

What works?

First findings from the independent evaluation of the National Partnership on Literacy and Numeracy

Centre for Education Statistics and Evaluation

The first independent evaluation of the National Partnership on Literacy and Numeracy in New South Wales schools across all sectors is complete. It provides important evidence about how to build quality teaching practices that will improve student outcomes.



Key findings

The evaluation shows that schools can bring about significant change by:

- taking a whole-school approach to improving student outcomes
- adopting explicit teaching strategies, where teachers identify key learning outcomes from the outset
- using data to improve whole-school planning and student outcomes
- increasing teacher collaboration and shared responsibility for student outcomes
- demonstrating effective instructional leadership, where principals play an active role in directing the delivery of teaching in their schools
- measuring the impact of quality teaching on student learning behaviours.

The National Partnership on Literacy and Numeracy – doing things differently

The National Partnership on Literacy and Numeracy was built on the understanding that teachers are the single greatest in-school influence on student outcomes. International research tells us that teachers account for about 30 per cent of variation in student outcomes – ‘It is what teachers know, do, and care about which is very powerful in the learning equation’¹.

The gap in outcomes between a student who has a less effective teacher and a student who has a highly effective teacher can be as much as a full year’s difference in achievement². If a student has a good teacher as opposed to an average teacher for five years in a row, the increased learning would be sufficient to close the average gap between a typical low-income student and a student from a more advantaged background³.

In the past, attempts to improve literacy and numeracy skills in New South Wales have focused on lifting the outcomes of underperforming students, through the provision of multiple, overlapping, and often narrowly focused programs, rather than on improving the quality of teaching.

Recognising the weakness of this approach, schools involved in the National Partnership on Literacy and Numeracy tackled the task of improving students’ literacy and numeracy skills holistically. Participating schools focused on the broad uptake of quality teaching practices – the rigorous use of data, increased teacher collaboration, universally high expectations, and explicit teaching – to ensure that *all* students would receive the teaching they need for high achievement.

Systemic improvement requires a whole-school approach

Schools in the National Partnership on Literacy and Numeracy undertook a rigorous self-assessment to identify focus areas for reform at the beginning of their participation and an evaluation of impact at the end. There was a strong expectation of changed classroom practice, and schools were provided with extensive support, including a menu of evidence-based strategies, and a framework for professional development and capacity-building.

Principals reported that they highly valued the tools provided to support school self-evaluation. Almost all teachers (95 per cent) reported that their active participation in determining the overall teaching vision and school goals had positively influenced their approach.

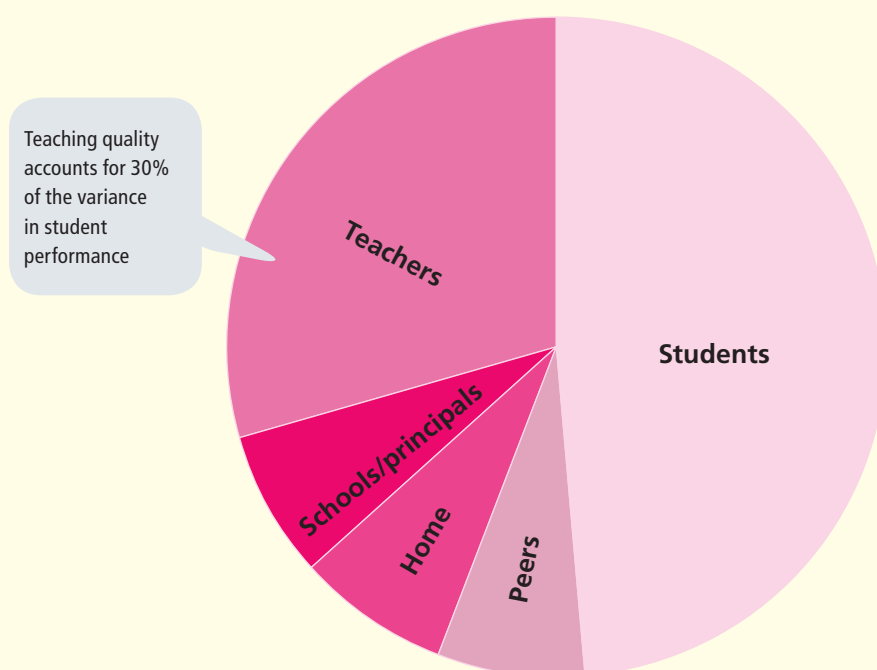
While literacy and numeracy were the focus of this Partnership, principals reported that they anticipated applying the whole-school approach and their learnings about teaching improvement to other curriculum areas.

‘The National Partnership on Literacy and Numeracy has encouraged our school to take more risks – but to evaluate and change different things when needed. We now look to see how programs support our central focus, rather than being ends in themselves’.

School Principal

Figure 1

Impact of different factors on student performance



Source: J Hattie 2003, ‘Teachers make a difference: What is the research evidence?’ ACER Research Conference, Melbourne, 19-21 October.

Explicit teaching is better teaching

Explicit teaching refers to structured and systematic teaching practice. It involves strategies such as:

- clear articulation of expectations for students
- a clear purpose and rationale for learning a new skill or content
- more consistent use of terminology by teachers and students
- increased use of scaffolded learning or teacher demonstrations
- supported practising and feedback
- ensuring that students achieve mastery, that is, students are confident with new skills and knowledge.

Research demonstrates the effectiveness of a more explicit approach to teaching literacy and numeracy⁴. The first edition of *Learning Curve* showed the positive impact of explicit teaching strategies on students' results in the Programme for International Student Assessment⁵. The teaching strategies associated with the biggest differences in reading literacy mean scores were:

- asking students to explain the meaning of a text
- giving students the chance to ask questions about reading assignments

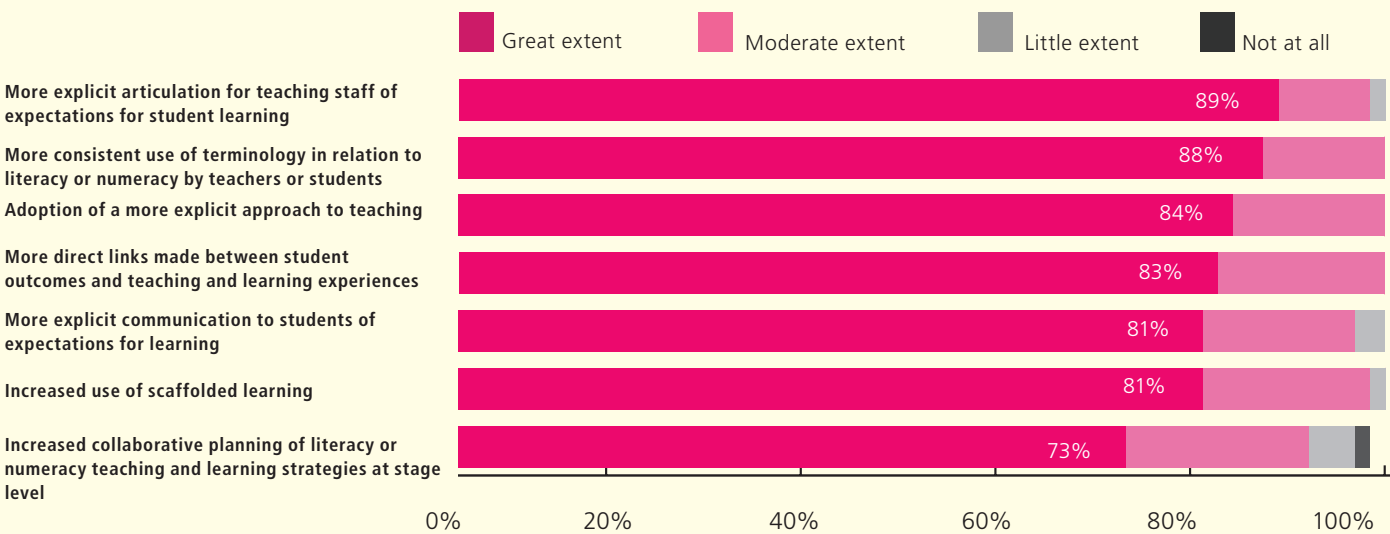
- asking questions that challenge students to get a better understanding of a text
- telling students in advance how their work is going to be judged.

Research shows that students should know what it looks like to be 'doing it right' before they start to practise, and that close monitoring by the teacher of students' mastery of skills will result in more focused teaching and learning strategies⁶.

100 per cent of survey respondents in this evaluation of the National Partnership on

Literacy and Numeracy confirmed that explicit teaching approaches significantly improved their practice. Qualitative survey data indicates many teachers also perceived a direct link to improved student learning and outcomes.

Figure 2
Changes in teaching practice as a result of participation in the National Partnership on Literacy and Numeracy



Source: T Wyatt and R Carbines 2011, *Evaluation of the take-up and sustainability of new literacy and numeracy practices in NSW schools: final report of phase 1*, Erebus International, Table 10.

Note: Where bars do not reach 100%, a small number of respondents have indicated 'N/A'.

Using data improves whole-school planning and student outcomes

Explicit teaching goes hand-in-hand with effective data use.

The use of evidence is one of the hallmarks of professional practice. Teaching is no exception. Teachers are increasingly required to make more and more nuanced decisions, as the expectations of education and the task of schools undergo a fundamental change – teachers must have universally high expectations and personalise their teaching to meet individual student needs. It is important that their professional decisions are as sound as possible.

Student achievement data is critically important information that:

- provides the context and evidence-base for change, at school and classroom levels
- helps identify the focus for change
- provides evidence to support the evaluation of change initiatives.

Better use of student data underpins and drives broad improvements in teaching practice.

When teachers are competent and confident data users, their teaching strategies are more likely to be directly

informed by the analysis of school-level and standardised assessments. For example, pre- and post-testing can help teachers pinpoint areas they need to revisit for individual students and whole classes.

Previous studies have identified some shortcomings in Australian teachers’ skills in the use of assessment data⁷. However, the roll out of the National Partnership on Literacy and Numeracy addressed these concerns. All survey respondents reported that a greater understanding of data analysis tools and techniques (for example, the use of pre- and post-testing) had a very significant impact on classroom practice, particularly the appreciation of the role of data in measuring change and improvement.

‘One of the main ways that the National Partnerships have helped me is not only to directly assess student needs but also to understand what the test results actually mean.

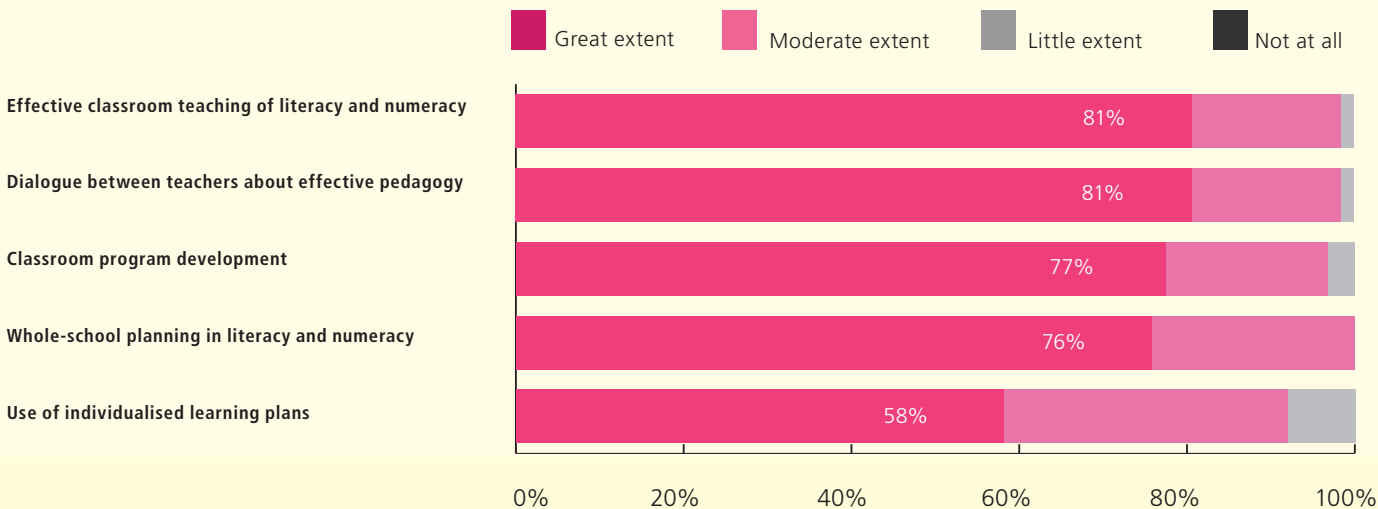
This has meant that I can now really target just what students need, and the professional development courses have helped me to be really specific about their learning outcomes.

I know I am making a difference with these students because I can measure the outcomes and we can even discuss students’ learning together’.

Teacher

Figure 3

Extent to which training in the use of student outcomes data has enhanced practice



Source: T Wyatt and R Carbines, Table 12.

Teacher collaboration builds shared responsibility for student outcomes

Improving results across an entire school relies on a 'critical mass' of teachers committed to change. The Partnership's whole-school approach fostered teacher collaboration and a shared sense of responsibility. More than 98 per cent of teachers reported a greater sense of collective responsibility for student outcomes, while 97 per cent reported themselves to be far more proactive in dealing with accountability issues relating to student outcomes.

The evaluation confirmed previous research demonstrating the benefit of moving away from the notion of teachers as isolated practitioners, and the effectiveness of teacher collaboration, especially in areas such as data analysis and instructional planning⁸. International researchers claim that when teachers are working by themselves, they tend to rely on anecdotes and intuition rather than using data⁹.

The comparative review of innovative learning environments by the Organisation for Economic Co-operation and Development (OECD) indicates that teachers need to:

- be able to work in highly collaborative ways, working with other teachers, professionals and para-professionals within the same organisation, or with individuals in other organisations, networks of professional communities and different partnership arrangements, which may include mentoring teachers
- develop the capacity to help design, lead, manage and plan learning environments in collaboration with others¹⁰.

The evaluation of the National Partnership on Literacy and Numeracy revealed that teachers found significant advantages in collectively examining and assessing student outcomes and learning challenges. A tendency to be dismissive of the National Assessment Program – Literacy and Numeracy (NAPLAN) or to attribute disappointing results to the students' previous year of schooling was replaced by the collaborative examination of assessment data in order to target teaching more effectively.

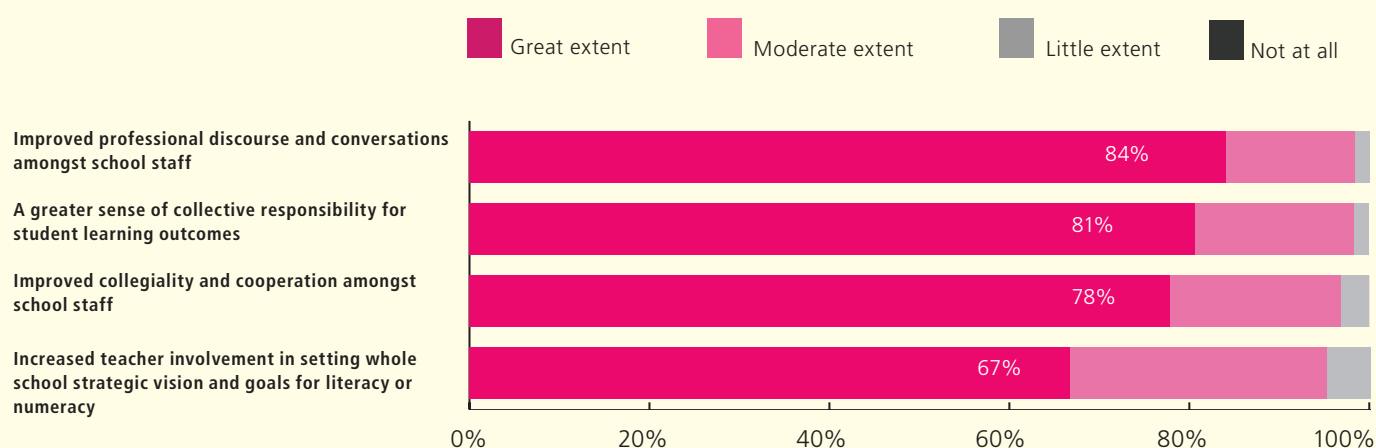
As a result of their participation in the Partnership, teachers were found to be more collaborative in their planning, delivery and evaluation of lessons and more engaged in professional dialogue.

They were also increasingly sharing teaching and learning resources.

Collaboration can also beneficially extend beyond the individual school. Half of the National Partnership on Literacy and Numeracy schools worked with other schools as part of their partnership activity. The most common way of working together was through the provision of collegial support for teachers and principals (nearly 80 per cent).

Figure 4

Observed impact of the Literacy and Numeracy National Partnership on teacher behaviour



Source: T Wyatt and R Carbines, Table 8.

'I've never been in a school before where so much time was devoted to helping us to analyse what students' scores in numeracy actually mean.

In the past we did this on our own and in our own classrooms and really didn't chat to anybody else about our students' results because they were considered confidential between the student and ourselves as teachers.

Because of this program, there is now a real sense of openness across our Stage. We help each other and we can ask each other questions without feeling silly or embarrassed.

We are constantly learning from each other and it has made a big difference in our teaching and it is having a good effect on our kids' learning ...

It makes teaching more enjoyable and we all believe we are doing a better job'.

Teacher

Effective instructional leadership guides change

Strong and effective leadership is at the heart of the school change process, building critical engagement and commitment from teachers and other members of the school community¹¹.

92 per cent of principals believe that their skills or capabilities in instructional leadership have been improved through Partnership strategies.

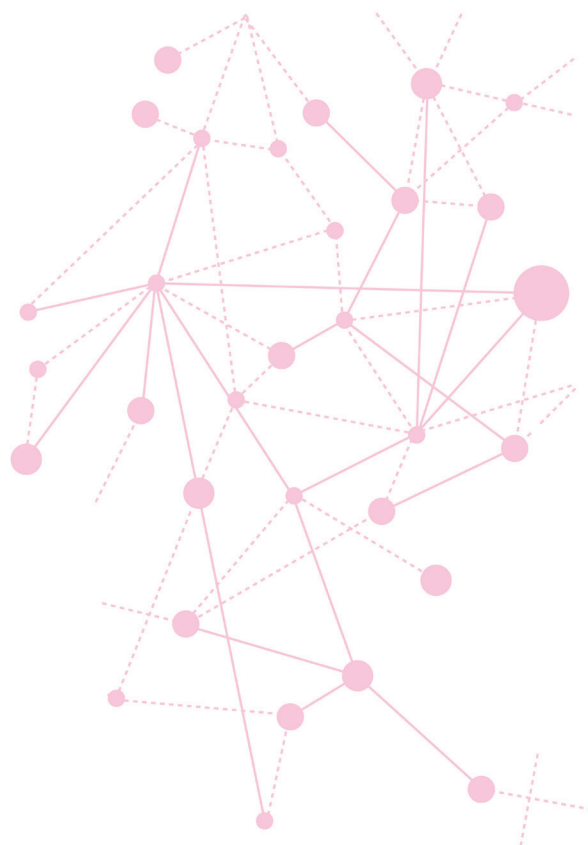
One of the ways that leadership capacity can be strengthened is through targeted training programs focusing on the skills and key behaviours required to lead the change process. Over 85 per cent of surveyed schools reported the programs they accessed through the National Partnership on Literacy and Numeracy improved instructional leadership to a moderate or great extent.

Instructional leadership was also strengthened by the appointment of in-school literacy or numeracy coordinators or classroom leaders. Over 95 per cent of schools reported that this moderately or greatly improved instructional leadership, consistent with research supporting distributed models of leadership in schools.

Instructional leadership refers to principals taking an active role in directing how teaching is delivered in their schools. In practice, this means that the principal and school leadership team encourage educational achievement by making instructional quality the top priority of the school.

A principal who is an instructional leader works with teachers to define educational objectives and set school-wide goals; provides the necessary resources for learning; and creates new learning opportunities for students and staff.

The result of instructional leadership is better collaboration, where learning is the objective of all educators.



'I've witnessed a huge shift in the attitudes of some of my less able students to participate in learning and to be prepared to show what they really know.

There has been a greater focus on student interest in learning and this has allowed access to the curriculum at their own level, thereby ensuring greater ownership of their learning and their goals'.

Teacher

Measuring the impact of quality teaching on student learning behaviours

Participants in the National Partnership on Literacy and Numeracy overwhelmingly reported the positive impact of Partnership initiatives on teaching and learning.

Overall, 100 per cent of teachers surveyed believed that the National Partnership on Literacy and Numeracy improved students' numeracy outcomes to a great or moderate extent. Almost all teachers (98 per cent) reported the same positive effect on literacy outcomes.

The evaluation found positive impacts on a number of aspects of students' learning behaviours (see fig. 5). These behaviours establish important conditions for success over the longer term.

Ideally, the impact of National Partnership activity will in time also be measurable in standardised student assessment data such as NAPLAN.

The Literacy and Numeracy evaluation was unable to measure outcomes for the Partnership schools based on

NAPLAN as there is not yet sufficient data available in just two years of program implementation. A minimum of five years of trend data is needed before changes can be confidently identified as distinct from the normal variability that can be expected in student test results from one year to the next.

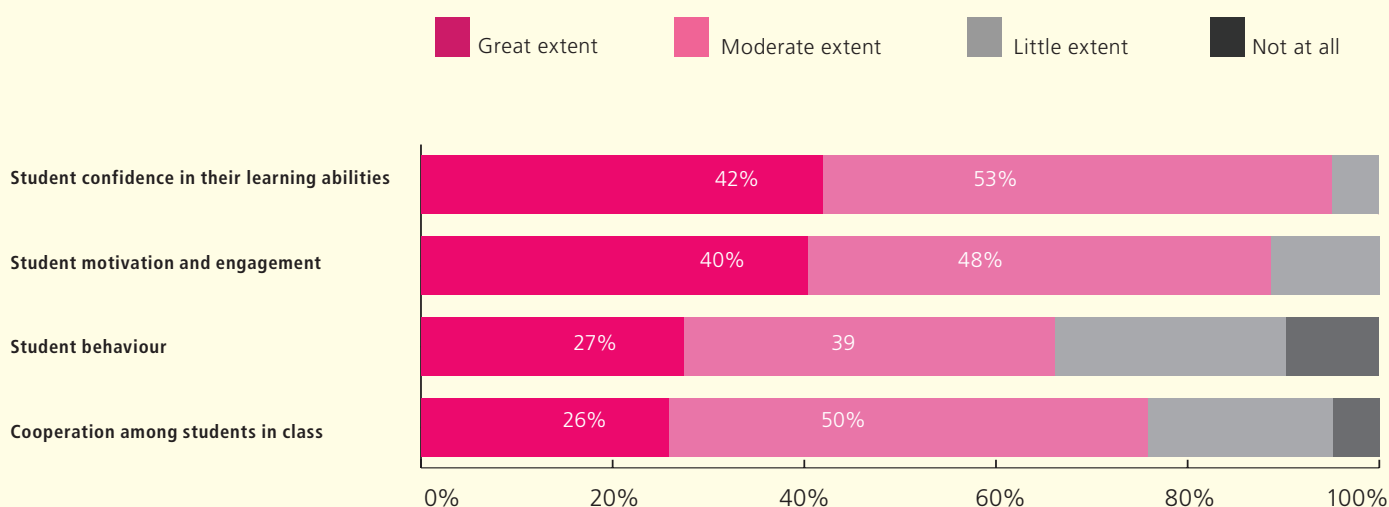
Further analysis

New South Wales is conducting rigorous and robust evaluations of the Smarter Schools National Partnerships. Quality evaluation takes time and the surveys underpinning this work will extend until 2017.

Future editions of *Learning Curve* will present the findings from the next phases of evaluation of the Literacy and Numeracy and other National Partnerships, and introduce an online resource for schools to guide the selection of literacy and numeracy programs.

Figure 5

Impact of the National Partnership on Literacy and Numeracy on aspects of student behaviour



Source: T Wyatt and R Carbines, Table 15.

About the Smarter Schools National Partnerships

The National Partnership on Literacy and Numeracy was one of three Smarter Schools National Partnership Agreements that were agreed by the Council of Australian Governments in November 2008. The other two Smarter Schools National Partnerships were on Low Socio-economic Status School Communities and Improving Teacher Quality.

The Literacy and Numeracy Partnership was designed to deliver sustained improvements in literacy and numeracy outcomes for all students, especially those who were falling behind.

The priority areas for reform effort were:

- effective and evidence-based teaching of literacy and numeracy
- strong school leadership and whole-school engagement with literacy and numeracy
- monitoring student and school literacy and numeracy performance to identify where support is needed.

147 government, Catholic and independent schools across New South Wales participated in the two-year Partnership.

Notes on the evaluation

The independent evaluation of aspects of the National Partnership on Literacy and Numeracy was undertaken by Erebus International, commissioned on behalf of the New South Wales Minister for Education by the Smarter Schools National Partnerships Evaluation Committee.

Evaluations of the Smarter Schools National Partnerships are supported by the findings of the Cross-Sectoral Impact Survey. This is a series of online surveys of principals, executives and teachers in National Partnership schools, which aims to gauge their perceptions of the overall impact of all three National Partnerships. ARTD Consultants are undertaking analysis of survey data. Reports will be published each year.

Information on other evaluation and data analysis projects related to the Smarter Schools National Partnerships is available at the Smarter Schools National Partnerships website: www.nationalpartnerships.nsw.edu.au/reporting-and-evaluation.php

The full list of government and non-government schools included in the National Partnership on Literacy and Numeracy can be found at:

www.nationalpartnerships.nsw.edu.au/resources/documents/SchoolList-LN.pdf

Previous editions of Learning Curve

Issue 1 Teaching quality: effective teaching practices for improving student achievement

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Centre for Education Statistics and Evaluation
GPO Box 33
Sydney NSW 2001
Australia
T 9561 8000
E cese@det.nsw.edu.au
www.dec.nsw.gov.au/cese

NSW Department of Education and Communities