

# Education in Australia 2012: Five years of performance

Report to the Council of Australian Governments

21 October 2013





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Dear Prime Minister

On behalf of the COAG Reform Council I am pleased to present our report *Education in Australia 2012: Five years of performance*.

In 2008, all Australian governments agreed to work together to ensure that Australia's school students acquire the knowledge and skills needed to participate fully in society and employment in a globalised economy. This objective was enshrined in the National Education Agreement.

In the council's fifth report on that agreement, we look at how governments have performed against this objective in the last five years.

Our report shows high levels of participation and improvements in the early years of schooling since 2008. School attendance has remained high in the primary years. Australian students have improved in Year 3 and Year 5 reading and in Year 5 numeracy. By secondary school however, school attendance falls and there has been little improvement in reading and numeracy.

More young Australians have attained Year 12 or an equivalent qualification. However, this has been accompanied by a decline in the proportion of young people fully engaged in work or study after leaving school. While more young people are studying full-time, the proportion in full-time employment declined.

Reducing the educational disadvantage experienced by Indigenous young people, young people from the lowest socio-economic backgrounds or from rural or remote places remains a big challenge. The education outcomes for these groups are still poor. Large gaps in reading and numeracy achievement remain in place. While Year 12 attainment has increased, young people from these groups continue to be less likely to move on to further work or study after leaving school.

We trust that the findings in this report will assist COAG to make further progress on its important education and skills reform agenda, and contribute to the future success of Australia's young people.

Yours sincerely



JOHN BRUMBY  
Chairman



# About this report

## Outcomes in education: progress over five years

All Australian governments signed the National Education Agreement in January 2009. The objective of the agreement is that all Australian school students acquire the knowledge and skills to participate effectively in society and employment in a globalised economy. This objective recognises the important role that education plays in meeting Australia's economic and social goals.

We assess and report publicly on the performance of governments against the outcomes in the agreement. This year we focus on whether these outcomes have improved over the five years since the agreement was developed. We mainly assess progress over time and identify trends.

### Structure of the report

We have organised the report around the five outcomes the agreement aims to achieve.

- Are children engaged in and benefiting from schooling?
- Are young people meeting basic literacy and numeracy standards and are overall levels improving?
- Are Australian students excelling internationally?
- Are young people making a successful transition from school to work and further study?
- Does schooling promote social inclusion and reduce educational disadvantage?

We also report on whether governments are on track to meet COAG's targets to:

- lift the Year 12 or equivalent (Certificate II or above) attainment rate to 90 per cent by 2015
- lift the Year 12 or equivalent (Certificate III or above) attainment rate to 90 per cent by 2020
- halve the gap for Indigenous students in reading, writing and numeracy by 2018
- halve the gap for Indigenous students in Year 12 or equivalent attainment by 2020.

### Treatment of data in this report

The data used in this report come from a variety of surveys, administrative collections and censuses. Most of the available data covers the 2008 to 2012 timeframe. For some indicators this year we use data from the 2011 Census of Population and Housing as it is newly available and provides a sound five year comparison with the 2006 Census.

For survey data, we test for statistical significance of any changes or differences and note when differences are statistically significant. We do not test Census data or data from administrative collections as there are no estimates of error from sampling. However, there may be error from other sources such as processing or collection issues which are not quantified.

Appendices C and D provide relevant information on data used, the collections and any limitations with collection methods, definitions and data quality. Appendix D also includes a summary of contextual information relevant to the indicators and outcomes of the National Education Agreement.



# Table of contents

<b>Education 2012: Key findings five years of performance</b>	<b>8</b>
<b>Performance over five years</b>	<b>11</b>
<b>Recommendations</b>	<b>12</b>
<b>Chapter 1 Engaged in and benefiting from school</b>	<b>15</b>
Key findings .....	17
Preparing for school.....	18
Starting school .....	20
Attending school .....	22
<b>Chapter 2 Literacy and numeracy</b>	<b>25</b>
Key findings .....	27
Achievement in reading .....	28
Achievement in numeracy .....	30
Participation in NAPLAN.....	32
Gain over time.....	34
<b>Chapter 3 Excelling internationally</b>	<b>37</b>
Key findings .....	39
Student achievement in Year 4.....	40
Student achievement in Year 8.....	42
<b>Chapter 4 Leaving school</b>	<b>45</b>
Key findings .....	47
Year 12 attainment.....	48
Work and study after school .....	50
<b>Chapter 5 Indigenous young people</b>	<b>53</b>
Key findings .....	55
Engagement at school .....	56
Reading and numeracy.....	58
Leaving school.....	60
<b>Chapter 6 Young people from low socio-economic backgrounds</b>	<b>63</b>
Key findings .....	65
Reading achievement .....	66
Leaving school.....	68
<b>Chapter 7 Young people from rural and remote areas</b>	<b>71</b>
Key findings .....	73
Reading achievement.....	74
Leaving school.....	76
<b>Chapter 8 Improving performance reporting</b>	<b>79</b>
Prioritising work on data development.....	80
<b>Appendices</b>	<b>83</b>
Appendix A The National Education Agreement .....	84
Appendix B Terms used in this report .....	87
Appendix C Data sources and notes .....	91
Appendix D Supporting information .....	103
Appendix E References .....	119
<b>About the COAG Reform Council</b>	<b>122</b>

# Education 2012: key findings

## Five years of performance

Participation in preschool is high and school outcomes in the early years are improving. Nationally, average scores improved in Years 3 and 5 in reading and in Year 5 in numeracy, but there were no improvements in Years 7 and 9. Australia is also performing behind top countries in these key areas. Year 12 attainment has increased, particularly for Indigenous students. More than a quarter of young people are not fully engaged in work or study after leaving school and this has worsened over five years.

### High levels of participation in education in the early years

COAG's commitment to universal access to preschool aims to get all children off to a good start and benefiting from schooling. For States and Territories we can report on, over 90% of those enrolled in preschool attended in 2012. But weekly hours of attendance must rise to meet the 15 hour per week benchmark for quality learning.

With increasing participation in preschool, student performance at school may improve in future years. In international tests at Year 4, students who had attended early childhood education performed better in tests of reading, maths and science than students who had not attended.

Once children start school, most are on track in developing the skills and behaviour needed to benefit from school.

### Reading and numeracy improving in the primary years but not in secondary

In five years, national average scores improved in Years 3 and 5 reading and Year 5 numeracy. Years 7 and 9 did not improve in reading, and Year 7 declined in numeracy. Most States and Territories improved in Year 3 reading and Year 5 numeracy.

However, there was little improvement in the proportion of students achieving the minimum standards. Nationally, and in Queensland and Western Australia, there were improvements in Year 3 reading. There were no improvements in numeracy and a national decline for Year 7. Students below the national minimum standard are at risk of being left behind.

### Reading and numeracy, average scores, Australia, 2008 to 2012



Green is significant increase, red is significant decrease, grey is no change.

## Australia behind top performing countries in reading, maths and science

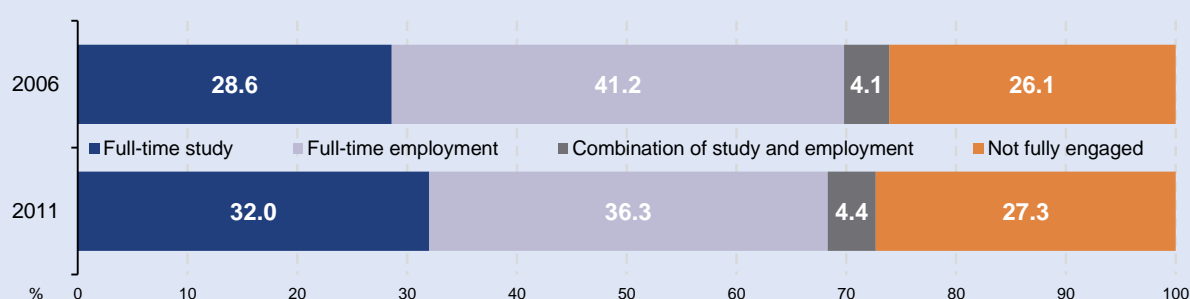
Australia's average scores for Year 4 and Year 8 students reached the intermediate benchmark in reading, maths and science. But the proportions at the advanced benchmark (around 10%) are well below the top performing countries, especially Singapore (24%–48%). In Year 4 science, Australia's performance went backwards from 10% reaching the advanced benchmark in 2007 to 7% in 2011.

## More young people attain Year 12 but fewer are fully engaged in work or study after school

More young people (20–24 year olds) have completed Year 12 or equivalent, increasing from 82.8% in 2006 to 85.0% in 2011. Despite this improvement, progress needs to be faster if governments are to reach COAG's target of 90% of young people having attained Year 12 or equivalent by 2015.

The proportion of young people (17–24 year olds) fully engaged in work or study following school declined from 73.9% in 2006 to 72.7% in 2011. This was due to a fall in full-time employment which more than offset increases in the rate of young people who were studying full-time.

### 17-24 year olds fully engaged in work or study, Australia, 2006 and 2011



## Little progress for Indigenous students

Indigenous children are more than twice as likely to start school developmentally vulnerable. There were no improvements in Indigenous school attendance over five years with decreases in some years. Indigenous students are much less likely to meet the minimum standards in reading and numeracy. In five years nationally, only Year 3 reading improved but Years 3 and 7 numeracy declined.

Encouragingly, there has been growth in Indigenous Year 12 attainment—6.5 percentage points in 5 years. This has narrowed the gap. But after leaving school, Indigenous young people are much less likely to be fully engaged in work or study—60.6% were not fully engaged compared to 26.0% of non-Indigenous young people in 2011. This gap is due in part to lower levels of participation in study.

## Outcomes for students from the lowest socio-economic backgrounds still poor

Between 2008 and 2012, the reading achievement of students in the lowest socio-economic group increased in Years 3 and 5 but declined in Years 7 and 9. Large gaps in achievement between low and high socio-economic groups remain in all year levels of testing.

Over the period 2006 to 2011, Year 12 attainment increased for the lowest socio-economic group to 73.7% compared to 93.3% for the highest socio-economic group. The gap between the two groups remained similar to that in 2006. There were greater improvements for the lower and middle socio-economic groups (quintiles 2 and 3). Year 12 attainment for both these groups increased by nearly 5 percentage points, to 81.9% and 85.8% respectively, reducing the gap with the highest group.

In 2011, after leaving school, 41.7% of young people from the lowest socio-economic backgrounds were not fully engaged in work or study, compared to 17.4% for young people from the highest socio-economic backgrounds. This gap widened between 2006 and 2011.



# Performance over five years

Measure or target	First year	Latest year	Assessment
<b>Are children engaged in and benefiting from schooling?</b>			
Year 1 students' attendance at government schools* (2008–2012)	82–94%	81–94%	~
Year 10 students' attendance at government schools* (2008–2012)	82–90%	74–91%	~
<b>Are literacy and numeracy improving?</b>			
Average score in reading of Year 3 students (2008–2012)	401 pts	420 pts	✓
Average score in numeracy of Year 3 students (2008–2012)	397 pts	396 pts	~
Average score in reading of Year 9 students (2008–2012)	578 pts	575 pts	~
Average score in numeracy of Year 9 students (2008–2012)	582 pts	584 pts	~
<b>How well do young people transition from school to work or further study?</b>			
20–24 year olds with Year 12 or equivalent or Certificate II or above (2006–2011)	82.8%	85.0%	✓
17–24 year olds fully engaged in work or study after school (2006–2011)	73.9%	72.7%	✗
<b>Are we reducing educational disadvantage?</b>			
Indigenous Year 10 students' attendance at government schools* (2008–2012)	64–82%	55–83%	✗
Indigenous Year 3 students at the minimum standard in reading (2008–2012)	68.3%	74.2%	✓
Indigenous 20–24 year olds with Year 12 or Certificate II or above (2006–2011)	47.4%	53.9%	✓
Indigenous 17–24 year olds fully engaged in work/study after school (2006–2011)	38.0%	39.4%	✓
20–24 year olds, low SES, with Year 12 or Certificate II or above (2006–2011)	71.6%	73.7%	✓
17–24 year olds, low SES, fully engaged in work or study after school (2006–2011)	59.9%	58.3%	✗
<b>Do Australian students excel internationally?</b>			
Year 4 at advanced benchmark in maths (2007–2011)	9%	10%	~
Year 8 at advanced benchmark in maths (2007–2011)	6%	9%	~
Year 4 at advanced benchmark in science (2007–2011)	10%	7%	✗
Year 8 at advanced benchmark in science (2007–2011)	8%	11%	~
<b>Is COAG on track towards making its targets?</b>			
90% of 20–24 year olds with Year 12 or equivalent or Certificate II or above by 2015 (2008–2012)	84.2%	85.9%	~
90% of 20–24 year olds with Year 12 or equivalent or Certificate III or above by 2020 (2008–2012)	83.2%	84.6%	✓
Halve the gap for Indigenous students in reading by 2018 (assessment over all year levels) (2008–2012)	23.5— 29.2 ppts gap	19.7— 28.4 ppts gap	~
Halve the gap for Indigenous students in Year 12 or equivalent attainment rates by 2020 (2006–2011)	36.4 ppts gap	32.1 ppts gap	✓
<b>Key</b>	✓ <b>Good progress</b>	~ <b>Little to no progress</b>	✗ <b>Decline</b>

Where appropriate, the assessment takes into account the results of statistical significance testing.

pts—points, ppts—percentage points

\* National level data are not available. State and Territory range is shown and assessment is made on these data.

# Recommendations

## Recommendation 1

The COAG Reform Council recommends that COAG **note** the following outcomes after five years of the National Education Agreement.

### Engaged in and benefiting from schooling

- School attendance remained high in primary years. It was lower in secondary and did not improve.

### Literacy and numeracy levels

- For reading, average scores rose nationally in Years 3 and 5 and in six of eight States and Territories in Year 3 and three of eight in Year 5.
- For numeracy, average scores rose nationally in Year 5 and six of eight States and Territories. Numeracy declined nationally in Year 7 and only Western Australia improved in Year 9. Elsewhere, there were no changes or a decline in Years 7 and 9.
- There was little improvement in the proportions of students meeting minimum standards, except in Year 3 reading. There were declines in some years in some States and Territories.

### Excelling internationally

- In international tests of reading, maths and science, Australia fell short of top performing nations. The proportions meeting the advanced benchmark in maths and science did not improve between 2007 and 2011.

### Transitions from school to work and further study

- Young people's attainment of Year 12 or equivalent rose by more than 2 percentage points.
- Following school, the proportion of young people fully engaged in work or study declined—from 73.9% in 2006 to 72.7% in 2011—despite growth in the proportion studying full-time.

### Reducing educational disadvantage

- For Indigenous students and young people:
  - school attendance did not improve and the gap between Indigenous and non-Indigenous students is up to 10 percentage points
  - low proportions met minimum standards and only Year 3 reading improved nationally while Years 3 and 7 numeracy declined
  - Year 12 attainment increased by 6.5 percentage points, while there were small improvements in post-school engagement, driven by increases in full-time study.
- For young people from low socio-economic backgrounds:
  - literacy and numeracy achievement did not improve and Years 7 and 9 reading declined
  - Year 12 attainment improved, but there were greater improvements in the lower to middle socio-economic groups which contributed more to overall improvement
  - engagement in work or study after school declined, however there was improvement in the proportion studying full-time.

### **Progress towards COAG targets**

- The 2015 target—that 90% of young people attain Year 12 or equivalent by 2015—is unlikely to be met based on the current trend, but will be achieved by 2020.
- Halving the gap between Indigenous and non-Indigenous students in literacy and numeracy is variable across year levels—Year 3 and Year 7 reading show promising progress.
- The gap in Indigenous Year 12 attainment narrowed by more than 4 percentage points.

### **Recommendation 2**

The COAG Reform Council recommends that COAG **agree** that, while work has started on improving the quality of information on education and training, faster progress is needed to improve coverage and data quality.

### **Recommendation 3**

The COAG Reform Council recommends that COAG **agree** to further work on:

- a. timely and comparable data on Year 12 completions to support reporting on schooling outcomes for young people
- b. improving the quality of data on children's participation in preschool programs
- c. better data on outcomes for people in rural and remote areas.



## Chapter 1

# Engaged in and benefiting from school

This chapter reports on children's participation in preschool programs and provides a snapshot of the early childhood development outcomes of children when they enter school. It outlines attendance rates of students in government primary and secondary schools.

### How this chapter links to the National Education Agreement

Sections in this chapter	Performance indicators	Outcome
Preparing for school	Proportion of children enrolled in and attending a preschool program	All children are engaged in and benefiting from schooling
	Proportion of children enrolled in and attending a preschool program by weekly hours	
Starting school	Level of development for children in the first year of formal schooling, across five domains	
	Proportion of children developmentally vulnerable in one or more domains	
Attending school	Student attendance at government schools	

#### Like to know more about the indicators?

The indicators for the 'Preparing for school' section relate to the National Partnership Agreement on Early Childhood Education. The council reports on National Partnerships which support the objectives of a national agreement. The indicators for the 'Starting school' section relate to the Australian Early Development Index. The indicators in these sections were chosen as they support the outcome of the National Education Agreement. Further information can be found at **Appendix D**.

**Appendix A** outlines the structure of the National Education Agreement. It lists the indicators that are not included in this report in detail, either due to data quality or availability issues.

# Key findings

A key outcome of an effective education system is that children are engaging in and benefiting from schooling. We report on children's participation in early childhood education because good early childhood outcomes put children on a strong footing to thrive throughout school and into adult life.

In the National Partnership Agreement on Early Childhood Education (which expired on 30 June 2013), COAG committed to ensuring universal access to early childhood education for all children in the year before full-time school by 2013. We do not have nationally comparable data on whether all children are enrolled in a preschool program. We report on the attendance of children who are enrolled in a preschool program for most States and Territories. See Appendix D for further information.

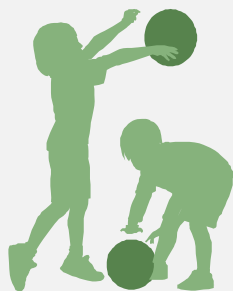
We also report on school attendance as a basic measure of engagement in schooling.

**There were high levels of preschool attendance in 2012.** In most States and Territories, over 90% of children enrolled in a preschool program attended in 2012. However, the proportion attending for 15 hours a week, an indication of quality learning, was generally low across States and Territories. The highest levels were in NSW, South Australia, Tasmania and the ACT, where over 50% of children attended for 15 hours or more a week.

**Most children were on track in developing the skills and behaviours they need to thrive in school and society.** In 2012 for the five areas measured, between 74.7% and 82.6% of children were on track in developing the skills needed to engage in and benefit from school.

**There was little to no change in school attendance rates from 2008 to 2012.** Primary school attendance rates remained above 90% for all States and the ACT. Secondary school students continued to attend at lower levels than primary school students from 2008 to 2012. Year 10 students had the lowest rates of attendance in all States and Territories, ranging from 74% to 91% in 2012, with no improvement since 2008.

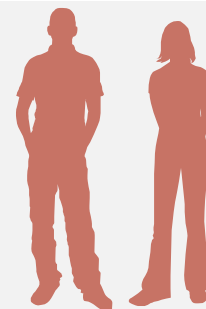
## Summary of key findings in this chapter



**High levels of children enrolled in a preschool program attended**



**Most children developmentally on track when they started school**



**Little improvement in attendance rates of Year 10 students**

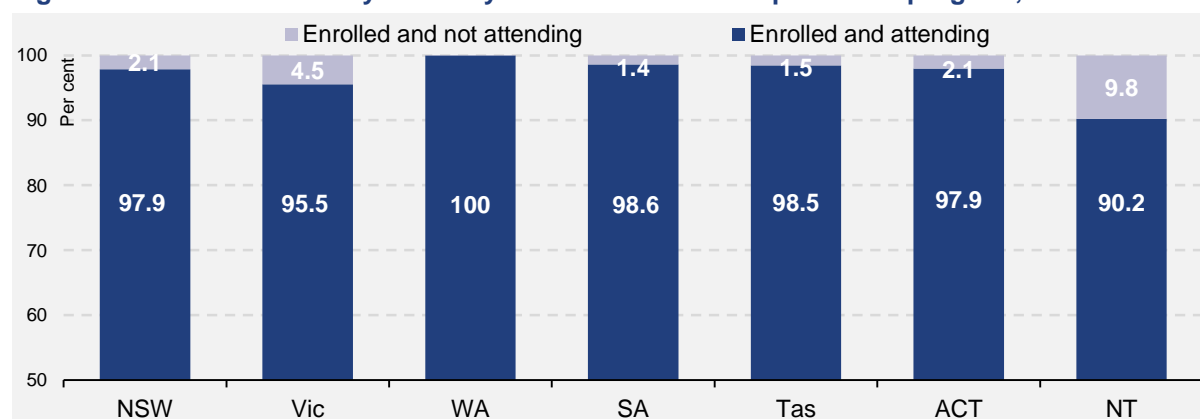
# Preparing for school

**In 2012, high rates of children who were enrolled in a preschool program attended. However, attendance for 15 hours a week needs to increase. International testing shows early childhood education improves results in later years of schooling.**

## High rates of children enrolled in a preschool program attended

In 2012, the levels of attendance of children enrolled in a preschool program were high (Figure 1.1). The Northern Territory attendance rate of 90.2% of enrolled children was the lowest level.

**Figure 1.1 Attendance by 4 and 5 year olds enrolled in a preschool program, 2012**



Notes:

1. Data for Queensland are recorded differently and not comparable to other States and Territories, and are not reported here. See Appendix D for further information.
2. In Western Australia, attendance rates have been applied to enrolment counts to estimate the number of children attending and the hours of attendance. These figures are indicative only.

Source: ABS, 2012 Preschool Education—see Appendix C.

## States and Territories a long way from reaching attendance for 15 hours per week

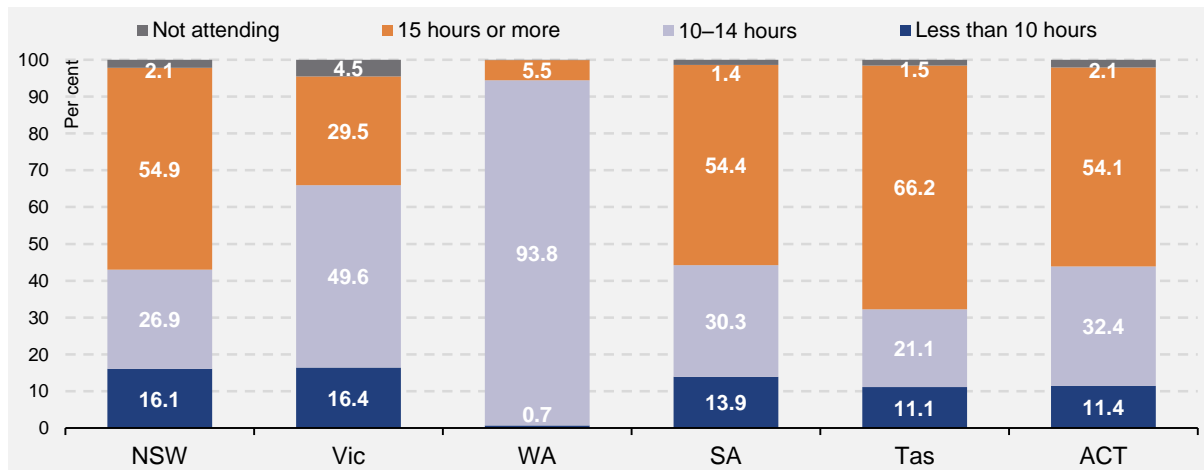
The National Partnership on Early Childhood Education includes a provision to deliver a preschool program for 15 hours a week as a standard for quality learning.

In 2012, the highest proportion of children enrolled in preschool who were attending for 15 hours or more a week was in Tasmania (66.2%) (Figure 1.2). More than 50% of enrolled children in NSW, South Australia, Tasmania and the ACT attended for 15 hours or more a week.

In Western Australia, 93.8% of enrolled children attended for 10 to 14 hours a week.

Victoria had the highest proportion (16.4%) of enrolled children who attended for fewer than 10 hours a week, followed by NSW at 16.1%.

**Figure 1.2 Weekly hours of attendance by 4 and 5 year olds enrolled in preschool, 2012**



Notes:

1. Data on Queensland are recorded differently and not comparable to other States and Territories, and are not reported here. See Appendix D for further information.
2. Data on hours of attendance for Western Australia were collected and calculated using a different method from that used for other States and Territories in the national collection. Attendance rates have been applied to enrolment counts to estimate the number of children attending and the hours of attendance. These figures are indicative only.
3. Attendance data for the Northern Territory were not available by weekly hours in 2012.

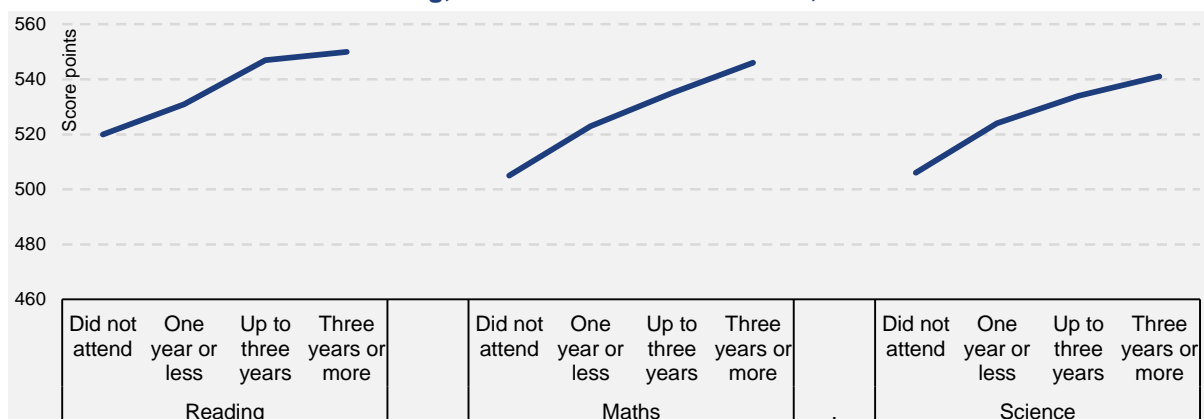
Source: ABS, 2012 Preschool Education—see Appendix C.

### Attendance at pre-primary education linked to better results at school

In 2011 in international testing (TIMSS and PIRLS), Australian students in Year 4 who attended up to one year or more of pre-primary education (pre-school, kindergarten or an early childhood education program) achieved a higher score than students who had not attended (Figure 1.3) (ACER 2012c). Australian Year 4 students who attended up to one year of pre-primary education scored 11 points higher in reading and 18 points higher in maths and science than children who had not attended. This difference grew to 30 points in reading, 41 points in maths and 35 points in science for children who had attended for three years or more.

The OECD PISA testing of 15 year olds found that generally, attending at least one year of an early childhood education program was associated with better performance later in school (OECD 2013).

**Figure 1.3 Attendance at pre-primary education and average achievement levels in international testing, Year 4 students in Australia, 2011**



Notes:

1. Attendance at pre-primary education was reported by parents.

Source: ACER 2012c, TIMSS and PIRLS—see Appendix C.

# Starting school

**Most children were developmentally on track when they started their first year of school in 2012. The proportion of children who were developmentally vulnerable in one or more domains of early childhood development has decreased since 2009.**

## **The Australian Early Development Index measures young children's development**

The Australian Early Development Index (AEDI) is a national population measure of children's development when they enter school. Box 1.1 describes the five areas or domains used by the AEDI to measure early childhood development outcomes. Results for each domain are classified into three levels of development—on track; developmentally at risk; and developmentally vulnerable. We report on each domain for 2012. Appendix D has further information on the domains.

### **Box 1.1 AEDI domains for measuring early childhood development outcomes**

**Physical health and wellbeing.** This measures children's physical readiness for the school day, physical independence and gross and fine motor skills.

**Social competence.** This measures children's overall social competence, responsibility and respect, approaches to learning and readiness to explore new things.

**Emotional maturity.** This measures children's pro-social and helping behaviour, anxious and fearful behaviour, aggressive behaviour and hyperactivity and inattention.

**Language and cognitive skills.** This measures the skills that are needed for school—a child's memory, basic literacy, and interest in literacy and numeracy.

**Communication and general knowledge.** This measures children's communication skills and general knowledge.

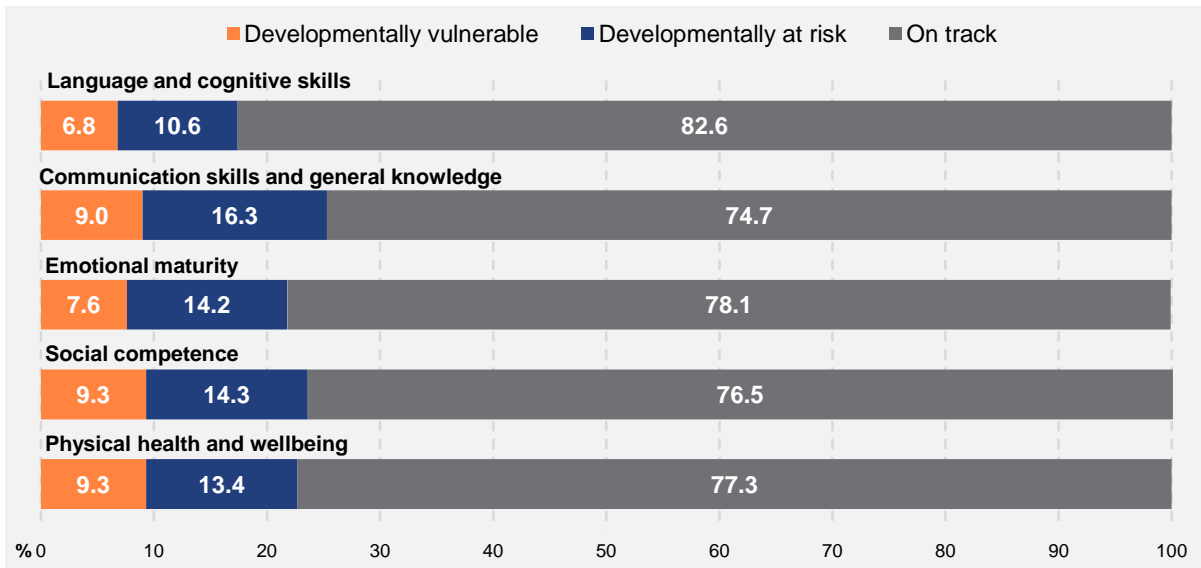
We use the composite measure, "children are developmentally vulnerable in one or more domains", to report on progress between 2009 and 2012. Children who are developmentally vulnerable may come to school with one or more of these characteristics—unprepared, have limited motor skills, poor social and communication skills, anxious or aggressive behaviours, no basic literacy or numeracy skills, and show little interest in reading or numbers.

## **Most children were developmentally on track when they started school**

Nationally, most children were developmentally on track in each of the five domains when they started school in 2012 (Figure 1.4). The language and cognitive skills domain had the highest proportion of children that were on track, at 82.6%. The communication skills and general knowledge domain had the lowest proportion, at 74.7%.

Nationally, between 6.8% and 9.3% of children were developmentally vulnerable in each of the five domains in 2012.

**Figure 1.4 Results by developmental domain, Australia, 2012**



Source: Australian Government 2013, AEDI—see Appendix C.

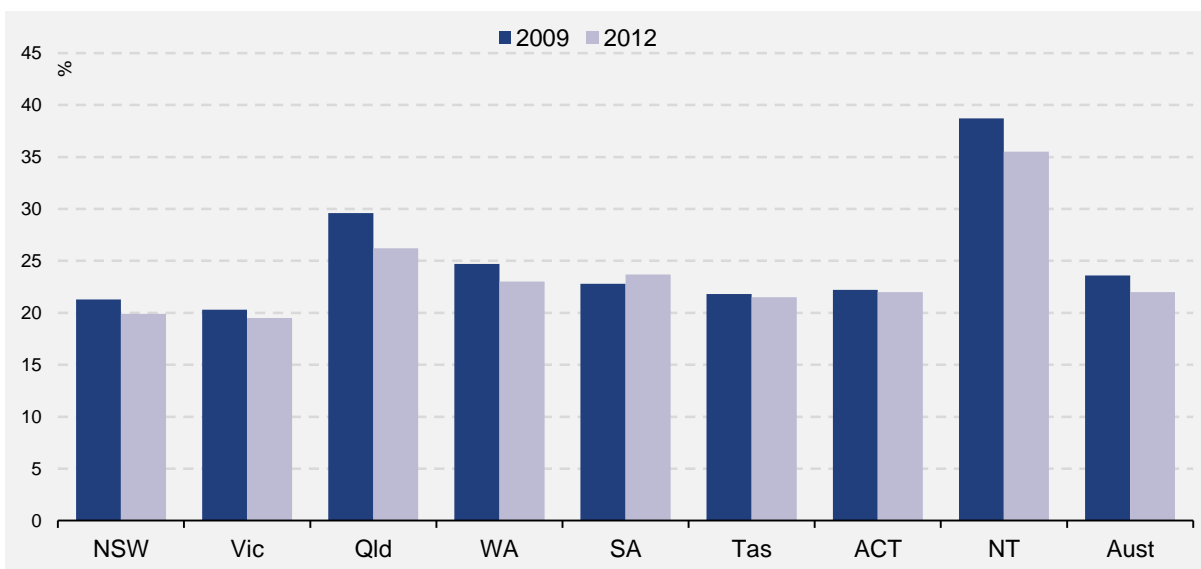
**Proportions of children who were developmentally vulnerable fell**

In 2012 nationally, 22.0% of children were developmentally vulnerable in one or more domains (Figure 1.5). This was a significant decrease from 23.6% in 2009.

There were significant decreases between 2009 and 2012 in the proportion of children who were developmentally vulnerable in one or more domains in NSW, Victoria, Queensland, Western Australia and the Northern Territory. However, proportions in Queensland (26.2%), Western Australia (23.0%) and the Northern Territory (35.5%) were still higher than the national figure in 2012.

Only South Australia had a significant increase from 22.8% in 2009 to 23.7% in 2012. There were no significant changes in Tasmania and the ACT from 2009 to 2012.

**Figure 1.5 Children developmentally vulnerable in one or more domains, 2009 and 2012**



Source: Australian Government 2013, AEDI—see Appendix C.

# Attending school

**From 2008 to 2012, attendance rates for primary school students remained over 90% in all States and the ACT. Attendance rates for secondary school students were consistently lower than primary school.**

We report on attendance in government schools only as data cannot be aggregated across school sectors or States and Territories.

## **Attendance for primary students was high**

We have chosen to report on Year 1 student attendance, as a measure of attendance by primary school students. In all States and Territories, Year 1 attendance rates mirror the attendance rates of the other primary years.

There was little to no change in attendance rates from 2008 to 2012. Year 1 student attendance remained above 90% in all States and the ACT (Figure 1.6). The Northern Territory had low attendance rates (81% in 2012). These patterns were consistent with other primary school years.

## **Secondary school students had lower attendance rates**

We have also chosen to report on attendance by Year 10 students as it is the final year of compulsory school attendance. Following Year 10, young people must participate full-time in education, training or work or a combination until they are 17 years old.

In all States and Territories, attendance rates decline during secondary school and remain below primary levels.

Year 10 students had the lowest attendance rates in all States and Territories and this has not improved since 2008 (Figure 1.6). From 2008 to 2012, attendance declined in NSW by two percentage points (to 87% in 2012) and in Tasmania by one percentage point (to 86% in 2012). Victoria had high levels of attendance for Year 10 students (91% in 2012).

Students in the Northern Territory had low attendance rates and large decreases in Year 10 attendance from 2008 to 2012. In 2012, the Year 10 attendance rate in the Northern Territory was 74%, a decrease of 8 percentage points from 2008. Results in the Northern Territory may reflect higher levels of disadvantage in the very remote, Indigenous population.

**Figure 1.6 Student attendance, Years 1 and 10, government schools, 2008 to 2012**



Source: ACARA, National Schools Attendance Data Collection—see Appendix C.



## Chapter 2

# Literacy and numeracy

This chapter presents the reading and numeracy achievement of school students. It also provides information on participation in testing and gain over time.

### How this chapter links to the National Education Agreement

Section in this chapter	Performance indicator	Outcome
Achievement in reading	Reading and numeracy achievement of Year 3, 5, 7 and 9 students in national testing	Young people are meeting basic literacy and numeracy standards, and overall levels of literacy and numeracy achievement are improving
Achievement in numeracy		
Participation in NAPLAN		
Gain over time		

### Like to know more about the indicators?

**Appendix A** outlines the structure of the National Education Agreement. It lists the indicators that are not included in this report in detail, either due to data quality or availability issues.

# Key findings

An adequate level of literacy and numeracy is an important determinant of future success—in finishing school, going on to further education and in getting a job. The National Assessment Program—Literacy and Numeracy (NAPLAN) is Australia’s annual testing program for students in Years 3, 5, 7 and 9 in literacy and numeracy. This chapter reports significant changes in reading and numeracy from 2008 to 2012. Information on writing is in Appendix D.

There are two measures in NAPLAN—proportions meeting national minimum standards and average scores. The national minimum standard is a basic level of achievement. Tracking the proportions of students meeting the minimum standard shows the performance of low achieving students over time. The average score is a measure of the achievement of a total group of students—year level, jurisdiction or subgroup—and is an indication of the performance of the school, the system as a whole or a jurisdiction.

Results for the Northern Territory may reflect, in part, a high proportion of disadvantaged Indigenous students. In the Northern Territory, Indigenous children made up 44% of the 5–19 year old population.

## **The performance of students in reading in Years 3 and 5 improved from 2008 to 2012.**

Nationally, and in most States and Territories, the average reading score improved in Year 3. Scores also improved in Year 5 nationally and in Queensland, Tasmania and the ACT. There were no declines.

## **In numeracy, there were increases in achievement levels in Year 5 but declines in Year 7.**

From 2008 to 2012, the average score increased in Year 5, nationally and in all States and Territories except Victoria and the Northern Territory. In Year 7, there were declines nationally and in Victoria and Queensland. There were few other changes.

**Participation in NAPLAN testing declined nationally.** Between 2008 and 2012, in all States and the ACT, participation rates fell or remained the same. After an initial large increase between 2008 and 2009, participation in the Northern Territory decreased from 2009 to 2012.

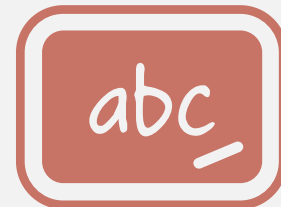
### Summary of key findings in this chapter



**Most States and Territories improved in Year 3 reading**



**Most States and Territories improved in Year 5 numeracy**



**Participation in testing decreased over time**

# Achievement in reading

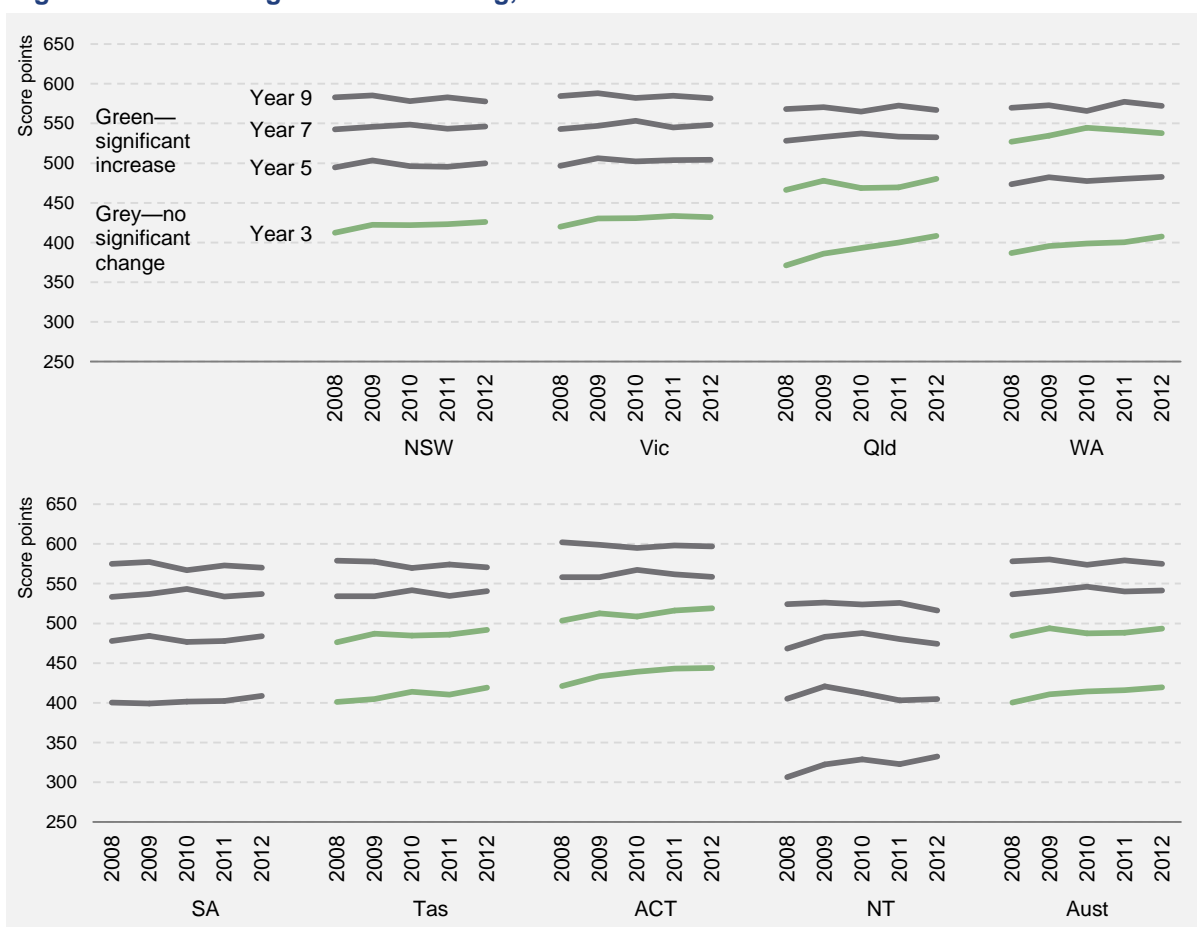
Over the five years from 2008 to 2012, Years 3 and 5 average scores in reading improved nationally and in some States and Territories. However, there were few changes in the proportion meeting the minimum standards with only some improvements in Years 3 and 5 and some declines in Year 9.

## Improvements in reading mostly in Year 3

Average scores in Year 3 improved nationally and in all States and Territories except South Australia and the Northern Territory between 2008 and 2012 (Figure 2.1). Scores also improved in Year 5 nationally and in Queensland, Tasmania and the ACT.

Only Western Australia improved in Year 7 and there were no changes in Year 9.

**Figure 2.1** Average score in reading, 2008 to 2012



Source: ACARA, NAPLAN—see Appendix C.

## In 2012, the ACT outperformed all other States and Territories

We compare performance between States and Territories by comparing average NAPLAN scores and testing for statistically significant differences (see Appendix D for details). States and Territories can be statistically similar to, higher than or lower than each other.

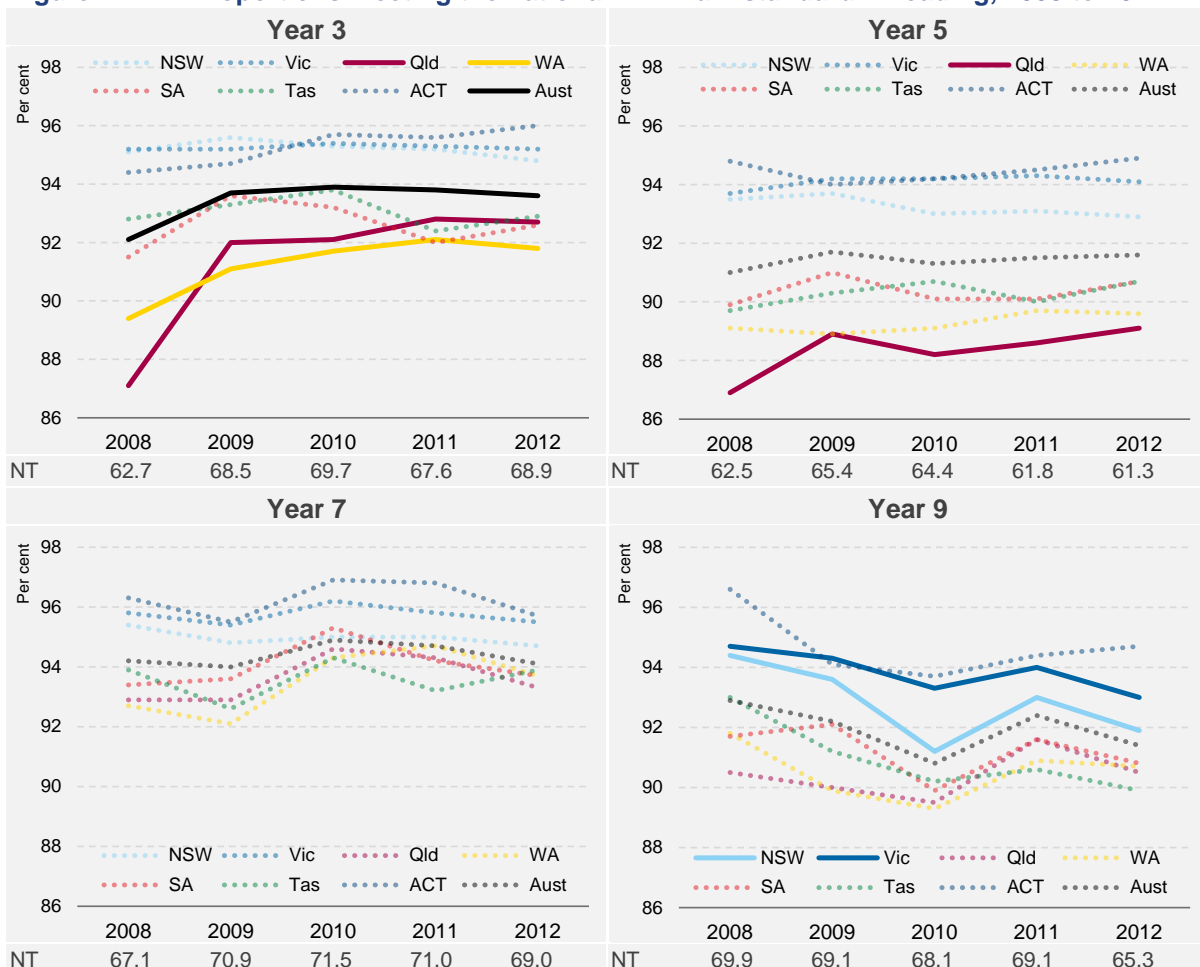
In 2012, average scores for the ACT were higher than all other States and the Northern Territory in all year levels. On the other hand, the Northern Territory's average scores were lower than all other States and the ACT in all year levels.

## Little improvement in the proportion meeting the minimum standard

Nationally, over five years, the proportion of students meeting the minimum standard did not improve except in Year 3. Queensland improved in Year 3 as well as in Year 5. Western Australia also increased in Year 3. There were no changes in Year 7. However, there were decreases in Year 9 for NSW and Victoria (Figure 2.2).

In 2012, nationally, between one in 12 and one in 17 students did not reach the minimum standard across all year levels. In the Northern Territory, around one in three did not reach the minimum standard. The best results were in Victoria and the ACT.

**Figure 2.2 Proportions meeting the national minimum standard in reading, 2008 to 2012**



Notes:

1. Unbroken lines are significant changes from 2008 to 2012. Dashed lines are not significant changes.
2. Data for the Northern Territory are shown separately due to a different scale. Significant changes are in bold.

Source: ACARA, NAPLAN—see Appendix C.

# Achievement in numeracy

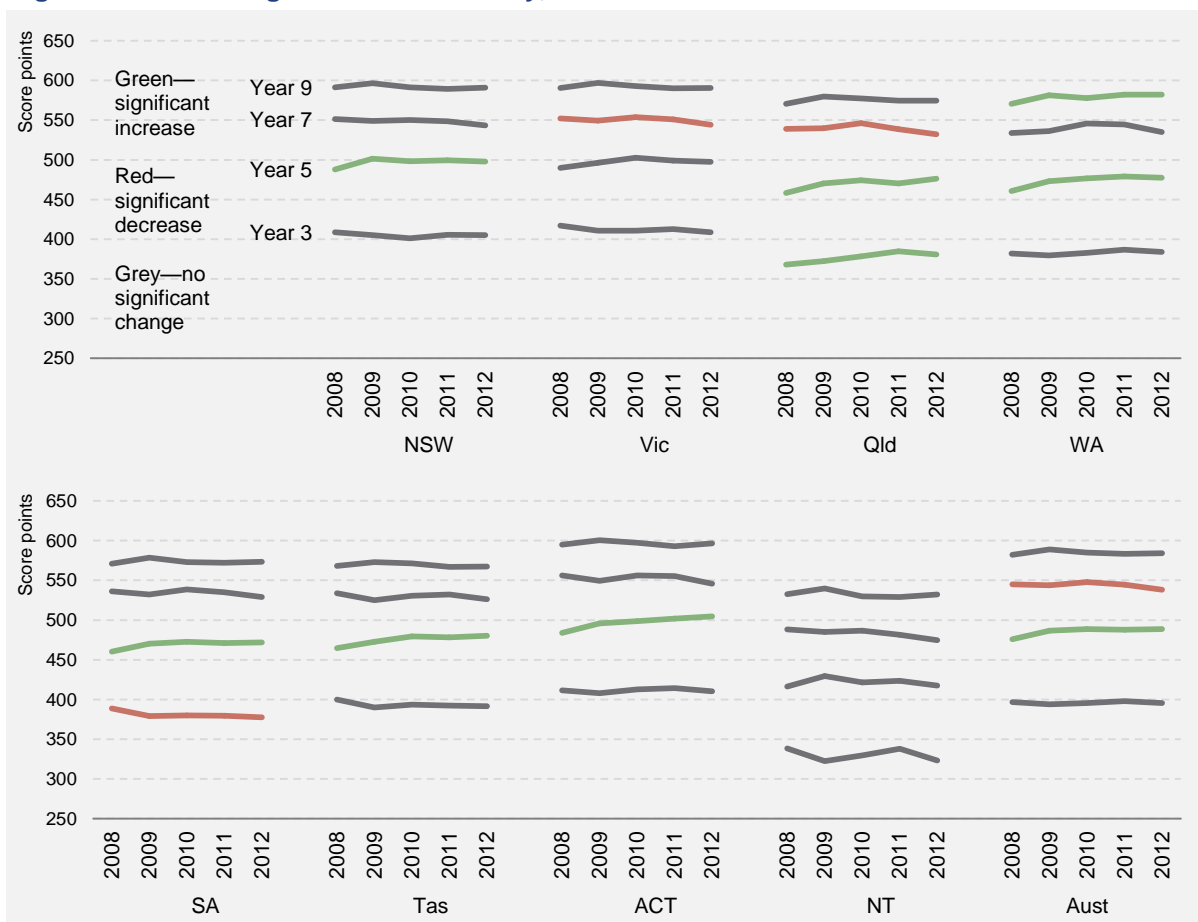
Over the five years from 2008 to 2012, there were improvements in average scores in Year 5 nationally and in all States and Territories except Victoria and the Northern Territory. There were falls in Years 3 and 7 in the proportions meeting the national minimum standard.

## Improvements in numeracy mostly in Year 5

Between 2008 and 2012, the average score increased nationally only in Year 5. It increased in Year 3 in Queensland but fell in South Australia. The average score rose in Year 5 in all States and Territories, except Victoria and the Northern Territory.

The average score in Year 7 fell nationally and in Victoria and Queensland. Western Australia was the only State or Territory with an increase in Year 9 (Figure 2.3).

**Figure 2.3** Average score in numeracy, 2008 to 2012



Source: ACARA, NAPLAN—see Appendix C.

## In 2012, Victoria, NSW and the ACT were high performers

We compare performance between States and Territories by comparing average NAPLAN scores and testing for statistical significance (see Appendix D for details). States and Territories can be similar to, above or below each other.

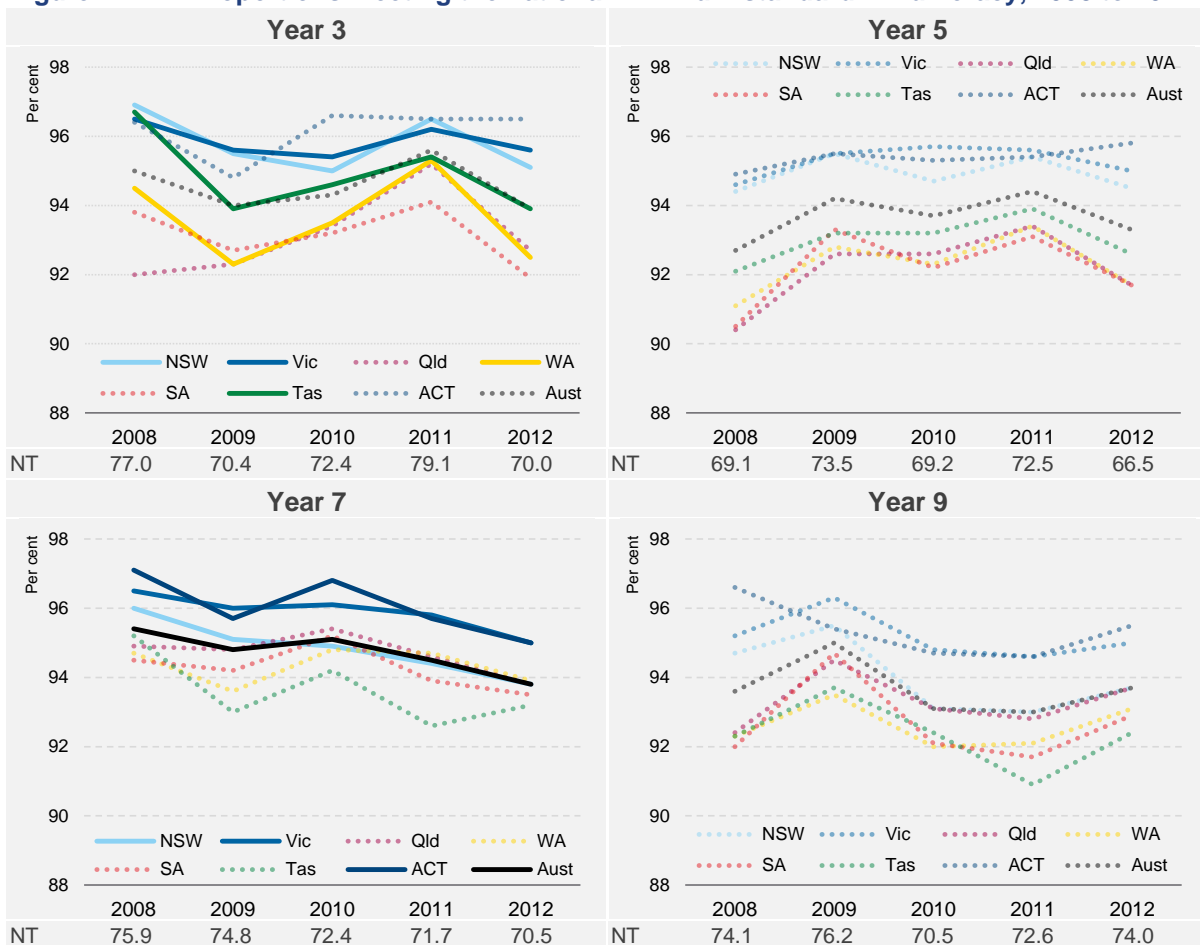
In 2012, there were no differences between the high performing States and Territories—NSW, Victoria, and the ACT—except in Year 3 where Victoria outperformed NSW. All three had average scores greater than or similar to all other States and the Northern Territory. Results for the Northern Territory were lower than all other States and Territories for all year levels.

## There were falls in Years 3 and 7 in the proportion meeting the minimum standard

From 2008 to 2012, in Year 3, there were decreases in the proportion meeting the minimum standard in NSW, Victoria, Western Australia and Tasmania. There were no improvements in Years 5 and 9. In Year 7 there were decreases nationally and in NSW, Victoria and the ACT (Figure 2.4).

In 2012, nationally, between one in 15 and one in 16 students did not reach the minimum standard in numeracy across all year levels. As for reading, in the Northern Territory, around one in three did not reach the minimum standard. The best results were in Victoria and the ACT.

**Figure 2.4 Proportions meeting the national minimum standard in numeracy, 2008 to 2012**



Notes:

1. Unbroken lines are significant changes from 2008 to 2012. Dashed lines are not significant changes.
2. Data for the Northern Territory are shown separately due to a different scale. Significant changes are in bold.

Source: ACARA, NAPLAN—see Appendix C.

# Participation in NAPLAN

**Over the five years from 2008 to 2012, participation in NAPLAN generally fell. Participation rates were lowest in Year 9 in 2012. Most students who did not participate were absent on the test day. NSW had above average participation and achievement.**

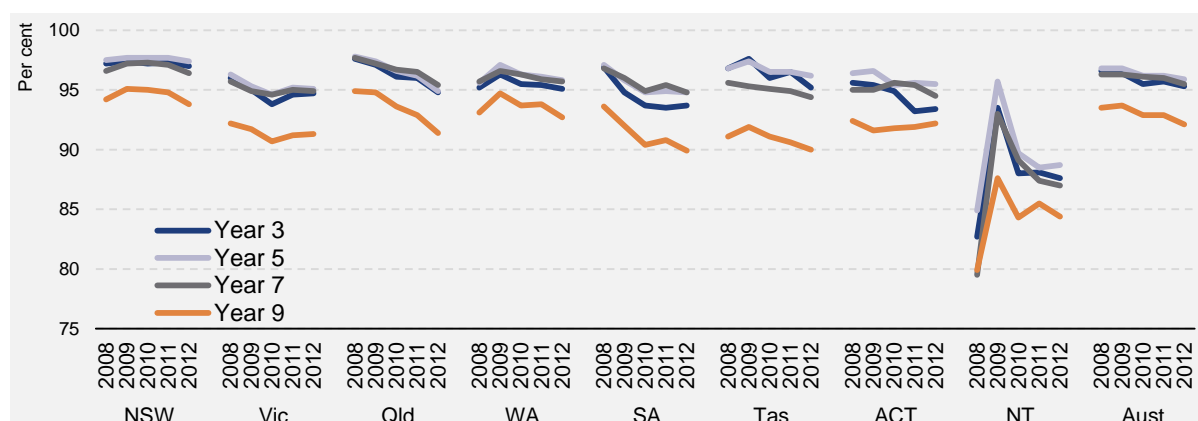
## Participation rates have generally fallen since 2008

Monitoring and reporting on participation in NAPLAN is important contextual information to understand variation in achievement, over time and between States and Territories.

We have used reading to illustrate participation in NAPLAN as patterns for other domains are similar. Participation rates in reading in each State and Territory were about the same in Years 3, 5 and 7. In 2012, the highest were in NSW (around 97%) and the lowest in the Northern Territory (about 88%). But rates were much lower in Year 9 in all States and Territories—between 84% in the Northern Territory and 94% in NSW.

Since 2008, participation rates have generally fallen or remained fairly stable except in the Northern Territory. In that Territory there was a large increase in participation in 2009 but since then rates have gone down (Figure 2.5). Nationally, participation decreased by around one percentage point between 2008 and 2012, in each year level.

**Figure 2.5 Participation rates in reading, 2008 to 2012**



Source: ACARA, NAPLAN—see Appendix C.

## Absence from school was the most common reason for not participating in the test

In all States and Territories, absent rates were similar in Years 3 and 5 then rose in Year 7 and again in Year 9. Nationally, in 2012, rates ranged from 2.7% absent in Year 3 to 6.6% in Year 9. The highest proportion was in the Northern Territory, where 15.2% of students in Year 9 were absent (Figure 2.6).

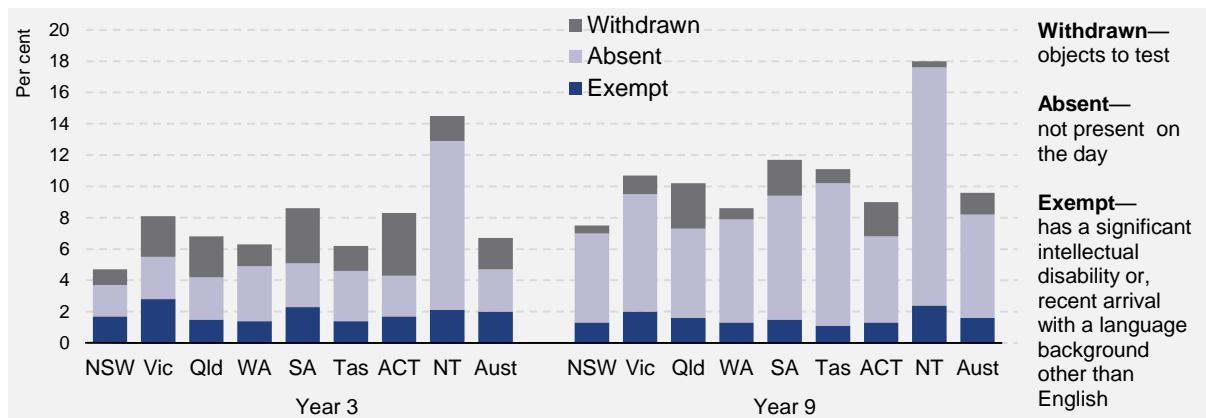
Data for withdrawn and absent were not available separately in 2008. Since 2009, absent rates increased by the most in the Northern Territory. They ranged from a 2.8 percentage point increase in Year 9 to a 6.4 percentage point increase in Year 5.

### There were few changes in the exempt or withdrawn rates from 2009

In 2012, the highest rates of exempt students were in Victoria and the Northern Territory (from 2.0% to 2.8% across year levels). For withdrawn students, the highest rates were in South Australia and the ACT (from 2.1% to 4.0%) (Figure 2.6).

The rate of withdrawn students increased by roughly one to two percentage points or more in all year levels in Queensland and the ACT between 2009 and 2012 (data are not available for 2008). There were almost no changes to the exempt rate.

**Figure 2.6 Exempt, absent and withdrawn students in reading, Years 3 and 9, 2012**



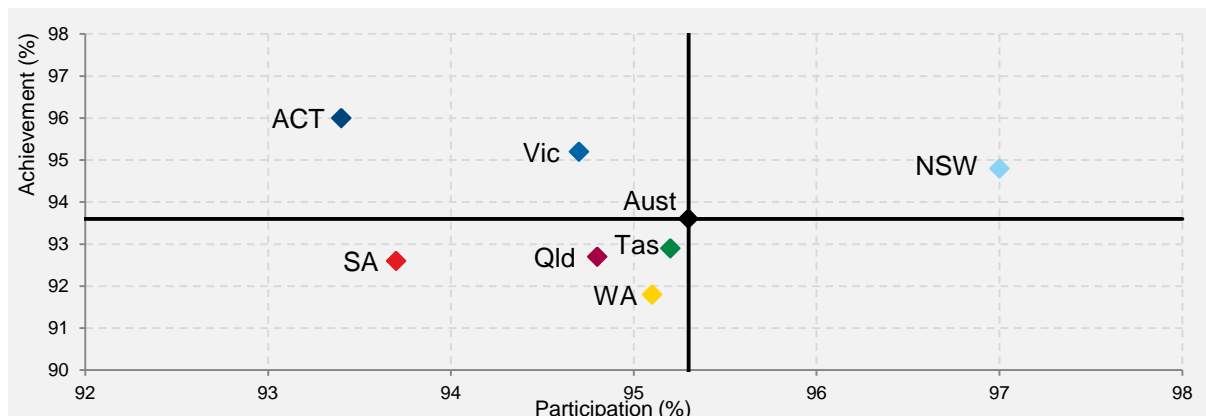
Source: ACARA, NAPLAN—see Appendix C.

### Participation and achievement vary by State and Territory

NSW has both high participation and high achievement in Year 3 reading. Victoria and the ACT, on the other hand, have high achievement but lower than average participation (Figure 2.7). The same pattern occurred every year since 2008.

Students who do not participate tend to be among the lower performers. Higher participation therefore, means that the results present a fuller picture of the performance of a year level (Adams 2012, COAG Reform Council 2012, pp12-14).

**Figure 2.7 Participation in the reading test versus proportion meeting the national minimum standard, Year 3, 2012**



Notes:

1. Northern Territory results are not shown. The Northern Territory had 87.6% participation and 68.9% meeting the national minimum standard.

Source: ACARA, NAPLAN—see Appendix C.

# Gain over time

**The largest gains for groups of students as they move through Years 3, 5, and 7 were made by students in the Northern Territory, Queensland and Western Australia. However, these States also started with lower average scores.**

## **Results for a group of students can be tracked over time**

With five years of NAPLAN data we can follow the same group of students over time. For example, we can do this for Year 3 students in 2008 who became Year 5 students in 2010 and Year 7 students in 2012. This group of students is called a cohort. It should be noted that this group will not be exactly the same, as some students move between States and Territories.

We can compare the performance of a cohort in testing to measure improvement over time or 'gain'. Gain is the difference between the average scores at two points in time. In this example, gain is the difference between the average score for a group in Year 3 in 2008 and their score either two years later in 2010 or four years later in 2012. It is also the difference between Year 5 in 2010 and Year 7 in 2012. Gain over these years (Years 3 to 5 to 7) represents the period of schooling with a focus on literacy and numeracy skills, providing the foundation for later learning in secondary school.

Figure 2.8 shows the average reading scores of this cohort of students. NSW, Victoria and the ACT had scores that were consistently above the national average. The scores for Tasmania and South Australia were virtually the same as the national average.

## **States and Territories with lower starting scores have made the largest gains**

Nationally, the reading score for this cohort increased by 141.0 points, from 400.5 in Year 3 to 541.5 in Year 7.

The highest overall gains from 2008 to 2012 were in the Northern Territory (167.7 points), Queensland (161.6 points) and Western Australia (151.1 points). However, these three States also had the lowest starting scores in Year 3. More improvement is possible from a lower base.

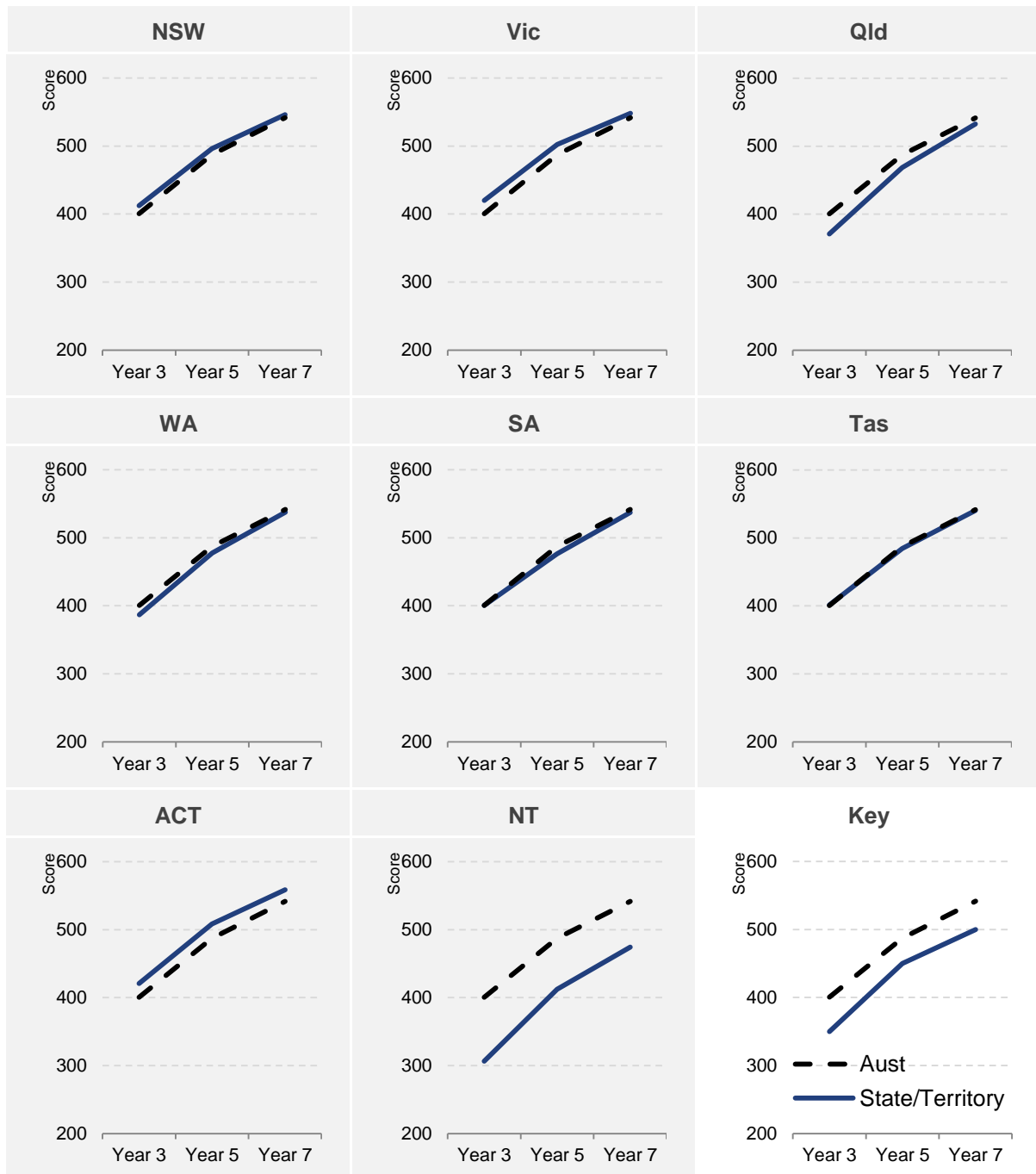
The remaining jurisdictions had similar gains (128.4 to 139.4 points). The ACT (421.0 points) and Victoria (419.9) had the highest starting scores.

## **Gain is larger between Years 3 and 5 than between Years 5 and 7**

Gain was more rapid between Years 3 and 5 than between Years 5 and 7. States with the lowest starting scores had the largest gains between both Years 3 and 5 and Years 5 and 7. In the Northern Territory, Queensland and Western Australia, the Year 3 to 5 gain was between 90.8 and 105.5 points and the Year 5 to 7 gain was between 60.3 and 64.0 points.

Analysis of gain in NAPLAN scores has also been done for Indigenous students in *Indigenous Reform 2011–12: Comparing performance across Australia* (COAG Reform Council 2013).

**Figure 2.8 Average scores, gain in reading, by State and Territory, Years 3, 5 and 7, 2008 to 2012**



Source: ACARA, NAPLAN—see Appendix C.



## Chapter 3

# Excelling internationally

This chapter looks at the results of international testing in reading, maths and science in Year 4 and maths and science in Year 8.

### How this chapter links to the National Education Agreement

Section in this chapter	Performance indicators	Outcomes
Student achievement in Year 4	Proportion of Year 4 and 8 students by levels of achievement in reading, maths and science, PIRLS and TIMSS	Australian students excel by international standards
Student achievement in Year 8		

### Like to know more about the indicators?

**Appendix A** outlines the structure of the National Education Agreement. It lists the indicators that are not included in this report in detail, either due to data quality or availability issues.

# Key findings

To maintain our competitiveness in the global economy, it is important that Australian students compare well against nations that excel. Australia participates in a number of international tests of reading, maths and science across the years of compulsory schooling.

In this report, we include results from tests run by the International Association for the Evaluation of Educational Achievement (Martin et al (2012), Mullis et al (2012)). In 2011, Year 4 students did the Progress in International Reading Literacy Study (PIRLS) for the first time. Year 4 and 8 students did the Trends in International Mathematics and Science Study (TIMSS) in 2011 and we compare these results with those from 2007. There are four benchmarks—low, intermediate, high and advanced.

Data in this chapter have been tested for statistical significance by the IEA. Significant results are explicitly noted.

**In Year 4 reading, Australia was behind the top performing countries at the advanced benchmark.** In 2011, Australia performed above the intermediate benchmark overall but did not reach the high benchmark. Only 10% reached the advanced benchmark. This was well behind the top performing country Singapore, with 24%.

**For Year 4 maths and science, Australia's performance at advanced benchmarks was well behind top performing countries and declined in science over time.** In 2011, Australia performed above the intermediate benchmark overall but did not reach the high benchmark. Only 10% in maths and 7% in science reached the advanced benchmark. This was well behind the top performing country, Singapore, which had 43% in maths and 33% in science. Between 2007 and 2011, maths did not improve and science decreased significantly from 10% to 7%.

**In Year 8 maths and science, Australia's performance at advanced benchmarks was behind top performing countries and did not improve over time.** In 2011, Australia performed above the intermediate benchmark overall but did not reach the high benchmark. Only 9% in maths and 11% in science reached the advanced benchmark. This was well behind the top performing countries, Chinese Taipei with 49% in maths and Singapore with 40% in science reaching the advanced benchmark.

## Summary of key findings in this chapter



**Australia was well below Singapore, the top performing nation in Year 4 reading, maths and science**



**Australia was well below Singapore and Chinese Taipei, the top performing nations in Year 8 maths and science**



**Australia's performance did not change between 2007 and 2011, except for Year 4 science, which declined**

# Student achievement in Year 4

**Australia’s average scores for reading, maths and science reached the intermediate benchmark but were below the high benchmark. 10% or less of Year 4 students met the advanced benchmark for each subject. This was below top performing countries and maths and science have not improved between 2007 and 2011.**

In international tests, students’ results are measured against four benchmarks of performance—‘advanced’, ‘high’, ‘intermediate’ and ‘low’. There is a further group who do not meet the low benchmark, described as ‘below low’ in this section. Further information is at Appendix D.

We focus on the advanced benchmark as a measure of how Australian students are excelling internationally. For maths and science we can report results over time, but for reading only 2011 results are available. We use the average score to compare our position relative to other countries.

## **In reading, Australia behind the top countries in reaching the advanced benchmark**

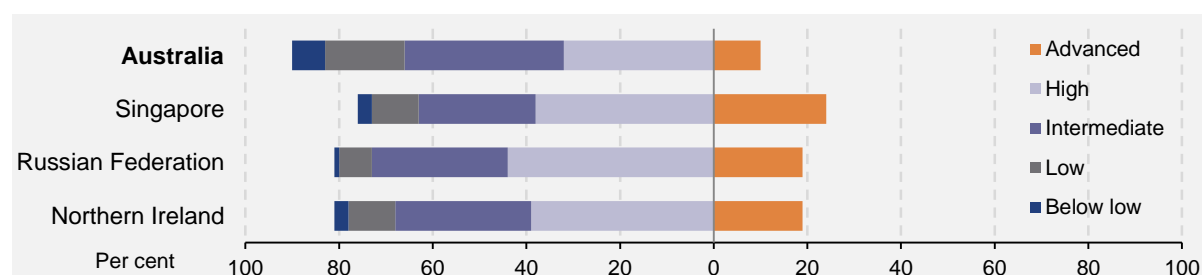
In the 2011 reading test (PIRLS), Australia had an average score of 527, which was significantly higher than 17 countries but significantly lower than 21 other countries. Australia’s score was above the intermediate benchmark overall but did not reach the high benchmark.

Ten per cent of Australian students reached the advanced benchmark. The ACT (17%), NSW (12%), Victoria (12%) and Tasmania (11%) were above the national proportion.

The proportion of Australian students at the advanced benchmark was well behind Singapore (24%), the top performing country on this measure (Figure 3.1). Several countries had higher proportions of advanced students than Australia—Hong Kong, Finland, the Russian Federation, Northern Ireland and England all had 18%–19% of students at the advanced level.

The proportion of Australian Year 4 students who did not meet the low benchmark was 7%. In Singapore and Northern Ireland, 3% of students did not meet the low benchmark, and in Hong Kong, Finland and the Russian Federation 1% did not.

**Figure 3.1 PIRLS reading achievement, Year 4, benchmarks, 2011**



Source: ACER, PIRLS—see Appendix C.

### In maths, Australia below the top performers

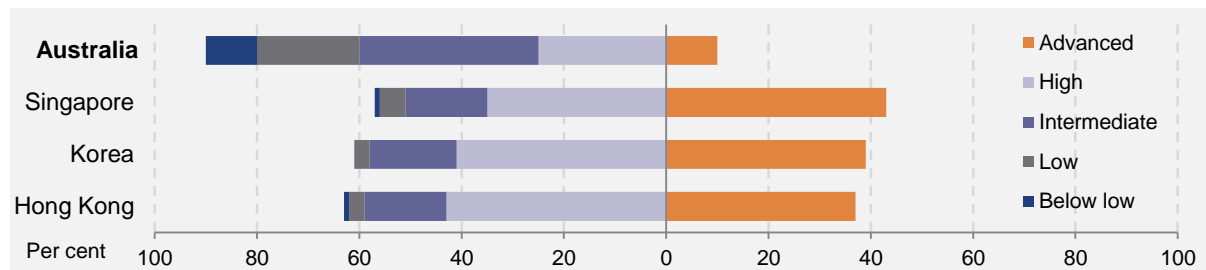
In the 2011 maths test (TIMSS), Australian students in Year 4 had an average score of 516, significantly higher than 27 countries but significantly lower than 17 other countries. Its average performance was above the intermediate benchmark but below the high benchmark.

Ten per cent of Australian students met the advanced benchmark. The ACT (14%), Victoria (13%), NSW (12%) and Tasmania (10%) were above the national proportion. Australia was behind the top country, Singapore (43%) and other high performers such as Korea (39%) and Hong Kong (37%).

There was no significant change between 2007 and 2011 in the proportion of Australians students meeting the advanced benchmark. Singapore's proportion also did not change.

The proportion of Australian students who did not meet the low benchmark was 10%. In Korea all students met the low benchmark. Only 1% did not in Singapore and Hong Kong (Figure 3.2).

**Figure 3.2 TIMSS maths achievement, Year 4, benchmarks, 2011**



Source: ACER, TIMSS—see Appendix C.

### In science, the proportion of Australian students meeting advanced benchmark fell

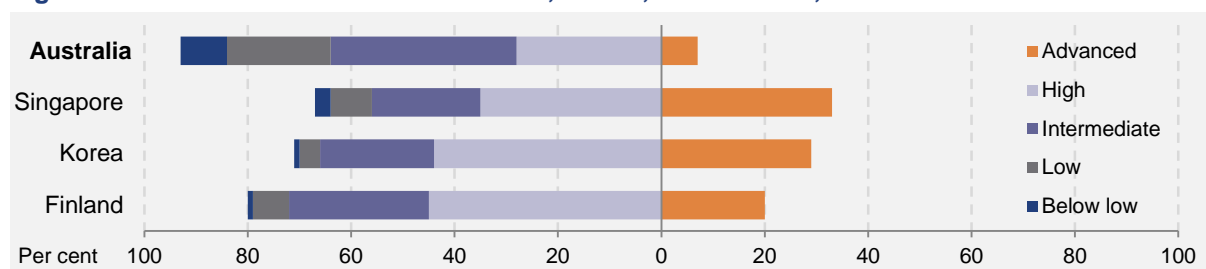
In the 2011 science test (TIMSS), Year 4 students in Australia had an average score of 516, significantly higher than 23 countries but significantly lower than 18 other countries. Its average score was above the intermediate benchmark but below the high benchmark.

Australia had 7% of students reaching the advanced benchmark. The ACT (13%), Victoria (10%), NSW (9%) and Tasmania (9%) were above the national proportion. Australia was behind the top performing country, Singapore (33%), in the proportion of students at the advanced benchmark (Figure 3.3). Other top performing countries were Korea (29%) and Finland (20%).

Between 2007 and 2011, there was a significant fall of three percentage points in the proportion of Australian students at the advanced benchmark.

The proportion of Australian students who did not meet the low benchmark was 9%. In comparison, only 1% of students did not in Korea and Finland, and 3% in Singapore.

**Figure 3.3 TIMSS science achievement, Year 4, benchmarks, 2011**



Source: ACER, TIMSS—see Appendix C.

# Student achievement in Year 8

**Australia's average scores in Year 8 maths and science were above the intermediate benchmark but did not reach the high benchmark. Only 9% of students in maths and 11% in science met the advanced benchmark, well below top performing countries. There has been no increase since 2007.**

In international tests, students' results are measured against four benchmarks of performance—'advanced', 'high', 'intermediate' and 'low'. There is a further group who do not meet the low benchmark, described as 'below low' in this section. Further information is at Appendix D.

We focus on the advanced benchmark as a measure of how Australian students are excelling internationally. For Year 8 maths and science we can report results over time. Reading was not tested in Year 8.

## In maths, Australia behind top performing countries

For the 2011 maths test (TIMSS), Australian students in Year 8 received an average score of 505 placing Australia significantly higher than 27 countries but significantly lower than six other countries. Australia's score was above the intermediate benchmark overall but did not reach the high benchmark.

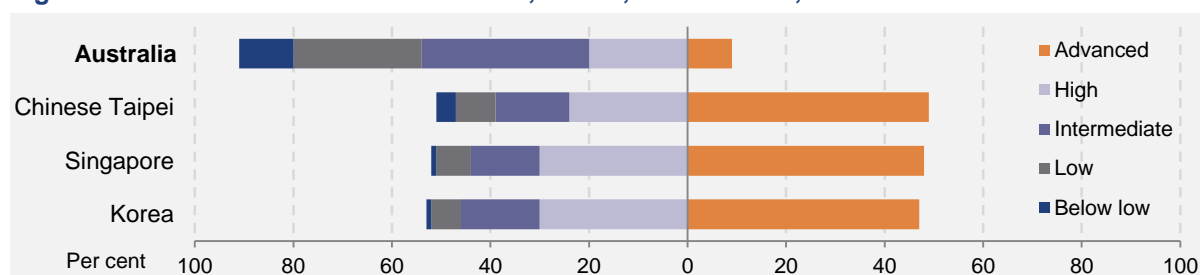
Nine per cent of Australian Year 8 students achieved the advanced benchmark for maths. In Australia, the ACT (14%) and NSW (13%) were above the national proportion of students at the advanced benchmark.

The proportion of Australian students at the advanced benchmark was well behind the top performing countries, Chinese Taipei (49%), Singapore (48%) and Korea (47%) (Figure 3.4).

Between 2007 and 2011, the proportion of students at the advanced benchmark improved three percentage points for Australia and four percentage points for Chinese Taipei, the top performing nation. Neither of these differences was significant.

In 2011, the proportion of Australian Year 8 students not meeting the low benchmark was 11%. In Chinese Taipei, 4% did not reach the low benchmark. In Singapore and Korea only 1% did not.

**Figure 3.4 TIMSS maths achievement, Year 8, benchmarks, 2011**



Source: ACER, TIMSS—see Appendix C.

### In science, Australia behind top performing countries

For the 2011 science test (TIMSS), Australian Year 8 students had an average score of 519. Australia was significantly higher than 26 other countries but significantly lower than nine countries. Australia's score was above the intermediate benchmark overall but did not reach the high benchmark.

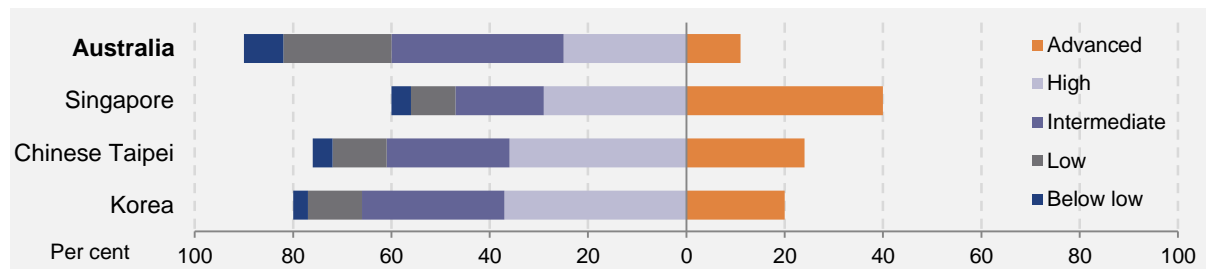
Australia had 11% at the advanced benchmark. The ACT (19%), and NSW (16%) were above the national proportion of students at the advanced benchmark.

Australia was well behind the top performing country, Singapore, which had 40% achieving at the advanced benchmark. Other top performing countries at the advanced level were Chinese Taipei (24%) and Korea (20%) (Figure 3.5).

Between 2007 and 2011, the proportion of Australia's Year 8 students at the advanced benchmark increased three percentage points but this difference was not significant. Singapore, the top performing country, increased significantly by eight percentage points from 32% to 40%.

In 2011, the proportion of Australian Year 8 students not meeting the low benchmark was 8%. In Singapore and Chinese Taipei, 4% of students did not meet the low benchmark. In Korea, 3% did not.

**Figure 3.5 TIMSS science achievement, Year 8, benchmarks, 2011**



Source: ACER, TIMSS—see Appendix C.



## Chapter 4

# Leaving school

This chapter reports on whether young people are attaining a Year 12 or equivalent qualification and whether they are fully engaged in work or study after leaving school.

### How this chapter links to the National Education Agreement

Section in this chapter	Performance indicators/targets	Outcomes
Year 12 attainment	<p>Proportion of young people (20–24 year olds) who have attained at least a Year 12 or equivalent or AQF Certificate Level II/III or above</p> <p>90% of young people (20–24 year olds) having attained Year 12 or equivalent or Certificate II/III or above by 2015</p>	Young people make a successful transition from school to work and further study
Work and study after school	Proportion of young people (17–24 year olds) participating in post-school education, training or employment	

### Like to know more about the indicators?

**Appendix A** outlines the structure of the National Education Agreement. It lists the indicators that are not included in this report in detail, either due to data quality or availability issues.

# Key findings

A successful move from school to work and/or further study is important for full economic participation in later years of life. This year, we report on young people's transition from school using data from the 2006 and 2011 Censuses of Population and Housing—see Appendix D for details. For Year 12 attainment, young people are defined as 20–24 year olds. For measuring post-school outcomes, young people are defined as 17–24 year olds.

COAG has also set a target of 90% of 20–24 year olds having attained Year 12 or equivalent or Certificate II by 2015 and a related target of 90% for Certificate III by 2020. We report on annual progress towards these targets using the Survey of Education and Work, which includes 2012 data and allows us to project the trend to 2015 and 2020.

**The Year 12 or equivalent attainment rate is improving.** Since 2006, the proportion of 20–24 year olds who attained Year 12 or an equivalent qualification increased in every State and Territory by up to six percentage points and nationally by around two percentage points.

**The 2015 target for Year 12 or equivalent attainment is unlikely to be met.** In 2012, the national attainment rate was 85.9%. If the trend from 2002 to 2012 continues, the 2015 target of 90% attainment is unlikely to be met.

**Young people's full participation in work or study after leaving school has fallen.** Nationally, from 2006 to 2011, the proportion of 17–24 year olds who were fully engaged in post-school study, training or work fell by over one percentage point to 72.7%.

**More young people were in full-time study but the proportion in full-time work fell.** Young people studying full-time, or combining work and study, increased by around four percentage points from 2006 to 2011. However, the fall in full-time work of around five percentage points offset these gains nationally.

## Summary of key findings in this chapter



**Year 12 or equivalent or Certificate II attainment increasing overall but unlikely to meet the 2015 target**



**Decrease in young people fully engaged in work or study by 1.2 percentage points from 2006 to 2011**



**Increase in young people studying full-time but falls in full-time work by around 5 percentage points**

# Year 12 attainment

**From 2006 to 2011, the rate of young people attaining Year 12, or an equivalent, increased in all States and Territories. However, the rate must increase faster to meet COAG’s target of 90% by 2015.**

Attaining Year 12 or a vocational training equivalent assists young people to successfully move from school to work, further education or training.

COAG has a target of 90% of young people (20–24 year olds) having attained Year 12 or equivalent or Certificate II or above by 2015. COAG also set a related target of 90% of young people having attained Year 12 or equivalent or Certificate III or above by 2020.

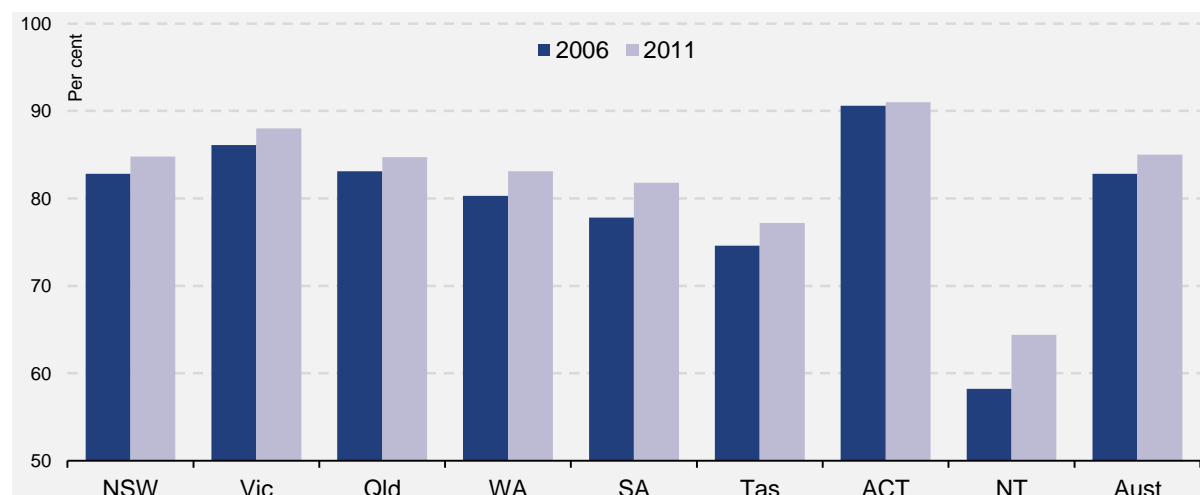
This year, we report on Year 12 attainment at a State and Territory level using data from the Census of Population and Housing (Figure 4.1). We use data from the Survey of Education and Work to report nationally on progress towards the 2015 and 2020 Year 12 targets (Figures 4.2 and 4.3).

## Year 12 or equivalent attainment increased in all States and Territories

From 2006 to 2011, the proportion of young people attaining Year 12 or an equivalent increased in all States and Territories (Figure 4.1). Based on Census data, the national figure was 85.0% in 2011.

By 2011, the ACT had the highest proportion at 91.0% and the Northern Territory had the lowest at 64.4%. The Northern Territory had the largest gain between 2006 and 2011, of 6.2 percentage points. South Australia also had a large gain of 4.0 percentage points (to 81.8% in 2011).

**Figure 4.1 20–24 year olds with Year 12 or equivalent or Certificate II or above attainment, 2006 and 2011**

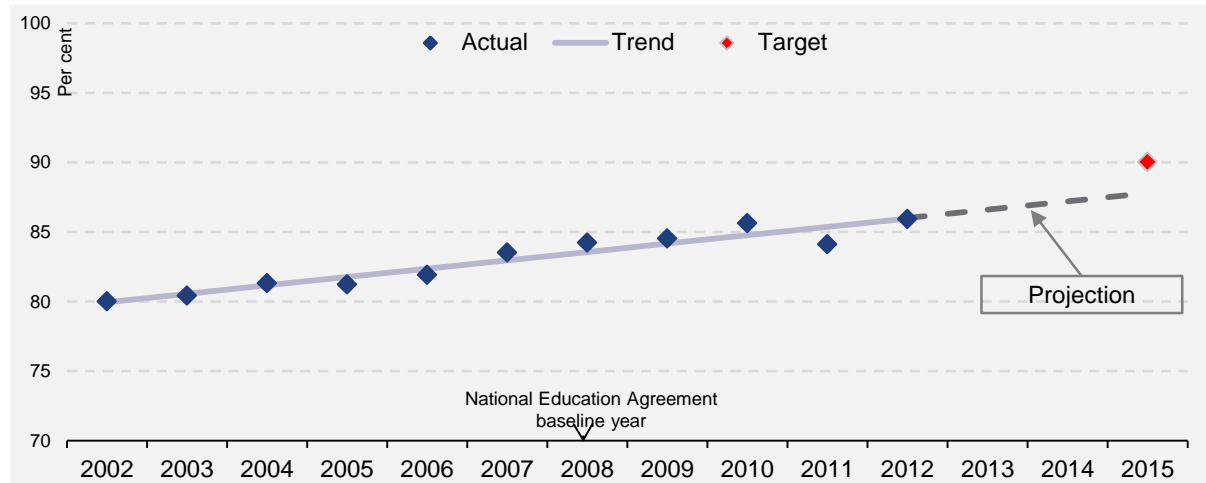


Source: ABS, 2006 and 2011 Census of Population and Housing—see Appendix C.

### Year 12 attainment target unlikely to be met by 2015 but on track for 2020

In 2012, the Year 12 or equivalent attainment rate for 20–24 year olds was 85.9% (Figure 4.2), an increase from 84.2% in 2008. Since 2002, this rate has increased 6.0 percentage points or 0.6 percentage points per year. If the trend continues, the 2015 target is unlikely to be met. Over the next three years, the rate will need to increase faster to meet the target.

**Figure 4.2 20–24 year olds with Year 12 or equivalent or Certificate II or above, 2002–2012**



Notes: R-Squared = 91.5%.

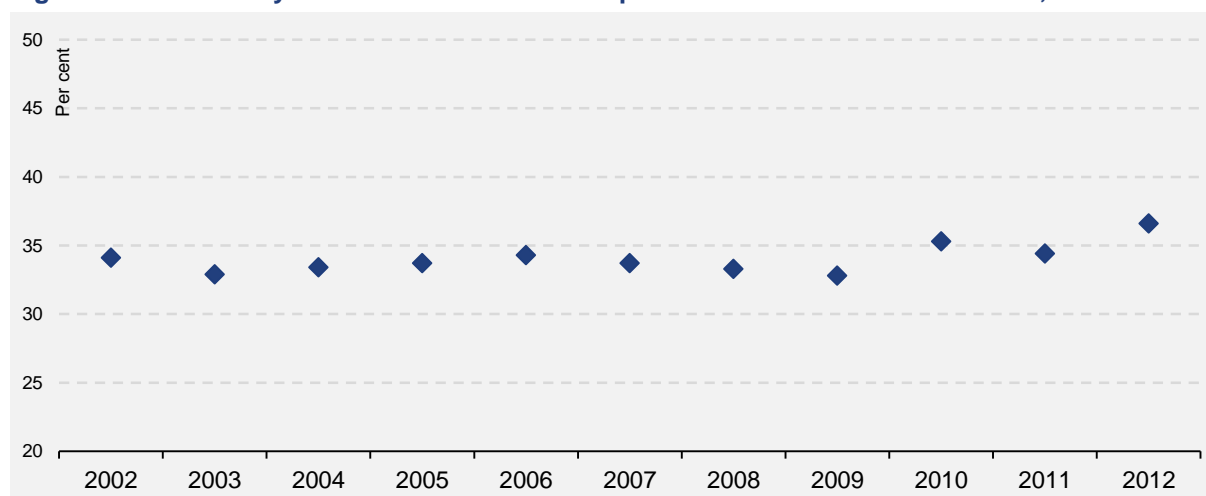
Source: ABS, 2012 Survey of Education and Work—see Appendix C.

Since 2002, the proportion of 20–24 year olds with Year 12 or equivalent or Certificate III or above has increased at a rate of 0.6 percentage points per year and was 84.6% in 2012. If the trend from 2002 to 2012 continues, COAG will meet the 90% target by 2020.

### Year 12 or equivalent or Certificate II attainment for 15–19 year olds increased

Looking at the Year 12 or equivalent attainment rate for 15–19 year olds can give an early indication of progress towards the attainment targets for 20–24 year olds. The attainment rate of 15–19 year olds since 2009 improved significantly (Figure 4.3). This change could signal an improvement in the 20–24 attainment rates as the 15–19 cohort matures into the 20–24 cohort.

**Figure 4.3 15–19 year olds with Year 12 or equivalent or Certificate II or above, 2002–2012**



Source: ABS, 2012 Survey of Education and Work—see Appendix C.

# Work and study after school

**The proportion of young people fully engaged in work or study after leaving school fell between 2006 and 2011. The proportion in full-time study rose, but there were falls in full-time work. In 2011, more than a quarter of young people were not fully engaged in work or study.**

Full-time participation in education or work after leaving school is an important step in establishing a young person's employment path through the working years. Young people who are not fully engaged at this stage—including those who are in part-time work only, or are unemployed or are not in any form of study or the labour market—are at greater risk of an insecure future.

We use the cohort of 17–24 year olds for this indicator as young people may leave school at 17 years.

## Fewer young people fully engaged in work or study after school

From 2006 to 2011, the national proportion of young people (17–24 year olds) who were fully engaged in work or study declined from 73.9% to 72.7% (Figure 4.4). The largest falls were in Queensland (3.3 percentage points) and Western Australia (1.9 percentage points). The proportion increased in the ACT and Northern Territory by 0.7 and 0.9 percentage points respectively.

In 2011, the ACT had the highest proportion of 17–24 year olds who were fully engaged (83.3%) while the Northern Territory had the lowest (57.7%).

**Figure 4.4 17–24 year olds fully engaged in work or study, 2006 and 2011**



Source: ABS, 2006 and 2011 Census of Population and Housing—see Appendix C.

### More than one in four 17–24 year olds were not fully engaged in work or study

More than one in four 17–24 year olds (27.3%) nationally were not fully engaged in either work or study in 2011. Queensland (30.9%), South Australia (30.5%), Tasmania (33.4%) and the Northern Territory (42.3%) were all above the national average (Figure 4.5).

In 2011, the proportion of young people engaged in full-time study was higher than the national average of 32.0% in NSW (33.5%), Victoria (37.8%) and the ACT (38.4%). The proportion of young people engaged in full-time employment was higher than the national average of 36.3% in Queensland (39.1%), Western Australia (41.3%), the ACT (37.3%) and the Northern Territory (46.5%).

**Figure 4.5 17–24 year olds fully engaged in work or study, 2011**

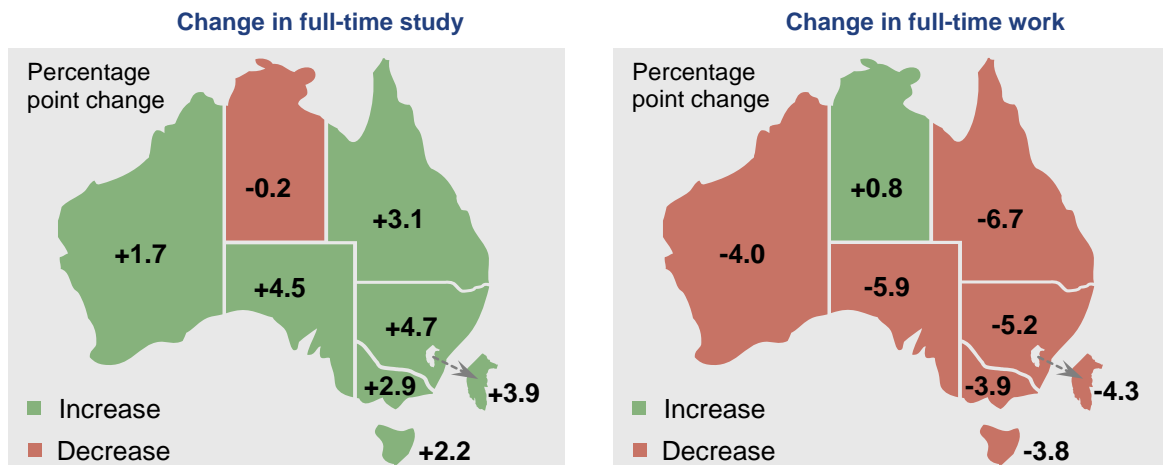


Source: ABS, 2011 Census of Population and Housing—see Appendix C.

### Full-time study increased while full-time work decreased

From 2006 to 2011, the proportion of 17–24 year olds engaged in full-time study increased nationally from 28.6% to 32.0%. This increase was not enough to offset the falls in the proportion engaged in full-time employment, from 41.2% to 36.3%. Figure 4.6 shows the change in each State and Territory.

**Figure 4.6 Change in 17–24 year olds fully engaged in work or study, 2006 and 2011**



Source: ABS, 2006 and 2011 Census of Population and Housing—see Appendix C.



## Chapter 5

# Indigenous young people

This chapter reports on the outcomes of Indigenous young people in early childhood, during school and after leaving school.

## How this chapter links to the National Education Agreement

Section in this chapter	Performance indicators/targets	Outcomes
Engagement at school	<p>Level of development for children in the first year of formal schooling, across five domains</p> <p>Children are developmentally vulnerable in one or more domains</p> <p>Student attendance at government schools</p>	Schooling promotes social inclusion and reduces the educational disadvantage of children, especially Indigenous children
Reading and numeracy	Reading and numeracy achievement of Years 3, 5, 7 and 9 students in national testing	
Leaving school	<p>Proportion of young people (20–24 year olds) who attained Year 12 or equivalent or AQF Certificate II/III or above</p> <p>Proportion of young people (17–24 year olds) participating in post-school education, training or employment</p>	

### Like to know more about the indicators?

The indicators “level of development for children in the first year of formal schooling, across five domains”, and “children are developmentally vulnerable in one or more domains” relate to the Australian Early Development Index. The indicators were chosen as they support the outcome of the National Education Agreement. Further information can be found at **Appendix D**.

**Appendix A** outlines the structure of the National Education Agreement. It lists the indicators that are not included in this report in detail, either due to data quality or availability issues.

# Key findings

Social inclusion is a major focus of COAG's reform agenda. In the National Education Agreement, COAG agreed to an outcome that schooling promotes social inclusion and reduces the educational disadvantage of children, especially Indigenous children.

**There was no improvement in school attendance rates of Indigenous students.** From 2008 to 2012, Indigenous Year 10 students had the lowest attendance rates of all years. The Northern Territory had the largest decrease in Year 10 attendance, of 14 percentage points to 55% in 2012. There was little to no change in all other year levels in other States and Territories.

**There were few improvements in the proportions of Indigenous students meeting minimum standards in reading and no improvements in numeracy.** From 2008 to 2012, there were improvements in Year 3 reading nationally and in Queensland and Western Australia. For numeracy, there were decreases in Year 3, nationally and in all States and Territories except Queensland and the ACT. There were also decreases in Year 7, nationally and in NSW.

**More Indigenous young people attained Year 12 or equivalent but over 60% were not fully engaged in study or work after leaving school.** The Indigenous Year 12 or equivalent attainment rate increased from 47.4% in 2006 to 53.9% in 2011. However, in 2011, 60.6% of Indigenous young people were not fully engaged in study or work after leaving school. This was more than double the rate for non-Indigenous young people.

## Summary of key findings in this chapter



**School attendance rates did not improve over five years**



**Improvements in Year 3 reading but decreases in Year 3 numeracy**



**High proportions of Indigenous young people not fully engaged in work or study after school**

# Engagement at school

**Indigenous children were more than twice as likely to be developmentally vulnerable in their first year of school. Attendance rates of Indigenous school students have not improved since 2008.**

## The Australian Early Development Index measures young children’s development

The Australian Early Development Index (AEDI) is a national population measure of children’s development when they enter school. The AEDI has five domains for measuring early childhood development outcomes. Results for each domain are classified into three levels—on track; developmentally at risk; and developmentally vulnerable. We report on each domain for 2012. Appendix D has further information on the domains.

We use the composite measure, “children are developmentally vulnerable in one or more domains”, to report on progress between 2009 and 2012. Children who are developmentally vulnerable come to school with one or more of the following characteristics—unprepared, have limited motor skills, poor social and communication skills, anxious or aggressive behaviours, limited basic literacy or numeracy skills and little interest in reading or numbers.

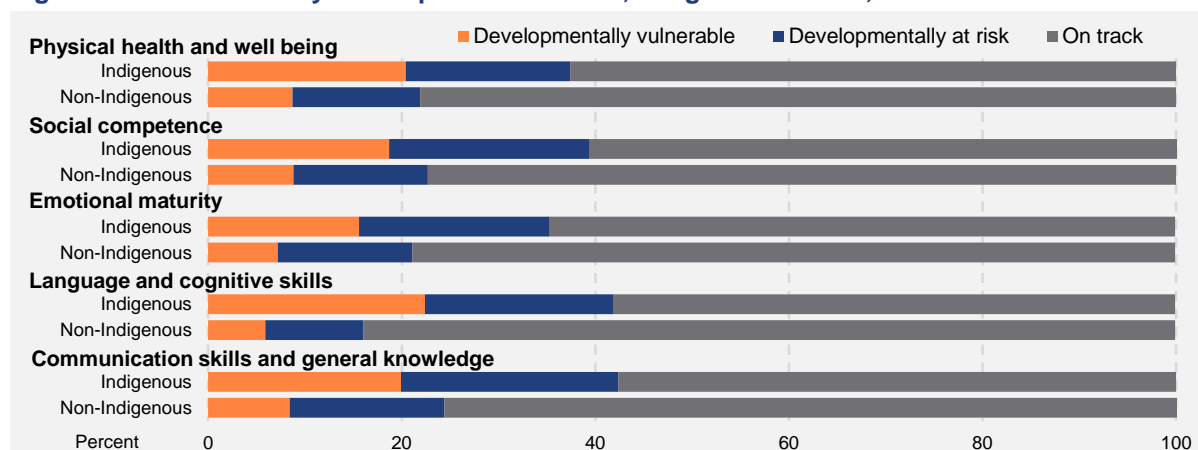
## Indigenous children more likely to be developmentally vulnerable

In 2012, over 50% of Indigenous children were developmentally on track in each domain, ranging from 57.6% to 64.6% (Figure 5.1). For non-Indigenous children, over 70% were developmentally on track in each domain, ranging from 75.7% to 83.9%.

Indigenous children were more than twice as likely to be developmentally vulnerable than non-Indigenous children in each domain. In 2012, the largest difference was in the language and cognitive skills domain—22.4% of Indigenous children were developmentally vulnerable compared to 5.9% of non-Indigenous children.

In 2012, 43.2% of Indigenous children were developmentally vulnerable in one or more domains. While this was a significant improvement from 2009 (47.4%), this was twice the proportion of non-Indigenous children who were vulnerable (20.9%) in 2012.

**Figure 5.1 Results by developmental domain, Indigenous status, 2012**



Source: Australian Government 2013—see Appendix C.

## No improvement in school attendance by Indigenous students between 2008 and 2012

We report on attendance in government schools only as data cannot be compared across school sectors or States and Territories. We report on Year 1 school attendance as a measure of attendance by primary school students. Results for Year 1 are similar to attendance rates of students in other primary years. We also report on attendance by Year 10 students as it is the final year of compulsory secondary school attendance. Following Year 10, young people are required to participate full-time in education, training or work or a combination until they are 17 years old.

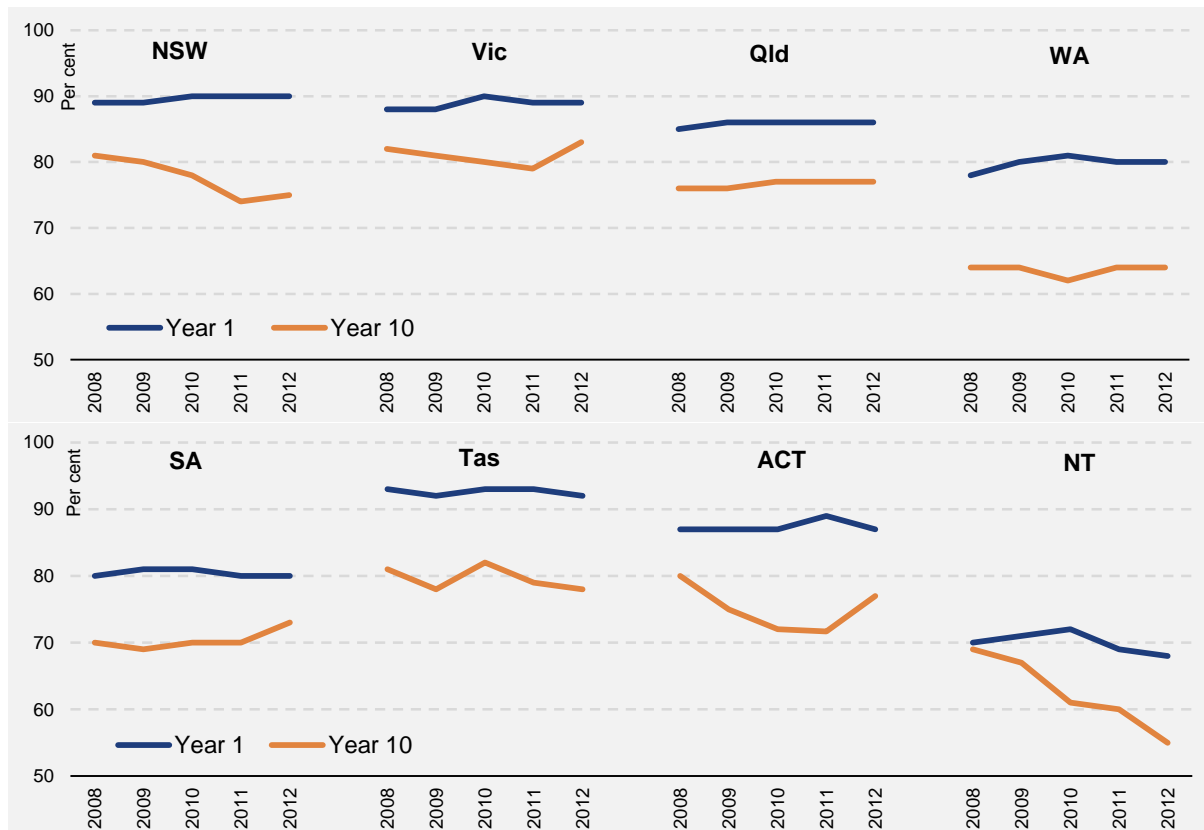
There were almost no improvements in Indigenous attendance rates from 2008 to 2012 (Figure 5.2). Attendance rates fluctuated or remained stable for all States and the ACT for Year 1 students. Only Tasmania had Indigenous attendance rates above 90%.

Year 10 Indigenous students continued to have lower attendance rates than Year 1 students. From 2008 to 2012, attendance fell by six percentage points in NSW (to 75%) and by three percentage points in Tasmania (to 78%) and the ACT (to 77%). Attendance increased in South Australia by three percentage points (to 73%).

The Northern Territory had low attendance rates for Indigenous Year 10 students from 2008 to 2012, with a large decrease of 14 percentage points to 55% in 2012.

Indigenous school attendance rates remained lower than non-Indigenous rates. The Northern Territory, South Australia and Western Australia continued to have gaps in attendance of greater than 10 percentage points across all year levels. Gaps were generally largest in Year 10 attendance. For example, the Northern Territory had large gaps between Indigenous and non-Indigenous school attendance, of 30 percentage points lower in Year 10 in 2012.

**Figure 5.2 Indigenous student attendance, Years 1 and 10, government schools, 2008 to 2012**



Source: ACARA, National Schools Attendance Data Collection—see Appendix C.

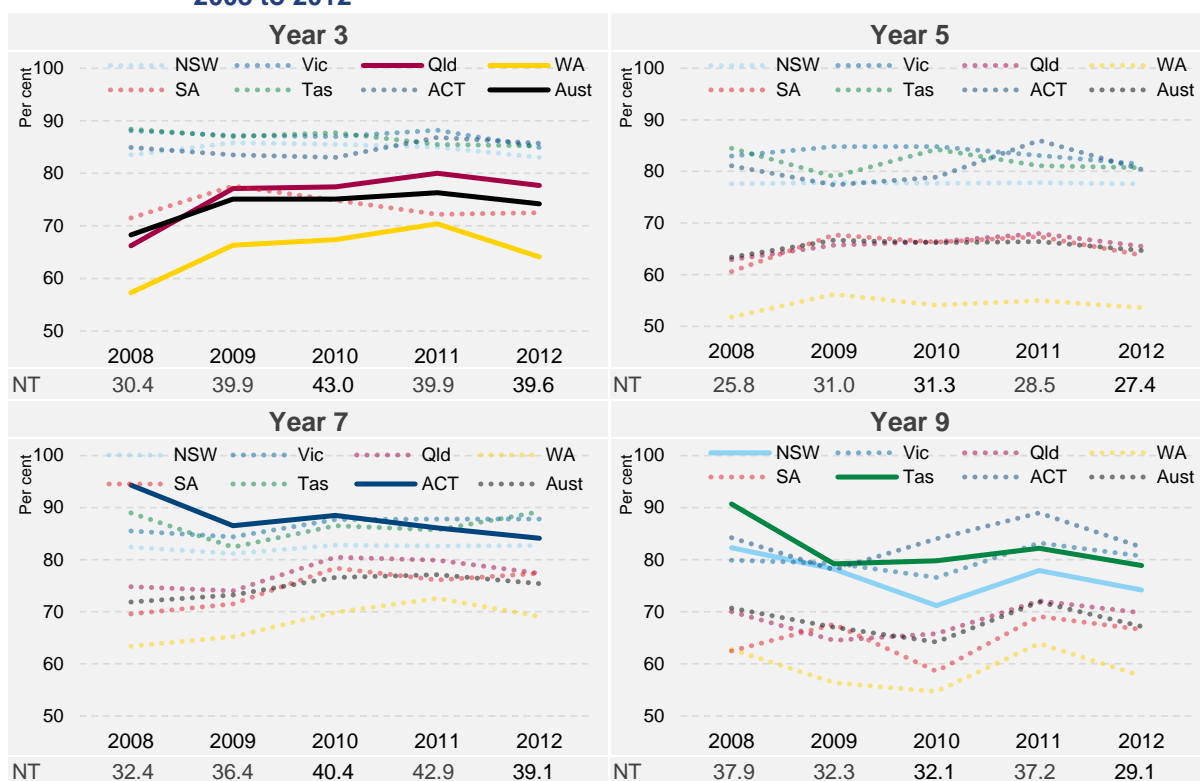
# Reading and numeracy

**From 2008 to 2012, reading only improved for Year 3 Indigenous students nationally and in two States and Territories, while there were decreases nationally and in most States and Territories in Year 3 in numeracy.**

## Increase in Indigenous students in Year 3 meeting minimum standard in reading

In 2012, nationally, the proportion of Indigenous students meeting the minimum standard for reading ranged from 64.7% (Year 5) to 75.4% (Year 7). From 2008 to 2012, the proportion increased in Year 3 nationally, and in Queensland and Western Australia (Figure 5.3). There were no changes in Year 5. The proportion decreased in Year 7 the ACT and in NSW and Tasmania in Year 9.

**Figure 5.3 Proportion of Indigenous students meeting the minimum standard in reading, 2008 to 2012**



Notes:

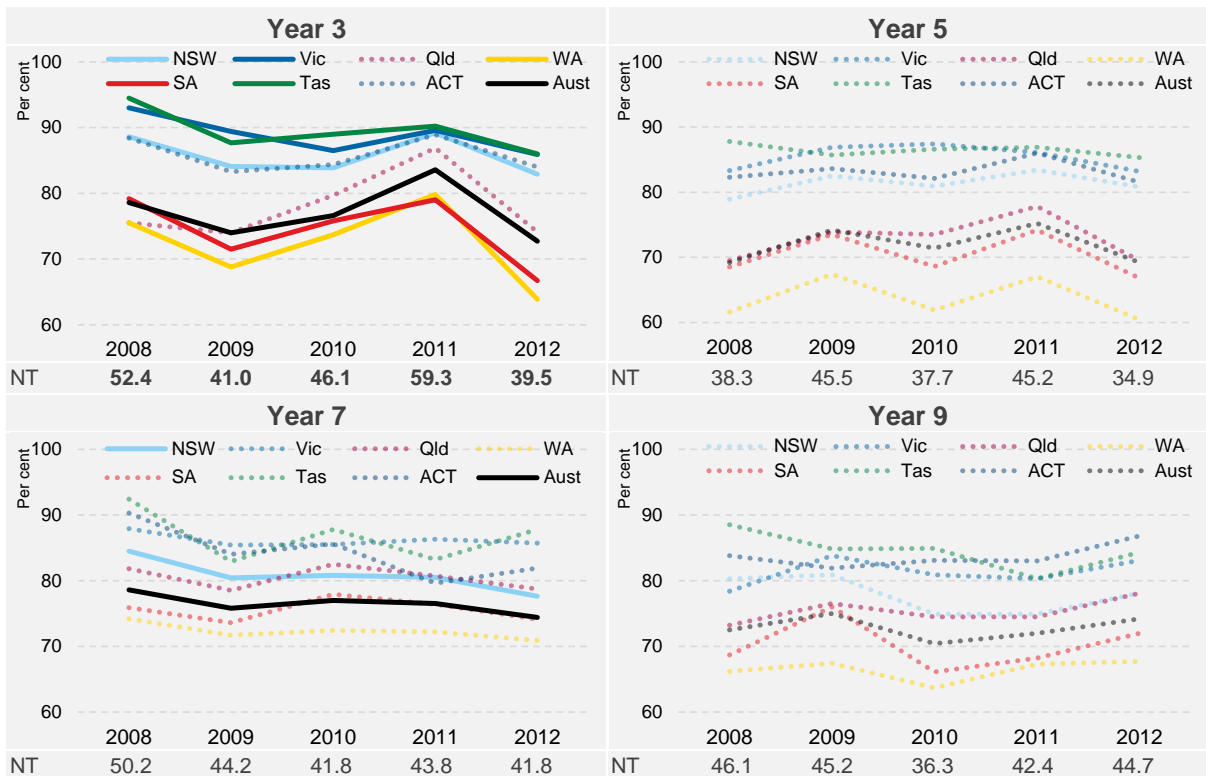
1. Unbroken lines are significant changes from 2008 to 2012. Dashed lines are not significant changes.
2. Data for the Northern Territory are shown separately due to a different scale. There were no significant changes.

Source: ACARA, NAPLAN—see Appendix C.

## Decrease in Indigenous students meeting minimum standard in numeracy in Year 3

In 2012, nationally, the proportion of Indigenous students meeting the minimum standard in numeracy ranged from 69.2% (Year 5) to 74.4% (Year 7) (Figure 5.4). From 2008 to 2012, in Year 3 there were decreases nationally and in all States and Territories except Queensland and the ACT. Nationally, and in NSW, Year 7 decreased. There were no changes in Years 5 and 9.

**Figure 5.4 Proportion of Indigenous students meeting the minimum standard in numeracy, 2008 to 2012**



Notes:

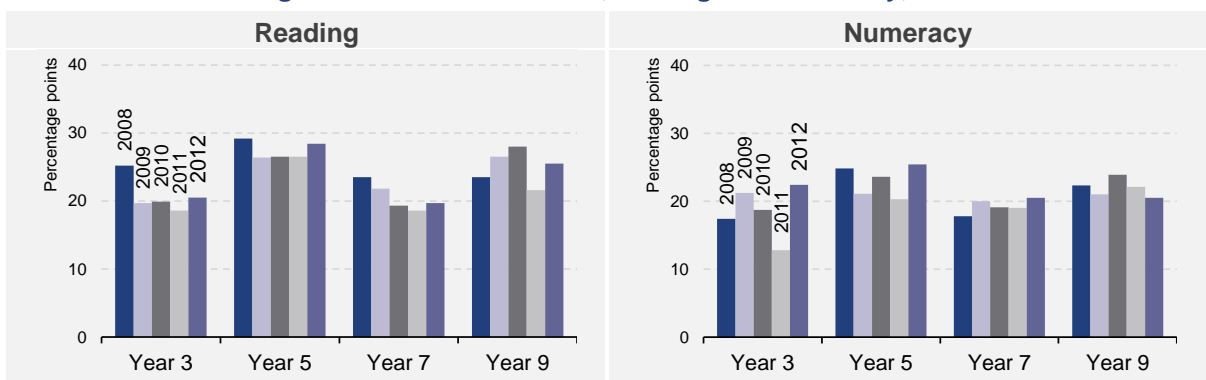
1. Unbroken lines are significant changes from 2008 to 2012. Dashed lines are not significant changes.
2. Data for the Northern Territory are shown separately due to a different scale. Significant changes are in bold.

Source: ACARA, NAPLAN—see Appendix C.

### The gap has remained between Indigenous and non-Indigenous students

COAG has set a target to halve the gap between the achievement of Indigenous and non-Indigenous students within a decade (2008–2018). Figure 5.5 shows that the gap has fluctuated over time in reading and numeracy. See *Indigenous Reform 2011-12: Comparing performance across Australia* (COAG Reform Council 2013) for further information.

**Figure 5.5 Gap between Indigenous and non-Indigenous students in the proportion meeting the minimum standards, reading and numeracy, 2008 to 2012**



Source: ACARA, NAPLAN—see Appendix C.

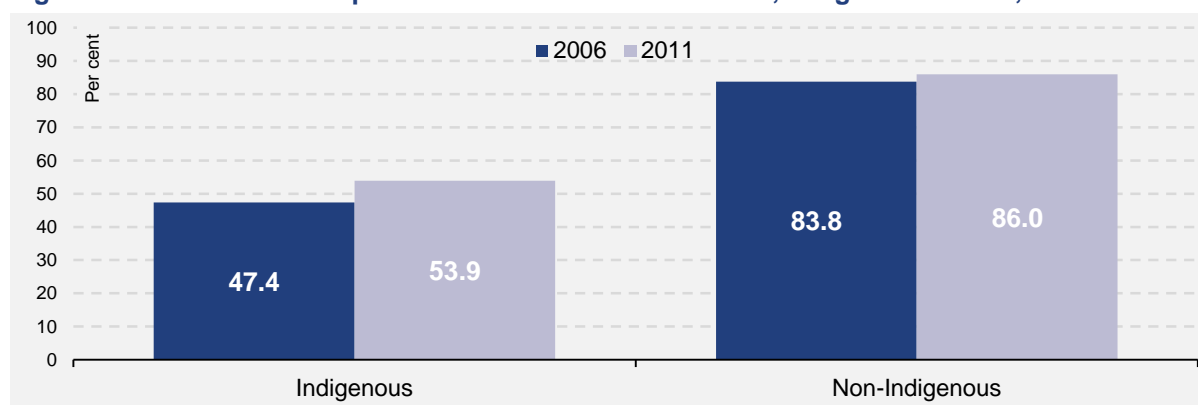
# Leaving school

**From 2006 to 2011, the Year 12 attainment rate for Indigenous 20–24 year olds rose 6.5 percentage points. However, 6 in 10 Indigenous 17–24 year olds were not fully engaged in work or study after leaving school.**

## Increase in Indigenous 20–24 year olds attaining Year 12 in all States and Territories

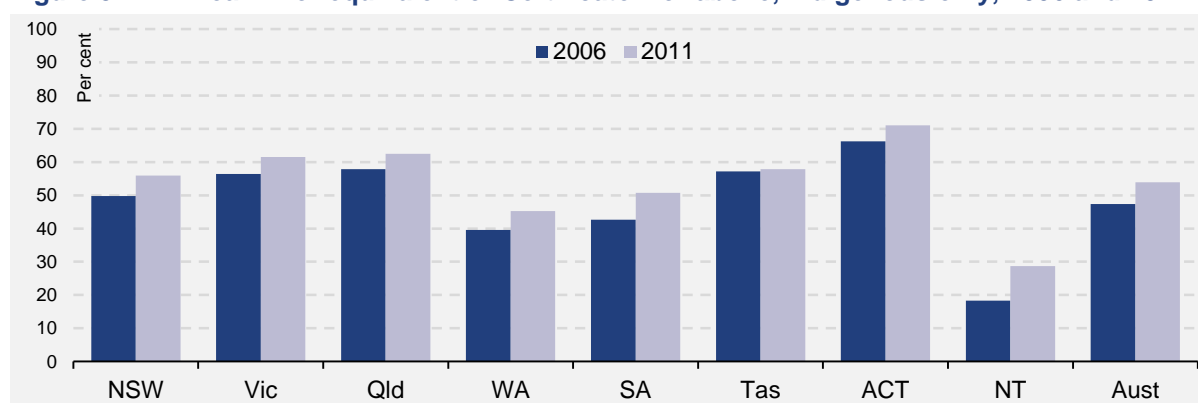
Nationally, the proportion of Indigenous young people (20–24 year olds) who attained Year 12 or an equivalent or Certificate II or above increased by 6.5 percentage points from 47.4% in 2006 to 53.9% in 2011 (Figure 5.6). The proportion also increased in that period in all States and Territories. The largest increases were in the Northern Territory (from 18.3% in 2006 to 28.7% in 2011) and South Australia (from 42.7% in 2006 to 50.7% in 2011) (Figure 5.7).

**Figure 5.6** Year 12 or equivalent or Certificate II or above, Indigenous status, 2006 and 2011



Source: ABS 2006 and 2011, Census of Population and Housing—see Appendix C.

**Figure 5.7** Year 12 or equivalent or Certificate II or above, Indigenous only, 2006 and 2011



Source: ABS 2006 and 2011, Census of Population and Housing—see Appendix C.

COAG set a target to halve the gap in Year 12 or equivalent attainment between Indigenous and non-Indigenous young people by 2020. Nationally, the gap reduced from 36.4 percentage points in 2006 to 32.1 percentage points in 2011. For further information see *Indigenous Reform 2011–12: Comparing performance across Australia* (COAG Reform Council 2013).

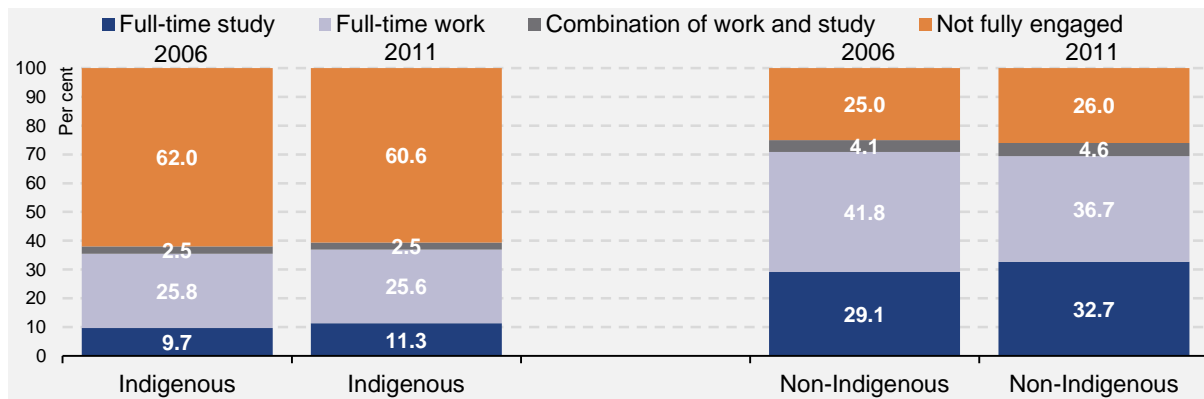
### High proportions of Indigenous 17–24 year olds not fully engaged in work or study

In 2011, the proportion of Indigenous young people (17–24 year olds) not fully engaged in work or study after leaving school nationally was 60.6% (Figure 5.8). This was better than 2006 (62.0%). However, this rate was more than double the non-Indigenous rate. The rates for non-Indigenous young people were 25.0% in 2006 and 26.0% in 2011.

This difference between the groups was driven in part by the levels engaged in full-time study. From 2006 to 2011, fewer Indigenous compared to non-Indigenous young people were studying full-time. In 2011, there was a 21.4 percentage point gap between Indigenous (11.3%) and non-Indigenous young people (32.7%) who were studying full-time. This was similar to 2006 (19.4 percentage points).

From 2006 to 2011, full-time work for Indigenous young people fell by 0.2 percentage points compared to a fall of 5.1 percentage points for non-Indigenous young people. Despite this, in 2011 a gap of 11.1 percentage points remained between Indigenous and non-Indigenous young people.

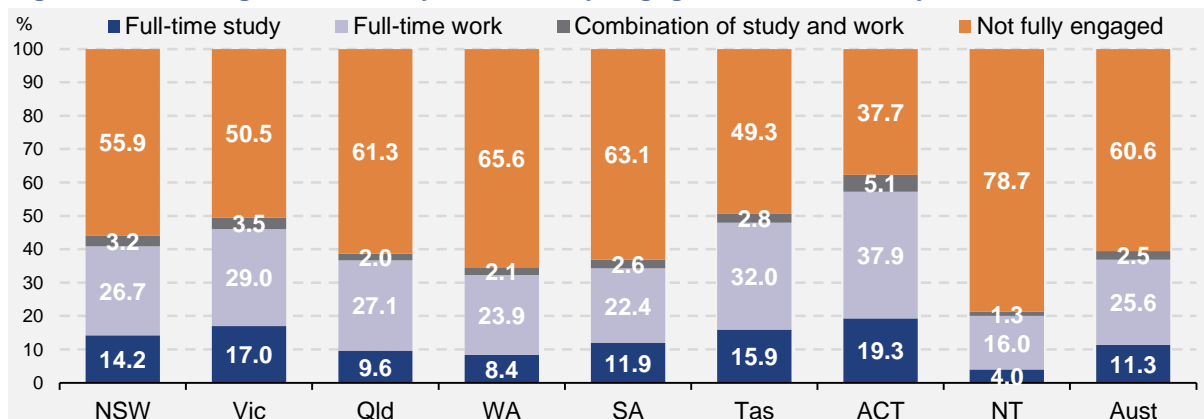
**Figure 5.8 17–24 year olds fully engaged in work or study, Indigenous status, 2006 and 2011**



Source: ABS 2006 and 2011, Census of Population and Housing—see Appendix C.

In 2011, the Northern Territory had the largest proportion of Indigenous young people who were not fully engaged in work or study (78.7%) (Figure 5.9). Western Australia (65.6%), South Australia (63.1%) and Queensland (61.3%) also had large proportions of Indigenous young people who were not fully engaged that were higher than the national average (60.6%).

**Figure 5.9 Indigenous 17–24 year olds fully engaged in work or study, 2011**



Source: ABS 2006 and 2011, Census of Population and Housing—see Appendix C.



## Chapter 6

# Young people from low socio-economic backgrounds

This chapter reports on the education outcomes of young people from low socio-economic backgrounds during school and after leaving school.

### How this chapter links to the National Education Agreement

Section in this chapter	Performance indicators	Outcomes
Reading achievement	Reading achievement of Years 3, 5, 7 and 9 students in national testing	Schooling promotes social inclusion and reduces the educational disadvantage of children, especially Indigenous children
Leaving school	Proportion of young people (20–24 year olds) who attained Year 12 or equivalent or AQF Certificate II/III or above  Proportion of young people (17–24 year olds) participating in post-school education, training or employment	

### Like to know more about the indicators?

**Appendix A** outlines the structure of the National Education Agreement. It lists the indicators that are not included in this report in detail, either due to data quality or availability issues.

# Key findings

Social inclusion is a major focus of COAG's reform agenda. Students and young people from low socio-economic backgrounds experience educational disadvantage, which is reflected in outcomes measured under the agreement. We report on the differences between outcomes for young people from low and high socio-economic backgrounds.

**In 2012, students from low socio-economic backgrounds met the minimum standard in reading at lower rates than students from high socio-economic backgrounds.** From 2008 to 2012, between 80% and 89% of students from low socio-economic backgrounds met the minimum standard in reading. The proportion of Years 7 and 9 students from a low socio-economic background meeting the minimum standard fell. In contrast, around 98% of students from a high socio-economic background met the minimum standard in all year levels.

**Year 12 attainment increased across all socio-economic backgrounds.** From 2006 to 2011, Year 12 or equivalent attainment increased for all socio-economic backgrounds. The largest increases (of up to 4.9 percentage points in 2011) were in the proportions of young people from lower and middle socio-economic backgrounds. However, there was a large gap of 19.5 percentage points between young people from the lowest to the highest socio-economic backgrounds in 2011, similar to 2006.

**Young people from low socio-economic backgrounds were less likely to be fully engaged in study or work after leaving school.** In 2011, 41.7% of young people from the lowest socio-economic background were not fully engaged in work or study after leaving school, an increase of 1.6 percentage points from 2006. In 2011, there was a 17.9 percentage point gap between the proportions of young people from the lowest to the highest socio-economic backgrounds studying full-time.

## Summary of key findings in this chapter



**Reading achievement of low SES background students fell in Years 7 and 9**



**Year 12 attainment gap between low and high SES background young people was 19.5 percentage points**



**High proportions of low SES background young people not fully engaged after school**

# Reading achievement

## The reading achievement of students from a low socio-economic background fell in Years 7 and 9 from 2008 to 2012.

### Students from a low socio-economic background had lower achievement

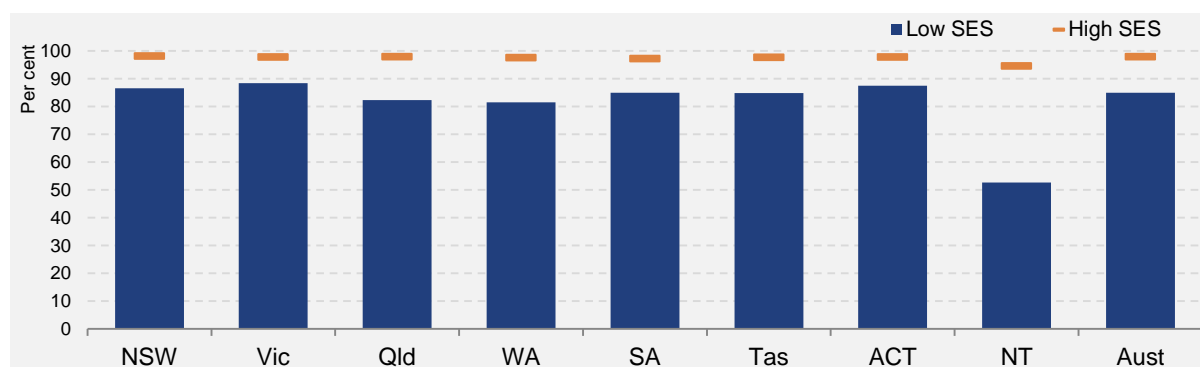
In our reporting, we use parental education level as a measure of socio-economic status (SES) in NAPLAN. Low is Year 11 or below and high is bachelor degree or above (see Appendix D). We report on reading only, as results are similar for numeracy.

More than 90% of students from high socio-economic backgrounds met the national minimum standard in reading in 2012 across all years and all States and Territories. However, there was variation among students from low socio-economic backgrounds, from 39.1% (Year 5 in the Northern Territory) to 89.3% (Year 7 in Victoria) (Figure 6.1).

Nationally, Year 3 students from low socio-economic backgrounds were 12.9 percentage points behind students from high socio-economic backgrounds in reading. The reading gap between low and high socio-economic background students ranged between 11.5 and 16.1 percentage points across year levels.

The Northern Territory had the largest differences of between 40.4 (Year 7) and 54.9 percentage points (Year 5).

**Figure 6.1** Proportion meeting the minimum standard in Year 3 reading, socio-economic background, 2012



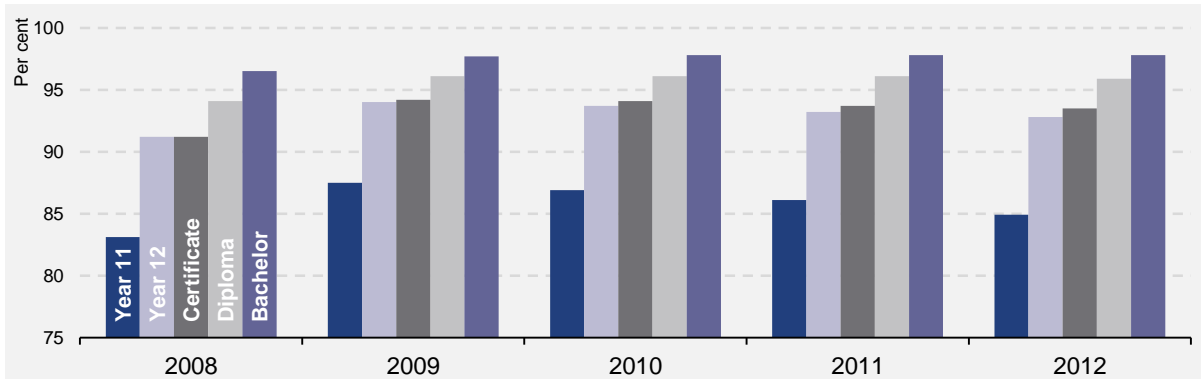
Source: ACARA, NAPLAN—see Appendix C.

### Student achievement increases with parental education level

Student achievement increases with higher levels of parental education. The biggest step up (at least four percentage points in each jurisdiction) was between students whose parents had an educational level of Year 11 or below, and those whose parents had an educational level of Year 12 (Figure 6.2). As levels of parental education increase, smaller improvements are seen. This was true for reading for all year levels from 2008 to 2012.

For example, in 2012, for Year 3 reading, the difference between students with parents with Year 11 or below compared to Year 12 was 7.9 percentage points (Figure 6.2).

**Figure 6.2** Proportion meeting the minimum standard in Year 3 reading, by parental education level, 2008 to 2012

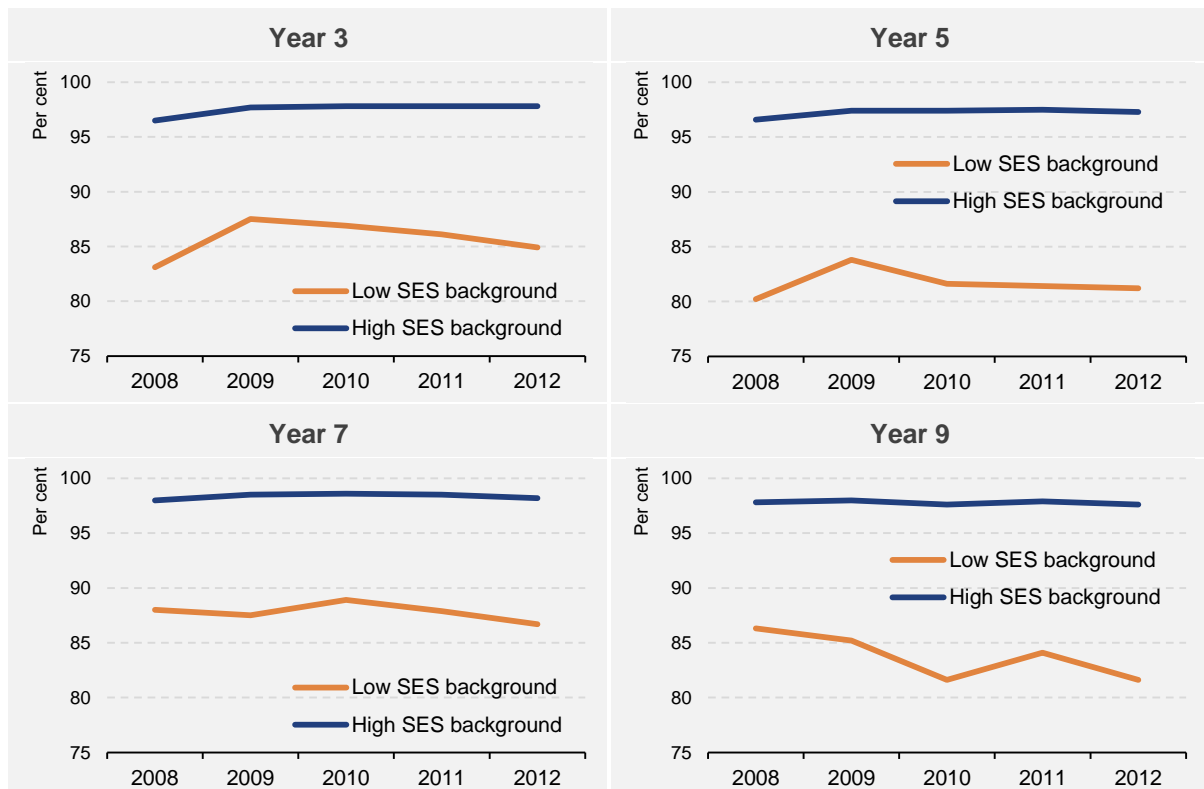


Source: ACARA, NAPLAN—see Appendix C.

**Mixed results for students from a low socio-economic background over five years**

Nationally, over five years, from 2008 to 2012, the proportion of students from a low socio-economic background who met the minimum standard in reading increased in Years 3 and 5 but decreased in Years 7 and 9 (Figure 6.3). Achievement for those from a high socio-economic background remained stable at around 98%. Statistical testing was not available for this indicator.

**Figure 6.3** Proportion meeting the minimum standard in reading, by low and high socio-economic background, 2008 to 2012



Notes:

1. Statistical significance testing was not available for these data.

Source: ACARA, NAPLAN—see Appendix C.

# Leaving school

**Year 12 or equivalent attainment increased for all socio-economic areas from 2006 to 2011. However, there was a large gap between young people from low (73.7%) and high socio-economic areas (93.2%) in 2011. Young people from low socio-economic areas continue to be less likely to be fully engaged in work or study.**

## Young people from most disadvantaged areas have lower Year 12 attainment

We report socio-economic status (SES) using the ABS' Socio-Economic Indexes for Areas Index of Relative Socio-economic Disadvantage (SEIFA IRSD). This measures disadvantage in geographic areas.

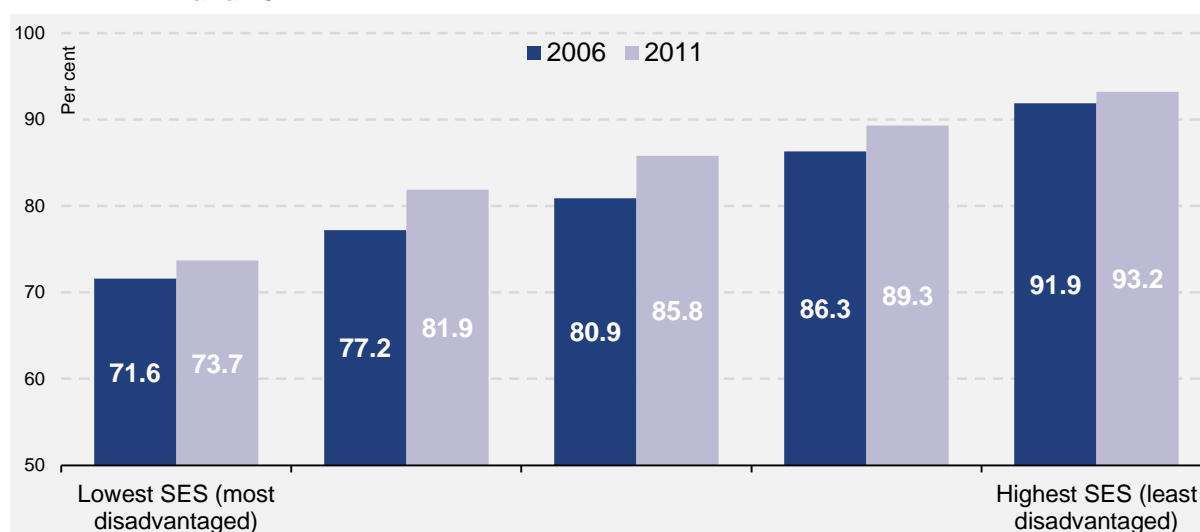
The proportions of young people (20–24 year olds) who attained Year 12 or equivalent or Certificate II or above increased across all socio-economic areas between 2006 and 2011 (Figure 6.4).

The largest increases in Year 12 or equivalent attainment were in the proportions of young people from the low and middle socio-economic areas (quintiles 2 and 3), of up to 4.9 percentage points from 2006 to 2011.

In 2011, the proportion of young people from the most disadvantaged socio-economic areas who attained Year 12 or equivalent was 73.7%. This was an increase of 2.1 percentage points from 2006. In 2011, 93.2% of young people from the least disadvantaged socioeconomic areas had attained Year 12 or an equivalent. This was an increase of 1.3 percentage points.

There was a difference of 19.5 percentage points between young people with Year 12 or equivalent from the most to the least disadvantaged socio-economic areas in 2011. This was similar to the difference in 2006, which was 20.3 percentage points.

**Figure 6.4** Year 12 or equivalent or Certificate II or above, by socio-economic areas, 2006 and 2011



Source: ABS 2006 and 2011, Census of Population and Housing—see Appendix C.

### Young people from most disadvantaged areas less likely to study full-time

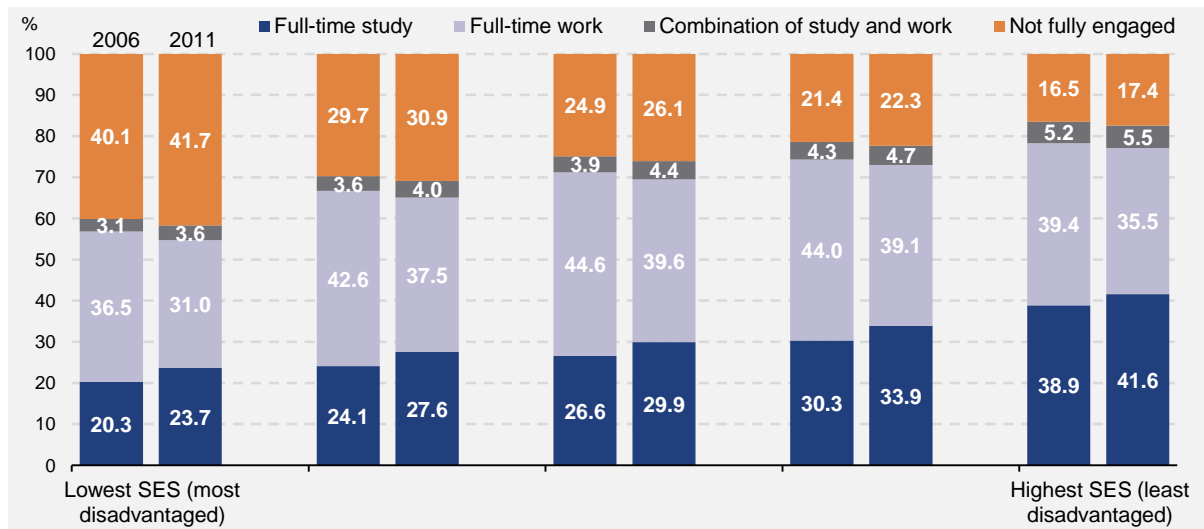
From 2006 to 2011, the proportion of young people (17–24 year olds) who were fully engaged in work or study after leaving school fell across all quintiles of socio-economic areas (Figure 6.5).

From 2006 to 2011, the proportion of young people from the most disadvantaged socio-economic areas who were not fully engaged in work or study grew by 1.6 percentage points to 41.7% in 2011 (Figure 6.5). This compares to an increase of 0.9 percentage points for young people from the least disadvantaged socio-economic areas in 2011 to 17.4%. This amounted to a gap of 24.3 percentage points between young people from the most to the least disadvantaged socio-economic areas in 2011, larger than the 2006 gap.

This difference was mostly due to the levels engaged in full-time study. While the proportions studying full-time grew for all groups from 2006 to 2011, fewer young people from the most disadvantaged socio-economic areas were studying full-time compared to those from the least disadvantaged socio-economic areas. In 2011, the gap between young people from the most (23.7%) to the least disadvantaged (41.6%) socio-economic areas who were studying full-time was 17.9 percentage points. This was a small decrease of 0.7 percentage points from a gap of 18.6 percentage points in 2006.

Full-time work fell across all socio-economic areas from 2006 to 2011. The proportion of young people from the most disadvantaged socio-economic areas in full time work fell by 5.5 percentage points, compared to a 3.9 percentage point fall for the least disadvantaged socio-economic areas. The gap between young people from the most to the least disadvantaged socio-economic areas grew from 2.9 percentage points in 2006 to 4.5 percentage points in 2011.

**Figure 6.5 17–24 year olds fully engaged in work or study, by socio-economic areas, 2006 and 2011**



Source: ABS, Census of Population and Housing—see Appendix C.



## Chapter 7

# Young people from rural and remote areas

This chapter reports on the outcomes of young people living in rural and remote areas during school and after leaving school.

### How this chapter links to the National Education Agreement

Section in this chapter	Performance indicators	Outcomes
Reading achievement	Reading achievement of Years 3, 5, 7 and 9 students in national testing	Schooling promotes social inclusion and reduces the educational disadvantage of children, especially Indigenous children
Leaving school	Proportion of young people (20–24 year olds) who attained Year 12 or equivalent or AQF Certificate II/III or above Proportion of young people (17–24 year olds) participating in post-school education, training or employment	

#### Like to know more about the indicators?

**Appendix A** outlines the structure of the National Education Agreement. It lists the indicators that are not included in this report in detail, either due to data quality or availability issues.

# Key findings

Social inclusion is a major focus of COAG's reform agenda. Students and young people living in rural and remote areas may experience higher levels of educational disadvantage compared with those living in cities and regional centres. Data collections use different concepts of remoteness. Appendix B contains the definitions of remoteness used for NAPLAN and the ABS Census of Population and Housing.

**There were improvements in Year 3 in the proportion meeting the minimum standard in reading for students in remote areas from 2008 to 2012.** In Year 3 in 2012, 84.3% of remote students and 57.6% of very remote students met minimum standards. In contrast, achievement for metro students was 94.8%.

**Year 12 or equivalent attainment for students from remote and very remote areas increased.** The proportion of young people (20–24 year olds) in very remote areas who attained Year 12 or equivalent increased by 7.3 percentage points to 54.7% in 2011. Attainment by young people in remote areas also increased, by 3.9 percentage points to 72.1% in 2011. The gap between young people in remote and very remote areas and young people in major cities reduced between 2006 and 2011.

**More young people (17–24 year olds) in remote and very remote areas were fully engaged in work or study after leaving school.** From 2006 to 2011, the proportion of young people from remote areas not fully engaged in work or study decreased from 36.6% to 36.1%. The proportion in very remote areas also decreased, from 57.6% in 2006 to 55.5% in 2011.

## Summary of key findings in this chapter



**Improvement in reading for Year 3 students in remote areas**



**More young people in remote and very remote areas attained Year 12**



**More young people from remote and very remote areas fully engaged in work or study after school**

# Reading achievement

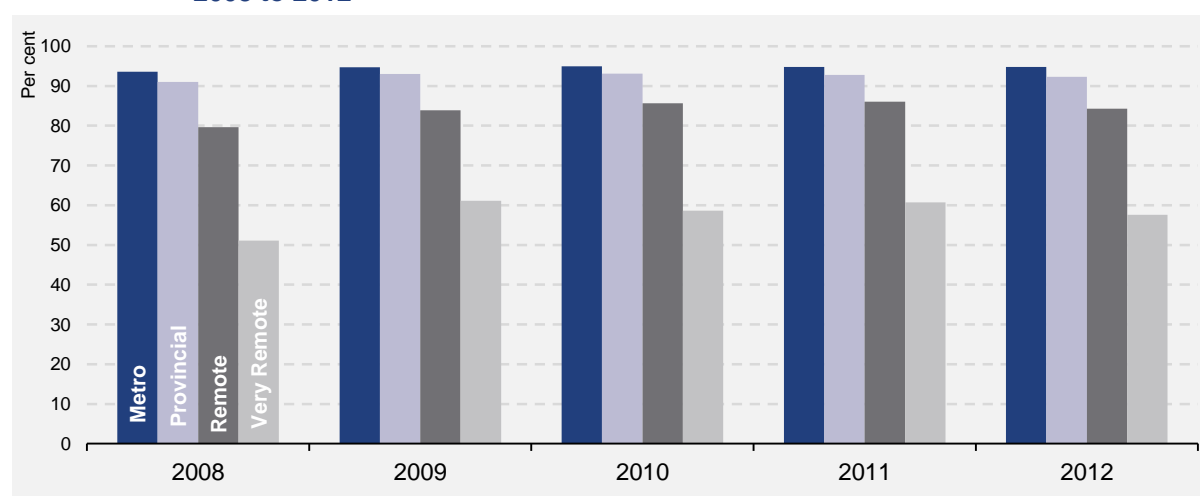
**Achievement in reading falls with increasing remoteness. However, results in Year 3 reading improved in remote areas. Poorer outcomes in remote and very remote areas are linked to the high proportions of Indigenous students in these areas.**

## Achievement declined with increasing remoteness

As remoteness increases, the proportion meeting the national minimum standard in reading decreases. The largest step down is between remote and very remote areas. For example, nationally from 2008 to 2012, the range for remote areas in Year 3 was from 79.6% to 86.0% and for very remote areas it was from 51.1% to 61.1%. The difference between remote and very remote areas was from 22.8 to 28.5 percentage points in each year from 2008 to 2012 (Figure 7.1).

In contrast, around 94% of students from metro areas met the minimum standard in reading from 2008 to 2012. This was similar for students in provincial areas.

**Figure 7.1** Proportion meeting the minimum standard in Year 3 reading, by remoteness, 2008 to 2012

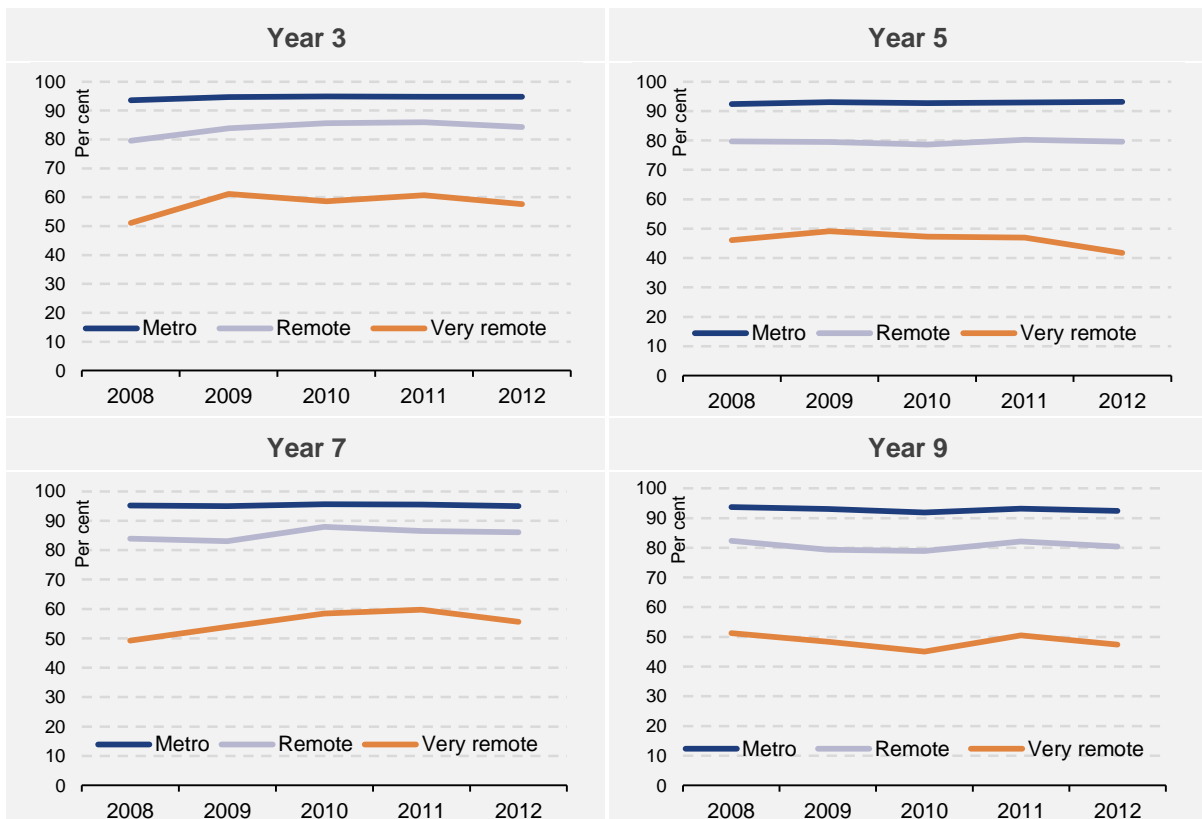


Source: ACARA, NAPLAN—see Appendix C.

## Improvements in reading achievement in Year 3 in remote areas

There were improvements in the proportion of students in remote areas meeting the minimum standard in Year 3 reading from 79.6% in 2008 to 84.3% in 2012 (Figure 7.2). There were no other significant changes for remote or very remote students. Although the gap is greatest between metro and very remote areas, both remote and very remote areas are shown. This is due to the small number of students living in very remote areas.

**Figure 7.2 Proportion meeting the minimum standard in reading in metro, remote and very remote areas, 2008 to 2012**



Source: ACARA, NAPLAN—see Appendix C.

### Remote areas have high proportions of Indigenous students

There is a link between the outcomes for remote and very remote areas, and Indigenous students' results. This is due to the compounding effects of high proportions of Indigenous students who live in remote and very remote areas.

Although Indigenous people make up 3.0% of Australia's population, they are 16.3% of its remote and 45.1% of its very remote population.

For Year 3 reading for example, the proportion of Indigenous students who reached the national minimum standard in metro areas was 82.6% compared to 61.2% in remote areas, a difference of 21.4 percentage points. For non-Indigenous students, the figures were 95.2% in metro areas and 91.6% in remote areas, a difference of 3.6 percentage points.

# Leaving school

**20–24 year olds from remote and very remote areas had low levels of Year 12 or equivalent attainment, but the rate increased from 2006 to 2011. The proportion of 17–24 year olds fully engaged in work or study also increased.**

## More 20–24 year olds who live in remote areas attained Year 12 or equivalent

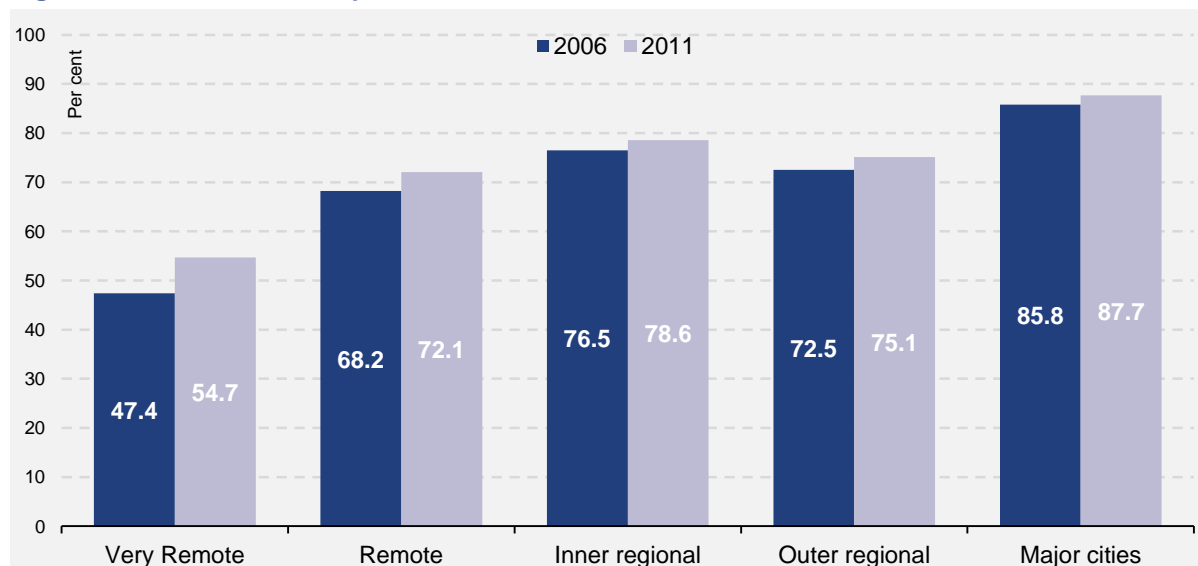
The proportions of young people (20–24 year olds) who attained Year 12 or equivalent or Certificate II or above increased across all geographic areas between 2006 and 2011 (Figure 7.3).

The proportion of young people living in very remote areas who attained Year 12 or equivalent increased from 47.4% in 2006 to 54.7% in 2011. This was an increase of 7.3 percentage points. The proportions of young people in remote areas also increased to 72.1% in 2011. This was an increase of 3.9 percentage points.

The proportion of young people in major cities with Year 12 or equivalent increased from 85.8% in 2006 to 87.7% in 2011, an increase of 1.9 percentage points.

The gap between young people outside major cities and young people in major cities with Year 12 or equivalent narrowed from 2006 to 2011. The gap between young people in remote areas and in major cities reduced from 17.6 percentage points in 2006 to 15.6 percentage points in 2011.

**Figure 7.3 Year 12 or equivalent or Certificate II or above, remoteness, 2006 and 2011**



Source: ABS 2006 and 2011, Census of Population and Housing—see Appendix C.

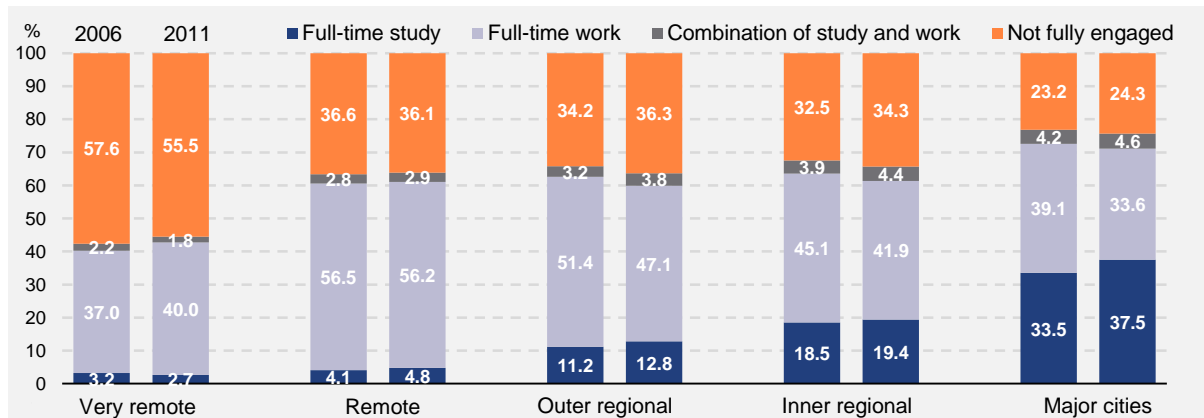
### More 17–24 year olds from remote areas fully engaged in work or study

From 2006 to 2011, the proportion of young people (17–24 year olds) not fully engaged in work, study or training increased in major cities and regional areas, by up to 2.1 percentage points (Figure 7.4).

However, from 2006 to 2011, the proportion of young people not fully engaged in work, study or training decreased in very remote areas, by 2.1 percentage points, and in remote areas, by 0.5 percentage points. The improvement in very remote areas was due to an increase of three percentage points in the proportion engaged in full-time work in 2011. The improvement in remote areas was due to an increase of 0.7 percentage points in the proportion studying full-time in 2011.

The gap between young people in very remote areas and in major cities who were not fully engaged fell from 34.4 percentage points in 2006 to 31.2 percentage points in 2011. The gap between young people in remote areas and in major cities also fell from 13.4 percentage points in 2006 to 11.8 percentage points in 2011.

**Figure 7.4 17–24 year olds fully engaged in work or study, by remoteness, 2006 and 2011**



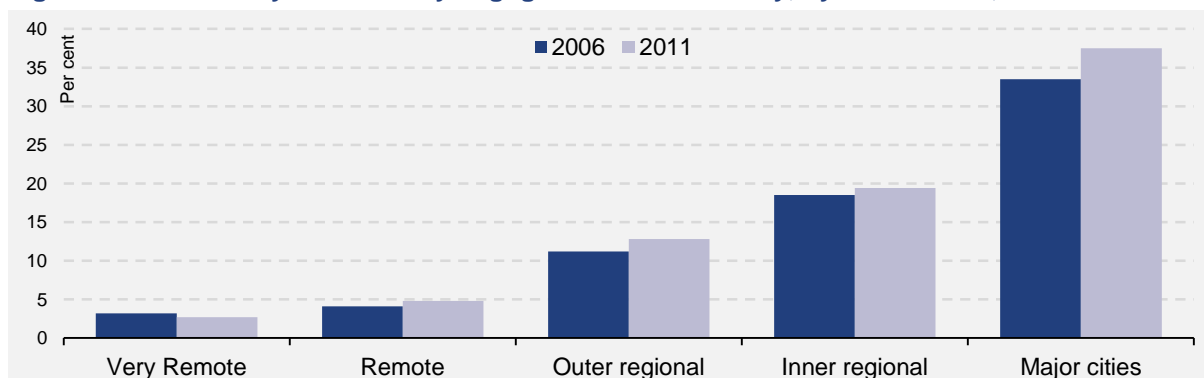
Source: ABS 2006 and 2011, Census of Population and Housing—see Appendix C.

### Young people from remote areas less likely to be engaged in full-time study

The differences between the groups were mostly driven by the levels engaged in full-time study (Figure 7.5). From 2006 to 2011, the proportion of young people in major cities studying full-time increased by 4.0 percentage points to 37.5% in 2011. By contrast, the proportion of young people in remote areas studying full-time increased by 0.7 percentage points to 4.8% in 2011.

The gap between young people living in remote areas and in major cities who were engaged in full-time study increased from 29.4 percentage points in 2006 to 32.7 percentage points in 2011.

**Figure 7.5 17–24 year olds fully engaged in full-time study, by remoteness, 2006 and 2011**



Source: ABS 2006 and 2011, Census of Population and Housing—see Appendix C.



## Chapter 8

# Improving performance reporting

This chapter outlines progress on improving the performance reporting framework for the National Education Agreement and identifies areas for further improvement.

# Prioritising work on data development

**Governments are working on improving education data though this work needs to be faster. Data for performance reporting has gaps in the coverage of some sectors and groups. The quality and timeliness of some data need improvement.**

We have previously highlighted the need to fast track work to improve data sets both within and between sectors of education and training. The aim is to be able to measure and report on learning over the life cycle and provide evidence for policy and public accountability.

The 2012 review of the National Education Agreement recommended priorities for data development work. An overall strategy is being developed under the auspices of the Standing Council on School Education and Early Childhood (SCSEEC) and the Standing Council on Tertiary Education, Skills and Employment (SCOTESE). While this is a good start, the council encourages governments to accelerate this work to improve reporting. Projects should be prioritised and a clear planning framework developed to outline timing and responsibilities.

We recognise that governments will need to determine priorities in a way that supports a range of users in policy development, research, and program management and reporting.

We have considered which developments should be given priority to improve our performance reporting for public accountability under the National Education Agreement. These developments are outlined below.

## **Work on data development needs to move faster**

National collaborative work on data development has improved the performance information available. Achievements to date include:

- the development and implementation of comprehensive reporting on literacy and numeracy outcomes of school students through NAPLAN
- the development of a national early childhood and care data collection that captures all early childhood settings
- the development and adoption of the Australian Early Development Index to measure, describe and monitor Australian children's development over time
- better reporting on sub-groups, including coherence in definitions and consistency across State and Territory collections.

A cross-sectoral working party in education and training (SCDC) has been working on a number of initiatives to link and integrate data within and between sectors of education and training. With continued collection and sharing of student level data, this has the potential to provide a wide range of data that can be analysed in depth, including longitudinally.

Data integration projects have started in the early childhood, schools and vocational education and training (VET) sectors. One important initiative is the development of the unique student identifier (USI) for the VET sector. This will allow training outcomes to be accumulated over time and recorded

at the student record level, informing both individual and population level reporting on outcomes. The former Commonwealth government introduced a Bill into the Parliament in March 2013, however the Bill had not passed by September 2013.

Although a start has been made in important areas, these projects should be prioritised within a clear planning framework outlining timing and responsibilities.

### **Further work needed on comparability of some administrative data collections**

We have used data from the National Early Childhood Education and Care Collection (NECECC) for the first time this year to report on participation in early childhood education.

The 2012 NECECC addressed data quality and the limited coverage of preschool programs in some sectors (such as limited non-government coverage). The discrete administrative collections of States and Territories were aligned with the standards in the Early Childhood Education and Care National Minimum Data Set. This improved data availability and consistency across the States and Territories.

However, the collection requires further development and investment to improve reporting on enrolment and attendance as population participation measures. This would allow for better reporting on differences between States and Territories' performance.

In the schools collections, from 2014 onwards, newly agreed national standards for attendance data will allow national comparability for the first time. The 2012 review of the National Education Agreement recommended that COAG use administrative data on Year 12 completions to supplement the Year 12 or equivalent qualification attainment indicator, which currently focusses on the older age group of 20 to 24 year olds.

This year, we used Census data on Year 12 attainment to examine performance at a State and Territory level. However, from next year, we will have to use the Survey of Education and Work (SEW) alone to report on Year 12 attainment, which cannot reliably measure year to year changes at the State and Territory level. In future years we would like to be able to report reliable administrative data on Year 12 completions, as a supplement to reporting using the SEW.

ACARA is currently leading a national committee working on data standards on a range of senior secondary outcomes indicators, including Year 12 completions. This work is due for completion by June 2014.

### **Information on some groups needs to improve, particularly for rural and remote areas**

Our previous education reports have highlighted the need to improve the capacity to report on sub-groups for some indicators.

For reporting on schooling outcomes, there has been some national collaborative work on definitions and data standards. The data standards work to enable comparability across States and Territories and schooling systems has been completed for students with disabilities, for staged national implementation and reporting from 2016 onwards.

This year, we received limited data for indicators to report on outcomes for rural and remote areas. We will work with the Secretariat for the Steering Committee for the Review of Government Service Provision and data agencies to look at the feasibility of disaggregating data for more measures by location.



# Appendices



# Appendix A

# The National Education Agreement

## About the Agreement

The National Education Agreement—the agreement between the Commonwealth, State and Territory governments in relation to education—commenced on 1 January 2009. Its objective is that all Australian school students acquire the knowledge and skills to participate effectively in society and employment in a globalised economy.

COAG reviewed the agreement in 2012, and amended some performance indicators. The following diagram shows the structure, the revised indicators and targets for the agreement.

## Performance indicators not reported

Each year, we report on only a selection of performance indicators in the agreement. In some years, we cannot report on indicators for reasons such as data not being available or measures not yet being agreed between governments.

We also may choose not to report indicators for which we have been given data. Indicators we choose not to report in detail may be omitted because there has been little change since the previous year or because they have been reported on in full in our other reports, such as the National Indigenous Reform Agreement reports. Additionally, we may choose not to report on an indicator because we think the data are not helpful for measuring progress toward COAG's outcome. Data for indicators not reported in detail are published on our website in our statistical supplement to this report.

## National Education Agreement Structure

**Objective: All Australian school students acquire the knowledge and skills to participate effectively in society and employment in a globalised economy**

**All children are engaged in and benefiting from schooling**

The rate of student attendance at school

**Young people are meeting basic literacy and numeracy standards, and overall levels of literacy and numeracy are improving**

Literacy and numeracy achievement of Year 3, 5, 7 and 9 students in national testing

**Australian students excel by international standards**

The proportion of students in the bottom and top levels of performance in international testing

**Young people make a successful transition from school to work and further study**

The proportion of young people who have attained at least a Year 12 or equivalent or AQF Certificate Level II/III or above

The proportion of young people participating in post-school education, training or employment

**Schooling promotes social inclusion and reduces the educational disadvantage of children, especially Indigenous children**

All performance indicators are to be disaggregated with specific measures included under Outcomes 1, 2 and 4

**Performance targets**

Lift the Year 12 or equivalent or Certificate II attainment rate to 90 per cent by 2015

Lift the Year 12 or equivalent or Certificate III attainment rate to 90 per cent by 2020

Halve the gap for Indigenous students in reading, writing and numeracy by 2018

At least halve the gap for Indigenous students in Year 12 or equivalent attainment rates by 2020

**Key**

**Outcome**

Included in this report

Not reported in detail though data available

Cannot be reported this year

# Appendix B

## Terms used in this report

<b>ABS</b>	Australian Bureau of Statistics
<b>ACARA</b>	Australian Curriculum, Assessment and Reporting Authority
<b>AEDI</b>	Australian Early Development Index
<b>AQF</b>	Australian Qualifications Framework
<b>Census</b>	Census of Population and Housing
<b>COAG</b>	Council of Australian Governments
<b>Confidence interval</b>	A measure of the uncertainty attached to a survey result
<b>DEEWR</b>	Department of Education, Employment and Workplace Relations
<b>Indigenous</b>	The terms 'Indigenous', 'Indigenous Australians' and 'Indigenous people' are used to refer to Australia's Aboriginal and/or Torres Strait Islander peoples.
<b>NAPLAN</b>	National Assessment Program—Literacy and Numeracy. NAPLAN is a national, annual set of tests in literacy and numeracy for students in Years 3, 5, 7 and 9.
<b>Absent</b>	A student who was not at school on test day or was not able to sit the test due to accident or mishap.
<b>Average score</b>	The average of all student scores in a particular State or Territory or for particular groups such as Indigenous or remote.
<b>Domains</b>	There are a total of five learning domains tested as part of NAPLAN—reading, writing, spelling, grammar and punctuation and numeracy.
<b>Exempt</b>	A student with a language background other than English who arrived from overseas less than a year before the tests or a student with significant intellectual disability is exempt from sitting the tests.

<b>Gain</b>	The amount of change between two time periods for the same group of students, eg the change in the scores of students in Year 3 in 2008 who became Year 5 in 2010.
<b>National minimum standard</b>	The level at which students have typically demonstrated only the basic elements of literacy and numeracy for the year level.
<b>Not assessed</b>	The total of exempt, absent and withdrawn students.
<b>np</b>	Not publishable. Data are not published as there were either no students tested or the number of students tested was less than 30.
<b>Participation rate</b>	The number of assessed and exempt students as a percentage of the total number of students in that year.
<b>Socio-economic status (SES)</b>	SES is based upon the highest educational qualification of either parent. Low SES students are those with a parent who has Year 11 or below only. High SES students are those with a parent who has a Bachelor degree or higher.
<b>Withdrawn</b>	A student withdrawn from testing by a parent/carer. Withdrawals are intended to address issues such as religious beliefs and philosophical objections to testing.
<b>NECECC</b>	National Early Childhood Education and Care Collection
<b>NIRA</b>	National Indigenous Reform Agreement
<b>OECD</b>	Organisation for Economic Cooperation and Development
<b>PIRLS</b>	Progress in International Reading Literacy Study
<b>PISA</b>	Programme for International Student Assessment

<p><b>Preschool</b></p>	<p>In this report, the term 'preschool' is used broadly to refer to 'preschool programs'.</p> <p>Consistent with the Early Childhood Education and Care National Minimum Data Set, a preschool program is defined as a structured, play-based learning program, delivered by a degree qualified teacher, primarily aimed at children in the year before they commence full-time schooling. This is irrespective of the type of institution that provides it, or whether it is government funded, or privately provided. Programs may be delivered in a variety of service settings including separate preschools or kindergartens, long day care centres or in association with a school.</p>
<p><b>Attendance</b></p>	<p>A child is classed as attending a preschool program if they were enrolled and present for at least one hour during the reference week.</p> <p>Children who were absent—for example, due to illness or extended holiday leave—were not counted as attending.</p> <p>For the 2012 National Early Childhood Education and Care Collection (NECECC), the reference period was in July/August 2012. While some jurisdictions preferred to incorporate a reference period of two weeks that included the collection date, to better reflect their preschool program delivery models, attendance data are derived from a representative reference week.</p>
<p><b>Enrolment</b></p>	<p>Enrolled means the child was offered a place in the preschool program and:</p> <p>attended the preschool program for at least one hour during the reference period; or</p> <p>was absent during the reference period due to illness or extended holiday leave, but was expected to return.</p>
<p><b>Remoteness</b></p>	<p>Different remoteness classifications are used in different datasets. The ABS' Census of Population and Housing uses the standard ABS classification of remoteness (ARIA). Remoteness is defined as major cities, inner regional, outer regional, remote and very remote areas. The division is based on the physical road distance from urban centres of varying sizes.</p> <p>Remoteness in NAPLAN is based on the Schools Geographic Location Classification Scheme of the former Ministerial Council for Education, Early Childhood Development and Youth Affairs (MCEECDYA). It classifies the locality of individual schools into metro, provincial, remote and very remote areas. It uses a mixture of definitions including ARIA.</p>

<b>Significant</b>	The term 'significant' is used to say that a difference or change is not due to chance. There are various tests for significance. In this report, significance testing was done by the ABS and ACARA. The word 'significant' is not used outside this statistical meaning. See also Appendix D.
<b>SCRGSP</b>	Steering Committee for the Review of Government Service Provision, an intergovernmental committee, supported by a Secretariat within the Productivity Commission. Under the Intergovernmental Agreement on Federal Financial Relations, the Steering Committee is responsible for compiling and supplying performance information for the COAG Reform Council's reports.
<b>SCOTese</b>	Standing Council on Tertiary Education, Skills and Employment
<b>SCSEEC</b>	Standing Council on School Education and Early Childhood
<b>SEIFA IRSD</b>	Socio-Economic Index for Areas Index of Relative Socio-economic Disadvantage
<b>TIMSS</b>	Trends in International Mathematics and Science Study
<b>Trajectory</b>	Trajectories are a guide to progress from baseline performance to the achievement of a target. They are an indicative path only and are not intended to forecast future progress at any point
<b>VET</b>	Vocational Education and Training
<b>Year 12 or equivalent attainment rate</b>	Proportion of the 20–24 year old population having attained at least a Year 12 or equivalent or AQF Certificate II/III or above.
<b>Young people</b>	<p>In this report, 'young people' is used to refer to two different age groups for the following indicators:</p> <p>For Year 12 or equivalent attainment, 'young people' refer to the 20–24 year old population.</p> <p>For fully engaged in work, further education or training, 'young people' refer to the 17–24 year old population.</p>

# Appendix C

## Data sources and notes

The Steering Committee for the Review of Government Service Provision compiled and supplied performance information to the COAG Reform Council for this report. We have also used performance information in addition to that provided by the Steering Committee. We publish the Steering Committee's report and any additional data we have used in our statistical supplement. The table below lists each figure in the report and gives a corresponding reference to the table in our statistical supplement, available on our website.

The Steering Committee supplies data quality statements on the data they provide, which we have re-published in the statistical supplement to this report. Where users require data quality information beyond that provided alongside the non-Steering Committee data in our statistical supplement, data quality information regarding these sources is generally available from the relevant data provider.

### National Education Agreement: figure numbers and performance information

Figure 1.1: Attendance by 4 and 5 year olds enrolled in a preschool program, 2012

Reference	Additional.1 Attendance by 4 and 5 year old children in a preschool program, 2012
Source	ABS (2013d), Preschool Education Australia 2012
Notes	Proportions are calculated as follows: <ul style="list-style-type: none"> <li>the numerator is children aged 4 and 5 years attending a preschool program</li> <li>the denominator is children aged 4 and 5 years enrolled in a preschool program.</li> </ul>

Figure 1.2: Weekly hours of attendance for 4 and 5 year olds enrolled in a preschool program, 2012

Reference	Additional.2 Weekly hours of attendance by 4 and 5 year olds enrolled in a preschool program, 2012
Source	ABS (2013d), Preschool Education Australia 2012
Notes	Proportions are calculated as follows: <ul style="list-style-type: none"> <li>the numerator is children aged 4 and 5 years by weekly hours of attendance</li> <li>the denominator is children aged 4 and 5 years enrolled in a preschool program.</li> </ul>

### National Education Agreement: figure numbers and performance information

Figure 1.3: Attendance at pre-primary education and average achievement levels in international testing, Year 4 students in Australia, 2011

Reference	Additional.3 Attendance at pre-primary education and average achievement levels in international testing, Year 4 students in Australia, 2011, score points
Source	ACER, (2012c), Highlights from TIMSS & PIRLS 2011 from Australia's perspective, ACER, Melbourne

Figure 1.4: Results by developmental domain, Australia, 2012

Reference	Additional.4 AEDI results by developmental domain, Australia, 2012, per cent
Source	Australian Government (2013) A Snapshot of Early Childhood Development in Australia 2012—AEDI National Report, Australian Government, Canberra.

Figure 1.5: Children developmentally vulnerable in one or more domains, 2009 and 2012

Reference	Additional.5 AEDI results for children who are developmentally vulnerable in one or more domains, 2009 and 2012, per cent
Source	Australian Government 2013. A Snapshot of Early Childhood Development in Australia 2012—AEDI National Report, Australian Government, Canberra.

Figure 1.6: Student attendance, government schools, 2008 to 2012

Reference	NEA.1.4 Student attendance rates, government schools, 2012
Source	ACARA (unpublished) National Student Attendance Data Collection.
Notes	Data on government schools only are reported here, as data are not comparable across school sectors and States and Territories due to differences in collection and reporting processes.

Figure: 2.1 Average score, reading, 2008 to 2012

Reference	NEA.2.25, NEA.2.28, NEA.2.31, NEA.2.34 NAPLAN mean scale scores for reading Year 3, Year 5, Year 7 and Year 9 students, by State and Territory, by Indigenous status and geolocation, 2012
Source	ACARA (2012) NAPLAN Achievement in Reading, Writing, Language Conventions and Numeracy: National Report for 2012, ACARA, Sydney
Notes	Significance testing published in ACARA (2012)

## National Education Agreement: figure numbers and performance information

Figure 2.2: Proportions meeting the national minimum standard, reading, 2008 to 2012

Reference	NEA.2.1, NEA.2.4, NEA.2.7, NEA.2.10 Proportion of Year 3, Year 5, Year 7 and Year 9 students who achieved at or above the national minimum standard for reading, by State and Territory, by Indigenous status, by geolocation, 2012
Source	ACARA (2012) NAPLAN Achievement in Reading, Writing, Language Conventions and Numeracy: National Report for 2012, ACARA, Sydney
Notes	Significance testing was provided by ACARA.

Figure 2.3: Average score, numeracy, 2008 to 2012

Reference	NEA.2.27, NEA.2.30, NEA.2.33, NEA.2.36 NAPLAN mean scale scores for numeracy, Year 3, Year 5, Year 7 and Year 9 students by State and Territory, by Indigenous status and geolocation, 2012
Source	ACARA (2012) NAPLAN Achievement in Reading, Writing, Language Conventions and Numeracy: National Report for 2012, ACARA, Sydney
Notes	Significance testing published in ACARA (2012)

Figure 2.4: Proportions meeting the national minimum standard, numeracy, 2008 to 2012

Reference	NEA.2.3, NEA.2.6, NEA.2.9, NEA.2.12 Proportion of Year 3, Year 5, Year 7 and Year 9 students who achieved at or above the national minimum standard for numeracy, by State and Territory, by Indigenous status, by geolocation, 2012
Source	ACARA (2012) NAPLAN Achievement in Reading, Writing, Language Conventions and Numeracy: National Report for 2012, ACARA, Sydney
Notes	Significance testing was provided by ACARA.

Figure 2.5: Participation rates, reading, 2008 to 2012

Reference	NIRA.6(b).1 to NIRA.6(b).4 Year 3, Year 5, Year 7 and Year 9 student participation in assessment, by Indigenous status, 2012
Source	ACARA (2012 and unpublished) NAPLAN Achievement in Reading, Writing, Language Conventions and Numeracy: National Report for 2012, ACARA, Sydney

Figure 2.6: Exempt, absent and withdrawn students, reading, Years 3 and 9, 2012

Reference	NIRA.6(b).5 Proportion of student exemptions, by Indigenous status, 2012 NIRA.6(b).6 Proportion of student absences, by Indigenous status, 2012 NIRA.6(b).7 Proportion of student withdrawals, by Indigenous status, 2012
Source	ACARA (2012) NAPLAN Achievement in Reading, Writing, Language Conventions and Numeracy: National Report for 2012, ACARA, Sydney

## National Education Agreement: figure numbers and performance information

Figure 2.7: Participation in the reading test versus proportion meeting the national minimum standard, Year 3, 2012

Reference	NEA.2.1 Proportion of year 3 students who achieved at or above the national minimum standard for reading, by State and Territory, by Indigenous status, by geolocation, 2012 NIRA.6(b).1 Year 3 student participation in assessment, by Indigenous status, 2012
Source	ACARA (2012) NAPLAN Achievement in Reading, Writing, Language Conventions and Numeracy: National Report for 2012, ACARA, Sydney

Figure 2.8: Average scores, reading Gain in reading, by State and Territory

Reference	NEA.2.25, NEA.2.28, NEA.2.31, NEA.2.34 NAPLAN mean scale scores for reading Year 3, Year 5, Year 7 and Year 9 students, by State and Territory, by Indigenous status and geolocation, 2012
Source	ACARA (2012) NAPLAN Achievement in Reading, Writing, Language Conventions and Numeracy: National Report for 2012, ACARA, Sydney

Figure 3.1: PIRLS reading achievement, Year 4, benchmarks, 2011

Reference	NEA 3.19 Proportion of Year 4 students international level of reading literacy in PIRLS assessments by State and Territory, 2011 Additional.8 Proportion of students reaching international benchmarks, top performing countries and Australia, Year 4, 2007 and 2011, per cent
Source	ACER (2012a) Monitoring Australian Year 4 student achievement internationally: TIMSS and PIRLS 2011, ACER, Melbourne

Figure 3.2: TIMSS maths achievement, Year 4, benchmarks, 2011

Reference	NEA 3.1 Proportion of Year 4 students international level of mathematics achievement in TIMSS assessments by State and Territory, 2011 Additional.8 Proportion of students reaching international benchmarks, top performing countries and Australia, Year 4, 2007 and 2011, per cent
Source	ACER (2012a) Monitoring Australian Year 4 student achievement internationally: TIMSS and PIRLS 2011, ACER, Melbourne

Figure 3.3: TIMSS science achievement, Year 4, benchmarks, 2011

Reference	NEA 3.10 Proportion of Year 4 students international level of science achievement in TIMSS assessments by State and Territory, 2011 Additional.8 Proportion of students reaching international benchmarks, top performing countries and Australia, Year 4, 2007 and 2011, per cent
Source	ACER (2012a) Monitoring Australian Year 4 student achievement internationally: TIMSS and PIRLS 2011, ACER, Melbourne

## National Education Agreement: figure numbers and performance information

Figure 3.4: TIMSS maths achievement, Year 8, benchmarks, 2011

Reference	NEA 3.5 Proportion of Year 8 students international level of mathematics achievement in TIMSS assessments by State and Territory, 2011 Additional.9 Proportion of students reaching international benchmarks, top performing countries and Australia, Year 8, 2007 and 2011, per cent
Source	ACER (2012b) Monitoring Australian Year 8 student achievement internationally: TIMSS 2011, ACER, Melbourne

Figure 3.5: TIMSS science achievement, Year 8, benchmarks, 2011

Reference	NEA 3.14 Proportion of Year 8 students international level of science achievement in TIMSS assessments by State and Territory, 2011 Additional.9 Proportion of students reaching international benchmarks, top performing countries and Australia, Year 8, 2007 and 2011, per cent
Source	ACER (2012b) Monitoring Australian Year 8 student achievement internationally: TIMSS 2011, ACER, Melbourne

Figure 4.1: Year 12 or equivalent or Certificate II or above attainment, 2006 and 2011

Reference	NEA.4.1: Proportion of young people aged 20–24 years who have completed year 12 (or equivalent) or gained a qualification at AQF Certificate II level or above, (year)
Source	ABS (unpublished) Census of Population and Housing, 2006 and 2011

Figure 4.2: 20–24 year olds who have completed Year 12 or equivalent or Certificate II or above , 2002–2012

Reference	Additional.10 Proportion of 20–24 year olds who have completed Year 12 or equivalent or Certificate II or above, 2002–2012
Source	ABS Survey of Education and Work, 2012
Notes	The projection uses simple linear regression and an R squared value of 91.5%. The R squared value is a measure of how the line fits the data. Higher values indicate a better fit.

Figure 4.3: 15–19 year olds who have completed Year 12 or equivalent or Certificate II or above, 2002–2012

Reference	Additional.11 Proportion of 15–19 year olds who have completed Year 12 or equivalent or Certificate II or above, 2002–2012
Source	ABS Survey of Education and Work, 2012

### National Education Agreement: figure numbers and performance information

Figure 4.4: 17–24 year olds fully engaged in work or study, 2006 and 2011

Reference	NEA.5.1, NEA.5.2: Proportion of persons aged 17–24 years who are fully engaged in post-school education, training or employment, by state and territory, (year)
Source	ABS (unpublished) Census of Population and Housing, 2006 and 2011

Figure 4.5: 17–24 year olds fully engaged in work or study, 2011

Reference	NEA.5.1: Proportion of persons aged 17–24 years who are fully engaged in post-school education, training or employment, by state and territory, 2011
Source	ABS (unpublished) Census of Population and Housing, 2011

Figure 4.6: Change in 17–24 year olds fully engaged in work or study, 2006–11

Reference	NEA.5.1, NEA.5.2: Proportion of persons aged 17–24 years who are fully engaged in post-school education, training or employment, by state and territory, (year)
Source	ABS (unpublished) Census of Population and Housing, 2006 and 2011

Figure 5.1: Results by developmental domain , Indigenous status, 2012

Reference	Additional.6 AEDI results by developmental domain, Indigenous status, 2012
Source	Australian Government (2013) A Snapshot of Early Childhood Development in Australia 2012—AEDI National Report, Australian Government, Canberra

Figure 5.2: Indigenous students attendance rates, government schools, 2008 to 2012

Reference	NEA.1.4 Student attendance rates, government schools, by Indigenous status, 2012
Source	ACARA (unpublished) National Student Attendance Data Collection
Notes	Data on government schools only are reported here, as data are not comparable across school sectors and States and Territories due to differences in collection and reporting processes.

## National Education Agreement: figure numbers and performance information

Figure 5.3: Proportion of Indigenous students meeting the national minimum standard, reading, 2012

Reference	NEA.2.1 to NEA.2.12 Proportion of Year 3, Year 5, Year 7 and Year 9 students who achieved at or above the national minimum standard for (domain), by State and Territory, by Indigenous status, by geolocation, 2012
Source	ACARA (2012) NAPLAN Achievement in Reading, Writing, Language Conventions and Numeracy: National Report for 2012, ACARA, Sydney
Notes	Significance testing was provided by ACARA.

Figure 5.4: Proportion of Indigenous students meeting the national minimum standard, numeracy, 2012

Reference	NEA.2.1 to NEA.2.12 Proportion of Year 3, Year 5, Year 7 and Year 9 students who achieved at or above the national minimum standard for (domain), by State and Territory, by Indigenous status, by geolocation, 2012
Source	ACARA (2012) NAPLAN Achievement in Reading, Writing, Language Conventions and Numeracy: National Report for 2012, ACARA, Sydney
Notes	Significance testing was provided by ACARA.

Figure 5.5: Gap between Indigenous and non-Indigenous students in the proportion meeting minimum standards, reading and numeracy, 2008 to 2012

Reference	NEA.2.1 to NEA.2.12 Proportion of Year 3, Year 5, Year 7 and Year 9 students who achieved at or above the national minimum standard for (domain), by State and Territory, by Indigenous status, by geolocation, 2012
Source	ACARA (2012) NAPLAN Achievement in Reading, Writing, Language Conventions and Numeracy: National Report for 2012, ACARA, Sydney

Figure 5.6: Year 12 or equivalent or Certificate II or above, Indigenous status, 2006 and 2011

Reference	NEA.4.2: Proportion of young people aged 20–24 years who have completed year 12 (or equivalent) or attained a formal qualification at AQF Certificate II level or above, by Indigenous status, (year)
Source	ABS (unpublished) Census of Population and Housing, 2006 and 2011

Figure 5.7: 17–24 year olds fully engaged in work or study, Indigenous status, 2006 and 2011

Reference	NEA.5.5, NEA.5.6: Proportion of persons aged 17–24 years who are fully engaged in post-school education, training or employment, by state and territory and Indigenous status, (year)
Source	ABS (unpublished) Census of Population and Housing, 2006 and 2011

## National Education Agreement: figure numbers and performance information

Figure 5.8: Indigenous 17–24 year olds fully engaged in work or study, 2006 and 2011

Reference	NEA.5.5, NEA.5.6: Proportion of persons aged 17–24 years who are fully engaged in post-school education, training or employment, by state and territory and Indigenous status, 2011
Source	ABS (unpublished) Census of Population and Housing, 2006 and 2011

Figure 6.1: Proportion meeting the national minimum standard in reading, Year 3, by socio-economic background, 2012

Reference	NEA.2.13 Proportion of year 3 students who achieved at or above the national minimum standard for reading, by State and Territory, by parental education and parental occupation, 2012
Source	ACARA (2012) NAPLAN Achievement in Reading, Writing, Language Conventions and Numeracy: National Report for 2012, ACARA, Sydney

Figure 6.2: Proportion meeting the national minimum standard in reading, Year 3, by parental education level, 2008 to 2012

Reference	NEA.2.13 Proportion of Year 3 students who achieved at or above the national minimum standard for reading, by State and Territory, by parental education and parental occupation, 2012
Source	ACARA (2012) NAPLAN Achievement in Reading, Writing, Language Conventions and Numeracy: National Report for 2012, ACARA, Sydney

Figure 6.3: Proportion meeting the national minimum standard, low and high socio-economic status background, reading, 2012

Reference	NEA.2.13, NEA2.16, NEA2.19, NEA2.22 Proportion of Year 3, Year 5, Year 7 and Year 9 students who achieved at or above the national minimum standard for reading, by State and Territory, by parental education and parental occupation, 2012
Source	ACARA (2012) NAPLAN Achievement in Reading, Writing, Language Conventions and Numeracy: National Report for 2012, ACARA, Sydney
Notes	Significance testing was not available.

Figure 6.4: Year 12 or equivalent or Certificate II or above, socio-economic status, 2006 and 2011

Reference	NEA.4.2: Proportion of young people aged 20–24 years who have completed year 12 (or equivalent) or attained a formal qualification at AQF Certificate II level or above, by SEIFA IRSD quintiles, (year)
Source	ABS (unpublished) Census of Population and Housing, 2006 and 2011

## National Education Agreement: figure numbers and performance information

Figure 6.5: 17–24 year olds fully engaged in work or study, socio-economic status, 2006 and 2011

Reference	NEA.5.3, NEA.5.4: Proportion of persons aged 17–24 years who are fully engaged in post-school education, training or employment, by state and territory and SEIFA IRSD, 2011, 2006
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Source	ABS (unpublished) Census of Population and Housing, 2006 and 2011
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Figure 7.1: Proportion meeting the national minimum standard in reading, Year 3, geo-location, 2008 to 2012

Reference	NEA.2.1 Proportion of year 3 students who achieved at or above the national minimum standard for reading, by State and Territory, by Indigenous status, by geolocation, 2012
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Source	ACARA (2012) NAPLAN Achievement in Reading, Writing, Language Conventions and Numeracy: National Report for 2012, ACARA, Sydney
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Figure 7.2: Proportion meeting the national minimum standard in reading, metro, remote and very remote areas, 2008 to 2012

Reference	NEA.2.1, NEA.2.4, NEA.2.7, NEA.2.10 Proportion of Year 3, Year 5, Year 7 and Year 9 students who achieved at or above the national minimum standard for reading, by State and Territory, by Indigenous status, by geolocation, 2012
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Source	ACARA (2012) NAPLAN Achievement in Reading, Writing, Language Conventions and Numeracy: National Report for 2012, ACARA, Sydney
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Notes	Significance testing was provided by ACARA.
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Figure 7.3: Year 12 or equivalent or Certificate II or above, geo-location, 2006 and 2011

Reference	Additional.13 Proportion of young people aged 20–24 years who have completed Year 12 or equivalent or gained a qualification at AQF Certificate II or above, by remoteness, 2011 Additional.14 Proportion of young people aged 20–24 years who have completed Year 12 or equivalent or gained a qualification at AQF Certificate II or above, by remoteness, 2006
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Source	ABS (unpublished) Census of Population and Housing, 2006 and 2011
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Figure 7.4: 17–24 year olds fully engaged in work or study, geo-location, 2006 and 2011

Reference	Additional.15 Proportion of young people aged 17–24 years who are fully engaged in post-school education, training or employment, by remoteness, 2011 Additional.16 Proportion of young people aged 17–24 years who are fully engaged in post-school education, training or employment, by remoteness, 2006
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Source	ABS (unpublished) Census of Population and Housing, 2006 and 2011
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## National Education Agreement: figure numbers and performance information

Figure D.1: Students in the Northern Territory by Indigenous status, 2012

Reference	NEA.2.1 to NEA.2.12 Proportion of (year level) students who achieved at or above the national minimum standard for (domain), by State and Territory, by Indigenous status, by geolocation, 2012 NEA.2.25 to NEA.2.36 NAPLAN mean scale scores for (domain) (year level) students, by State and Territory, by Indigenous status and geolocation, 2012
Source	ACARA (2012) NAPLAN Achievement in Reading, Writing, Language Conventions and Numeracy: National Report for 2012, ACARA, Sydney

Figure D.2: How to read the state comparison figure

Notes	Guide to figures D.3, D.4 and D.5.
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Figure D.3: Reading, average scores, States and Territories compared, 2012

Reference	ACARA (2012) pp61, 125, 189, 253
Source	ACARA (2012) NAPLAN Achievement in Reading, Writing, Language Conventions and Numeracy: National Report for 2012, ACARA, Sydney
Notes	Significance testing published in ACARA (2012)

Figure D.4: Numeracy, average scores, States and Territories compared, 2012

Reference	ACARA (2012) pp62, 126, 190, 254
Source	ACARA (2012) NAPLAN Achievement in Reading, Writing, Language Conventions and Numeracy: National Report for 2012, ACARA, Sydney
Notes	Significance testing published in ACARA (2012)

Figure D.5: Writing, average scores, States and Territories compared, 2012

Reference	ACARA (2012) pp61, 125, 189, 253
Source	ACARA (2012) NAPLAN Achievement in Reading, Writing, Language Conventions and Numeracy: National Report for 2012, ACARA, Sydney
Notes	Significance testing published in ACARA (2012)

## National Education Agreement: figure numbers and performance information

Figure D.6: Achievement in writing, 2012

Reference	NEA.2.2, NEA.2.5, NEA.2.8, NEA.2.11 Proportion of (year level) students who achieved at or above the national minimum standard for writing, by State and Territory, by Indigenous status, by geolocation, 2012 NEA.2.26, NEA.2.29, NEA.2.32, NEA.2.35 NAPLAN mean scale scores for writing (year level) students, by State and Territory, by Indigenous status and geolocation, 2012
Source	ACARA (2012) NAPLAN Achievement in Reading, Writing, Language Conventions and Numeracy: National Report for 2012, ACARA, Sydney

Figure D.7: Overview of TIMSS and PIRLS international benchmarks

Source	ACER (2012c), Highlights from TIMSS & PIRLS 2011 from Australia's perspective, ACER, Melbourne
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Figure D.10: Key contextual factors

Source	NEA Performance information, Tables 6, 7 and 9 ABS (2012) Australian Demographic Statistics, June quarter 2012, cat. no. 3101.0, ABS, Canberra ABS (2013b) Estimates of Aboriginal and Torres Strait Islander Australians, June 2011, cat. no. 3238.0, ABS, Canberra ABS (2013c) Regional Population Growth, Australia, 2012, cat. no. 3218.0, ABS, Canberra
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# Appendix D

## Supporting information

### Approach to statistical testing in this report

#### Sources of error in data from surveys and censuses

This report uses data from both surveys, a sample drawn from the population of interest, and from censuses, including administrative collections, with information from the whole population of interest.

Surveys collect information from a subset of the population. As a sample is not the whole population it is possible that the results do not accurately reflect the whole population. This is sampling error which can be measured. Censuses, on the other hand, collect information from everyone in the population. A census has no sampling error and the data provided is said to be a true estimate. There may be other sources of error in data collected using a census approach.

In our reporting, only NAPLAN data quantifies and reports on other sources of error, including error associated with measurement and equating (year to year).

#### Assessing difference between data estimates

We often want to know if the results for two groups are actually different. This could be over two time periods or between sub-groups such as States and Territories or people from low and high socio-economic status backgrounds.

Assessing whether two results are different depends on whether the data are from a survey or a census. In a survey, two estimates that are different may not reflect actual differences in the population because the estimates are based on a sample of the population rather than the whole population. When we use survey data, they are tested for statistical significance. We use a test which defines a range within which 95% of results would fall. We compare the ranges of the two groups. Generally, if the ranges do not overlap then the difference in estimates is unlikely to be due to chance. These differences are called 'significant'. We do not note changes that are not significant in this report.

In a census, data come from a whole population meaning there is no sampling error. So these statistical significance testing concepts do not apply. We report differences in census data as actual differences—we do not describe such differences as 'significant' or otherwise.

#### Practical significance

For both surveys and censuses there is the issue of meaningfulness. If a change is small it may be statistically significant but not be considered to be of any practical significance. Practical significance means an observed change or difference represents real progress, improvement or change.

## Notes for Chapter 1: Engaged in and benefiting from school

### National Partnership on Early Childhood Education

In Chapter 1, we report on data for performance indicators under the National Partnership Agreement on Early Childhood Education (the National Partnership) which expired on 30 June 2013. In the National Partnership, governments committed to universal access to a preschool program for every child in the year before full-time schooling by 2013. The program was:

- to be delivered by a four year university qualified early childhood teacher
- in accordance with a national Early Years Learning Framework
- for 15 hours a week across 40 weeks in the year
- in a form that met the needs of parents
- at cost that was not a barrier to access.

A new National Partnership Agreement on Universal Access to Early Childhood Education began on 18 June 2013 and will expire on 30 June 2015. This National Partnership continues the commitment to universal access. The definition of a quality early childhood education program is now, in the year before full-time schooling:

- 600 hours per year (equivalent to 15 hours a week across 40 weeks in the year)
- and focuses on participation by vulnerable and disadvantaged children.

For 2012 and 2013, we report data for the indicators in the expired National Partnership. Reporting on the new National Partnership will begin in 2015.

### The National Early Childhood Education and Care Collection (NECECC)

The NECECC is designed to provide annual, nationally comparable data on early childhood education and care.

The NECECC measures enrolment and attendance in a preschool program. The reference period is up to two weeks. Collection of the NECECC is done on a census date of the first Friday in August of each year. To ensure that the collection is comparable across the States and Territories, governments have consistent collection dates and overlapping reference periods, with data reported for a representative reference week only.

The NECECC is compiled from administrative data collected by States and Territories, and the Commonwealth government. While improvements have been made to the NECECC over time, there are still some issues affecting the quality and coverage of data.

To ensure national comparability, States and Territories followed national data standards for the 2012 collection. However, not all governments were able to align their collection methods directly with these standards. This meant that not all data items are published for all States and Territories.

Currently, not all records in the NECECC are able to be reported at the unique child level (a unique identifier for each child). This means that there is a risk of duplicate counts across services and sectors for these records. It is also possible for a child to be attending preschool for more than one year, so that duplication may occur across time. Therefore, results for 2012 may overcount preschool enrolment and attendance.

The 2012 NECECC is limited by under-coverage of the preschool programs in some sectors, for example, the collection has limited non-government coverage. Data from Independent schools in the ACT were unavailable in 2012. Totals for the ACT in 2012 had an undercount.

For definitions of key terms like 'enrolment', 'attendance' and 'preschool', see Appendix C.

### **Calculation of the early childhood education indicators**

For the indicators we report, the 2012 data presented use the population of 4 and 5 year old children attending a preschool program for each State and Territory that we report on for the numerator. The population of 4 and 5 year old children enrolled in a preschool program for each State and Territory that we report on was used as the denominator. Reporting against the total population of 4 year olds (the cohort that is considered to be the best approximation for enrolment and attendance patterns) resulted in proportions that exceeded 100%, and could not be used.

Other methodologies have been used in State and Territory annual reporting under the National Partnership on Early Childhood Education to report on participation in a preschool program. These are available at <http://education.gov.au/>.

The NECECC currently reports data based on three concepts—'episodes', 'children' and 'children in year before full-time schooling'.

'Episodes' are the number of preschool programs delivered to children within a reference period. If a child is enrolled in more than one preschool then they are counted as having more than one episode.

'Children' counts children only once regardless of how many preschool programs they attend. There will be fewer unique children than episodes.

'Children in the year before full-time schooling' removes children who are aged 5 and in their second year of preschool. There are fewer children in the year before full-time schooling than unique children.

As data availability varied between the States and Territories, our indicators used data based on the concept of "children".

Data were available by 'children' in NSW, Victoria, Western Australia, South Australia, Tasmania, the ACT and the Northern Territory.

Data were only available by 'episodes' for Queensland and were therefore not included in this report.

For further information see:

- ABS 2013, *Preschool Education, Australia, 2012*, ABS Cat. No. 4240.0  
[http://www.ausstats.abs.gov.au/ausstats/subscriber.nsf/0/5AED3993A2C5D651CA257B2C000F62BA/\\$File/42400\\_2012.pdf](http://www.ausstats.abs.gov.au/ausstats/subscriber.nsf/0/5AED3993A2C5D651CA257B2C000F62BA/$File/42400_2012.pdf)
- ABS 2013 *National Early Childhood Education and Care Collection: Concepts, Sources and Methods, 2012*, ABS cat. no. 4240.0.55.001  
[http://www.abs.gov.au/ausstats/Subscriber.nsf/LookupAttach/4240.0.55.001Publication13.03.131/\\$File/4240055001\\_2012.pdf](http://www.abs.gov.au/ausstats/Subscriber.nsf/LookupAttach/4240.0.55.001Publication13.03.131/$File/4240055001_2012.pdf)

## The Australian Early Development Index

The Australian Early Development Index (AEDI) is a national population measure of children's development when they enter school. The AEDI was reported in 2009 and 2012.

Data are collected on all children during their first year of formal full-time schooling. Teachers complete checklists based on their knowledge and observation of the children in their class, along with demographic information from school enrolment forms.

The AEDI has five areas or domains for measuring early childhood development outcomes (Box D.1). Results from each domain are assessed separately on a scale of 0 to 10. In 2009, cut-off scores were created for three levels of development—developmentally vulnerable, developmentally at risk and developmentally on track. These cut-off scores were then used with the 2012 data to place students in each level. To create the cut-offs, children were ranked from lowest to highest in 2009. They were categorised as vulnerable if they were in the bottom 10% of students, at risk if they were between the bottom 10% and 25%, and on track if they were in the top 75% of students.

We use the composite measure, “children are developmentally vulnerable in one or more domains”, to report on progress in children's development between 2009 and 2012. Children who are developmentally vulnerable on one or more domains have at least one or more domain score below the 10<sup>th</sup> percentile. The difference in the proportion of children that were vulnerable in 2009 and 2012 results is tested for significance. The difference is statistically significant if it exceeds the ‘critical difference’ level, that is, the minimum level of change required between 2009 and 2012.

### Box D.1 AEDI domains for measuring early childhood development outcomes

**Physical health and well-being.** This measures children's physical readiness for the school day, physical independence and gross and fine motor skills.

**Social competence.** This measures children's overall social competence, responsibility and respect, approaches to learning and readiness to explore new things.

**Emotional maturity.** This measures children's pro-social and helping behaviour, anxious and fearful behaviour, aggressive behaviour and hyperactivity and inattention.

**Language and cognitive skills (school-based).** This measures the skills that are needed for school—a child's memory, basic literacy, and interest in literacy and numeracy.

**Communication and general knowledge.** This measures children's communication skills and general knowledge.

## Notes for Chapter 2: Literacy and numeracy

### Reporting in literacy and numeracy

The data used to report on literacy and numeracy are from the National Assessment Program—Literacy and Numeracy (NAPLAN).

Two measures are used—national minimum standard and average scores. The national minimum standard is the basic literacy and numeracy achievement which a student should have for a year level. Apart from the Northern Territory, 89.1% to 96.5% of students achieved at or above the national minimum standard in all year levels in reading and numeracy. In the Northern Territory, the range was from 61.3% to 74.0% across all year levels. The Northern Territory data may reflect, in part, the high

proportion of disadvantaged Indigenous students who generally have results at a lower level than their non-Indigenous peers (see below). The national minimum standard does not distinguish between groups of students or States and Territories very effectively.

For more information on NAPLAN see ACARA (2012) *NAPLAN Achievement in Reading, Persuasive Writing, Language Conventions and Numeracy: National Report for 2012* and [naplan.edu.au](http://naplan.edu.au).

### **Participation in NAPLAN**

The reported results for NAPLAN testing include all students, those who participated and those who did not. If the ability of students who participate is different from those who do not, results may be affected.

In NAPLAN, scores for absent and withdrawn students (non-participants) are imputed. These students are assigned scores based on students with similar background characteristics (for example, sex, geolocation and parental education). This is done to reduce the potential for bias in the results due to non-participation. Imputed scores are included in participation rates, the national minimum standard and average scores. It is done at a State and Territory level.

Exempt students are not assigned an imputed score—but they are included in the proportion below the national minimum standard. They are also included in participation rates as participating students but are not included in average scores.

It is ideal to have a high participation rate as this most accurately represents the achievement of all students. If a State or Territory has a low level of participation then more scores will be imputed.

Work commissioned by the council suggests that there is a likelihood for non-participants to be lower scoring students (see Adams 2012 and COAG Reform Council 2012, pp12–14 for more information). It is stressed that these conclusions are exploratory and only the first step in an analysis of participation.

### **Indigenous students in the Northern Territory**

Across all States and Territories, for Indigenous students, the range for proportions meeting the national minimum standard across reading and numeracy was 27.4% to 89.2%. Change in the proportion meeting the national minimum standard is a useful measure for assessing the performance of governments in addressing the needs of students in the lowest performance band.

Results for the Northern Territory may reflect, in part, the high proportion of disadvantaged Indigenous students. Indigenous children made up 44% of the 5–19 year old population. See *Indigenous Reform 2011–12: Comparing performance across Australia* (COAG Reform Council 2013) for more information.

The 2012 results for the Northern Territory by Indigenous status are shown in Figure D.1.

**Figure D.1 Students in the Northern Territory by Indigenous status, 2012**

	National minimum standard (%)				Average score (points)			
	<b>Indigenous</b>							
	<b>Year 3</b>	<b>Year 5</b>	<b>Year 7</b>	<b>Year 9</b>	<b>Year 3</b>	<b>Year 5</b>	<b>Year 7</b>	<b>Year 9</b>
Reading	39.6	27.4	39.1	29.1	242.4	310.2	397.3	433.5
Numeracy	39.5	34.9	41.8	44.7	251.8	349.2	410.1	471.3
	<b>Non-Indigenous</b>							
	<b>Year 3</b>	<b>Year 5</b>	<b>Year 7</b>	<b>Year 9</b>	<b>Year 3</b>	<b>Year 5</b>	<b>Year 7</b>	<b>Year 9</b>
Reading	90.8	89.0	90.8	87.7	400.2	482.3	530.8	566.9
Numeracy	92.9	92.3	91.6	92.2	377.0	473.4	522.7	569.6

Source: ACARA, NAPLAN—see Appendix C.

### Statistical testing of NAPLAN results

Statistical significance testing tells us whether a difference between groups has occurred by chance. One group can be significantly higher, significantly lower or not significantly different from the other group. It is a complex process. Significance testing for NAPLAN was done by the Australian Curriculum, Assessment and Reporting Authority (ACARA). Some testing was published in the 2012 national report (ACARA 2012) and some was done on request.

Data in NAPLAN have three sources of error: equating, measurement and sampling. Each of these errors can be measured and contributes to statistical testing. Equating error is a result of comparing tests across years, for example the Year 3 reading test in 2011 is compared to the Year 3 reading test in 2012. The tests are adjusted so that results reflect the same degree of difficulty.

Measurement error refers to the possible variation of a student's test scores if similar tests are given. The variation in scores is due to the fact that each test only samples a small set of a student's capabilities in a subject area.

Sampling error is relevant as some students do not sit the NAPLAN tests and conclusions are drawn about the full cohort in a year level.

Differences over time in the proportion at or above the national minimum standard and the average score between 2008 and 2012 were tested. Comparisons between States and Territories were also statistically tested.

Gain over time (cohort analysis) was not tested. Significance testing is not applicable to participation rates.

## State and Territory comparisons

### Overall, the ACT, Victoria and NSW performed better than other States and Territories

Comparisons between States and Territories are shown in full in Figure D.3, Figure D.4 and Figure D.5. Read across the row to find out the relative performance against other States and Territories. In the example below (Figure D.2), for NSW, reading across shows that NSW was lower than Victoria and the ACT but higher than Queensland, Western Australia, South Australia, the Northern Territory and the national average. It was similar to (not statistically different from) Tasmania. The average scores are also shown in both the columns and the rows.

**Figure D.2 How to read the state comparison figure**

		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
					Year 3					
	Score	426.0	432.0	408.5	407.6	408.9	419.1	443.8	332.2	419.6
NSW	426.0		▼	▲	▲	▲	■	▼	▲	▲

Figure D.3 Reading, average scores, States and Territories compared, 2012

		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust	
					Year 3						
	Score	426.0	432.0	408.5	407.6	408.9	419.1	443.8	332.2	419.6	
NSW	426.0		▼	▲	▲	▲	■	▼	▲	▲	
Vic	432.0	▲		▲	▲	▲	▲	▼	▲	▲	
Qld	408.5	▼	▼		■	■	▼	▼	▲	▼	
WA	407.6	▼	▼	■		■	▼	▼	▲	▼	
SA	408.9	▼	▼	■	■		▼	▼	▲	▼	
Tas	419.1	■	▼	▲	▲	▲		▼	▲	■	
ACT	443.8	▲	▲	▲	▲	▲	▲		▲	▲	
NT	332.2	▼	▼	▼	▼	▼	▼	▼		▼	
Aust	419.6	▼	▼	▲	▲	▲	■	▼	▲		
					Year 5						
	Score	499.8	504.1	480.3	482.6	483.9	491.7	519.0	404.8	493.6	
NSW	499.8		▼	▲	▲	▲	▲	▼	▲	▲	
Vic	504.1	▲		▲	▲	▲	▲	▼	▲	▲	
Qld	480.3	▼	▼		■	■	▼	▼	▲	▼	
WA	482.6	▼	▼	■		■	▼	▼	▲	▼	
SA	483.9	▼	▼	■	■		▼	▼	▲	▼	
Tas	491.7	▼	▼	▲	▲	▲		▼	▲	■	
ACT	519.0	▲	▲	▲	▲	▲	▲		▲	▲	
NT	404.8	▼	▼	▼	▼	▼	▼	▼		▼	
Aust	493.6	▼	▼	▲	▲	▲	■	▼	▲		
					Year 7						
	Score	546.1	548.3	532.7	537.8	537.0	540.6	558.6	474.3	541.5	
NSW	546.1		■	▲	▲	▲	■	▼	▲	▲	
Vic	548.3	■		▲	▲	▲	■	▼	▲	▲	
Qld	532.7	▼	▼		▼	▼	▼	▼	▲	▼	
WA	537.8	▼	▼	▲		■	■	▼	▲	▼	
SA	537.0	▼	▼	▲	■		■	▼	▲	▼	
Tas	540.6	■	■	▲	■	■		▼	▲	■	
ACT	558.6	▲	▲	▲	▲	▲	▲		▲	▲	
NT	474.3	▼	▼	▼	▼	▼	▼	▼		▼	
Aust	541.5	▼	▼	▲	▲	▲	■	▼	▲		
					Year 9						
	Score	577.9	581.6	566.8	572.2	570.1	570.6	597.0	516.0	574.8	
NSW	577.9		■	▲	▲	▲	■	▼	▲	■	
Vic	581.6	■		▲	▲	▲	▲	▼	▲	▲	
Qld	566.8	▼	▼		■	■	■	▼	▲	▼	
WA	572.2	▼	▼	■		■	■	▼	▲	■	
SA	570.1	▼	▼	■	■		■	▼	▲	■	
Tas	570.6	■	▼	■	■	■		▼	▲	■	
ACT	597.0	▲	▲	▲	▲	▲	▲		▲	▲	
NT	516.0	▼	▼	▼	▼	▼	▼	▼		▼	
Aust	574.8	■	▼	▲	■	■	■	▼	▲		

Notes:

1. Read across the row to compare performance with State or Territory.
2. ▲ Significantly higher performance, ▼ significantly lower performance, ■ no significant difference.

Source: ACARA (2012)—see Appendix C.

Figure D.4 Numeracy, average scores, States and Territories compared, 2012

		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust	
					Year 3						
	Score	405.0	408.9	380.9	383.9	377.4	391.5	410.1	323.2	395.5	
NSW	405.0		▼	▲	▲	▲	▲	■	▲	▲	
Vic	408.9	▲		▲	▲	▲	▲	■	▲	▲	
Qld	380.9	▼	▼		■	■	▼	▼	▲	▼	
WA	383.9	▼	▼	■		▲	▼	▼	▲	▼	
SA	377.4	▼	▼	■	▼		▼	▼	▲	▼	
Tas	391.5	▼	▼	▲	▲	▲		▼	▲	■	
ACT	410.1	■	■	▲	▲	▲	▲		▲	▲	
NT	323.2	▼	▼	▼	▼	▼	▼	▼		▼	
Aust	395.5	▼	▼	▲	▲	▲	■	▼	▲		
					Year 5						
	Score	497.7	497.6	476.1	477.5	471.9	480.4	504.4	417.6	488.7	
NSW	497.7		■	▲	▲	▲	▲	■	▲	▲	
Vic	497.6	■		▲	▲	▲	▲	■	▲	▲	
Qld	476.1	▼	▼		■	▲	■	▼	▲	▼	
WA	477.5	▼	▼	■		▲	■	▼	▲	▼	
SA	471.9	▼	▼	▼	▼		▼	▼	▲	▼	
Tas	480.4	▼	▼	■	■	▲		▼	▲	▼	
ACT	504.4	■	■	▲	▲	▲	▲		▲	▲	
NT	417.6	▼	▼	▼	▼	▼	▼	▼		▼	
Aust	488.7	▼	▼	▲	▲	▲	▲	▼	▲		
					Year 7						
	Score	543.4	544.3	532.0	534.9	529.1	526.0	545.9	474.7	538.1	
NSW	543.4		■	▲	▲	▲	▲	■	▲	▲	
Vic	544.3	■		▲	▲	▲	▲	■	▲	▲	
Qld	532.0	▼	▼		■	■	■	▼	▲	▼	
WA	534.9	▼	▼	■		▲	▲	▼	▲	■	
SA	529.1	▼	▼	■	▼		■	▼	▲	▼	
Tas	526.0	▼	▼	■	▼	■		▼	▲	▼	
ACT	545.9	■	■	▲	▲	▲	▲		▲	■	
NT	474.7	▼	▼	▼	▼	▼	▼	▼		▼	
Aust	538.1	▼	▼	▲	■	▲	▲	■	▲		
					Year 9						
	Score	591.1	590.7	574.6	582.0	573.3	567.5	596.5	532.1	584.2	
NSW	591.1		■	▲	▲	▲	▲	■	▲	▲	
Vic	590.7	■		▲	▲	▲	▲	■	▲	▲	
Qld	574.6	▼	▼		▼	■	■	▼	▲	▼	
WA	582.0	▼	▼	▲		▲	▲	▼	▲	■	
SA	573.3	▼	▼	■	▼		■	▼	▲	▼	
Tas	567.5	▼	▼	■	▼	■		▼	▲	▼	
ACT	596.5	■	■	▲	▲	▲	▲		▲	▲	
NT	532.1	▼	▼	▼	▼	▼	▼	▼		▼	
Aust	584.2	▼	▼	▲	■	▲	▲	▼	▲		

Notes:

1. Read across the row to compare performance with State or Territory.
2. ▲ Significantly higher performance, ▼ significantly lower performance, ■ no significant difference.

Source: ACARA (2012)—see Appendix C.

Figure D.5 Writing, average scores, States and Territories compared, 2012

		NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust	
					Year 3						
	Score	424.3	428.1	403.3	406.8	403.3	411.6	416.0	322.9	415.8	
NSW	424.3		▼	▲	▲	▲	▲	▲	▲	▲	
Vic	428.1	▲		▲	▲	▲	▲	▲	▲	▲	
Qld	403.3	▼	▼		▼	■	▼	▼	▲	▼	
WA	406.8	▼	▼	▲		■	■	▼	▲	▼	
SA	403.3	▼	▼	■	■		▼	▼	▲	▼	
Tas	411.6	▼	▼	▲	■	▲		■	▲	■	
ACT	416.0	▼	▼	▲	▲	▲	■		▲	■	
NT	322.9	▼	▼	▼	▼	▼	▼	▼		▼	
Aust	415.8	▼	▼	▲	▲	▲	■	■	▲		
					Year 5						
	Score	485.6	488.7	457.7	469.9	463.2	471.5	485.2	390.9	477.0	
NSW	485.6		▼	▲	▲	▲	▲	■	▲	▲	
Vic	488.7	▲		▲	▲	▲	▲	■	▲	▲	
Qld	457.7	▼	▼		▼	▼	▼	▼	▲	▼	
WA	469.9	▼	▼	▲		▲	■	▼	▲	▼	
SA	463.2	▼	▼	▲	▼		▼	▼	▲	▼	
Tas	471.5	▼	▼	▲	■	▲		▼	▲	▼	
ACT	485.2	■	■	▲	▲	▲	▲		▲	▲	
NT	390.9	▼	▼	▼	▼	▼	▼	▼		▼	
Aust	477.0	▼	▼	▲	▲	▲	▲	▼	▲		
					Year 7						
	Score	520.3	525.5	511.7	520.9	516.5	508.3	519.5	434.8	518.3	
NSW	520.3		▼	▲	■	■	▲	■	▲	■	
Vic	525.5	▲		▲	▲	▲	▲	■	▲	▲	
Qld	511.7	▼	▼		▼	▼	■	■	▲	▼	
WA	520.9	■	▼	▲		■	▲	■	▲	■	
SA	516.5	■	▼	▲	■		▲	■	▲	■	
Tas	508.3	▼	▼	■	▼	▼		■	▲	▼	
ACT	519.5	■	■	■	■	■	■		▲	■	
NT	434.8	▼	▼	▼	▼	▼	▼	▼		▼	
Aust	518.3	■	▼	▲	■	■	▲	■	▲		
					Year 9						
	Score	556.4	566.3	539.4	557.5	549.7	543.7	561.9	472.2	553.7	
NSW	556.4		▼	▲	■	■	▲	■	▲	■	
Vic	566.3	▲		▲	▲	▲	▲	■	▲	▲	
Qld	539.4	▼	▼		▼	▼	■	▼	▲	▼	
WA	557.5	■	▼	▲		■	▲	■	▲	■	
SA	549.7	■	▼	▲	■		■	■	▲	■	
Tas	543.7	▼	▼	■	▼	■		▼	▲	▼	
ACT	561.9	■	■	▲	■	■	▲		▲	■	
NT	472.2	▼	▼	▼	▼	▼	▼	▼		▼	
Aust	553.7	■	▼	▲	■	■	▲	■	▲		

Notes:

1. Read across the row to compare performance with State or Territory.
2. ▲ Significantly higher performance, ▼ significantly lower performance, ■ no significant difference.

Source: ACARA (2012)—see Appendix C.

## Achievement in writing

### Average writing scores were highest in NSW, Victoria and the ACT

Average scores were lowest in Queensland and the Northern Territory (Figure D.6).

This is the first year that the council has reported on writing. Research has shown that teaching writing ‘enhances students’ ability to read a text accurately, fluently and with comprehension’ (Graham and Hebert (2010)). In other words, writing is a powerful tool for improving reading.

The NAPLAN writing test changed from narrative to persuasive writing tasks in 2011 so we cannot compare the results over the five year period. In future years, with more data, we will be able to assess change over time.

### Proportions meeting the national minimum standard were highest in the ACT, NSW and Victoria in all year levels

Queensland and the Northern Territory, on the other hand, had the lowest proportions in each year level (Figure D.6). In all jurisdictions achievement decreased with increasing year level so that Year 9 achievement was around 10 to 17 percentage points lower than Year 3.

**Figure D.6 Achievement in writing, 2012**

Average scores									
	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
Year 3	424.3	428.1	403.3	406.8	403.3	411.6	416.0	322.9	415.8
Year 5	485.6	488.7	457.7	469.9	463.2	471.0	485.2	390.9	477.0
Year 7	520.3	525.5	511.7	520.9	516.5	508.3	519.5	434.8	518.3
Year 9	556.4	566.3	539.4	557.5	549.7	543.7	561.9	472.2	553.7
National minimum standard									
	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
Year 3	96.3	96.1	94.7	94.7	95.3	95.6	96.4	69.3	95.3
Year 5	93.8	94.5	88.3	91.0	90.6	92.1	93.6	62.2	92.1
Year 7	90.2	91.8	88.8	90.6	90.2	87.7	89.8	60.3	89.9
Year 9	81.5	85.9	78.3	82.7	81.0	78.7	83.4	55.0	81.7

Source: ACARA, NAPLAN—see Appendix C.

## Victoria was the top performer in writing

We can compare State and Territory achievement by looking at average scores and statistical significance testing. States and Territories can be significantly higher or lower or they can be similar.

Victoria consistently outperformed all other States and Territories in average scores across all year levels except for the ACT in Years 5, 7 and 9, where its results were not statistically different.

In a number of year levels performance was higher in some states than in the ACT. Like reading and numeracy, the Northern Territory had scores that were consistently lower than all other States and Territories.

## Notes for Chapter 3: Excelling internationally

The International Association for the Evaluation of Educational Achievement measures performance between countries on reading, maths and science student results (IEA 2012). In 2011, Australian students completed the Progress in International Reading Literacy Study (PIRLS) and the Trends in International Mathematics and Science Study (TIMSS).

PIRLS provides information on the reading achievement of students in Year 4 across 48 countries. Australia participated in PIRLS for the first time in 2011. The assessment occurs every five years.

TIMSS is a study of the mathematical and science achievement of Years 4 and 8 students. 52 countries participated in the Year 4 test and 45 countries in the Year 8 test. Australia has participated since the first test in 1995.

Students who take these tests receive a score for each subject between 0 and 1000. This score equates to achievement against four broad benchmarks which are outlined at Figure D.7.

**Figure D.7 Overview of TIMSS and PIRLS international benchmarks**

Benchmark	Reading	Maths		Science	
	Year 4	Year 4	Year 8	Year 4	Year 8
Advanced (625)	Integrates ideas and information across a text to provide reasons and explanations with full text based support	Apply knowledge and understanding in a variety of relatively complex situations and explain reasoning	Organise and draw conclusions, make generalisations, and solve non-routine problems	Apply knowledge and understanding of scientific processes and relationships in beginning scientific inquiry	Demonstrates a grasp of complex and abstract concepts in biology, chemistry, physics, and earth science
High (550)	Make inferences and interpretations with text-based support, recognise use of language features	Apply knowledge and understanding to solve problems	Apply knowledge and understanding in a variety of relatively complex situations	Apply knowledge and understanding to explain everyday phenomena	Demonstrates conceptual understanding of some science cycles, systems, and principles
Intermediate (475)	Retrieve information, make straight forward inferences, begin to recognise language features	Apply basic knowledge in straightforward situations	Apply basic knowledge in straightforward situations	Apply basic knowledge and understanding to practical situation in the sciences	Can recognise and communicate basic scientific knowledge across a range of topics
Low (400)	Locate and retrieve explicitly stated detail or information	Have some basic mathematical knowledge	Some knowledge of whole numbers and decimals, operations, and basic graphs	Have some elementary knowledge of life science and physical science	Recognises some basic facts from the life and physical sciences

Source: ACER (2012c) *Highlights from TIMSS & PIRLS from Australia's perspective*. ACER, Melbourne.

## Notes for Chapter 5: Indigenous young people

In this report, data for the proportion of Indigenous persons who attained Year 12 or equivalent or Certificate II or above, who were fully engaged in work or study are based on the Census.

The 2011 Census count of Indigenous people was 21% higher than the 2006 count. This is higher than could be expected by natural increase (the excess of births over deaths). In total, 70% of the increase can be explained by natural increase. The remaining 30% is 'unexplained'. The Indigenous population is a self-identifying one. Most of the unexplained component is probably the result of increased self-identification in the Census. Self-identification may vary according to the context and the collection. A small amount of the increase may be due to better Census procedures.

The ABS (2013a) has examined the changes in the Census counts for several characteristics including Year 12 or equivalent attainment (not including Certificate II or above) and labour force indicators.

### Year 12 or equivalent attainment

The proportion of the Indigenous population aged 15 years and over with Year 12 or equivalent (not including Certificate II or above) increased from 20.1% in 2006 to 25.0% in 2011. This is a 52.5% relative increase. In contrast the non-Indigenous rate increased from 46.5% to 52.1%, an increase of 22.9%. The high relative increase for Indigenous people is partly a function of starting with a low base. The absolute difference between the years for Indigenous students was 4.9 percentage points, compared to 5.6 percentage points for non-Indigenous people.

When looking at the same group of people over time, as expected, there was a large increase (nearly three times as many) in attainment for those aged 15–19 in 2006 who were then 20–24 in 2011. However, there have also been increases in older age groups over time which may seem unlikely (Figure D.8). Based on these unusual increases in the older age groups, the ABS considers that the change in Year 12 or equivalent attainment most likely reflects a change in the composition of the identifying population and does not reflect any real improvement over time (ABS 2013a).

However, it is possible that there has been some small but real improvement over time in the older age groups. This may happen if the new identifiers did in fact acquire Year 12 or equivalent between 2006 and 2011 (perhaps through TAFE) and identified for the first time in 2011.

**Figure D.8 Change in Indigenous cohort attaining Year 12, 2006 to 2011 Censuses**

Age group		2006	2011	Change 2006–2011	
In 2006	In 2011	Number	Number	Number	Per cent
20–24	25–29	12,020	13,088	1,068	8.9
25–39	30–44	23,531	28,025	4,494	19.1
40–54	45–59	8,903	10,930	2,027	22.8

### Fully engaged in work or study

The NEA indicator, proportion of 17–24 year olds fully engaged in work or study, uses two Census variables—labour force status and student status. The distribution of labour force status has shown little change between 2006 and 2011 and the ABS considers that it is not affected by the change in identification as much as the education variables (ABS 2013a).

We also examined the proportion of 17–24 year olds who are currently studying full-time (not in school) (Figure D.9). Like Year 12 or equivalent attainment, there was a large increase in the proportion of Indigenous young people studying from 6.7% to 8.4%. For non-Indigenous young people the change was from 24.4% to 27.7%. Increases for non-Indigenous students were higher in the older years but were more evenly spread for Indigenous students.

For each single year of age, the change in the proportion studying full-time was much higher for Indigenous students than for non-Indigenous students. It is probable, therefore, that at least a part of these increases was due to people who identified in 2011 for the first time.

However, like Year 12 or equivalent attainment, it is possible that some students did not identify in 2006 but started attending a non-school institution between the censuses and then identified in 2011. The institution itself may have been the catalyst to self-identify.

**Figure D.9 Change in proportion of 17–24 year olds currently studying (not in school), 2006 and 2011 Censuses by Indigenous status**

	Indigenous			Non-Indigenous		
	2006 (%)	2011 (%)	2006–2011 (%)	2006 (%)	2011 (%)	2006–2011 (%)
17 years	5.3	6.2	17.2	6.7	7.3	9.3
18 years	8.9	11.3	26.7	29.8	31.7	6.2
19 years	8.9	11.5	29.7	37.6	41.3	9.9
20 years	8.1	10.3	27.1	36.2	40.8	13.0
21 years	7.2	8.5	18.5	31.0	35.8	15.6
22 years	6.1	7.6	25.0	23.4	28.1	20.1
23 years	4.4	6.1	37.1	17.3	21.0	21.8
24 years	4.3	4.8	10.6	13.2	15.6	18.8
<b>17–24 years</b>	<b>6.7</b>	<b>8.4</b>	<b>25.4</b>	<b>24.4</b>	<b>27.7</b>	<b>13.7</b>

## Notes for Chapter 6: Young people of low socio-economic status

Data collections used in this report measure socio-economic status differently.

For reporting on NAPLAN, a student's socio-economic status is measured by the educational and occupational status of their parents. This report uses parental educational status, as it is highly correlated with occupational status. The higher level of education of either parent is used, for example, if one parent has Year 12 only and the other a bachelor degree, the student will have a parental education background of bachelor degree, as the highest category of socio-economic status.

Students with a low socio-economic background are defined as those whose parents have an educational level of Year 11 or below. Students with a high socio-economic background are defined as having parents with an educational level of a bachelor degree or above.

Some students do not have their parental education recorded. Nationally, the proportion was between 9% and 14%. It was lowest in Victoria (4%–6%) and highest in the Northern Territory (28%–34%).

Reporting on socio-economic status for other indicators uses the ABS' SEIFA IRSD. This measures the disadvantage of a geographic area, not of individuals. We break the areas into groups of 20% of areas (quintiles), ranging from quintile 1 (the 20% most disadvantaged areas) to quintile 5 (the 20% least disadvantaged areas).

## Contextual data

Each year we highlight the key contextual differences between States and Territories that are relevant to understanding the performance information in the National Education Agreement. The contextual factors in Figure D.10 are useful to keep in mind when considering the relative performance between and within States and Territories.

**Figure D.10 Key contextual factors**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
<b>All persons (%)</b>									
In each State and Territory (2012)	32.1	24.8	20.1	10.7	7.3	2.3	1.7	1.0	100
In most disadvantaged areas (2011)	22.8	16.8	18.5	12.5	23.4	31.6	2.0	27.6	19.3
In remote and very remote areas (2011)	0.5	0.1	3.0	6.9	3.7	2.1	na	44.2	2.3
Aged 20–24 years who are Indigenous (2011)	3.6	1.1	5.2	4.7	3.1	6.8	2.3	34.6	3.8
<b>Indigenous persons (%)</b>									
In each State and Territory (2011)	2.9	0.9	4.2	3.8	2.3	4.7	1.7	29.8	3.0
In remote and very remote areas (2011)	4.5	na	19.0	40.1	17.1	3.3	na	79.7	21.3
Indigenous population ('000) (2011)	208.5	47.3	189.0	88.3	37.4	24.2	6.2	68.9	669.9
<b>All students (%)</b>									
Who are Indigenous (2012)	4.8	1.3	6.9	6.3	3.9	7.0	2.4	40.4	4.9
With a language background other than English (2011)	26.3	25.7	13.9	19.6	16.1	6.9	21.9	33.6	na
In remote and very remote areas (2011)	0.5	0.1	2.8	6.8	3.6	1.0	na	45.2	2.3

na not available

Source: ABS, various—see Appendix C.

# Appendix E

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# About the COAG Reform Council

The Council of Australian Governments (COAG) established the COAG Reform Council as part of the arrangements for federal financial relations to assist COAG to drive its reform agenda. Independent of individual governments, we report directly to COAG on reforms of national significance that require cooperative action by Australian governments.

Our mission is to assist COAG to drive its reform agenda by strengthening the public accountability of governments through independent and evidence based assessment and performance reporting.

## COAG Reform Council members

The Hon John Brumby (Chairman)

Professor Greg Craven (Deputy Chairman)

Ms Patricia Faulkner AO

Mr John Langoulant AO

Ms Sue Middleton

Dr Kerry Schott

Ms Mary Ann O'Loughlin AM (Executive Councillor and Head of Secretariat)

## Acknowledgements

The council thanks the following organisations and their staff who provided helpful, ongoing support and advice for this report. Their work added to the quality of this publication and their valuable contribution is gratefully acknowledged.

Commonwealth, State and Territory governments

Secretariat for the Steering Committee for the Review of Government Service Provision

Australian Bureau of Statistics

Australian Council for Educational Research (ACER)

Australian Curriculum, Assessment and Reporting Authority (ACARA)

Education in Australia 2012: Five years of performance

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ISBN 978-1-921706-88-2 (doc copy version)

ISBN 978-1-921706-87-5 (pdf version)

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The appropriate citation for this Report is:

COAG Reform Council 2013, Education in Australia 2012: Five years of performance, COAG Reform Council, Sydney.