

# AUDITOR-GENERAL'S REPORT

## PERFORMANCE AUDIT

### Improving Literacy and Numeracy in NSW Public Schools

Department of Education and Training



The Legislative Assembly  
Parliament House  
SYDNEY NSW 2000

The Legislative Council  
Parliament House  
SYDNEY NSW 2000

In accordance with section 38E of the *Public Finance and Audit Act 1983*, I present a report titled **Improving Literacy and Numeracy in NSW Public Schools: Department of Education and Training**.

A handwritten signature in black ink that reads 'Peter Achterstraat'.

Peter Achterstraat  
Auditor-General

Sydney  
October 2008

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## **Foreword**

A key priority for our Government is the education of our children. Literacy and numeracy are fundamental skills necessary for children to reach their potential at school and to live rewarding lives.

In this report I examine how successful the New South Wales Department of Education and Training has been in improving the literacy and numeracy of NSW school children. During the last ten years the Department has spent a significant amount to improve literacy and numeracy in the State's public schools.

Recent results of national literacy and numeracy tests show that NSW schools students performed well when compared with other Australian states.

However NSW, in common with other states, has a higher concentration of poorer results in some schools and some regions. In some areas one in five students are at or below the minimum level needed. The challenge is to ensure that these children are identified and helped. This group particularly includes children from indigenous, rural and lower socio-economic backgrounds.

This report recommends a number of changes that will better position schools to improve the literacy and numeracy of NSW children.

Peter Achterstraat  
Auditor-General

October 2008



## Executive summary

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## The focus of our audit

Literacy and numeracy skills are essential in life and today's global marketplace. The *NSW Literacy and Numeracy Action Plan 2007* emphasises that students skilled in literacy and numeracy are more likely to stay at school, and as adults be more productive and earn higher wages. Improving students' literacy and numeracy can have a positive effect on their confidence, their ability to deal with every day tasks, as well as their lifelong learning and health.

During the last ten years the NSW Department of Education and Training has spent a significant amount to improve literacy and numeracy in NSW public schools. Since 1998-99 funding for literacy and numeracy programs has increased three-fold from \$53 million to \$154 million in 2006-07. This \$154 million in funding, which consists of \$50 million directed towards literacy and numeracy programs and \$104 million of equity program funding, is to be maintained over the next four years.

This audit looks at whether the Department of Education and Training's processes to improve literacy and numeracy are likely to be successful.

## Audit opinion

For many years, and particularly over the last decade, the Department of Education and Training has focused on building the capacity of teachers and schools to improve the levels of literacy and numeracy in NSW public schools.

During the course of the audit we were impressed by the dedication and efforts of teachers in NSW public schools, particularly when dealing with the needs of students with learning difficulties.

Although NSW schools perform well nationally and internationally, NSW has a high concentration of poor outcomes in some schools and some regions. Each year a group of between 5 and 15 per cent of children are at risk of not reaching the minimum level of achievement needed to progress at school. In this group, indigenous students are over represented.

We were impressed by the Department of Education and Training's continuing focus on improving the literacy and numeracy of NSW public school students and the extensive range of programs it has developed for this purpose.

Despite this, over the last decade State tests have shown little change in results for numeracy and literacy. We see a number of risks to the success of the Department's efforts. There is no systematic assessment of what resources and support are needed. The recent increased focus and support may be too diffuse to make a significant difference, particularly for the lowest performing group. The lowest performing group are likely to have the least experienced teachers. The available support may not reach all students 'at risk', particularly if they are not in designated *Priority* schools.



In our view, all children who are having difficulties, and who are at risk of failing, need:

- a full assessment and an individual learning plan for their improvement that can move from school to school
- access to resources and support based on their individual needs and disadvantage, not the school they happen to be enrolled in
- a continuing record of their performance and the support they have received, so teaching can be better tailored to their individual needs and their progress can be effectively tracked regardless of their location.

### Key audit findings

#### Is there a need to improve literacy and numeracy?

Improving students' literacy and numeracy can have a positive effect on their confidence, their ability to deal with every day tasks, as well as their lifelong learning and health. Since 1998-99 funding for literacy and numeracy programs has increased three-fold from \$53 million to \$154 million in 2006-07. This \$154 million in funding is to be maintained over the next four years.

Despite this, over the last decade State tests have shown little change in results for numeracy and literacy, both in terms of the percentages of students in the performance bands and the state average scores.

Overall, around 85-90 per cent of NSW public school students exceed national minimum standards and NSW consistently exceeds the national average.

However NSW, in common with other states, has a higher concentration of poorer results in some schools and some regions. In some areas one in five students are at or below the minimum level needed. Under-performance in literacy and numeracy may be associated with a range of factors such as a disability or learning difficulty, a language background other than English, Aboriginal or Torres Strait Islander background, low socio-economic background or geographical location.

The 2006 NSW State Plan focuses on raising the attainment level of all students. It sets an overall target for improvement in literacy and numeracy and a target for the number of students who reach minimum standards.

#### Are the literacy and numeracy needs of each child assessed?

The literacy and numeracy needs of individual students, groups and regions in NSW public schools are diagnosed using state-wide tests administered at Years 3, 5, 7 and 8. The Department has developed the *School Measurement, Assessment and Reporting Toolkit (SMART)* to help schools analyse results. Although accessed by a large number of schools, use of the SMART program by schools remains voluntary.

Schools conduct their own classroom assessments to identify students' strengths and weaknesses against the expectations of the syllabus. Schools are required to follow a Department policy on assessment and reporting, but have flexibility in how they implement the policy requirement. The Department has issued principles and guidance and issues sample assessment tasks, templates and work samples to assist schools.

The Department is introducing a literacy and numeracy assessment for all children as soon as they start school to determine how well they can read, write, speak and count. The first stage was introduced into 434 schools in 2008, with the remaining schools to be included over the next two years.

State or national test results and classroom assessments allow schools to identify individual students and groups of students who are at risk of not meeting literacy and numeracy expectations, and areas of the curriculum where there are weaknesses.

While we did not find any Departmental system that supported schools to consistently gather and record information about a student's achievements, the Department's planned new *Student Administration and Learning Management* system (SALM) should enable it to sharpen its focus on those individuals and groups of students 'at risk' by strengthening its capacity to:

- consistently identify and support those students 'at risk' of not meeting literacy and numeracy expectations
- individually plan, assess and effectively track student performance
- identify the factors contributing to poor performance
- monitor student needs at a school and then regional level to assist in guiding resource allocation
- target students individually or in a group when allocating literacy and numeracy resources.

The Department has advised us that, while SALM may be some years off, the essential components of this capacity are included in the SMART software redevelopment due for implementation in 2009.

**Are there adequate programs to help those with literacy and numeracy learning needs?**

Over the last decade the Department has developed an extensive range of programs to improve literacy and numeracy. Some of these are specific initiatives have the single purpose of improving literacy and numeracy achievement through the day to day work of the classroom teacher. The specific programs range from those designed to address the needs of individual students, those which provide additional funds to particular categories of schools and those which are professional learning programs to assist teachers.

However, the delivery of these programs is dependant on schools knowing what is needed, what is available, what works best, whether funding is available, and the skills and ability of the classroom teacher.

While an extensive range of programs exists we were unable to find a centralised source of information for schools on what additional instruction and support each student should be given to address identified learning needs, any systematic assessment of what resources and support are needed, any survey of the adequacy of resources, or individual assessments of teachers' literacy and numeracy training needs.

Schools are responsible for identifying and addressing the literacy needs of their students and allocating appropriate support. However, the nature and type of intervention may be influenced by the performance and funding status of the school.

We see a need for more intensive scrutiny of how under-performing schools are using their resources, what changes are being made, and what impact they are having. We also see potential to strengthen accountability arrangements by rationalising funding programs, increasing quality assurance with some limited external review, and more clearly establishing authority and responsibility for such programs at the school and regional level.

There is a range of general guidance information available to parents including reports on student test results, a range of online resources and a new online monthly newsletter. However, we have not seen any specific guidance for parents on what support students can expect from all public schools, what is available for their child's specific needs, how they can support their child's specific learning and development, and how they can be involved in helping schools.

**How does the Department know which programs are successful?**

We found that although the Department was aiming at increased levels of achievement for all students in line with State Plan targets, and had set explicit targets for regions, not all schools had set such targets.

We found that some regions monitor improvements to student learning performance over time to identify those schools most in need of assistance.

We found that the Department had conducted a number of general reviews, but it had not evaluated the efficiency and effectiveness of its programs on a regular basis, using studies of individuals over time to assess their specific impact on student learning.

We did not find information that might help provide assurance that the Department's resources and support continue to be directed to the programs that provide the most benefit, such as:

- what level of resources and support needs to be made available now in order to reach targeted literacy and numeracy achievement levels at a particular point in the future
- rules governing the allocation of scarce literacy and numeracy funds, including what rules apply in what circumstances

- evaluations of the efficiency and effectiveness of each program on a regular basis, using studies of individuals over time to assess their specific impact on student learning
- a close tracking or monitoring of the factors contributing to poor performance, to assist strategic resource planning and to help assess the value of performance achievements (or otherwise) actually attained.

Although many schools link with prior-to-school services, we found little consideration in the Department's programs and plans of the impact of early childhood education on its efforts to improve literacy and numeracy.

## Recommendations

### Are the literacy and numeracy needs of each child assessed?

We recommend that the Department sharpens its focus on those individual students at risk, including:

- 1) ensuring by July 2009 that schools use the *School Measurement, Assessment and Reporting Toolkit (SMART)* to help understand their performance (page 24)
- 2) expanding the literacy and numeracy assessment templates developed for the *Best Start* program to apply by December 2009 from kindergarten through to Year 10 (page 25)
- 3) developing by December 2009 a more systematic means of identifying and supporting the 'at risk' student, so as to facilitate early identification, assessment and targeting of resources (page 26)
- 4) providing by July 2009 clear guidelines to support the development of individual learning plans and requiring such plans for all 'at risk' students (page 27)
- 5) ensuring its new management systems are fully developed by December 2010 and quickly put to use to enable the effective tracking and analysis of student performance and student needs over time (page 28)
- 6) working with other agencies to provide earlier identification, intervention and information sharing prior-to-school on children with learning difficulties (page 29).

### Are there adequate programs to help those with literacy and numeracy learning needs?

We recommend that the Department more effectively targets its limited resources and support to the needs of individuals, including:

- 7) systematically assessing student needs for literacy and numeracy support at the school and regional level (page 37)
- 8) periodically surveying the adequacy of resources and support (page 37)
- 9) providing by July 2009 better information for all schools on what additional instruction and support students should be given, what learning resources works best for their specific needs and what funding programs a school may be eligible for (page 38)

- 10) strengthening by December 2009 the literacy and/or numeracy teaching skills of teachers working with the lowest performing students, such as by accelerating its planned introduction of expert literacy and numeracy learning leaders, particularly those with expertise in teaching 'at risk' students (page 40)
- 11) undertaking more intensive monitoring and review of how under-performing schools are using their resources, what changes are being made, and what impact they are having (page 42)
- 12) developing by July 2009 clear and consistent guidance on what intervention is needed, based on the results of a student's assessment, regardless of the overall performance or funding status of the student's school (page 42)
- 13) strengthening accountability arrangements by rationalising funding programs to more closely align with student needs, increasing quality assurance, and more clearly establishing authority and responsibility for such programs at the school and regional level (page 44)
- 14) providing by July 2009 more specific guidance to parents on what support students can expect and how they can be involved in helping schools (page 48).

**How does the Department know which programs are successful?**

We recommend that the Department more rigorously reviews its programs and the performance of low achieving schools, including:

- 15) ensures that all regions and schools work together to set explicit targets for literacy and numeracy attainment by December 2008 (page 53)
- 16) rationalising and consolidating the programs that aim to improve literacy, and (separately) the programs that aim to improve numeracy (page 56)
- 17) establishing at the outset of such programs the expected impact over time on literacy or numeracy outcomes (page 56)
- 18) monitoring program performance with a suite of performance indicators and with studies of individual students over time (page 56)
- 19) leading a whole of government assessment by July 2009 of the value of strengthening transition to school support and programs in communities with the poorest performing public schools (page 57).

## Response from the Department of Education and Training

*I write in response to your letter of 19 September 2008 about the NSW Audit Office report, Improving Literacy and Numeracy in NSW Public Schools.*

*The Department of Education and Training welcomes the opportunity, provided through the performance audit process, to reflect on the strategies and practices that are in place and to address the challenges of gaining further improvement in children's literacy and numeracy learning.*

*I am pleased that the report recognises the dedication and efforts of teachers in NSW public schools and the improvements in literacy and numeracy learning that have been achieved over the last decade.*

*The recently released results of the National Assessment Program in Literacy and Numeracy, which have New South Wales placed first, second or third in each aspect of literacy and numeracy assessed, provide evidence of the success of teachers in our schools.*

*As the report found, our ongoing efforts to build teacher capacity and the extensive range of resources available to teachers mean that we are well placed to build on the success that we have experienced. In particular, all beginning teachers continue to be supported through structured programs of growth and will, from 2009, receive additional time to develop their skills.*

*Despite our success we are not complacent. Literacy and numeracy skills are fundamentally important for every student in our schools - for success at school and for success beyond school. The State Plan, and our departmental plans, recognise this and set the goal of increasing levels of attainment for all students.*

*The report highlights opportunities to fine tune our efforts to focus on every student, particularly those who may be at risk of failing to achieve appropriate standards of literacy and numeracy.*

*The report's recommendations focus on key areas:*

- better targeting of individual student learning needs and tracking of progress and linking strategies and resources to individual needs*
- greater accountability and monitoring of resource development and program delivery at class, school, region and State levels to assure students and parents that particular needs are being addressed*
- building partnerships with prior to school settings and with parents to enhance the literacy and numeracy learning that takes place in schools.*

*The Department accepts the report recommendations.*

*I too would like to recognise the outstanding contribution made by our teachers in public schools, and those working to support them, to the lives and futures of young people in New South Wales.*

*I would like to thank the staff of the Audit Office for their professional and collaborative approach to the conduct of this audit.*

*(signed)*

*Michael Coutts-Trotter  
Director-General of Education and Training  
Managing Director of TAFE NSW*

*Dated: 3 October 2008*





# **1 Is there a need to improve literacy and numeracy?**

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## 1.1 Why is literacy and numeracy important?

This audit looks at efforts to improve literacy and numeracy in NSW public schools.

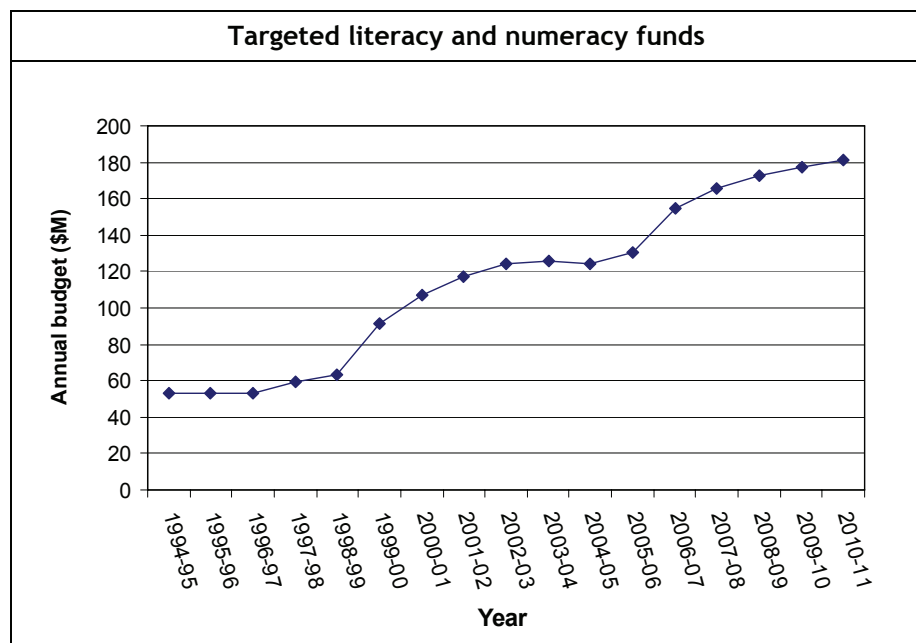
### Essential life skills

Literacy and numeracy skills are essential in life and today's global marketplace. The *NSW Literacy and Numeracy Action Plan 2007* emphasises that students skilled in literacy and numeracy are more likely to stay at school, and as adults be more productive and earn higher wages. Improving students' literacy and numeracy can have a positive effect on their confidence, their ability to deal with every day tasks, as well as their lifelong learning and health.

### Increasing focus

For many years, and particularly over the last decade, the Department of Education and Training has focused on building the capacity of teachers and schools to improve the levels of literacy and numeracy in NSW public schools. The Department has developed a range of programs to support both teachers and students in NSW public schools.

NSW invests \$8 billion annually in school education. Literacy and numeracy is an important part of this. Since 1998-99 funding for additional literacy and numeracy programs has increased three-fold from \$53 million to \$154 million in 2006-07. This \$154 million in funding consists of \$50 million directed towards literacy and numeracy programs and \$104 million of equity program funding. This is to be maintained over the next four years.



Source: NSW Department of Education and Training

## 1.2 How do well do NSW public schools perform?

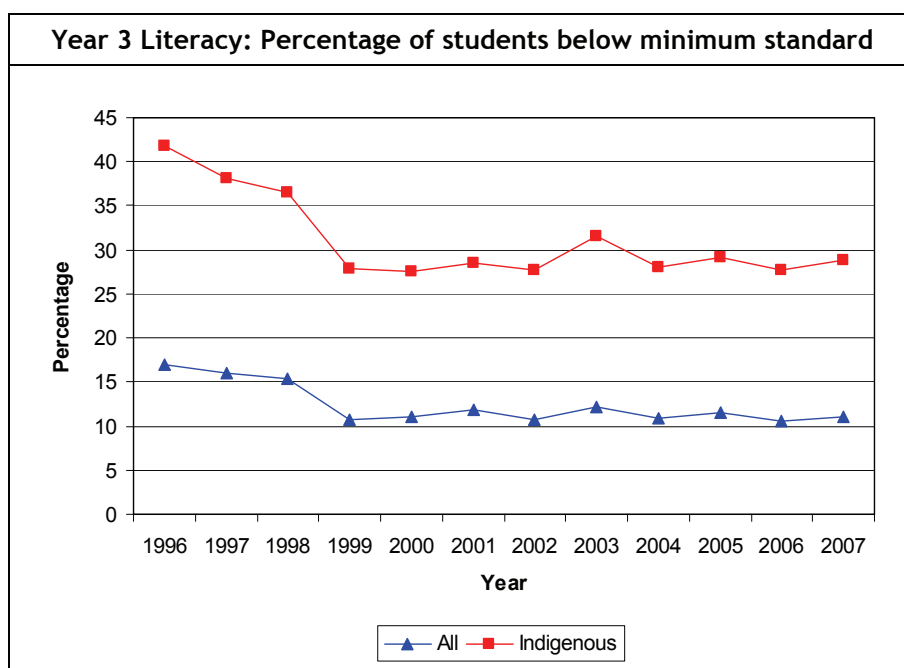
For some time the Department has evaluated the literacy and numeracy of school students at state and regional levels using NSW state-wide tests. This builds on the school based assessment and reporting that occurs in schools and provides a system-wide perspective to inform planning at the state, regional and school level. Students are placed in performance bands depending on the results of their state-wide test.

### State tests

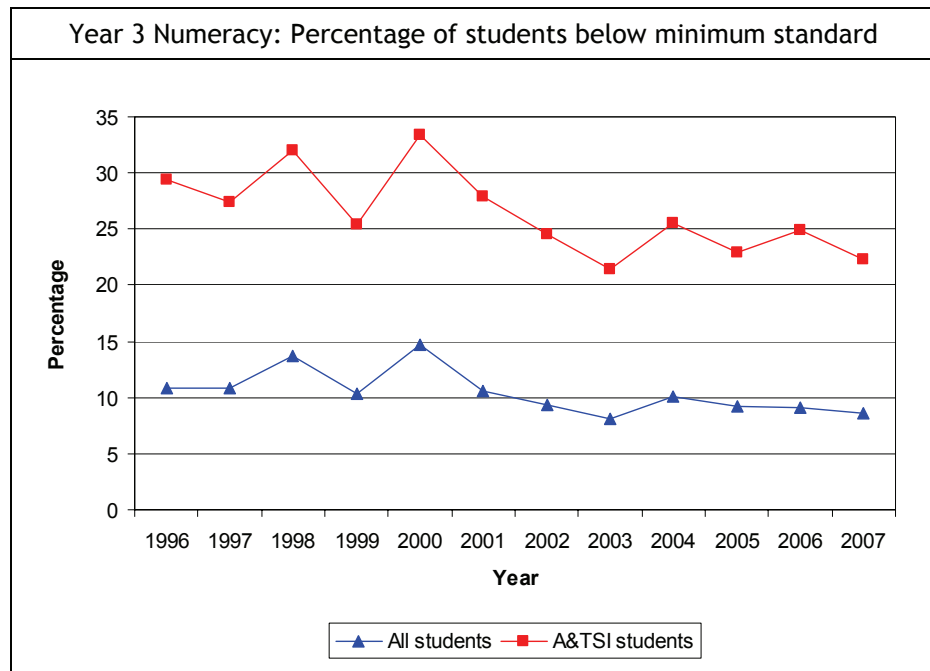
Over the last decade, State tests have shown some improvements in results for numeracy and literacy, both in terms of the percentages of students in the performance bands and the state average scores.

However, each year a group of between 5 and 15 per cent of children are at risk of not reaching the minimum level of achievement needed to progress at school. In this group, indigenous students are over represented.

For example, since 1996 the percentage of all Year 3 students below the minimum standard (band 1) for literacy has decreased from 17.0 per cent to 11.1 per cent while the fall for Indigenous students has been from 41.7 per cent to 28.9 per cent. Year 3 numeracy results have also improved. The percentage of students below the minimum has fallen from 10.8 to 8.6 per cent for all students and from 29.4 to 22.3 per cent for indigenous students.

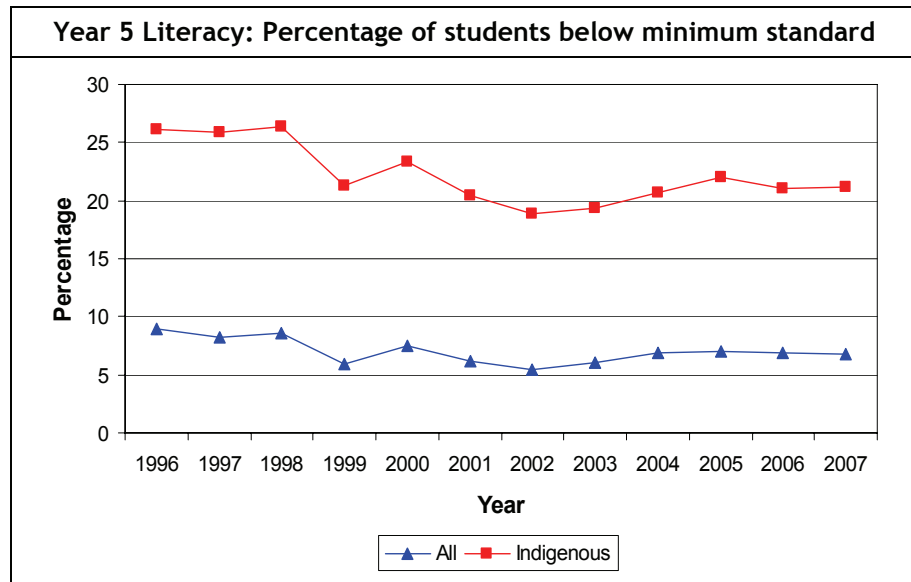


Source: NSW Department of Education and Training

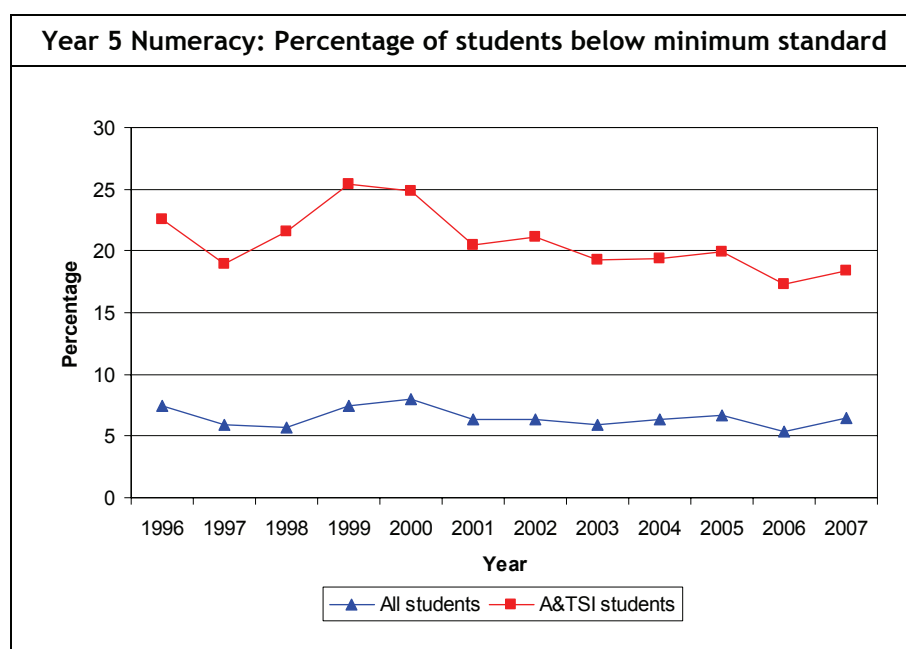


Source: NSW Department of Education and Training

Most of this improvement occurred between 1996 and 1999. Improvement at other year levels has also occurred, although not to the same extent as Year 3. The results obtained by Year 5 students are as shown below.



Source: NSW Department of Education and Training



Source: NSW Department of Education and Training

There are, however, significant differences between NSW state regions, as illustrated by the following table.

Year 3: Percentage of students below minimum in 2005 and 2007				
Region	Literacy 2005	Literacy 2007	Numeracy 2005	Numeracy 2007
Sydney	4.6	4.3	5.4	5.6
Northern Sydney	1.7	1.4	2.3	2.0
South Western Sydney	10.5	10.8	13.5	11.4
Western Sydney	8.5	8.7	9.8	9.3
Hunter / Central Coast	7.8	9.2	8.5	9.0
North Coast	9.9	11.4	9.6	9.8
New England	9.4	12.2	9.2	11.7
Riverina	11.1	11.4	11.1	10.0
Illawarra / South East	8.4	9.1	9.1	8.4
Western NSW	16.7	14.0	15.8	13.5

Source: NSW Department of Education and Training

**Factors affecting performance**

A 2007 report by the OECD Directorate for Education notes that in Australia, as in most countries, factors such as location of school, language spoken at home and socioeconomic status have a significant effect on student performance:

- students in metropolitan areas performed at significantly higher levels than students in regional cities, who in turn performed at significantly higher levels than students in rural areas
- students who mainly spoke English at home performed significantly better than those whose main home language was other than English
- while the relationship between socioeconomic background and performance was less strong in Australia than for the OECD on average, there still exists a distinct advantage for those students with higher socio-economic backgrounds
- while some Indigenous students performed well, this was a very small proportion of the overall sample and a large proportion were at the lower end of the performance levels.

The impact of these factors is illustrated by the statistics summarised in the table below.

<b>Year 3: Percentage of students below minimum in 2007 (Basic Skills Test Band 1)</b>		
<b>Classification</b>	<b>Literacy</b>	<b>Numeracy</b>
Remote	23.2	15.9
Country Areas Program	18.2	12.5
Non English speaking background	9.7	8.6
Priority Schools Program (for disadvantaged schools)	20.0	14.9
Indigenous	28.9	22.1

Source: NSW Department of Education and Training

Within these general classifications the picture is more complex. For example, the testing programs monitor newly-arrived students who are from a language background other than English - a group taken to be disadvantaged. We were surprised to learn that in 2007 students from a language background other than English, who have been in an Australian school for less than a year, scored in overall literacy:

- only 2 points less in Year 3 than those for NSW public schools as a whole (48.5 vs 51.0)
- only 3 points less in Year 5 than those for NSW public schools as a whole (53.9 vs 57.3)

The picture is also changing. For example, the gap between students in metropolitan and regional or rural areas is increasing, as shown below:

Differences in mean test scores: metropolitan vs regional and rural						
	2001			2007		
	Metropolitan	Regional and rural	Difference	Metropolitan	Regional and rural	Difference
Literacy - Year 3	50.9	49.7	1.2	51.8	49.6	2.2
Literacy - Year 5	57.3	56.5	0.8	58.0	56.1	1.9
Literacy - Year 7	89.0	87.9	1.1	89.5	87.7	1.8
Numeracy - Year 3	52.7	51.4	1.3	53.7	51.4	2.4
Numeracy - Year 5	60.7	59.3	1.4	62.7	59.9	2.8
Numeracy - Year 7	87.3	85.6	1.7	85.9	83.3	2.6

Source: NSW Department of Education and Training

### New national tests

Prior to 2008, the various states and territories had different ways of assessing student progress in literacy and numeracy. All Australian schools now use national tests known as the *National Assessment Program in Literacy and Numeracy* (NAPLAN). Full tests are required for numeracy and literacy in each of years 3, 5, 7 and 9. Student performance on the common national tests for numeracy and literacy is reported on a 10 point scale using 6 bands of achievement for each year level. For each of years 3, 5, 7, and 9 the second lowest band has been set as a 'national minimum standard', with the lowest band below the national minimum standard.

The first common national literacy and numeracy tests were administered to students in all Australian schools during the week beginning 12 May 2008. The tests covered four domains: reading, writing, numeracy and language conventions (spelling and punctuation and grammar). Each year level is reported in six bands.

Students in the lowest band have not achieved the minimum national standards for literacy and numeracy. According to the NAPLAN testing authority, these students need focused intervention and support to help them achieve the skills they require to continue in schooling.

Additionally, students in the second lowest band for each subject for each year are considered to be performing at the national minimum standard. While they have mastered the basic elements of literacy and numeracy in their year level, they remain at risk of slipping behind and need close monitoring and additional support to ensure that they have the opportunity to achieve their potential and improve their performance.

The results of the 2008 national tests show that:

- NSW students performed consistently better than the national average
- the NSW ranking is better in the early years than in the later years
- fewer NSW students performed at or below the national minimum standard - as demonstrated by the table below.

Subject	Year	NSW percentage <u>below</u> minimum standard	National percentage <u>below</u> minimum standard	NSW percentage <u>at</u> minimum standard	National percentage <u>at</u> minimum standard
Reading	3	4.0	6.1	10.2	12.0
	5	5.7	7.5	12.1	13.6
	7	4.0	4.6	13.5	14.1
	9	5.1	5.9	17.2	17.6
Writing	3	1.5	2.9	4.6	6.5
	5	4.0	5.9	9.9	11.8
	7	5.9	6.9	13.8	13.8
	9	10.6	11.6	19.5	18.5
Spelling	3	3.0	5.9	7.4	10.0
	5	4.6	6.8	10.1	12.8
	7	5.2	6.4	10.0	12.0
	9	7.3	9.1	13.5	15.3
Punctuation and grammar	3	3.9	6.6	8.8	10.7
	5	5.3	6.6	10.3	11.0
	7	6.1	7.2	14.2	15.4
	9	8.0	8.9	18.6	19.5
Numeracy	3	2.2	3.3	8.8	10.9
	5	4.8	5.9	15.0	17.4
	7	3.4	3.4	14.5	14.6
	9	4.8	5.2	17.0	18.0

Source: MCEETYA, National Assessment Program Summary Results, 2008

Note that these are combined results for all NSW schools, public and private. In 2006 the proportion of NSW students in public schools was 66.7 percent. The results are not available separately.

#### International benchmarking

Trends from the state and national tests can be verified by other international tests. For example, a sample of 15 year-old students is tested in reading, mathematical and scientific literacy, using the OECD's *Program for International Student Assessment* (PISA). A sample of Year 4 and Year 8 students is tested using materials from the *Trends in International Mathematics and Science Study* (TIMSS).

Australia has always ranked highly in these assessments, scoring significantly above the international average. For example in the most recent study, PISA 2006, out of the 57 countries that participated only five countries achieved significantly higher average scores than Australia in reading literacy. Eight countries achieved significantly higher average scores than Australia in mathematical literacy.

NSW scores have always exceeded the Australian average in these assessments. Again, these are combined results are for all NSW schools, public and private. The results are not available separately.



### 1.3 What improvement is being sought in the NSW State Plan?

The 2006 NSW State Plan focuses on raising the achievements of all students. It sets targets from a base year of 2005 for improvement in the number of all NSW students reaching minimum standards, and in the number of students performing at higher levels including:

- by 2008, reduce the number of lower performing students in literacy and numeracy in Years three, five and seven by 10 per cent in 2008, with a further 20 per cent reduction by 2016
- by 2012, increase the number of students in Years three, five and seven meeting or exceeding national standards for literacy and numeracy by 10 per cent with a further 5 per cent increase by 2016
- by 2016 close the gap between Aboriginal and all other students in primary school literacy and numeracy test results.

The Department advised us that the State Plan targets will need to be revised to reflect the new national tests, as the national tests will be reported on a different scale to that previously used in New South Wales.

#### New plans

The Department has a number of plans and strategies in place to help achieve these targets, including:

- *State Literacy and Numeracy Plans 2006-2008* included a range of initiatives to improve the achievement levels of students. They aim to ensure that schools with higher numbers of under-performing students can access specialist programs that are successful in lifting student achievement
- *NSW Aboriginal Education and Training Strategy 2006-2008* committed NSW public schools to closing the gap between Aboriginal students and all students in primary school literacy and numeracy by 2012.

#### New programs

Over the last three years the Department has introduced new programs. These include an assessment of all children as soon as they start school, individual learning plans for all Aboriginal students, and reduced class sizes in years Kindergarten - Year 2.

The assessment of all children as they start school, through the *Best Start* program, will focus attention on the literacy and numeracy knowledge and skill that children bring to school as the starting point for teaching and learning. The information generated by the *Best Start* program will also draw attention to preschool education programs. So this audit also considers how schools link with preschool programs. In NSW preschool programs are regulated by the Department of Community Services.

The Department's initiatives are discussed in the following chapters, where the audit asks:

- are literacy and numeracy needs adequately assessed? (Chapter 2)
- are there adequate programs to help those with literacy and numeracy learning needs? (Chapter 3)
- how does the Department know which programs are successful? (Chapter 4).



## **2 Are literacy and numeracy needs adequately assessed?**

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**At a glance**

**The key question we wanted to answer was:**

Are literacy and numeracy needs adequately assessed?

**Our assessment:**

The literacy and numeracy needs of individual students, groups and regions in NSW public schools are diagnosed using state-wide tests administered at Years 3, 5, 7 and 8. The Department has developed the *School Measurement, Assessment and Reporting Toolkit* (SMART) to help schools analyse results. Although accessed by a large number of schools, use of the SMART program by schools remains voluntary.

Schools conduct their own classroom assessments to identify students' strengths and weaknesses against the expectations of the syllabus. Schools are required to follow a Department policy on assessment and reporting, but have flexibility in how they implement the policy requirement. The Department has issued principles and guidance and issues sample assessment tasks, templates and work samples to assist schools.

The Department is introducing a literacy and numeracy assessment for all children as soon as they start school to determine how well they can read, write, speak and count. The first stage was introduced into 434 schools in 2008, with the remaining schools to be included over the next two years.

State or national test results and classroom assessments allow schools to identify individual students and groups of students who are at risk of not meeting literacy and numeracy expectations, and areas of the curriculum where there are weaknesses.

While we did not find any Departmental system that supported schools to consistently gather and record information about a student's achievements, the Department's planned new *Student Administration and Learning Management* system (SALM) should enable it to sharpen its focus on those individuals and groups of students 'at risk' by strengthening its capacity to:

- consistently identify and support those students 'at risk' of not meeting literacy and numeracy and numeracy expectations
- individually plan, assess and effectively track student performance
- identify the factors contributing to poor performance
- monitor student needs at a school and then regional level to assist in guiding resource allocation
- target students individually or in a group when allocating literacy and numeracy resources.

The Department has advised us that, while SALM may be some years off, the essential components of this capacity are included in the SMART software redevelopment due for implementation in 2009.

## 2.1 Are the literacy and numeracy needs of each child assessed?

**Our assessment** The literacy and numeracy needs of individual students, groups and regions in NSW public schools are diagnosed using state-wide tests administered at Years 3, 5, 7 and 8. The Department has developed the *School Measurement, Assessment and Reporting Toolkit* (SMART) to help schools analyse results. Although accessed by a large number of schools, use of the SMART program by schools remains voluntary.

Schools conduct their own classroom assessments to identify students' strengths and weaknesses against the expectations of the syllabus. Schools are required to follow a Department policy on assessment and reporting, but have flexibility in how they implement the policy requirement. The Department has issued principles and guidance and issues sample assessment tasks, templates and work samples to assist schools.

The Department is introducing a literacy and numeracy assessment for all children as soon as they start school to determine how well they can read, write, speak and count. The first stage was introduced into 434 schools in 2008, with the remaining schools to be included over the next two years.

We did not find a standardised state-wide template to help schools document student performance, monitor progress, identify resource needs and guide resource allocation across schools. In our view, this could further assist the Department in ensuring that school assessments are consistent, reflect better practice, follow individual students over time and serve as a basis for allocating resources most suited to the needs of individual students.

**State-wide tests** Over the last two decades the Department has conducted a range of state-wide tests:

- *Basic Skills Testing* (BST) since 1989 to assess the literacy and numeracy skills of Year 3 and Year 5 students
- *Primary Writing Assessment* since 2001 to assess the factual and literary writing of Year 3 and Year 5 students
- *English Language and Literacy Assessment* (ELLA) since 1998 to assess whether Year 7 students meet the literacy demands of all subjects in the school curriculum
- *Secondary Numeracy Assessment Program* (SNAP) since 2001 to assess whether Year 7 students meet the numeracy demands across all the *Key Learning Areas*.

These tests combine with school based assessments to provide information on students for parents and schools. Test results identify individual students and groups of students who are at risk, and areas of the curriculum where there were weaknesses. Test results and school based assessments assist schools to evaluate, review and develop their overall teaching programs.

Other Australian states and territories have had similar testing programs for numeracy and literacy. These tests are in addition to achievement examinations such as the NSW School Certificate and NSW Higher School Certificate.

**National tests** As outlined earlier, in 2008 the new South Wales BST, ELLA and SNAP tests have been replaced by national tests known as the *National Assessment Program in Literacy and Numeracy* (NAPLAN). Full tests are required for numeracy and literacy in each of years 3, 5, 7 and 9. Student performance on the common national tests for numeracy and literacy will be reported on a 10 point scale using 6 bands of achievement for each year level.

We understand that it will probably take a few years before confident judgements can be made about overall performance at a state or national level.

For the inaugural year of the national tests, NSW will run its existing state-based tests (ELLA, SNAP and BST) only for a sample of NSW public school students. The sample testing program will enable direct comparisons to be made between the previous tests and the new NAPLAN tests and will assist the Department to compare student reports from previous years.

**SMART reporting** The Department has developed the *School Measurement, Assessment and Reporting Toolkit* (SMART) to help schools understand their own performance. Schools can compare their results to either the whole state or to smaller groups of schools. This can help the Department to identify schools with best practice from which others might learn. SMART also provides curriculum links that highlight appropriate teaching activities to address areas of need. SMART is currently being adapted to enable analysis of the results of the new national tests. Although accessed by a large number of schools, use of the SMART program by schools remains voluntary.

**Recommendation** We recommend that the Department ensures that by July 2009 schools use the *School Measurement, Assessment and Reporting Toolkit* (SMART) to help understand their performance.

**Assessment in schools** Public interest in the results of state-wide tests has highlighted the importance of the more frequent on-going assessments conducted by teachers in schools as a regular part of teaching and learning.

The state-wide tests are not held until year 3 at the earliest, and then only at two year intervals until year 7. Efforts to improve literacy and numeracy require more timely feedback in order to:

- show teachers how students are progressing and where they need help, before they sit for the state or national tests
- provide parents with on-going information about their children's performance to ensure they are progressing satisfactorily
- help students identify areas in which they need to focus.

Teacher assessments also help to hold schools accountable for performance, provided they are obtained in a reasonably consistent and objective manner. They help to indicate whether schools are succeeding or whether they need additional help.

We found that:

- the importance of school-based assessment is emphasised in the Department's policy on *Curriculum planning, programming, assessing and reporting to parents K-12* and in the *Quality Teaching Framework*
- teachers conduct their own classroom assessments to identify students' strengths and weaknesses, comparing student achievement against syllabus expectations. Schools have different school-based assessment procedures for this. The Department has issued principles for assessment (such as valid, fair, timely, whole school approach etc) and issues sample assessment tasks, templates and work samples to assist
- the Department recommends a more focused individual assessment for students who have low results or for those identified as needing additional assistance through other assessment processes. It is developing an 'assessment warehouse' containing examples of best practice in assessment to further assist teachers, using both its own materials and those from the NSW Board of Studies
- the Department has commenced implementation of a Kindergarten literacy and numeracy assessment for all children to identify the literacy and numeracy knowledge and skill that they bring to school. Teachers use the assessment information to develop *Early Learning Plans* to focus the teaching of literacy and numeracy for individual students and groups of students. The aim of the *Best Start Kindergarten Assessment* is to identify problems well in advance of the state-wide or national tests. The assessment was conducted in 434 primary schools in 2008, with a further 600 schools to be involved in 2009. We understand that the *Best Start* software being developed for use from 2009 will allow schools to record literacy and numeracy learning and that it will prompt teachers on teaching strategies and resources that can be used to address individual learning needs
- the *Best Start* program is developing clear statements of expected literacy and numeracy learning in the early years of schooling. We understand that these progress maps could be extended to apply across K-10 and would provide a common template for all schools to assess and monitor literacy and numeracy learning.

We did not find a standardised state-wide template to help schools document student performance, monitor progress, identify resource needs and guide resource allocation across schools. In our view, this could further assist the Department in ensuring that school assessments are consistent, reflect better practice, follow individual students over time and serve as a basis for allocating resources most suited to the needs of individual students.

**Recommendation** We recommend that the Department expands the literacy and numeracy assessment templates developed for the *Best Start* program to apply by December 2009 from kindergarten through to Year 10.

## 2.2 Are there adequate arrangements to identify those in need of additional support?

<b>Our assessment</b>	<p>State or national test results and classroom assessments allow schools to identify individual students and groups of students who are at risk of not meeting literacy and numeracy expectations, and areas of the curriculum where there are weaknesses.</p> <p>The Department's planned new <i>Student Administration and Learning Management</i> system should enable the Department to sharpen its focus on those individuals 'at risk' by strengthening its capacity to:</p> <ul style="list-style-type: none"><li>▪ consistently identify and support those students 'at risk' of not meeting literacy and numeracy expectations</li><li>▪ individually plan, assess and effectively track student performance</li><li>▪ identify the factors contributing to poor performance</li><li>▪ monitor student needs at a school and then regional level to assist in guiding resource allocation</li><li>▪ target students individually or in a group when determining literacy and numeracy support.</li></ul>
<b>Defining students 'at risk'</b>	<p>The classroom teacher, principal and school learning support team have the responsibility of identifying the students at risk.</p> <p>However, we found that there was no consistent definition of what students were 'at risk', and consequently no clear indication of who is in need of additional literacy and numeracy support.</p> <p>The Department clearly regarded those in the minimum test bands as being 'at risk'. But teachers and stakeholders also expressed the view that any student who is not proficient is at risk. In particular, those just above the minimum benchmark may, by the next round of testing, be below the benchmark. In addition, some students may fall in and out of the category depending on their school and personal circumstances at the time. The numbers below the benchmark increase in the later years.</p> <p>Whatever the method used, the process of setting achievement standards involves professional judgment. However, there is a significant difference in relation to the additional resources needed.</p> <p>The Department advised us that it was not possible to arrive at a definition of what constitutes an 'at risk' student, because of the diverse and changing factors involved.</p>
<b>Recommendation</b>	<p>We recommend that the Department develops by December 2009 a more systematic means of identifying and supporting the 'at risk' student, so as to facilitate early identification, assessment and targeting of resources.</p>
<b>Individual student plans</b>	<p>Where the student has high support needs in literacy, the development of an individual literacy plan is required. This is now also required for all Aboriginal students, irrespective of whether they have high support needs.</p>



The school literacy or learning support team is asked to consider and coordinate arrangements for developing individual literacy plans. The Department's *Office of Schools Plan 2006-08* states that NSW public schools shall be positioned to lead the nation in personalised learning initiatives.

A key part of the *NSW Aboriginal Education and Training Strategy 2006-2008* is the development of personalised learning plans for Aboriginal students in public schools. The Department is also developing new *Early Learning Plans* for students in Kindergarten through to Year 2 based on the results of the new assessments.

Individual (or 'personal') learning plans can:

- identify the learning needs of the individual student
- involve students and parents in preparing and implementing individual learning plans
- show how improved learning outcomes will be achieved
- identify and provide additional support
- determine the roles and responsibilities of those involved in implementing the student's literacy program
- list who will do what for the student
- show monitoring and assessment procedures that will ensure the student's learning improves.

We found no requirement for individual learning plans that also involve numeracy.

We found that there is no standard template for individual learning plans. Individual learning plans are left to the discretion of schools. There is no standard software that all schools can use, even though these are commercially available. Regions have been endeavouring to develop their own approach. The plans that we observed were quite one sided: they emphasised what the student will do - not what the school or teachers should do and not what the parents should do.

**Recommendation** We recommend that the Department provides by July 2009 clear guidelines to support the development of individual learning plans and requires such plans for all 'at risk' students.

**Tracking individuals** We looked to see whether the performance and needs of individuals within the education system were recorded and effectively tracked from year to year and from school to school. In particular, this would enable the Department to 'case-manage' those in need of additional support.

Student information and tracking systems are seen as necessary to:

- know whether an individual's literacy and numeracy is improving from year to year
- provide an early warning system to diagnose changing student needs and focus teaching and support
- monitor student progress and help determine the extent to which teachers and additional resources have been effective
- assist in identifying the need for additional professional support for teachers.

Many students move from school to school during their education. This is particularly the case for indigenous students and those newly arrived from non-English-speaking backgrounds. As these students are more likely to be in need of support, it is important that their record of achievement and progress can follow them wherever they attend school.

We found that:

- all schools have some form of tracking and monitoring. The minimum is the student report card, which provides parents with a snapshot of their child's achievements with an A to E grade, information about the student's social development and commitment to learning, and teacher comments that identify areas of strength and areas for further development in each subject. This is usually issued twice a year
- there is also a capability arising from state-wide testing, where students' test results can be tracked from year 3 to year 5 to year 10. This is reported to schools annually
- some schools additionally use card files, folders or spread sheets to detail support for students experiencing learning difficulties. But such additional records are more likely to be limited to counsellors' assessments, not teachers' assessments. There is unlikely to be any record of discussion with parents.

**Student Administration and Learning Management system**

The Department, up till this time, has not had an information technology system to facilitate the above. Its planned new *Student Administration and Learning Management* system will include a single, secure record of each student's academic, health and well-being information, which will provide a means of effectively tracking students beyond individual schools. It will draw on the *Enrolment Registration Number* student identification system for students in public schools. It is understood that it will also include better ways of tracking student performance. It will also record and track individual student results in external tests, like NAPLAN. This should allow parents and teachers to follow student progress throughout their schooling and enable the Department to systematically 'case-manage' students with learning difficulties.

**Recommendation**

We recommend that the Department ensures its new management systems are fully developed by December 2010 and quickly put to use to enable the effective tracking and analysis of student performance and student needs over time.

**Sharing information prior-to-school**

We were interested in even earlier identification, intervention and information sharing prior-to-school for children with learning difficulties. Early intervention can help correct learning or social difficulties before a child starts to fall behind.

The Department's Directorate of Early Childhood and Interagency Programs was established in 2006. In NSW responsibility for school age children is with the Department, while responsibility for under school age children is with the Department of Community Services (DoCS).

The DoCS Submission to the Special Commission of Inquiry, May 2008 highlighted the need for early childhood intervention services. It identified:

- increasing provision of preschools as creating opportunities to significantly improve early intervention approaches, especially to disadvantaged children and their families
- the school (and preschool) system as the first point at which nearly all children and families come into contact with the social service system
- the benefits of extending from school age to the prior-to-school years the reach of the service system as a platform for identifying and responding to need.

We found that:

- there is not usually a close relationship between preschools and NSW public schools, unless the preschool was part of the school. Most schools, however, would run an orientation session with the local preschools. The impetus for closer links is likely to come from the preschools interested in the *Best Start* results for their kids
- while DoCS does collect information on children with learning difficulties, there is no structured way of sharing this with the Department of Education and Training
- the Victorian Department of Education and Early Childhood Development is establishing a system of collecting, maintaining and sharing information beginning at a child's entry into preschool services, through coordinated information technology platforms and supports.

**Recommendation** We recommend that Department works with other agencies to provide earlier identification, intervention and information sharing prior-to-school on children with learning difficulties.



### **3 Are there adequate programs to help those with literacy and numeracy learning needs?**

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**At a glance**

**The key question we wanted to answer was:**

Are there adequate programs to help those with literacy and numeracy learning needs?

**Our assessment:**

Over the last decade the Department has developed an extensive range of programs to improve literacy and numeracy. Some of these are specific initiatives that build on the single purpose of improving literacy and numeracy achievement through the day to day work of the classroom teacher. The specific programs range from those designed to address the needs of individual students, those which provide additional funds to particular categories of schools and those which are professional learning programs to assist teachers.

However, the delivery of these programs is dependant on schools knowing what is needed, what is available, what works best, whether funding is available, and the skills and ability of the classroom teacher.

While an extensive range of programs exist we were unable to find a centralised source of information for schools on what additional instruction and support each student should be given to address identified learning needs, any systematic assessment of what resources and support are needed, any survey of the adequacy of resources, or individual assessments of teachers' literacy and numeracy training needs.

Schools are responsible for identifying and addressing the literacy needs of their students and allocating appropriate support. However, the nature and type of intervention may be influenced by the performance and funding status of the school.

We see a need for more intensive scrutiny of how under-performing schools are using their resources, what changes are being made, and what impact they are having. We also see potential to strengthen accountability arrangements by rationalising funding programs, increasing quality assurance with some limited external review, and more clearly establishing authority and responsibility for such programs at the school and regional level.

There is a range of general guidance information available to parents including reports on student test results, a range of online resources and a new online monthly newsletter. However, we have not seen any specific guidance for parents on what support students can expect from all public schools, what is available for their child's specific needs, how they can support their child's specific learning and development, and how they can be involved in helping schools.

### 3.1 Is there consideration of what might be done at individual and class level to help pupils who are experiencing difficulties with numeracy and literacy?

#### Our assessment

Over the last decade the Department has developed an extensive range of programs to improve literacy and numeracy. Some of these are specific initiatives that build on the single purpose of improving literacy and numeracy achievement through the day to day work of the classroom teacher. The specific programs range from those designed to address the needs of individual students, those which provide additional funds to particular categories of schools and those which are professional learning programs to assist teachers.

Single purpose programs include:

- a system for schools to compare and analyse student performance data to identify where to focus their improvement effort
- professional learning courses such as *Literacy on Track*, *Literacy in the Middle Years of Schooling*, *Literacy Action Research Kit*, *Accelerated Literacy (formerly know as Scaffolding Literacy)*, *Count Me In Too and Counting On*
- appointment of specialist *Reading Recovery* teachers to provide individual assistance to students in year 1 who are experiencing reading and writing difficulties.

The programs that have a broader focus, of which improvement of literacy and numeracy is a component include:

- professional assistance such as the *Learning Assistance Program* to strengthen support to students in regular classes who experience difficulties in basic areas of learning
- additional funding, professional assistance and support for schools with high concentrations of students from low socio-economic status backgrounds under the *Priority Schools Programs*, and support for schools in remote areas under the *Country Areas Program*
- programs specifically for Indigenous education
- programs specifically for *English as a Second Language*.

In recent years the Department has been developing new measures including:

- a literacy and numeracy assessment, commenced in 2008 for all children as soon as they start school, with feedback to parents of Kindergarten students about the literacy and numeracy knowledge their son or daughter has brought to school along with advice on how they can support their learning. In addition, Early Learning Plans will be developed for students in Kindergarten through to Year 2 based on the results of the new assessments

- personal learning plans for Aboriginal students in public schools. Over the last 18 months in excess of 15 000 Personal Learning Plans have been developed for Aboriginal students
- increased English as a second language support for 5,000 newly arrived refugee students
- reduced class sizes in years Kindergarten - Year 2 to allow teachers to spend more one-on-one time with their students. Reduced class sizes were achieved in 2007.

While an extensive range of programs exist we were unable to find a centralised source of information for schools on what additional instruction and support each student should be given to address identified learning needs, any systematic assessment of what resources and support are needed, any survey of the adequacy of resources, or individual assessments of teachers' literacy and numeracy training needs.

**Range of programs** We found that the Department has an extensive range of programs to help students who are experiencing difficulties with numeracy and literacy.

These programs supplement the syllabus and curriculum materials that all teachers use. In NSW public schools classroom teachers are expected to teach literacy and numeracy. Where required, additional support is made available to increase teacher capacity and student learning.

Some of the programs are specific initiatives with the single purpose of improving literacy and numeracy achievement. These include:

- professional learning courses and learning materials for teachers and students such as *Literacy on Track*, *Literacy in the Middle Years of Schooling*, *Literacy Action Research Kit*, *Accelerated Literacy*, *Count Me In Too* and *Counting On*. For example, *Literacy on Track* consists of a set of classroom-based professional learning courses designed to improve literacy and reduce the achievement gap for Kindergarten to Year 4 students in participating schools. *Counting On* specifically focuses on identifying and responding to the needs of students experiencing difficulties in numeracy. A *Count Me In Too Indigenous* program provides additional information for teachers to work with Aboriginal families in promoting learning of mathematics
- appointment of specialist *Reading Recovery* teachers to provide individual assistance to students experiencing reading and writing difficulties. *Reading Recovery* identifies students experiencing reading and writing difficulties after their first year of school and provides intensive one to one teaching for 30 minutes each day. In 2005, the New South Wales government allocated more than \$32 million to the program, in which 928 teachers supported 8,015 students in 831 schools. In 2007 it was announced that the program would be expanded over four years by a further 200 specialist teachers



- *Best Start* which will include a literacy and numeracy assessment for all children as soon as they start school, with new Early Learning Plans for students in Kindergarten through to Year 2 based on the results of the new assessments. It will also include feedback to parents of Kindergarten students about the literacy and numeracy knowledge their son or daughter has brought to school along with advice on how they can support their learning.

In addition, there are programs that have a broader focus, of which the improvement of literacy and numeracy is a component. These include:

- professional assistance programs such as the *Learning Assistance Program* to support students in regular classes who experience significant difficulties with literacy and numeracy. The *Program* for 2007-2009 consists of 1,370 support teachers and additional funding to 1,886 primary and secondary schools, allocated on the basis of need - using the results from state-wide tests
- additional (largely federal) funding and support for schools with high concentrations of students from low socio-economic status backgrounds under the *Priority Schools Programs*. The *Priority Schools Programs* are directed at schools with high concentrations of students from low socio-economic status backgrounds. The funding may be used for teacher training, extra teaching staff, intensive literacy and numeracy programs, and tailored support for students who are at risk of failing or leaving school. More than 570 public schools were being assisted under the *Priority Schools Program* in 2006/07
- programs specifically for Indigenous education. Some 30 *Schools in Partnership* schools receive between \$100,000 and \$335,000 in additional funding each year to help them achieve targets for Aboriginal students in improving literacy and numeracy results, school retention rates and school attendance. A *Targeted Aboriginal Students Strategy* supports targeted learning programs at eight schools that have a significant number of Aboriginal student enrolments. A *Kids and Youth Excel* strategy supports schools with early school disengagement and poor results. An *Aboriginal Early Language Development Program* in 24 schools helps develop the language and literacy skills of Aboriginal students in the early years of schooling. Personal learning plans are being developed for Aboriginal students in public schools. Additional federal funding is available for teacher and Indigenous education assistant relief, involvement of local Aboriginal community members and planning for improved educational outcomes for all Aboriginal students within their school
- programs specifically for *English as a Second Language*. These programs are provided in primary schools and high schools, as well as in 14 *Intensive English Centres*. Students receiving support range from the children of refugees or humanitarian entrants newly arrived in Australia, to Australian-born students from a language background other than English. In 2007 the number of ESL teacher positions was increased to 886 full time equivalent positions. These specialist ESL teachers support some 82,300 students across 738 schools

- reduced class sizes in years Kindergarten - Year 2. The Department is investing \$710 million over four years to reduce class sizes in years Kindergarten - Year 2, allowing teachers to spend more one-on-one time with their students and improving classroom behaviour. This included \$107 million, for more than 600 additional classrooms and \$603 million for more than 1500 additional teachers. This program has reduced state-wide average class sizes to 20 children in Kindergarten, 22 children in Year 1 and 24 children in Year 2. The class size reduction program is being applied uniformly across the State, regardless of need
- new preschools in areas of highest socio-economic disadvantage. Twenty-one new preschools attached to public schools were opened in 2005, bringing a total of 100 preschools attached to public schools. The new preschools are strategically placed in areas of highest socio-economic disadvantage. Eleven of the Department's preschools are specifically for Aboriginal children and a further thirteen are in communities with high proportions of Aboriginal children
- *Teaching and Learning exchange (TaLe)*. This is an online gateway where teachers, school leaders and parents can locate resources to support student learning. The aim is to provide a comprehensive range of state literacy support materials for teachers to download online. There are currently 2134 literacy resources and 1674 numeracy resources available through TaLe. Although its use has been widely promoted, we gained the impression that, currently, most principals, teachers and parents do not use it. A performance assessment of its utilisation could prove instructive in this respect
- the *NSW Quality Teaching model*. The Department reports that this is being implemented in all schools. It aims to focus teachers' attention on HOW they teach as much as on WHAT they teach.

#### **Adequacy of resources**

Aside from the provision of specialist support, resources for schools typically consist of student learning materials for use by teachers when planning learning activities for students. School libraries have an important role here, supporting teachers, teacher-librarians and students with resources for teaching and learning.

Although the extensive array of support and resources suggests that there are adequate programs to help students with literacy and numeracy needs, we were unable to find assurance that they are adequate to meet the needs of every student.

We also encountered schools that had developed their own student learning materials. Some indicated that this was necessary because they had not been provided with enough resources for each classroom. Others did not seem fully aware of the range of Department resources available and how to use them.

The Department has recognised that there is a need to:

- ensure that the development of these resources is driven by a comprehensive priority setting process
- provide an online function so schools are readily aware of what materials have been developed.

We see limits to the support such programs can provide, including for :

- schools that are in need of additional assistance with literacy and numeracy, but for a range of reasons are not able to receive additional financial support
- specialist support that is in short supply. For example, it appeared to us that no more than half the schools that requested support for *Literacy on Track* were able to be so supported. Similarly, it appears that there are many Year 1 students who have weak literacy skill levels and do not receive *Reading Recovery* support. Each specialist teacher can support only around 10 students in a school
- individual students with learning difficulties within a school may be overlooked as there are not enough students with similar needs to obtain special support or extra funding
- student numeracy needs, particularly as schools do not have access to the same level of interventions, workshops, programs and level of resources as they do for literacy.

We were unable to find a systematic assessment of what resources and support are needed, any survey of the adequacy of resources, or any evaluation of their use. We had thought we would find individual student needs for resources and support aggregated at a school and then regional level to guide resource allocation.

**Recommendation**

We recommend that the Department:

- systematically assesses student needs for literacy and numeracy support at the school and regional level
- periodically surveys the adequacy of resources and support.

**Knowing what works best for individual needs**

Schools are expected to identify how to access the combination of resources and support and what works best for the specific needs of their students.

We found that there is a strong attachment to some of these programs, and many schools develop their own. Often the program will work for a particular group of students, but not necessarily for all students with needs.

The 2005 *National Inquiry into the Teaching of Literacy* found that many teaching approaches used in schools are not informed by findings from evidence-based research, and that too many teachers do not have a clear understanding of why, how, what and when to use particular strategies. The Inquiry found that, while the evidence indicates that some teaching strategies are more effective than others, no one approach of itself can address the complex nature of reading difficulties. An integrated approach requires that teachers have a thorough understanding of a range of effective strategies, as well as knowing when and why to apply them.

We were unable to find a centralised source of information for schools on:

- what additional instruction and support students should be given
- what additional funding programs or learning resources are available, together with relevant applicability, eligibility criteria and guidelines
- what works best for their specific needs.

The Department has indicated that its *Teaching and Learning exchange* will have the capacity to rate existing resources. Additionally, the *Best Start Kindergarten Assessment* program will include links to suggested resources to assist students to make progress.

The Victorian Department of Education and Early Childhood Development advised us that the University of Melbourne is developing a guide to school action, based on a child's circumstances. For example, if a student is in year 8 and not reading for this reason, then this is what needs to be done, or if due to that, this is what can be done.

**Recommendation** We recommend that the Department provides by July 2009 better information for all schools on what additional instruction and support students should be given, what learning resources works best for their specific needs and what funding programs a school may be eligible for.

**Effective delivery in the classroom** The skills and ability of the classroom teacher to teach literacy and numeracy, in at times quite difficult circumstances, are central to the effective delivery of literacy and numeracy resources and support.

Against this, we found that students in schools that serve students from poorer communities and schools in remote areas are much more likely to be taught by teachers with relatively less experience. The NSW Public Education Council, *Building on Strong Foundations*, March 2005 reported:

The complex market forces that affect schools produce a situation where some schools are harder to staff than others. These hard-to-staff schools typically receive disproportionate numbers of beginning teachers and experience high rates of teacher turnover. They also tend to have relatively inexperienced executive staff, with most in their first executive position.

As these schools tend to be in areas with high numbers of students from low SES communities, or in isolated rural areas, this results in a situation where those students growing up in communities affected by social and economic hardship and geographical isolation are at risk of having less than their fair share of the teaching resources of the system than those in more advantaged areas.

It also means that the beginning teachers in these schools do not have the same level of support within the school from numbers of experienced teachers and that the executive staff, many of whom are themselves comparatively new to the position, have a large responsibility to support their less experienced colleagues.

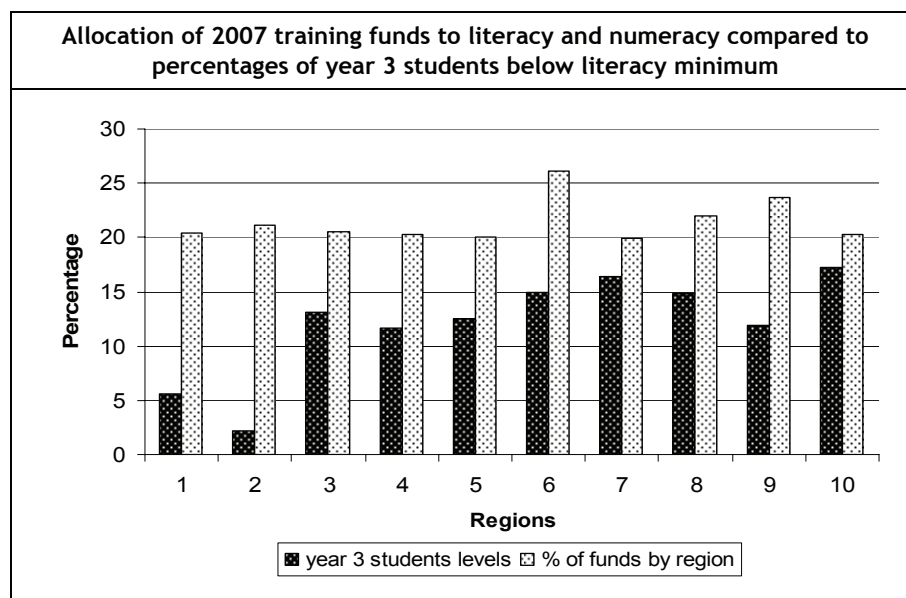
High staff turnover means that the benefits of professional development and capacity building, particularly for programs designed for disadvantaged students, do not stay with the school. New teachers, in particular, may need additional training to help them teach literacy and numeracy. The Department's 2003 evaluation of its *State Literacy Strategy* reported:

numerous comments lamented the cursory treatment of literacy in many teacher-training courses. Better preparation to teach literacy and more consistency across key learning areas for all trainees was called for

the Department and universities need to discuss how teacher training in literacy can be improved and courses need to be monitored. Casual and beginning teachers need more support.

Although we did not find any individual assessments of teachers' literacy and numeracy training needs, the Department advised us that school professional learning teams identify and address such needs in the professional learning component of the school plan. In developing the plan the professional learning team works collaboratively within the school community, taking account of professional learning needs identified by teachers, school self-evaluation data, and school and Department priorities.

We found that the Department allocates teachers' professional learning funds according to the number of teachers in a school, rather than on the basis of relative needs. The potential mismatch that can result is illustrated by the following comparison, showing the allocation of training funds to literacy and numeracy compared to percentages of year 3 children below the minimum. Regions of greatest need, such as number 7 or 10 below, could allocate no more funds for training than regions of least need, such as number 2 below.



Source: NSW Department of Education and Training

We understand that the Department has been addressing these issues with the universities. The Department has also been developing a course to help beginning teachers to teach literacy. Additionally, the NSW Institute of Teachers has been established to improve teacher quality and new teachers will progressively become accredited to a literacy requirement (but not a numeracy requirement).

The Department has also commenced the appointment of expert literacy and numeracy leaders to work in schools and clusters of schools in each region. Under *Best Start* the equivalent of 120 teaching positions will be provided for expert literacy and numeracy leaders to support newly appointed teachers, build teacher capacity and expertise in the diagnosis of student literacy and numeracy needs and further develop teaching strategies in literacy and numeracy teaching. This will assist teachers in classes up to Year 6.

**Recommendation** We recommend that the Department strengthens by December 2009 the literacy and/or numeracy teaching skills of teachers working with the lowest performing students, such as by accelerating its planned introduction of expert literacy and numeracy learning leaders, particularly those with expertise in teaching 'at risk' students.

### 3.2 Are interventions put in place together with evaluations to assess their effectiveness?

**Our assessment** Schools are responsible for identifying and addressing the literacy needs of their students and allocating appropriate support. However, the nature and type of intervention may be influenced by the performance and funding status of the school.

We see a need for more intensive scrutiny of how under-performing schools are using their resources, what changes are being made, and what impact they are having. We also see potential to strengthen accountability arrangements by rationalising funding programs, increasing quality assurance with some limited external review, and more clearly establishing authority and responsibility for such programs at the school and regional level.

**Sharing of responsibilities**

The State Literacy Plan 2006-2008 explains that:

- Schools are responsible for identifying and addressing the literacy needs of their students and allocating appropriate support within a whole-school planning approach.
- Regions are responsible for providing schools with practical and effective support that reflects and responds to school needs while meeting strategic requirements. Regions collect and provide data to assist with the monitoring of progress against the Plan.
- State Office Directorates are responsible for developing and aligning programs to strategic requirements and providing appropriate support to regions and schools.

**Ensuring intervention occurs at the school level**

We found that:

- intervention at the school level is primarily the responsibility of the classroom teacher, drawing on the involvement of the *Learning Support Team* where needed. These teams case manage interventions for students and are coordinated by the school principal or a member of the school executive. They may include school executives, class teachers, school counsellors, specialist teachers, parents, carers or students. The teams can decide how to support students needing additional assistance, from the resources available to the school. As school learning support teams are limited in the resources they have, not every child may receive the degree of support that they need
- schools are expected to report in their school management plans on the use of resources to improve learning outcomes for students with additional needs in literacy and numeracy, including those with disabilities
- regions analyse performance information to identify the lowest performing schools, in terms of results and levels of improvement. The ‘focused support schools’ model in regions is an example
- regions can intervene with schools as a result of the *Principals Assessment Review Schedule* (PARS) process. The school plan, with its short-term targets and longer-term goals provides the framework for the PARS annual review. Other documents such as the annual school self-evaluation, the annual school report, and the annual school financial statement and the annual school self-evaluation inform the PARS process.

**How much is being spent on individual schools?**

We were unable to see how much is being spent on individual schools or by student type (such as students with disabilities or those from low socioeconomic backgrounds). Information is readily available on what is being spent across all schools in terms of broad function (such as teacher salaries, redundancies, or capital), but is not otherwise easily broken into component parts. The financial information system does not provide a mechanism for a school to report on how it has expended its income generated through fees, investments, donations and fundraising. This further makes it difficult to efficiently and effectively ration scarce resources, and to cost the resources actually needed.

**Systematic review**

The Principal Assessment Review Schedule (PARS) is a systematic review process in place for NSW schools. The process aims to ensure that the principal is performing satisfactorily against major accountabilities.

The Department of Education and Training informed us that the PARS process has been significantly enhanced over the last few years through:

- establishment of 78 School Education Directors, with line management of principals.
- requirements for four individual performance reviews for each principal in each year, with a focus on school improvement, including student performance in external tests.



Each PARS review is undertaken by the relevant School Education Director who takes into account the level of experience of the principal and the particular circumstances of the schools, including the nature of the community and the size of the school.

In addition to the PARS the Department's *School Development Policy, 1999* identifies three types of review:

- Education support teams, at the principal's request, developing programs for schools in consultation with school and regional staff
- School program reviews, initiated by the school education director or the principal, when a program has shown need for improvement
- Management reviews, initiated by the school education director, when there is substantial evidence of significant dysfunction in the operation of the school.

In 2007 for example, there were 46 visits by education support teams, 30 program reviews and 1 management review. There are more than 2,200 schools.

By comparison, the Victorian Department of Education and Early Childhood Development systematically employs three levels of scrutiny of schools, depending on their performance:

- schools with student performance outcomes above expected levels (that are encouraged to act as mentor schools and share good practice)
- schools where student performance is satisfactory but where indicators suggest there is scope for improvement
- schools where student performance outcomes are below the expected levels and in need of an improvement strategy.

**Recommendation** Utilising its review processes, we recommend that the Department undertakes more intensive monitoring and review of how under-performing schools are using their resources, what changes are being made, and what impact they are having.

**Ensuring intervention meets individual needs** We did not find:

- clear and consistent guidance on what intervention supports teachers can draw on, linked to the results of a student's assessment, regardless of the overall performance or funding status of the student's school
- assurance that appropriate support reaches all students 'at risk'.

In our view the Department needs to sharpen its focus on students 'at risk', strengthen its capacity to plan, assess and effectively track their performance, and more closely target individuals when determining literacy and numeracy resources.

**Recommendation** We recommend that the Department develops by July 2009 clear and consistent guidance on what intervention is needed, based on the results of a student's assessment, regardless of the overall performance or funding status of the student's school.



**Funding student needs**

All schools are allocated teaching staff in line with state-wide staffing formulae. Beyond these resource allocations, additional resources for literacy and numeracy are provided through the federal, state and regional levels.

This can involve a number of programs, which provide support for students with particular needs, such as those in low socio-economic status communities, students with disabilities etc. Each has separate objectives, timing and reporting requirements.

Core state resourcing of schools is usually based on numbers of students. Additional funding from federal and some state programs is based on combinations of student numbers, cohort composition, location and literacy and numeracy performance. Recognising that needs are neither evenly distributed, nor confined to target groups, the State office and the regions endeavour to compensate for the differences by allocating their support so that it reflects overall needs shown by state-wide tests.

There are targeted programs serving communities which can be socially and economically disadvantaged. Some of these programs are known as the *Priority Schools Program*, as well as *Indigenous Tutorial Assistance Scheme*, *In Class Tuition* and *Supplementary Recurrent Assistance for aboriginal students*. Schools in receipt of those funds have specific reporting requirements as a result of their funding arrangements.

We see potential to revise the overall resourcing model so that it more closely aligns to the needs and disadvantage of individual students.

We also see potential to strengthen accountability arrangements by rationalising funding programs, increasing quality assurance with some limited external review, and more clearly establishing authority and responsibility for such programs at the school and regional level. At present State office, regions and schools are only partially accountable for their performance, as each has limited say in the allocation of resources.

By way of example, the Victorian Department of Education and Early Childhood Development's *Student Resource Package* aims to provide better outcomes for all students by focusing on student outcomes and school improvement when targeting resources to schools. Its objectives include:

- shifting the focus to student outcomes and school improvement by moving from providing inputs to providing resources needed to improve outcomes
- improving the targeting of resources to achieve better outcomes for all students by aligning resourcing to individual student learning needs
- ensuring the fairness of treatment of schools, with schools with the same mix of student learning needs receiving the same levels of funding
- improving the transparency of student resource allocations by reducing complexity
- providing greater certainty for schools about their ongoing level of resourcing allowing for more effective forward planning

Source: Department of Education and Early Childhood Development, *Blueprint for Government Schools*, website accessed 15 May 2008.

On this point, a recent report by McKinsey & Company, *How the world's best-performing school systems come out on top*, September 2007, noted that high performing school systems construct effective interventions at the level of the school, identifying schools that are not performing satisfactorily, and intervening to raise standards of performance. The very best intervene at the level of the individual student, developing processes and structures within schools that are able to identify whenever a student is starting to fall behind, and then intervening to improve that child's performance.

**Recommendations** We recommend that the Department strengthens accountability arrangements by rationalising funding programs to more closely align with student needs, increasing quality assurance, and more clearly establishing authority and responsibility for such programs at the school and regional level.

### 3.3 Is the help of parents enlisted to support the learning of their children?

**Our assessment** There is a range of general guidance information available to parents including reports on student test results, a range of online resources and a new online monthly newsletter.

However, we have not seen any specific guidance for parents on what support students can expect from all public schools, what is available for their child's specific needs, how they can support their child's specific learning and development, and how they can be involved in helping schools.

**Involvement of parents** The Department's *State Literacy Strategy Evaluation 1997-2003* observed that sometimes the contribution that parents can make is not recognised and parents can sometimes fail to understand both the importance of their contribution and the possibilities available to them. It recommended that schools be better supported to reinforce the important role that parents play in literacy development both at home and at school.

The *State Literacy Plan 2006-2008* states that genuine, two-way partnerships will be developed between home, school and community to ensure an understanding of diversity within school communities and the learning needs of different student groups.

The *NSW Literacy and Numeracy Action Plan 2007* explains that, as part of an \$82 million package over four years, the NSW Government will support parents to help their children learn at home and build stronger relationships and partnerships between teachers and parents.

At 47 schools the Department has led the introduction of a *Schools as Community Centres* program to support prevention and early intervention approaches in communities with high concentrations of disadvantage. It aims to strengthen partnerships between families, communities, schools and the human services agencies. The Centres support families through activities such as parenting education programs, child development

workshops, play groups, workshops on early literacy development, adult English classes, transition from home to school programs, speech and occupational therapy programs and programs to support positive behaviour and school attendance.

We observed that in general:

- parents value advice and information received through the newsletter, parent-teacher interviews, interim reports, phone contact and the school's web site
- there is limited parental involvement in schools, particularly in secondary schools
- parents of children with learning difficulties often have difficulties themselves, and have a poor view of schools
- parents from non-English speaking backgrounds may lack confidence in approaching schools
- parents find it difficult to interact with schools as most work at least 9 am to 5 pm, outside of school hours, which are 9 am to 3:30 pm.

#### Partnering with parents

The *Priority Schools Program* has developed a reflection and planning matrix to assist schools to identify the level of home, school and community partnerships that they have achieved, and to plan for further development in this area. It is based on the idea that a continuum exists from 'parent involvement' to 'partnerships':

- parent involvement is when the school keeps parents informed and parents play traditional volunteer roles at the school's request. Parents play an important role in school activities but do not usually help to make educational decisions
- parent participation is when parents know what is happening at school and take part in educational decision making as well as more traditional volunteer activities
- partnerships of home, school and community is a two way process; a relationship based on mutual understanding and equality. It is when all partners share responsibility and obligations of decision making in appropriate ways.
- Source: Department of Education and Training, *Developing home, school and community partnerships, A Working Paper, 2003*

We observed that there was considerable uncertainty as to the role that parents are expected play. For example:

- some schools use community helpers and parent helpers, others do not
- some have parent training programs, others do not
- some schools view parents as visitors, but not partners.

Parents' representatives explained to us that parents need to be brought into the learning continuum in a positive way at the start, not just called on when there is a crisis where a child has been unsuccessful and failed. They should be asked 'what can you tell me about your child so we can work it into their teaching?' They would like to know not just that a child has failed, but what is wrong and what can one expect would be done about it. Parents want not just sweeping statements but a plan and an agreement.

The Department's *State Literacy Strategy Evaluation 1997-2003* observed that:

- parents would appreciate more information about how to help
- parents believed that more could be done to keep them in touch with the language of literacy
- they felt that teachers should contact them if they needed parent helpers and that training should be provided
- more courses are needed to enable parents to understand the role they can play both at home and school
- some schools are very supportive of parent involvement.

**Clarifying the role of parents**

We did not find a Departmental policy that would clarify the parents/carers involvement expected of NSW public schools.

As an example, the Australian Capital Territory, Department of Education and Training's policy *Parents/Carers as Partners in Schooling* outlines processes that are required in all schools to ensure parent/carer participation is constantly promoted and developed. These include:

- creating an inventory of current practice of parent/carer involvement in schools
- conducting regular surveys of parents/carers (minimum once per year) to assess their satisfaction with, and ideas on, parent/carer involvement
- supporting teachers to attend professional development on parent/carer participation.

**Guidance on support from schools and how to help**

There is a range of general guidance information available to parents:

- the Department provides advice and information to parents about student literacy and numeracy achievements through written reports to parents; for example, the *Student Report for Parents* shows where the student scored on a scale, where their school scored (on average), how well they scored on different types of questions (such as number patterns or interpreting pictures), whether they scored above the "National Benchmark Standard"
- *Teaching and Learning Exchange* has an extensive range of resources available in different languages for parents on its website
- a new online monthly newsletter *Parents + School* will allow parents to read, hear, watch and download information relevant to raising school-aged children and managing school life. It will for example feature articles on ways parents can build a relationship with their child's teacher, ideas to promote literacy with young children while shopping, tools to help children get organised, a downloadable daily planner and activities to do with children
- the Board of Studies has provided schools with copies of the *Parents' Guide to the NSW Primary Syllabuses* for distribution to parents

- there is guidance on the Department of Education, Employment and Workplace Relations website on opportunities for parents to be involved in assisting their children
- as part of an \$82 million package over four years, the NSW Government will introduce parental/community engagement skills in school leadership training for school principals' and develop a *Parents' Guide to Literacy and Numeracy* to help parents help their children.

**Direct communication**

However, we found that:

- the Department does not usually provide written advice on whether the student has a serious problem, or not, the implications of not meeting the National Standard, what needs to be done, what the school can do, what the parent needs to do
- although there is a good supply of resources available from the Department's website, they are difficult for parents to access and their use needs to be promoted.

Parents have opportunities to discuss their child's performance directly with teachers. However, a report for the Department *Review of State-wide Assessments in the Context of National Developments, 2006* noted that while almost all parents discuss test reports with their child, looking at weaknesses that have been identified and then looking to see how they can help their children, only about half will discuss the areas of weakness with their child's teachers.

We have not seen any specific guidance for parents on:

- what support students can expect from all public schools
- what is available for their child's specific needs
- how they can support their child's specific learning and development
- how they can be involved in helping schools.

**Guidance on preschool years and how to help**

The *Effective Provision of Preschool Education (EPPE)* study in the United Kingdom shows that parent-child interaction through activities such as reading, teaching songs and nursery rhymes, painting, and playing with numbers and letters was more strongly associated with children's intellectual and social development than either parental education or occupation.

A recent review by the NSW Public Education Council, *Building on Strong Foundations*, March 2005 highlighted the role that schools could play in:

- encouraging parental involvement in their children's early learning, which is a strong indicator for later educational success
- positioning the school as a source of expert advice on early learning and child development.

In particular, it outlined Parkes Public School's *Birth to Kindergarten - Spread the Word* campaign. The school focuses on both wide coverage and ongoing reinforcement of messages. The series includes:

- a booklet of nursery rhymes offered at hospital, preschool, and play-group, and distributed to all Kindergarten students as a colouring book
- a booklet suggesting ways of engaging babies with language, distributed to expectant mothers when booking into hospital
- a booklet wrapped with a children's book and distributed to mothers and their babies while in hospital
- a booklet given to parents at the immunisation clinic, *Immunise Your Child Against Reading Problems*
- a booklet, *Getting Ready For School*, distributed to parents enrolling their children in preschool or childcare.

**Information on early learning**

The review by the NSW Public Education Council recommended that the Department:

- lead other agencies in providing information to parents on how to support their child's early learning and literacy development
- make information about transition and enrolment, in particular for children with special learning needs, widely available
- ensure the information is readily accessible to parents via its internet site and in other appropriate places, such as early childhood education and care settings, early childhood and community health centres and general practitioners' rooms.

However, other than for some general advice on the Department's website, we could find little information for parents about how children develop in their preschool years, the types of activities that support development and how parents can access specialised support if they need it.

**Recommendation**

We recommend that the Department provides by July 2009 more specific guidance to parents on what support students can expect and how they can be involved in helping schools.

## 4 How does the Department know which programs are successful?

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**At a glance**

**The key question we wanted to answer was:**

How does the Department know which programs are successful?

**Our assessment:**

We found that although the Department was aiming at increased levels of achievement for all students in line with State Plan targets, and had set explicit targets for regions, not all schools had set such targets.

We found that some regions monitor improvements to student learning performance over time to identify those schools most in need of assistance.

We found that the Department had conducted a number of general reviews, but it had not evaluated the efficiency and effectiveness of its programs on a regular basis, using studies of individuals over time to assess their specific impact on student learning.

We did not find information that might help provide assurance that the Department's resources continue to be directed to the programs that provide the most benefit, such as:

- what level of resources and support needs to be made available now in order to reach targeted literacy and numeracy achievement levels at a particular point in the future
- prioritisation rules governing the allocation of scarce literacy and numeracy funds, including what rules apply in what circumstances
- evaluations of the efficiency and effectiveness of each program on a regular basis, using studies of individuals over time to assess their specific impact on student learning
- a close tracking or monitoring of the factors contributing to poor performance, to assist strategic resource planning and to help assess the value of performance achievements (or otherwise) actually attained.

Although many schools link with prior-to-school services, we found little consideration in the Department's programs and plans of the impact of early childhood education on its efforts to improve literacy and numeracy.



#### **4.1 Are targets set for literacy and numeracy attainment and translated through to regions and schools to guide school planning and teaching?**

**Our assessment** We found that although the Department was aiming at increased levels of achievement for all students in line with State Plan targets, and had set explicit targets for regions, not all schools had set such targets.

We also found that some regions monitor improvements to student learning performance over time to identify those schools most in need of assistance. This offers a better way for regional management to identify where it needs to concentrate its attention.

**State Plan targets** We have seen aggregate performance targets set in the State Plan for all NSW students (including those from private schools) to 2016. These are:

- by 2008, reduce the number of lowest-performing students in literacy and numeracy in Years three, five and seven by 10 per cent in 2008, with a further 20 per cent reduction by 2016
- by 2012, increase the number of students in Years three, five and seven meeting or exceeding national proficiency benchmarks for literacy and numeracy by 10 per cent with a further 5 per cent increase by 2016
- by 2016 close the gap between Aboriginal and all students in primary school literacy and numeracy rates.

Additionally, on 26 March 2008 the Council of Australian Governments agreed to at least halve the gap for Aboriginal students in Year 12 or equivalent attainment rates by 2020. We expect this decision will in future be reflected in the State Plan.

We were advised that the State Plan targets will need to be re-calculated on the basis of experience with the new national tests.

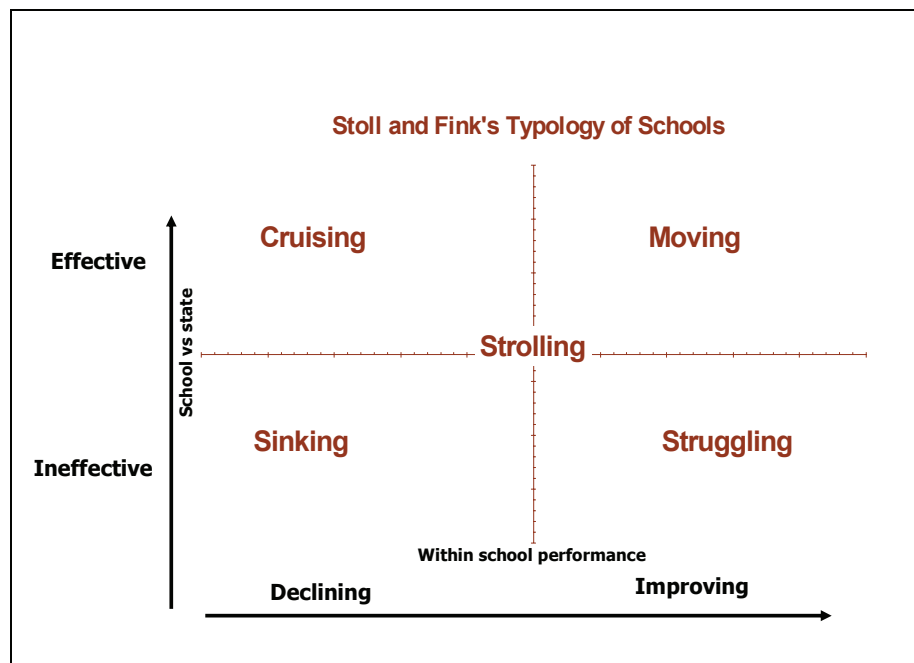
**Targets for NSW public schools** The Department's Corporate Plan 2008-2010 explains that it is aiming for increased levels of achievement for all students in line with State Plan targets.

We found that the Department had set explicit literacy and numeracy targets for its regions. The Department was aiming for an overall reduction of 10 per cent in the number of the lowest performing students in literacy for Years 3, 5 and 7 by 2008. For the most part schools knew of these targets.

The State Literacy and Numeracy Plans indicated that all schools were required to identify specific targets for literacy and numeracy improvement in their school plans. The expectation was that targets would be set by the school, as a result of school self-evaluation of student achievements and current school practices. The school plans were to include the strategies to be implemented to achieve the targets.

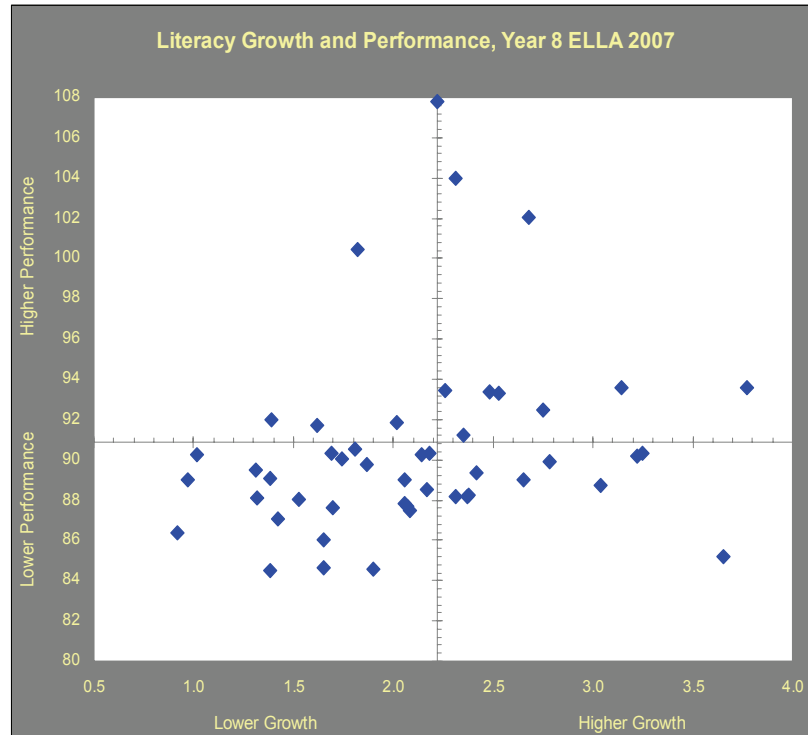
We found that literacy and numeracy targets are sometimes mentioned in the school management plan or in the school annual reports. The PARS performance review process includes a focus on the school's targets, but the school may not have set specific targets for literacy and numeracy attainment, or may have set targets for literacy but not numeracy. However, we were advised that the subject of literacy and numeracy targets could be raised as part of the PARS process when the principals were asked what they were doing to support regional priorities.

We also found that some regions are monitoring schools' improvements to student learning performance over time. They are using a two dimensional plot of average test scores vs change in test scores over time to identify those schools most in need of assistance - defined here as those that are low scoring, with falling results. Based on work by researchers Stoll and Fink, the plot offers a broad indication of where regional management needs to concentrate its attention.



Source: NSW Department of Education and Training

The following illustrates the relative performance of schools in one region, based on results from the *English Language and Literacy Assessment* of year 8 students.



Source: NSW Department of Education and Training

**Recommendation** We recommend that the Department ensures that all regions and schools work together to set explicit targets for literacy and numeracy attainment by December 2008.

#### 4.2 Does the Department evaluate the effectiveness of its strategic actions?

**Our assessment** We found that the Department had conducted a number of general reviews, but it had not evaluated the efficiency and effectiveness of its programs on a regular basis, using studies of individuals over time to assess their specific impact on student learning.

We did not find information that might help provide assurance that the Department's resources continue to be directed to the programs that provide the most benefit.

Although many schools link with prior-to-school services, we found little consideration in the Department's programs and plans of the impact of early childhood education on its efforts to improve literacy and numeracy.

**Evaluation of programs**

The Department's *Office of Schools Plan 2006-08* states that it will undertake rigorous evaluation of programs and initiatives to ensure effectiveness, transferability and value for money.

We asked to see the business case prepared for each significant literacy and numeracy program identified in the *State Literacy and Numeracy Plan 2007-08 Budget*, including options considered and the method of allocation of funds.

For example, we were interested in what impact the Department's \$640M program to reduce class sizes was expected to have on literacy and numeracy. While the program has been applied evenly 'across the board', we were interested in whether the Department had considered focusing it only the poorest performing schools. We were also interested to see what alternatives may have been considered, such as whether it may have been better to increase sizes by one or two students and increase professional teaching and development. This information was not available.

We were provided with this type of information only for *Best Start*. We were advised that many programs were developed as government commitments, but were to be funded within existing resources. As a result, business cases were not prepared. Other programs are federally funded and do not have a business case, but rather have federal government guidelines for their application.

**General reviews**

We found a number of general reviews:

- *Follow-up to BST - Assisting Year 3 and Year 5 students who need additional support in literacy, 2000*: a package containing recommended measures and information resources for school learning support teams
- *State Literacy Strategy Evaluation 1997-2003*: an assessment of what appeared to have worked well, based largely on surveys and focus groups of teachers and executive staff
- *Review of State-wide Assessments in the context of National Developments, 2006*: a review of the implications for NSW of the (then) proposed national testing program, plus consideration of how to include the national results in an overall assessment framework
- *Knowing makes the difference - Learnings from the NSW Priority Action Schools Program, 2004*: an assessment of the overall impact of this funding program on the 74 schools participating, developed on the basis of school self- assessments, school visits, aggregate test data and the views of key stakeholders
- *Equity programs for government schools in New South Wales: a review, December 2005*. This was an overall review of the impact of the *Priority Schools Funding Program*, *Priority Action Schools Program*, *Early Literacy and Numeracy Initiative*, *English as a Second Language* and the *Country Areas Program* equity programs based on previous evaluations, school visits, aggregate test data, consultation with program managers and stakeholders.
- *The Learning Assistance Program: A Reflective Study (June 2006)*: a review of the program based on surveys of schools, parent groups and the views of key stakeholders.

<b>Limitations</b>	<p>Reviewers noted limitations in these reports, particularly when they depended on the results of teacher surveys and school self evaluations, including:</p> <ul style="list-style-type: none"><li>▪ participants are aware of being assessed or observed and their activity and effort monitored, particularly when future funding is dependent on the outcomes</li><li>▪ it is often not possible to fully isolate the effects of some funding programs from the effects of other programs for improving literacy and numeracy. Multiple sources of income flow into schools, many of which appear not to operate in unison</li><li>▪ there is little long-term data on achievement and other outcomes covering periods before and after the introduction of funds to assess impact</li><li>▪ there has been little hard comparative evidence to support reported gains. Without comparisons with other schools, it is not possible to know whether or not any gains or changes are related specifically to trial schools or whether they reflect broader trends.</li></ul>
<b>Transparency</b>	<p>The transparency of the resource allocation process was raised by a number of different stakeholders as an issue. The Australian Council of Education Research noted in its 2007 report on <i>Australia's School Funding System</i> that improved consistency and transparency in this area would improve efficiency (by understanding better the impact of school resources on student outcomes) and equity (by understanding better the level of real need in individual schools, and funding appropriately).</p>
<b>Ensuring the most benefit</b>	<p>We did not find information that might help provide assurance that the Department's resources continue to be directed to the programs that provide the most benefit, such as:</p> <ul style="list-style-type: none"><li>▪ what level of resources and support needs to be made available now in order to reach targeted literacy and numeracy achievement levels at a particular point in the future - such as for year 7 students who are presently in year 3</li><li>▪ rules governing the allocation of scarce literacy and numeracy funds, including what rules apply in what circumstances. For example the <i>Priority Action Schools Program</i> is designed to fund schools for only a limited number of years and is targeted at a relatively small number of schools when there is a much larger number of schools that appear to need assistance</li><li>▪ evaluations of the efficiency and effectiveness of each program on a regular basis, using studies of individuals over time to assess their specific impact on student learning. For example, the Department has collected data on <i>Reading Recovery</i>. But there is some evidence to suggest that the program may not sustain initial gains and participants begin to fall behind again in the later years of primary school and into secondary school. If this is the case, it would point to the need for continuous monitoring and further strategic intervention at critical stages of schooling</li><li>▪ a close tracking or monitoring of the factors contributing to poor performance, to assist strategic resource planning and to help assess the value of performance achievements (or otherwise) actually attained.</li></ul>

**Measuring performance**

The NSW Audit Office Report *Educating Primary School Students with Disabilities 2006* recommended that the Department develop a suite of performance indicators to monitor the relevant programs at a school, region and state level. The Department accepted the recommendation. In this audit we did not find that it had adopted such measures for its literacy and numeracy programs.

It is important to ensure that programs deliver value for money. This entails:

- establishing at the outset of literacy and numeracy programs the expected impact over time on literacy or numeracy outcomes, identifying program efficiency or value for money, as well as effectiveness, monitoring program performance with a suite of performance indicators
- developing a more effective and meaningful school performance management system, with close tracking of the factors contributing to poor performance, effective student tracking and student plans, to readily gather and use evidence to support resource allocation and funding decisions
- maintaining adequate and accurate records concerning the performance of the programs. With this type of information, each program can be evaluated on a regular basis to determine its success and the Department's resources can be directed to the programs that provide the most benefits
- developing a more focused and strategic approach to the direction of funding, including rationalising funding and showing how the various funding components are dovetailed to address the issue of underperformance in literacy and numeracy.

**Recommendation**

We recommend that the Department:

- rationalises and consolidates the programs that aim to improve literacy, and (separately) the programs that aim to improve numeracy
- establishes at the outset of such programs the expected impact over time on literacy or numeracy outcomes
- monitors program performance with a suite of performance indicators and with studies of individual students over time.

**Impact of preschool educational programs**

Research shows preschool educational programs are particularly important for children from disadvantaged backgrounds as they make the transition to school easier and more positive, providing a solid platform for future development.

We found little in the Department's programs and plans on the impact of early childhood education on its efforts to improve literacy and numeracy.

The Department of Education and Training does not have legislative responsibility for the education of children below school aged, but rather its legislative responsibility begins with kindergarten as the first year of school. The Department of Community Services has legislative responsibility for the care and education of children below school age.

The Department does, however, operate 100 preschools. We observed that many of the Department's older preschools are now located in areas where there is relatively less social disadvantage.

**Recommendation** We recommend that the Department leads a whole of government assessment by July 2009 of the value of strengthening transition to school support and programs in communities with the poorest performing public schools.





## Appendix

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## About the audit

<b>Audit Objective</b>	Our objective in this audit is to determine whether the Department of Education and Training's processes to improve literacy and numeracy are likely to be successful.
<b>Lines of inquiry</b>	<p>In reaching an opinion against the overall objective, we examined three lines of inquiry:</p> <ol style="list-style-type: none"><li>1. Are literacy and numeracy needs adequately assessed?</li><li>2. Are there adequate programs to help those with literacy and numeracy learning needs?</li><li>3. How does the Department know which programs are successful?</li></ol>
<b>Audit criteria</b>	<p>The audit criteria, against which the Department of Education and Training's performance was assessed, addressed these three questions in detail. The criteria are standards based on our research of current thinking and guidance on better practice. They were discussed and, where possible, agreed with the Department of Education and Training.</p> <p>For line of inquiry 1, the audit criteria were:</p> <ul style="list-style-type: none"><li>▪ ensures that the literacy and numeracy learning needs of each child are assessed and appropriate learning activities set and monitored</li><li>▪ ensures that there are effective arrangements in place to identify those children in need of additional support.</li></ul> <p>For line of inquiry 2, the audit criteria were:</p> <ul style="list-style-type: none"><li>▪ considers what might be done at individual school and class level to help pupils who are experiencing difficulties with numeracy and literacy</li><li>▪ ensures that interventions (at the state, regional and / or school level) are put in place together with evaluations to assess their effectiveness</li><li>▪ enlists the help of parents to support the learning of their children.</li></ul> <p>For line of inquiry 3, the audit criteria were:</p> <ul style="list-style-type: none"><li>▪ ensures that appropriate targets are set for literacy and numeracy attainment and translated through to regions and schools to guide school planning and teaching</li><li>▪ evaluates the effectiveness of its strategic actions.</li></ul>
<b>Audit scope</b>	<p>Our audit looked at the Department of Education and Training's schools function. It also looked at how schools link with preschool programs. In NSW these programs are regulated by the Department of Community Services.</p> <p>The audit did not:</p> <ul style="list-style-type: none"><li>▪ duplicate reviews already conducted in relation to this topic</li><li>▪ question the merits of Government policy objectives.</li></ul>

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<b>Audit approach</b>	<p>We acquired subject matter expertise through:</p> <ul style="list-style-type: none"> <li>▪ interviews and examination of relevant documents including guidelines, reports, studies, strategies and reviews relating to improving literacy and numeracy</li> <li>▪ discussions with relevant staff of the Department of Education and Training</li> <li>▪ visits to three regions considered reasonably representative of current practice and circumstances</li> <li>▪ discussions with representatives of key stakeholders</li> <li>▪ comparisons where appropriate with other States and countries</li> <li>▪ government and best practice guidelines relevant to the above.</li> </ul> <p>This was supplemented with assistance from an external subject matter advisor who reviewed the audit plan, scope and criteria, overall findings and draft report.</p>
<b>Audit selection</b>	<p>We use a strategic approach to selecting performance audits which balances our performance audit program to reflect issues of interest to Parliament and the community. Details of our approach to selecting topics and our forward program are available on our website.</p>
<b>Audit methodology</b>	<p>Our performance audit methodology is designed to satisfy Australian Audit Standards AUS 806 and 808 on performance auditing, and to reflect current thinking on performance auditing practices. We produce our audits under a quality management system certified to International Standard ISO 9001. Our processes have also been designed to comply with the auditing requirements specified in the Public Finance and Audit Act 1983.</p>
<b>Acknowledgement</b>	<p>We gratefully acknowledge the co-operation and assistance provided by the Department of Education and Training. In particular, we wish to thank our liaison officers and staff who participated in interviews, assisted with document review or provided other material relevant to the audit.</p> <p>We were also assisted by discussions with a number of external bodies including the NSW Teachers Federation, NSW Primary Principals' Association, NSW Secondary Principals' Association, the NSW Institute of Teachers, NSW Aboriginal Education Consultative Group, Federation of Parents and Citizens' Associations of NSW.</p>
<b>Audit team</b>	<p>Our team leader for this performance audit was Chris Yates. Sean Crumlin provided direction and quality assurance.</p>
<b>Audit cost</b>	<p>Including staff costs, printing costs and overheads the estimated cost of the audit is \$223,000.</p>



## **Performance Audits by the Audit Office of New South Wales**

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## Performance Auditing

### What are performance audits?

Performance audits determine whether an agency is carrying out its activities effectively, and doing so economically and efficiently and in compliance with all relevant laws.

Performance audits may review a government program, all or part of a government agency or consider particular issues which affect the whole public sector.

Where appropriate, performance audits make recommendations for improvements.

If you wish to find out what performance audits are currently in progress, visit our website at [www.audit.nsw.gov.au](http://www.audit.nsw.gov.au).

### Why do we conduct performance audits?

Performance audits provide independent assurance to Parliament and the public that government funds are being spent efficiently and effectively, and in accordance with the law.

Performance audits seek to improve the efficiency and effectiveness of government agencies so that the community receives value for money from government services.

Performance audits also assist the accountability process by holding managers to account for agency performance.

### What are the phases in performance auditing?

Performance audits have three key phases: planning, fieldwork and report writing.

During the planning phase, the audit team will develop audit criteria and define the audit field work.

At the completion of field work we will meet with agency management to discuss all significant matters arising out of the audit. Following this, we will prepare a draft performance audit report.

We meet with agency management to check that facts presented in the report are accurate and that recommendations are practical and appropriate. Following this, a formal draft report is provided to the CEO for comment. The relevant Minister is also provided with a copy of the final report. The final report, which is tabled in

Parliament, includes any comment made by the CEO on the conclusion and the recommendations of the audit.

Depending on the scope, performance audits can take several months to complete.

Copies of our performance audit reports can be obtained from our website or by contacting our Office.

### How do we measure an agency's performance?

During the planning phase, the team develops the audit criteria. These are standards of performance against which the agency or program is assessed. Criteria may be based on best practice, government targets, benchmarks, or published guidelines.

### Do we check to see if recommendations have been implemented?

Every few years we conduct a follow-up audit. These follow-up audits look at the extent to which action has been taken to address issues or recommendations agreed to in an earlier performance audit.

The Public Accounts Committee (PAC) may also conduct reviews or hold inquiries into matters raised in performance audit reports. Agencies are also requested to report actions taken against each recommendation in their annual report.

### Who audits the auditors?

Our performance audits are subject to internal and external quality reviews against relevant Australian and international standards. This includes ongoing independent certification of our ISO 9001 quality management system.

The PAC is also responsible for overseeing the activities of the Audit Office and conducts a review of our operations every three years.

### Who pays for performance audits?

No fee is charged for performance audits. Our performance audit services are funded by the NSW Parliament and from internal sources.

### Further information

Further information can be obtained from our website [www.audit.nsw.gov.au](http://www.audit.nsw.gov.au) or by contacting us on 9275 7277.

## Performance Audit Reports

No	Agency or Issues Examined	Title of Performance Audit Report or Publication	Date Tabled in Parliament or Published
183	Department of Education and Training	<i>Improving Literacy and Numeracy in NSW Public Schools</i>	October 2008
182	Department of Health	<i>Delivering Health Care out of Hospitals</i>	24 September 2008
181	Department of Environment and Climate Change	<i>Recycling and Reuse of Waste in the NSW Public Sector</i>	11 June 2008
180	Follow-up of 2003 Performance Audit	<i>Protecting Our Rivers</i>	21 May 2008
179	NSW Office of Liquor, Gaming and Racing; NSW Police Force	<i>Working with Hotels and Clubs to reduce alcohol-related crime</i>	23 April 2008
178	Greyhound and Harness Racing Regulatory Authority	<i>Managing the Amalgamation of the Greyhound and Harness Racing Regulatory Authority</i>	3 April 2008
177	Office of the Director of Public Prosecutions	<i>Efficiency of the Office of the Director of Public Prosecutions</i>	26 March 2008
176*	Better Practice Guide	<i>Implementing Successful Amalgamations</i>	5 March 2008
175	Department of Commerce Department of Primary Industries	<i>Managing Departmental Amalgamations</i>	5 March 2008
174	Department of Education and Training	<i>Ageing workforce - Teachers</i>	13 February 2008
173	NSW Police Force	<i>Police Rostering</i>	5 December 2007
172	Department of Primary Industries	<i>Improving Efficiency of Irrigation Water Use on Farms</i>	21 November 2007
171	Department of Premier and Cabinet Department of Commerce	<i>Government Advertising</i>	29 August 2007
170	RailCorp	<i>Signal Failures on the Metropolitan Rail Network</i>	15 August 2007
169	NSW Police Force	<i>Dealing with Household Burglaries</i>	27 June 2007
168	Ministry of Transport	<i>Connecting with Public Transport</i>	6 June 2007
167	Follow-up of 2001 Performance Audit: Ambulance Service of New South Wales	<i>Readiness to Respond</i>	6 June 2007
166	Follow-up of Performance Audit Department of Education and Training	<i>Using Computers in Schools for Teaching and Learning</i>	9 May 2007
165	Homelessness	<i>Responding to Homelessness</i>	2 May 2007
164	Department of Juvenile Justice NSW Police Force	<i>Addressing the Needs of Young Offenders</i>	28 March 2007

No	Agency or Issues Examined	Title of Performance Audit Report or Publication	Date Tabled in Parliament or Published
163	Legal Aid Commission of NSW	<i>Distributing Legal Aid in New South Wales</i>	13 December 2006
162	NSW Health	<i>Attracting, Retaining and Managing Nurses in Hospitals</i>	12 December 2006
161	Follow-up of 2003 Performance Audit	<i>The Police Assistance Line</i>	6 December 2006
160	NSW Health	<i>Helping Older People Access a Residential Aged Care Facility</i>	5 December 2006
159	NSW Health	<i>Major Infectious Disease Outbreaks: Readiness to Respond</i>	22 November 2006
158	Department of Education and Training	<i>Educating Primary School Students with Disabilities</i>	6 September 2006
157	Roads and Traffic Authority	<i>Condition of State Roads</i>	16 August 2006
156*	Fraud Control	<i>Fraud Control Improvement Kit: Meeting Your Fraud Control Obligations</i>	20 July 2006
155	Follow-up of 2002 Performance Audit	<i>Regulating the Clearing of Native Vegetation</i>	19 July 2006
154	Follow-up of 2002 Performance Audit	<i>Managing Sick Leave in NSW Police and the Department of Corrective Services</i>	June 2006
153	Performance Information	<i>Agency Use of Performance Information to Manage Services</i>	21 June 2006
152	Roads and Traffic Authority	<i>The Cross City Tunnel Project</i>	31 May 2006
151	Department of Corrective Services	<i>Prisoner Rehabilitation</i>	24 May 2006
150	Follow-up of 2000 Performance Audit	<i>Fare Evasion on Public Transport</i>	26 April 2006
149	Agency Collaboration	<i>Agencies Working Together to Improve Services</i>	22 March 2006
148	Department of Education and Training	<i>The New Schools Privately Financed Project</i>	8 March 2006
147	Premier's Department	<i>Relocating Agencies to Regional Areas</i>	14 December 2005
146	Bus Transitways	<i>Liverpool to Parramatta Bus Transitway</i>	5 December 2005
145	Follow-up of 2002 Performance Audit	<i>Purchasing Hospital Supplies</i>	23 November 2005

\* Better Practice Guides

**Performance audits on our website**

A list of performance audits tabled or published since March 1997, as well as those currently in progress, can be found on our website [www.audit.nsw.gov.au](http://www.audit.nsw.gov.au).

If you have any problems accessing these reports, or are seeking older reports, please contact our Office Services Manager on (02) 9275 7116.