per cent)
<b>Table 6A.3.40</b>	Proportion of year 3 students who achieved the reading benchmark, 2005 (per cent)
<b>Table 6A.3.41</b>	Proportion of year 5 students who achieved the reading benchmark, 2005 (per cent)
<b>Table 6A.3.42</b>	Proportion of year 7 students who achieved the reading benchmark, 2005 (per cent)
<b>Table 6A.3.43</b>	Participation in reading testing by school sector, 2005 (per cent)
<b>Table 6A.3.44</b>	Exemptions, absences and participation by equity group in reading testing, 2005 (per cent)
<b>Table 6A.3.45</b>	Proportion of year 3 students who achieved the writing benchmark, 2005 (per cent)

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<b>Table 6A.3.46</b>	Proportion of year 5 students who achieved the writing benchmark, 2005 (per cent)
<b>Table 6A.3.47</b>	Proportion of year 7 students who achieved the writing benchmark, 2005 (per cent)
<b>Table 6A.3.48</b>	Participation in writing testing by school sector, 2005 (per cent)
<b>Table 6A.3.49</b>	Exemptions, absences and participation by equity group in writing testing, 2005 (per cent)
<b>Table 6A.3.50</b>	Proportion of year 3 students who achieved the numeracy benchmark, 2005 (per cent)
<b>Table 6A.3.51</b>	Proportion of year 5 students who achieved the numeracy benchmark, 2005 (per cent)
<b>Table 6A.3.52</b>	Proportion of year 7 students who achieved the numeracy benchmark, 2005 (per cent)
<b>Table 6A.3.53</b>	Participation in numeracy testing by school sector, 2005 (per cent)
<b>Table 6A.3.54</b>	Exemptions, absences and participation by equity group in numeracy testing, 2005 (per cent)
<b>Table 6A.3.55</b>	Proportion of year 6 students achieving at or above the proficient standard in science literacy, 2003 (per cent)
<b>Table 6A.3.56</b>	Proportion of years 6 and 10 students achieving at or above the proficient standard in civics and citizenship performance, Australia, 2004 (per cent)
<b>Table 6A.3.57</b>	Proportion of 15 year old secondary students achieving at or above the OECD mean for reading literacy (per cent)
<b>Table 6A.3.58</b>	Proportion of students achieving level 3 or above in the overall reading literacy scale (per cent)
<b>Table 6A.3.59</b>	Proportion of 15 year old secondary students achieving at or above the OECD mean for mathematical literacy (per cent)
<b>Table 6A.3.60</b>	Proportion of 15 year old secondary students achieving at or above the OECD mean for scientific literacy (per cent)
<b>Table 6A.3.61</b>	Proportion of 15 year old secondary students achieving at or above the OECD mean for problem solving, 2003 (per cent)

## 6.6 References

### 6 Early school engagement

Connell, R.W., White, V.M., and Johnston, K.M. 1991, *Running Twice as Hard: the Disadvantaged Schools Program in Australia*, Deakin University Press, Geelong.

Connell, R.W., Ashenden, D.J., Kessler, S. and Dowsett, G.W. 1982, *Making the Difference: Schools, Families and Social Division*, Allen & Unwin, Sydney.

Fine, M., 1991, *Framing Dropouts: Notes on the Politics of an Urban Public High School*, State University of New York Press, Albany.

---

House of Representatives Standing Committee on Employment, Education and Training 1996, *Truancy and Exclusion from School*, Australian Government Publishing Service, Canberra.

OECD (Organisation for Economic Co-operation and Development) 2006, *Starting Strong II: Early Childhood Education and Care*, Paris.

— 2004, *Learning for Tomorrow's World — First Results from PISA 2003*, France.

Thomson, P. 2002, *Schooling the rustbelt kids*, Allen & Unwin, Sydney.

## 6.1 Preschool and early learning

ANAO (Australian National Audit Office) 2002, *Indigenous Education Strategies: Department of Education, Science and Training*, Audit Report no. 43 2001–2002, Canberra.

COAG (Council of Australian Governments) 2006, *COAG National Reform Agenda (NRA): Human Capital, Competition and Regulatory Reform*, Communiqué, 14 July 2006, Canberra.

DEST (Department of Education, Science and Training) 2006, *National Preschool Census 2005 Aboriginal and Torres Strait Islanders and All Students: Technical Report*, DAA (Data Analysis Australia), Canberra.

Elliott, A. 2006, *Rethinking and Reshaping Early Childhood Care and Education Policy – Visions and Directions for the Future*, Australian Council for Educational Research, National Education Forum Conference, 2006, Brisbane.

Ferrari, J. 2006, 'Aborigines lifted by great expectations', *Australian* 29 March 2006.

HREOC (Human Rights and Equal Opportunity Commission) 2000, *Emerging Themes: National Inquiry into Rural and Remote Education*, Sydney, HREOC, [http://www.hreoc.gov.au/pdf/human\\_rights/emerging\\_themes.pdf](http://www.hreoc.gov.au/pdf/human_rights/emerging_themes.pdf) (accessed 28 June 2003).

Frigo, T. and Adams, I. 2002, Diversity and learning in the early years of school, paper presented at the Australian Association for Research in Education (AARE) Annual Conference, 2002, Brisbane.

Liddy, B. 2004, Mobile preschool pilot programs — an initiative to provide preschool programs for children in remote communities throughout the Northern Territory, paper presented at the 3rd National Australian Indigenous Education Conference, Ballarat, 15–18 November.

Morris, S. 2005, 'Contentious no-school, no-dole policy to continue', *Australian Financial Review*, 2 December 2005.

---

NTDE (Northern Territory Department of Education) 1999, *Learning Lessons, An Independent Review of Indigenous Education in the Northern Territory*, Darwin, [http://www.deet.nt.gov.au/education/indigenous\\_education/learning\\_lessons\\_review.pdf](http://www.deet.nt.gov.au/education/indigenous_education/learning_lessons_review.pdf) (accessed 30 April 2003).

OECD (Organisation for Economic Co-operation and Development) 2004, *Learning for Tomorrow's World — First Results from PISA 2003*, France.

## **6.2 School attendance (year 1 to year 3)**

DEWR (Department of Employment and Workplace Relations) 2006, *Halls Creek Engaging Families Trial February–July 2006 — Evaluation Report*, Australian Government, Canberra.

Robinson, G. and Tyler, B. 2006, *Ngaripirriga'ajirri — An Early Intervention Program on the Tiwi Islands* Final Evaluation Report, School for Social and Policy Research, Charles Darwin University.

Schwab, R.G. and Sutherland, D. 2004, *Literacy for Life: A Scoping Study for a Community Literacy Empowerment Project*, The Fred Hollows Foundation and the Centre for Aboriginal Economic Policy Research, Australian National University, Canberra.

Taylor, J. 2004, *Social Indicators for Aboriginal Governance: Insights from the Thamarrurr Region, Northern Territory*, Research Monograph no. 24, Centre for Aboriginal Economic Policy Research, Australian National University, Canberra.

UNICEF Innocenti Research Centre 2004, *Ensuring the Rights of Indigenous Children*, Innocenti Digest no. 11, Florence.

Zubrick S., Silburn S., De Maio J., Shepherd C., Griffin J., Dalby R., Mitrou F., Lawrence D., Hayward C., Pearson G., Milroy H., Milroy J., Cox A., 2006 *The Western Australian Aboriginal Child Health Survey: Improving the Educational Experiences of Aboriginal Children and Young People*, Curtin University of Technology and Telethon Institute for Child Health Research, Perth.

## **6.3 Year 3 literacy and numeracy**

ANAO (Australian National Audit Office) 2002, *Indigenous Education Strategies: Department of Education, Science and Training*, Audit Report no. 43 2001–2002, Canberra.

DEST (Department of Education, Science and Training) 2005, *What Works. The Work Program: Improving Outcomes for Indigenous Students*, <http://www.whatworks.edu.au> (accessed 17 March 2005).

---

—2006, *National Report to Parliament on Indigenous Education and Training 2004*, Canberra.

Devine, M. 2006, 'How intolerance can turn the tide', <http://www.smh.com.au/news/opinion/how-intolerance-can-turn-the-tide/2006/09/27/1159337220004.html> (accessed 27 September 2006).

IRUA (Innovative Research Universities Australia) 2006, *Response to DEST Knowledge Transfer Project: Developing a Culture of Engagement in Australian Universities through the Formation of Sustainable Partnerships*, <http://www.irua.edu.au/policy/policy-20060131.pdf> (accessed 28 September 2006).

MCEETYA (Ministerial Council on Education, Employment, Training and Youth Affairs) 2007, *National Report on Schooling in Australia 2005: Preliminary Paper National Benchmark Results Reading, Writing and Numeracy Years 3, 5 and 7*, Melbourne.

Ou, S., and Reynolds, A.J. 2004, 'Preschool education and school completion', in Tremblay, R.E., Barr, R.G. and Peters, R.DeV. (eds), *Encyclopaedia on Early Childhood Development*, Montreal, Centre of Excellence for Early Childhood Development, <http://www.excellence-earlychildhood.ca/documents/Ou-ReynoldsANGxp.pdf> (accessed 2 November 2006).

Reynolds, A.J., Temple, J.A., Robertson, D.L. and Mann, E.A. 2001, 'Long-term effects of an early childhood intervention on educational achievement and juvenile arrest — a 15-year follow-up of low-income children in public schools', *Journal of the American Medical Association*, vol. 285, pp. 2339–2346.

Schweinhart, L.J. 2005, *The High/Scope Perry Preschool Study Through Age 40 Summary, Conclusions, and Frequently Asked Questions*, Ypsilanti, High/Scope Press.

Storry, K. 2006, *Tackling Literacy in Remote Aboriginal Communities*, Issue Analysis, no. 73, The Centre for Independent Studies, St Leonards, NSW.

Thomson, S. and Fleming, N. 2004, *Summing it up: mathematics achievement in Australian schools 2002*, Australian Council for Educational Research, Camberwell.

YALP (Yachad Accelerated Learning Project) 2006, *Stakeholder Report: February 2006*, Melbourne.

Zubrick, S.R., Silburn, S.R., De Maio, J.A., Shepherd, C., Griffin, J.A., Dalby, R.B., Mitrou, F.G., Lawrence, D.M., Hayward, C., Pearson, G., Milroy, H., Milroy, J. and Cox, A. 2006, *The Western Australian Aboriginal Child Health Survey: Improving the Educational Experiences of Aboriginal Children and*



---

*Young People*, Curtin University of Technology and Telethon Institute for Child Health Research, Perth.

#### **6.4 Future directions**

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

