



Targeting support for high-need students in primary schools:

Report of the TRIPS study

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This study has been funded by the Australian Government.

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Foreword

Since 2001, the Australian Primary Principals Association has sponsored a series of research studies investigating aspects of Australian primary education.

In 2007, APPA published a report of the condition of Australian primary schools. The report was titled 'In the Balance'. It was based on curriculum and resource information collected from a random sample of 160 government, Catholic and independent primary schools. It provided the most comprehensive review of the condition of primary education for decades.

The present study, funded by the Department of Education, Employment and Workplace Relations, is investigating one of the major issues that arose from the earlier studies.

It examines whether schools and classrooms with large numbers of students struggling to reach national minimum standards in literacy or numeracy receive the support that they need.

In 2009, the study collected data from 33 schools with concentrations of students achieving below the standards. In 2010, the study examined whether additional support provided through the National Education Partnerships was addressing the needs of these students.

By asking teachers to focus on individual students, the study provides the first comprehensive picture of the factors restricting the achievement of students and the support each needs. It is gratifying that the response from the participating schools has been sufficient to enable such a comprehensive investigation.

The study has been undertaken collaboratively with schools from government, Catholic and independent sectors and with education authorities in Victoria, South Australia and Western Australia. I wish to express my appreciation of the time and effort displayed by all the participants in this study.

APPA believes that the study is important because it is capturing information about what is happening on the ground. This is an essential aspect for principals who sometimes feel that education policy making is too removed from the real world of schools. The feedback from the study should therefore be of considerable value in supporting primary students most in need of support, especially Indigenous students.



LEONIE TRIMPER, PRESIDENT, APPA

Abbreviations and terms

ACARA	Australian Curriculum, Assessment and Reporting Authority.
APPA	Australian Primary Principals Association.
COAG	Council of Australian Governments.
DEEWR	Department of Education, Employment and Workplace Relations.
Domain	NAPLAN is reported in five domains: Reading, Writing, Spelling, Grammar and Punctuation, and Numeracy.
ICSEA	Index of Community Socio-Educational Advantage calculated for individual schools and published since January 2010 on the MySchool website. The mean ICSEA for all Australian schools is 1,000.
IRSED	Index of Relative Socio-Economic Disadvantage.
Literacy and Numeracy NP	National Partnership Agreement on Literacy and Numeracy and related bilateral agreements.
Low-SES NP	National Partnership Agreement on Low Socio-Economic Status School Communities and related bilateral agreements.
MCEETYA	Ministerial Council for Employment, Education, Training and Youth Affairs.
MySchool	School enrolment and NAPLAN data are posted at www.myschool.edu.au .
NAPLAN	National Assessment Program – Literacy and Numeracy.
P/R	The year before Year 1 is Preparatory in Victoria, Reception in South Australia and Pre-primary in Western Australia.
SD	Standard deviation. A measure of variation from the mean or average. A large SD indicates scores were dispersed widely.
Smarter Schools	Documents about the National Partnerships are posted on the Smarter Schools website located at smarterschools.gov.au .
States	States and territories.
Target students	Students teachers have identified as below minimum standards expected for their year level in any one of the literacy or numeracy domains.
TRIPS	Targeting Resources in Primary Schools.

Authors' note

The study was conducted independently by the research team, with a high level of cooperation from school staff members and officers in government and non-government school agencies. The views expressed in this report are those of the authors and are not necessarily supported by APPA, DEEWR or other agencies.

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Executive summary

Introduction

Australian governments are directing substantial additional resources to schools in order to achieve better educational outcomes through a series of National Education Partnerships between the Australian Government and the governments of the states.

These initiatives are a response to widespread concerns that too many students finish their schooling without reaching an acceptable standard of literacy and numeracy, especially students from disadvantaged backgrounds.

The project investigated how primary schools can most effectively deploy their resources to ensure that low performing students reach nationally acceptable standards in literacy and numeracy. The TRIPS study also investigated the delivery of support to primary school students failing to meet national minimum standards in literacy and numeracy.

Concept of targeting

Targeting resources is a two-stage process. The first stage requires explicitly defining the target; the second involves delivering the resources 'on target' so that they can achieve their effect. Therefore, education resources are accurately targeted when they are allocated, disbursed and ultimately used to improve the educational achievement of the students for whom they were intended.

Ineffective targeting of support may explain why there has been so little progress over recent decades in reducing the proportion of students struggling to reach minimum standards.

Methods

The study was undertaken in three states, Victoria, South Australia and Western Australia, and is framed by demographic and performance data brought into the public arena through the MySchool website. This data enabled a comparison of the schools selected for the National Partnerships with those not selected.

The TRIPS study has drawn on detailed information from 33 case study primary schools selected in 2009 because they were expected to benefit from the National Partnerships in 2010.

Data from these schools has enabled analysis of classroom teachers' reports about students they identified as below minimum standards in literacy or numeracy.

In 2009, prior to the delivery of National Partnership support, classroom teachers provided details of factors limiting each target student in their class. Then, they identified additional support needed for each student to reach an acceptable standard. The teachers also made predictions about the future progress of their target students, assuming the 2009 level of support was maintained.

In 2010, National Partnership resources began to flow to schools. Principals of the case study schools described the additional support each school received and classroom teachers repeated the process of identifying target students and the factors limiting their progress. They also described the support that was available for them.

Focus of the report

Four main questions are addressed in this report.

1. What is the distribution of target students in primary schools?
2. What are the factors limiting the progress of target students and what forms of support do teachers say they need?
3. What additional instructional support was put in place for target students after the commencement of the National Partnerships? and
4. To what extent has the additional support met the needs of the target students?

Main findings

National Partnership funding

The National Partnerships were designed to improve the literacy and numeracy achievement of *all* students with priority given to students falling behind, the target students of this study. Hence, the interventions funded through the National Partnerships provide assistance to a wider group of students than those of interest in the TRIPS study.

The National Partnership resources that began to flow to schools in 2010 were shaped during 2009 prior to the final selection of schools. As a consequence, interventions were devised by central agencies in states with nominal collaboration among sectors. This has resulted in a diverse set of strategies from which effective interventions will be identified after implementation.

A quarter of Australian primary schools have been selected to participate in either the Low-SES NP or the Literacy and Numeracy NP. Nearly half of all primary students below national minimum standards are in a school selected for one of the National Partnerships.

The Low-SES NP schools were selected on the basis of their ranking on an index of socio-economic status in a process invigilated by the Australian Government. The Literacy and Numeracy NP schools were selected by state authorities on criteria that included NAPLAN 2008 results.

Compared to the Literacy and Numeracy NP schools, the schools participating in the Low-SES NP serve more disadvantaged communities, are smaller, more geographically remote and the proportion of Indigenous students is greater. They enrol proportionately more students below minimum standards in literacy and numeracy and their mean NAPLAN scaled scores are lower.

The Literacy and Numeracy NP schools were a more diverse group of schools with a more diffuse set of characteristics. The proportion of Indigenous students in these schools was closer to the average for all schools. The concentration of students below minimum standards was higher than average for all schools but not by a large amount. The mean NAPLAN scaled scores were lower than average but not greatly.

Among the Low-SES NP schools, the Literacy and Numeracy NP schools and the schools not selected in a National Partnership in the three states, there is evidence of selections that appear to be anomalous. It is not clear why some schools have been included or excluded. For example a quarter of the primary schools selected for a National Partnership did not report any students below the minimum standards in NAPLAN Reading or Numeracy 2009 and there were schools not selected for either of the National Partnerships with significant proportions of students below the minimum standards in literacy or numeracy.

Size of the target group

Classroom teachers in the case study schools identified target students at twice the rate of their own school's NAPLAN results and three times the rate reported for the Australian population in the *National Report on Schooling*. Approximately, 7 target students per class were reported; a third of students in all the classes described were target students.

Variation among schools was evident. The schools with the lowest number had 3 target students per class. The lowest concentration was 3 target students per class group of 26. The school with the highest number of target students per class was also the school with the highest concentration of target students: 15 target students per class group of 18.

Of the target students identified in 2009, 75 per cent were below minimum standards in literacy and numeracy and 25 per cent in either literacy or numeracy.

NAPLAN scaled scores were not available for approximately a quarter of the target students eligible to sit the tests during 2009. Target students with scaled scores available were on average more than two year levels below the year level in which they were enrolled.

Factors limiting progress

The performance of most target students was limited by multiple factors that span several distinctive categories. The most frequently reported factors limiting progress were 'Lack of prerequisite knowledge and skills' and 'Lack of effort'. In 2009, these were reported in regard to 68 per cent and 43 per cent of target students respectively.

Boys comprised a greater proportion of target students than did girls. Male target students were more frequently limited by factors in the behavioural and attitudinal category.

Indigenous students comprised one-fifth of the target students. The factors limiting their progress were similar to the factors limiting the progress of non-Indigenous target students. An exception was the set of factors categorised as out-of-school influences. There was a higher incidence of Indigenous target students reported to be limited by out-of-school influences than non-Indigenous target students. However, to place this finding in perspective, 36 per cent of the Indigenous target students were not limited by any of the out-of-school influences.

A cluster comprising approximately 40 per cent of target students for whom 'Poor attitude to learning or school', 'Problem behaviour at school' and 'Lack of effort' were factors limiting progress was identified through a Two-Step Cluster analysis. These target students had more than twice as many factors limiting their progress as the remaining target students.

Transient students comprised 14 per cent of the target students identified in 2009. Teachers reported these students had a wider range and greater number of factors limiting their progress than those who continued in the school the following year. Principals found it difficult to direct support to transient students below minimum standards even though they recognised these students need targeted support if they are to become literate and numerate.

Support needed by target students

In 2009, the most frequently requested forms of support were 'Specialist instruction in literacy' and 'Teachers assistant in class'. Teachers said these forms of support were needed by 80 per cent and 75 per cent of target students respectively.

Teachers also said the majority of target students needed more: 'Specialist instruction in numeracy', 'Class size reductions' and 'Diagnostic information'. Half of the target students were reported to need an 'Academic program before or after school'.

Teachers indicated that in order for approximately 40 per cent of target students to reach an acceptable standard, they would need additional training for themselves and non-teaching staff.

In 2009, 47 per cent of teachers reported they were not confident that the strategies they were using would lift target students up to the minimum standards. This may explain why they reported the need for so much additional support. The average number of forms of support teachers said was needed for each target student was 6.8 out of 18 possible forms listed on the survey instrument.

Variation among schools was evident. There were schools where no target student needed a particular form of support and other schools where teachers reported all target students needed it.

Delivery of support

The National Partnerships were kept confidential during the negotiation phase. This led to a 'top down' approach during the early stages of implementation, however, after agreements were formalised, state and system agencies had considerable scope regarding delivery.

A major focus of the National Partnerships during 2010 was professional development. This was provided through coaches, mentors and training sessions on and off school sites. Classroom teachers were given access to literacy and numeracy experts in order to get advice and support designed to improve their instruction.

Among the case study schools, some were given discretion to devise professional development initiatives that suited their individual circumstances while others had programs prescribed by line managers. There were also schools that were given access to professional learning support provided for a group of schools.

'Specialist instruction in literacy' and 'Specialist instruction in numeracy' were supports reported as needed by a high proportion of the target students suggesting a meshing of the target students' needs and the support delivered.

However, these initiatives did not reach all the teachers who needed them. For approximately half the target students, their teachers reported that there was no change in the level of available support from 2009 to 2010.

It is not yet clear whether some support failed to reach these classrooms, is scheduled for delivery and will shortly reach them, has been provided but was not focused on the target students, or whether the support provided was not recognised by the teachers who completed surveys about their target students.

Teachers in the Literacy and Numeracy NP reported an increase in the level of support for their target students at twice the rate of teachers in the other case study schools.

Some principals reported that a form of 'triage' was introduced. Students with the best chance of crossing data cut points in NAPLAN received highly targeted support between February and May 2010 with adjustments to take account of the needs of students expected to progress more slowly after May.

Expectations

In 2009 before schools were selected for the National Partnerships, teachers were not confident that their target students would reach minimum standards in the long term. Classroom teachers predicted that less than a quarter of their target students would reach or exceed the national minimum standards for their year level before completing primary school.

In 2010, the majority of principals of the case study schools selected for the National Partnerships reported they were confident that there would be a reduction in the percentage of students below minimum standards by next year though some indicated it may take longer for the additional support to take effect. Principals in the Literacy and Numeracy NP were more optimistic about target students reaching minimum standards in the future than principals in the other case study schools.

It is too early to form summative judgments about the efficacy of support provided to schools as the National Partnerships are at an early stage of implementation.

Implications

The National Partnerships constitute an important chapter in the history of school reform in Australia. They provide a national framework, are underpinned by commitments from all Australian governments, are guided by ambitious goals and are resourced with a large pool of additional funding allocated according to student need. Even so, there are many challenges.

Important targeting decisions were made when schools were selected for inclusion in a National Partnership. For the first time in school education, payments will be used to reward states that have reached agreed performance targets. More than half the funding for the Literacy and Numeracy NP has been reserved for reward payments to states. The evidence from the TRIPS study suggests schools were selected in order to maximise their eligibility for reward payments rather than on the basis of student need. Further, there were cases of principals who were directed to focus support on students close to the cut points linked to the reward payments.

An important finding of this study is the difference between the target group as defined by the national assessment program, NAPLAN, and the teachers in the case study schools. The classroom teachers have identified a larger group of target

students with significant variations from class to class. These variations relate to both the quantity and nature of factors limiting the progress of the target students. Such variation amplifies the difficulty that central agencies face when targeting resources for schools according to student need.

The variation among schools presents a major problem for central agencies when targeting resources. The needs of target students, and the support required by their teachers, form an irregular mosaic whose parameters are almost impossible to capture in a central resource allocation formula.

Further, any additional support provided to a school must be layered on top of what is already in place. As a result, the support required by one school may differ markedly from what is required by another even though the two schools may be comparable in many regards.

It is clear that staff in the schools selected to participate in the National Partnerships value the opportunity and have put the additional assistance they received to good use. Where resources have flowed to schools, programs have commenced that would not have been possible without the National Partnerships.

However, a better match between the support needed and the support provided is more likely when a school's leadership team is actively involved in negotiations around its students' needs and the delivery of the support. Such negotiations were undertaken in some of the case study schools but this option was not available to all of them.

To some extent the findings have raised questions yet to be answered. Each of the National Partnerships is pursuing goals that have been beyond the reach of earlier national reform efforts. Most developed countries are struggling to achieve the same outcomes and none has found a simple and uncontested formula for success. If there is to be a substantial benefit from the National Partnership investments then there needs to be a candid sharing of what is working *and* what is problematic.

It follows that principals and teachers should have opportunities to present their insights about the efficacy of the reforms. Practitioner feedback should be a valued part of the transformation that is underway.

Introduction

Importance of targeting student support

In December 2008, Australian governments announced plans to direct substantial additional resources to schools in order to achieve higher educational standards. The funding was to be provided through a series of agreements between the Australian Government and the governments of the states.

Two of these partnerships are of particular relevance in this report: the National Partnership for Low Socio-economic Status School Communities (Low-SES NP) and the National Partnership for Literacy and Numeracy (Literacy and Numeracy NP).

Initial statements indicated both would commence in 2009 with the Low-SES NP providing an average of \$500,000 per eligible school (COAG, 2008b) over a four-year period. Altogether \$1.5 billion has been allocated for this National Partnership. The Literacy and Numeracy NP would provide \$540 million to improve literacy and numeracy also over four years (COAG, 2008a). These initiatives were designed to target schools located in disadvantaged communities and schools with a record of low achievement in literacy and numeracy.

Over recent decades, prior to the National Partnerships, Australian governments have made several major attempts to alleviate the problem of educational disadvantage by constituting new programs that have directed additional support to schools in low socio-economic communities. Typically, these programs have met with limited success in improving the literacy and numeracy achievement of disadvantaged students.

The additional support funnelled through the National Partnerships provides a fresh opportunity to redress the problems that historically have impeded the educational progress of low achieving students from disadvantaged backgrounds in Australian primary schools.

Intractability of the problem

National assessments of literacy and numeracy in Australia show that about 10 per cent of students, on average, do not meet the minimum standards for literacy or numeracy; for students from low socio-economic communities the percentage is greater. Over several decades, substantial increases in funding and new programs appear to have had little impact on reducing the size of this group. There has been no overall improvement in the average achievement of the cohorts tested from year to year (Steering Committee for the Review of Government Services Provision, 2003-2008).

The failure to achieve a noticeable aggregate improvement has also been highlighted in two recent Australian reports.

A 2008 review of the NSW Department of Education and Training's literacy and numeracy programs by the NSW Office of the Auditor-General found that although the funding for the programs had trebled over the previous decade there was little apparent improvement in literacy and numeracy results that could be attributed to the additional funding (Audit Office of New South Wales, 2008).

More recently, the Victorian Auditor-General noted in his foreword to the 2009 review of literacy and numeracy achievement in government

schools that notwithstanding \$1.1 billion allocated over six years for improving literacy and numeracy the overall report card was disappointing (Victorian Auditor-General's Office, 2009).

In each of these reports the Auditors-General suggested the weak effects of the funding were the result of poor targeting: the interventions that were funded were not sufficiently concentrated on those students most in need of the extra support, nor sustained for as long as the support was needed.

If targeting is so imprecise that it undermines the integrity of educational reforms, the question arises why this is so.

A recent review of school funding in the UK claimed that the failure by school authorities to target low achieving students was no accident but rather a matter of deliberate policy on the part of local education authorities (DfES & HM Treasury, 2005). It was contended that the local education authorities preferred to treat schools equally, leading some analysts to call for stronger measures by the central government to ensure that the resources intended for low achieving students in disadvantaged schools reached them (Brook, 2008).

While this conclusion might also apply in the Australian context, it is hard to prove because the funding arrangements for Australian schools are so complex that it has been impossible to track school funding from the Commonwealth and state treasuries all the way to individual students. The analyses in the Auditors-General reports were confined to data aggregated at system level and hence had to infer that there had been poor targeting of the funding to schools. Little research examining the impact of resource increases on student learning drills down to the school, classroom or individual student level. Studies of the targeting of educational funding are reliant in most cases on measures aggregated at the state or district level.

In Australia, although there have been substantial increases in per student funding in real terms over recent decades (Burke, 2007), the increases appear to have been spread across schools rather than concentrated in the schools with the most disadvantaged students. A recent Australian study of primary school funding, drawing on a random sample of Australian primary schools, found that the correlation between per student expenditure and socio-economic measures of the school's community was almost zero (Angus et al., 2007). Much

more of the variation in per student expenditures was explained by school size and location than the socio-economic factors.

Even if the funding were accurately targeted to schools, there is no guarantee that it would make a difference to the achievement of students with the greatest needs. There is the possibility that the funds will be spread across all students rather than concentrated on those below minimum standards. However, it is not known how funds are directed in schools as there has been no Australian evidence to illuminate this.

If there is imprecise targeting of National Partnership funding, then it is conceivable that higher levels of investment in improving literacy and numeracy will fail to show actual improvements in achievement, most significantly for the group of students currently below minimum standards.

TRIPS

The Targeting Resources in Primary Schools (TRIPS) study is an initiative of the Australian Primary Principals Association. It follows a series of investigations of primary school resourcing which culminated in the report *In the balance: the future of Australia's primary schools* (Angus et al., 2007). This report contained analyses of the income and expenditure of a random sample of 160 primary schools, linking the per student amounts to various school characteristics. It showed that many of the primary schools with the greatest need did not have the capacity to achieve the national goals of schooling agreed to by Ministers. There appeared to be serious deficiencies in the way in which their central agencies differentially funded schools.

The TRIPS study, described more fully in Chapter 3, is an attempt to take the earlier work to the next step by tracking the school funding that is directed from central agencies to schools, from schools to classrooms and through classrooms to individual students.

The case study schools were asked to identify those students in each year level who were achieving below the national minimum standards in literacy or numeracy. These students referred to as 'target students' are those at greatest risk of leaving school functionally illiterate and innumerate.

These students are the focus of the TRIPS study because they face such serious consequences in later life if they are unable to catch up. Also, the achievement of this group on national tests of literacy and numeracy has been in the public

spotlight and the size of the group within each domain has become a measure of the efficacy of educational systems and institutions.

The TRIPS study works 'backwards' from the case study schools to trace the flow of funding allocated through the National Partnerships. It also works 'forwards' from the intergovernmental agreements that define the National Partnerships.

The National Partnership funding did not become available to schools during the 2009 calendar year. The delay enabled the TRIPS study to adopt a 'before and after' design.

In 2009, the case study schools reported on the target students, the resources available and needed, and their prospects of achieving national minimum standards, before and after the deployment of the support acquired through the National Partnerships.

In 2010, after the case study schools selected in the National Partnerships had been identified and resources had begun to flow through to them, similar questions were posed.

Focus of this report

During 2009, the plans for deploying the National Partnerships were devised centrally on behalf of the schools that would become the beneficiaries of the new funds. Of necessity, these plans were based on assumptions about the kinds of support needed and likely to be most effective.

Also during 2009, the TRIPS study gathered data in the case study schools on the characteristics and needs of the target students prior to the publication of the plans for the National Partnerships.

The information about the target students is important in its own right for several reasons.

First, the profiles of students who are reported in national surveys of literacy and numeracy to be unable to reach the minimum standards are seldom described except in gross categorical terms. The factors that have contributed to their low achievement on the tests are inferred either from this limited data set, from a mixed body of research that seeks to measure the relative importance of global factors impeding achievement, or from anecdotal information about individual students. There has been no systematic attempt to present a profile of these students.

Second, centrally devised intervention strategies tend to focus on similarities among schools and their students rather than on any differences.

Therefore, the method of delivering of the National Partnership support to the TRIPS schools has been considered together with the needs of the target students. This report describes how the support allocated by government reached the targeted schools and matched the needs of the target students.

2

Targeting resources

Introduction

This chapter describes in general terms the processes by which resources for primary education are allocated by governments and funnelled via state agencies through schools to classrooms. It explains why targeting resources to students according to their individual needs is difficult to accomplish in practice even when there is apparent agreement among funding providers, education authorities and school-based staff about what should happen.

From the cabinet room to the classroom there are many opportunities for the resources to be diverted and used for other purposes.

Concept of targeting

The accurate targeting of resources is a two-stage process. The first stage requires explicitly defining the target; the second involves delivering the resources 'on target' so that they can achieve their effect. Therefore, education resources are accurately targeted when they are allocated, disbursed and ultimately used to improve the educational achievement of a specified group of students.

In the TRIPS study the target has been defined as the improved academic achievement of students who have not reached the minimum standards for their year level. The resources allocated will have been accurately targeted if they enable students below minimum standards to reach or exceed the benchmarks set for literacy and numeracy before completing primary school.

The thesis outlined in Chapter 1 proposed that the ineffective targeting of support might be a significant factor explaining why there has been

so little progress over recent decades in reducing the proportion of students struggling to reach minimum standards. It is possible that the target group of students was redefined, funds were redirected or not used effectively or, in practice, a combination of these factors may have conspired to interfere with the delivery and take-up of resources as intended. All these factors are matters of interest.

It is within this context that the National Partnerships have been identified as an additional and targeted funding source.

Targeting at the central level

Base funding

In government school systems the level of funding allocated to a school is largely determined by the size of its student enrolment and to a much lesser extent by other factors. The base grant, amounting to more than 90 per cent of a primary school's allocation, takes little or no account of the special characteristics of the student intake. Hence, most primary school funding is not directly targeted according to the TRIPS definition.

Central agencies can attempt to target the base funding after it has been allocated by specifying how a school's resources are to be used. For example, in many systems schools have been required to limit class sizes in the early years of primary education. However, this is a crude form of targeting since every student in the year levels specified benefits without reference to the variations among schools, classes and individual students.

A relatively small percentage of recurrent funds (less than 10 per cent) in government school sys-

tems is allocated differentially on the basis of the profile of students attending a school, including their need for literacy and numeracy support.

Non-government primary schools are funded by a mix of government grants supplemented by funding from private sources. The Australian Government is the main source of grants and it uses a formula that weights the school's per student allocation according to the socio-economic status of the community in which its students live. Thus a degree of targeting is built into this funding mechanism: it is intended that schools serving lower socio-economic communities will receive more government funding than other schools. Regardless, this is generally inadequate to compensate for the failure to collect fees.

Per student grants may be supplemented by additional government grants that are tied to characteristics of the school's intake.

Most of the base funding of primary schools is used for the teaching of literacy and numeracy. This is because literacy and numeracy are the key learning areas in primary education; more than half of the instructional time in primary classrooms is devoted to achieving the literacy and numeracy outcomes specified in the primary curriculum (Angus et al., 2007).

Targeted special needs funding

All Australian governments subscribe to the principle of funding schools according to the educational needs of students. If this were put into effect the per student amounts would vary from school to school according to the profile of students in each school.

Although all students have needs of one kind or another, the term usually implies *unmet* needs, that is, needs that require some form of additional support beyond that routinely provided to schools through the base funding.

Students with educational needs include those with medical and behavioural problems that restrict their learning in school settings, students unable to speak and understand English, and those from home and community backgrounds that limit their opportunity to succeed at school. Students who are identified as having such needs generally achieve at lower levels in literacy and numeracy than other students though there are exceptions to this generalisation. Resources have been directed to these students through special programs variously named and targeted.

Some central programs fund schools on an individual student basis for cases where students meet eligibility criteria. There is a formal process where schools can be funded if they enrol students with a medically diagnosed disability, the amount of funding being tied to the nature and severity of the disability. Other examples of targeting include programs for supporting Indigenous students or newly arrived immigrants who are not proficient in the English language.

In the case of students who have special needs associated with socio-economic disadvantage, school authorities target schools that enrol a large proportion of their students from low socio-economic communities. However, not all students who attend a school that receives such funding are educationally disadvantaged. It is up to the school to allocate support according to need.

Targeted literacy and numeracy funding

Australian and state governments have established programs for the explicit purpose of improving literacy and numeracy. Because a school's average literacy achievement is usually linked to socio-economic factors some schools attract funds from literacy and numeracy programs as well as from programs that allocate funding according to the socio-economic status of the school's community.

Literacy and numeracy funding may be tied to the provision of interventions developed by system authorities. Strategic Initiatives in Literacy Assessment (SILA) is an example of such a program in South Australia. Getting it Right Literacy (GIRL) and Getting it Right Numeracy (GIRN) in Western Australia are also examples. The performance indicators for such programs may be literacy and numeracy results or defined more broadly to take account of other indicators of progress.

Of the central allocations that are targeted at students struggling to reach acceptable standards of educational attainment in literacy and numeracy few confine the expenditure of the allocated funding to individual students who have not met explicit performance criteria. Past attempts to do so have been unsuccessful.

A program known as An Even Start is an example of a sharply targeted program funded by the Australian Government that was intended to provide support directly to students in all jurisdictions according to explicit criteria: test score results. When it operated as a national tuition

program it provided \$700 per student for students failing to reach minimum standards on the national assessments that preceded NAPLAN. Parents or caregivers were able to use the funds to meet the costs of either school-based tuition or private tuition in reading, writing or numeracy.

An Even Start has not been funded since 2009. In practice, the program was difficult to administer as many parents or carers of eligible students failed to take advantage of the opportunity it provided.

Adjustments to targets by central authorities

System authorities may make adjustments to the resources centrally allocated to a school based on their assessment of the school's needs. They are able to pool the total amount of funding allocated to their schools and, in effect, re-target the funding. Hence, a school may be notionally allocated a specific level of funding but the amount that flows to the school, or is spent on its behalf, may be more or less. In some cases, the funding may be retained to develop or purchase central services that can then be made available to schools. In others, funds may be reallocated to schools that are deemed to have greater needs. Systems become filters through which centrally allocated school funding must pass. This practice is justified on various economic and ethical grounds.

Because of the complexity of the way in which schools are funded, and the political sensitivity of school funding issues, the total per student amounts of funding for individual schools have been either not calculated or, if they were, not published. Hence there has been no routine way of publicly verifying the accuracy of the targeting.

Targeting at the school level

School structures and processes for allocating resources

Many of the important targeting decisions in schools are made when the organisational structure of a school is adopted and determinations are made about the deployment of staff for classroom instruction and ancillary roles. This process normally occurs prior to the commencement of the school year.

If there are sufficient classrooms available, a principal could commit a school's whole teacher establishment to classroom teaching. This would enable the smallest class sizes possible with the resources available but limit the capacity of the school to provide support or coordination.

At the other end of the school organisation spectrum, a principal could increase class sizes thereby allowing teachers to undertake valued roles outside classrooms. These include roles such as providing leadership to colleagues in the area of literacy or numeracy and tracking target students so that support needs can be identified and met in a timely manner.

Principals also make targeting decisions when staff members are assigned duties based on individual teachers' strengths and weaknesses and the mix of students in a class. Likewise, targeting decisions are made when students are assigned to class groups with consideration for the mix of abilities, behaviour and relationships among the students.

The decisions made by a school principal in deploying staff have obvious, important consequences. They require the balancing of many competing considerations such as the capacity of the teacher, the make-up of the students assigned to the class, policies on class size and parents' preferences. To maintain the confidence of staff members, principals have to show that they have balanced considerations of fairness in regard to teacher workload with sound judgments about the best interests of students.

Schools may provide special services for students before and after school; for example, care and supervision, meals, sporting activities, homework classes, clubs and so on. Sometimes the resources that have been utilised may not appear to have been designed to improve literacy and numeracy issues when in fact they are part of such a strategy. For example, a school choir, orchestra or drama club may be of strategic importance beyond the formal curriculum. Senior students with a history of disruptive behaviour who become engaged through music, drama and performance help to induct younger children into the school community. They are both learning and showing others the benefits of belonging.

During all of these processes the principal must judge the extent to which resources should be concentrating on the group of students below minimum standards. If the needs of this group become the dominant consideration in the operation of the school then the principal risks the parents of other children complaining or even withdrawing their children from the school. This is one reason why new programs are often applied to the whole school or whole class even though, as Levin (2009)

has argued, it may be more cost-effective to target interventions at the students who are most at risk.

Classroom dynamics

A range of possible strategies is employed in classrooms to assist low achieving students. The most targeted form of intervention provides individual students with one-to-one instruction. At the other end of the continuum, one teacher is made responsible for teaching all students in a class without any assistance.

Reading Recovery is a well-known strategy that provides an individual student with one-to-one instruction from a tutor with specialist expertise. This model is expensive so access to it is carefully rationed.

Students may be placed in small groups for literacy or numeracy although the instructor or tutor may lack the specialist expertise of a Reading Recovery teacher. Various models for reconfiguring classes can enable weak students to receive targeted support during time allocated for literacy or numeracy.

Within a primary classroom teachers are expected to scaffold instruction and to use grouping techniques that allow the students to work on tasks pitched at a suitable level of difficulty. If teachers have access to assistants they can set work for most of the class while they direct their attention on an individual or small group who need help.

Teachers have considerable discretion over how their time and effort is directed towards particular students. Observations of classroom teachers at work have shown that during a lesson some students receive more of the teacher's attention than others (Lundgren, 1972). Aggregated over the course of a whole school year the differences among students in the amount of focused support they receive from teachers or teachers assistants can be substantial.

The fact that some students occupy more of a teacher's time than others during a regular lesson is not necessarily indicative of either good or poor teaching. Many motivated and able students produce high quality work with a large degree of independence. The issue for the TRIPS study is whether teachers have the time to provide the individualised guidance to students who cannot accomplish a set task because they lack the skills required to function as an independent learner in a class group.

Research in the UK has suggested that individualised teaching has declined over the two decades 1976-1996 (Galton et al., 1999). Teaching in 1996 involved more whole-class interactions and fewer interactions between the teacher and individual students. The decline was attributed in part to the pressures on teachers that have arisen from an overloaded curriculum and the growing need to attend to classroom management issues. While it is unclear how far these findings apply to primary classrooms in Australia it is plausible that conditions have changed over time and teachers now find it more difficult than in the past to concentrate their attention on individual students.

This view is supported by a more recent summary of research into British primary classroom practices that reported 'little group work takes place and still less is of good quality' (Blatchford et al., 2009, p. 578). Students tend to work by themselves at their desk or as a whole class. As a result, the opportunity is lost for students to be grouped so that they can be assigned common tasks appropriate to their achievement.

Hence, where a teacher is solely responsible for a class that contains a relatively large proportion of students with behaviour and learning problems, it is difficult to individualise teaching. Yet, these classes are likely to have the largest numbers of students below minimum standards.

Targeting and triage

Targeting schools and students is not only a technical matter. In most cases it raises moral and ethical issues. In an environment where resources are limited – both human and financial – targeting decisions lead some schools and students to benefit and others to miss out.

Over recent decades there has grown a wide acceptance that schools should be resourced on a needs basis, implying that schools with educationally disadvantaged students should be given extra assistance so that students can catch up to their more advantaged counterparts.

Providing additional funding to raise average test scores raises somewhat different issues. It is a policy that can run counter to needs-based funding since the additional resources may be directed to the students most likely to make progress; the students with the greatest need may be systematically excluded.

The practice of triage is associated with casualty departments of hospitals. Triage nurses are

employed to assess the severity of the condition of incoming patients and assign each a priority for treatment.

The practice originated in wartime when medical assistance was in short supply. Wounded soldiers were assigned to one of three categories: those who would probably live without treatment, those expected to die regardless of treatment, and those whose survival was in the balance who were given medical assistance as soon as possible.

Gillborn and Youdell (2000) report a similar form of triage in schools in the UK where students were divided into non-urgent cases, the hopeless cases and the cases suitable for intervention. Support was distributed accordingly in order to improve results on national tests.

Booher-Jennings (2005) describes the Texas Accountability System as a system of resource distribution designed to increase aggregate test scores rather than to meet the needs of individual students. In her case study she reports how accountability pressures led teachers to accept that some students must be 'sacrificed' in order to improve the school's aggregate scores. They did this by focusing on students who would pass the state test with more help and essentially giving up on students they assessed to be a 'lost cause'.

In another large US study, a third of primary teachers indicated that they focused more on students who were close to 'proficient' than they would have in the absence of their state testing program which measured their achievement in terms of the numbers of students reaching that standard (Hamilton et al., 2007). A large majority of the principals in the study said that their districts encouraged this practice.

These examples are relevant because the National Education Partnerships also employ incentives for schools to improve test results. The incentives have the potential to concentrate support away from the students most in need of additional support.

Effectiveness of the interventions

The main issues canvassed so far have related to interruptions to the flow of resources to students who need them. However, even when funding reaches an intended beneficiary, there is no guarantee that the support purchased will produce improvement; effective targeting requires an intervention to be appropriate, the support must be beneficial.

Designing interventions that have a high likelihood of success with low achieving students is extraordinarily challenging.

Multiplicity of limiting factors

It would be much easier to target support for literacy and numeracy if all the students achieving below the minimum standards were limited by a single, common factor. This is not the case.

A complex array of neurological, behavioural and social factors may be responsible for the lack of progress of an individual student. Furthermore, the mix of students and the factors limiting their progress differs from one class to the next. This presents central designers with system-wide responsibilities with a major problem. It is almost impossible to develop a single intervention that can be so tailored that it addresses the needs of all the students below minimum standards.

Relying on teachers to fix the problem

School authorities are being urged to give primacy to teacher quality concerns when designing school improvement initiatives. This position is now widely held in education policy circles.

While there is now widespread agreement that improving teacher quality should be a key goal of contemporary school reform there is much less agreement about what teachers must do to address the factors limiting the progress of low achieving students. Most of the studies that investigate the relative importance of wide-ranging factors and conclude that teacher quality is of most importance are unable to specify what precisely high quality teachers actually do since they are defined in research studies as teachers who produced larger than average test score gains for their students, a definition that measures quality narrowly and only in retrospect.

There is also a risk that interpretations of these research syntheses, in singling out teacher quality as the factor of greatest significance, understate the importance of the other major sources of variation that influence student learning by implying that there is not much that can be done about them. Student and home factors account for twice the variation explained by teacher factors (Hattie, 2003) and neither the dispositions that students bring to school nor what occurs at home are immutable.

Consider for example student attitude to learning, a disposition that is partially, if not largely,

constructed outside the school. It is not an immutable factor in student learning and its effects may be ameliorated by the school and by the way the teacher approaches the students. The point is that it is not simply a 'student factor' or a 'teacher factor'; the interplay between the school and the student's family, and the interplay between the student and the teacher, can be critically important. The fact that these kinds of interactions are seldom found to be statistically significant in studies of influences on student learning may be due more to the limitations of the statistical measures and models that were employed than the reality of why some students perform well at school and others do not.

There is a further pertinent point to be made about the research that seeks to partition student achievement variation into separate categories in order to establish the relative importance of categories. The studies were undertaken with large cohorts of students of varying ability and the findings applied to students generally. There is no guarantee that what might apply to students generally applies equally well to the students who form the lowest achieving decile and are overly concentrated in schools serving socio-economically disadvantaged communities.

Concentrating on the difficult cases

Centrally designed interventions are commonly based on evidence derived from class or school averages. These are likely to be interventions that have shown improvement based on the majority of students many of whom are already making satisfactory progress.

For example, the interventions may be relatively effective for students who are motivated or have already reached a certain standard but relatively ineffective for those below minimum standards.

The adoption of a form of triage may help to explain why evaluations of large scale interventions to support socio-economically disadvantaged students have shown improvement for high ability students but fail to benefit students with the greatest learning needs (Machin et al., 2007). If interventions are concentrated on the students expected to make the most substantial and measurable improvement then it is likely that this group will make progress at the expense of other students.

Linking interventions to student learning

Some interventions, nominally intended to improve the achievement of students, are actually designed to solve problems several steps from classrooms.

For example, it is often argued that school leadership is a critically important factor in school improvement. Classroom teachers find it difficult to function effectively in the absence of school leadership so leadership serves to enable good teaching; it does not necessarily have a direct impact on student learning.

A program designed to improve school leadership is another step removed from the classroom and the focus of such a program could be any number of topics related to school management. Therefore, there may be no flow-on benefits to the target students as a result of a staff member graduating from a leadership program.

A leadership program is one example of a number of broadly conceived and well-intentioned programs that are linked to student learning by a thin thread. The introduction of networks or the devolution of authority are also examples of interventions one or two steps removed from the classroom. However, if the connections are clear then benefits to teachers and students may be forthcoming.

Where the evidence is inconclusive

While the current commitment by governments to evidence-based reform is commendable, there is much less certainty about what needs to be done to achieve the desired results than is suggested by public pronouncements. Although there is wide agreement that interventions in education should be designed and applied on an evidence basis, it is less widely acknowledged that the evidence cited in support of a particular intervention is far from conclusive. The evidence regarding class size reduction is a case in point.

One of the foremost analysts in the field of school resourcing, Eric Hanushek, puts it this way:

There clearly are situations where small classes or added resources have an impact. It is just that no good description of when and where these situations occur is available, so that broad resource policies such as those legislated from central governments may hit some good uses but also hit bad uses that generally lead to offsetting outcomes (Hanushek, 2003, p. 89).

Another analyst, Norton Grubb, makes a simi-

lar point, drawing attention to the oversimplified language that is often used in discussions about the effectiveness of school resources. Grubb (2008) uses the construct of *compound* resources; that is, resources that are composed of two or more jointly necessary components: for example a school may require teachers with experience *and* a particular area of expertise. To use another example, teachers may need smaller classes *and* teaching strategies more appropriate to the needs of class members. While central agencies may be able to provide one of the components it is much harder to provide both yet without both there is a high risk that the resources will be wasted.

Sustaining interventions

The cost of additional supports often dictates when and where they are provided.

Countries differ markedly in the extent to which they provide additional support to classroom teachers for students with disabilities, learning difficulties and socio-economic disadvantage (OECD, 2007). Usually the support is made available for a fixed period and then withdrawn regardless of whether the students have reached an appropriate standard.

The availability of remedial instruction is an example. A program may be provided for the latter part of a school year after resource allocations have been communicated to the school. It may then finish at the end of the school year so funds can be acquitted. The intervention is not tied to student progress or an absolute standard that must be reached but rather a need to manage funds according to the terms of a grant.

The class-size reductions in junior primary provide another example of the cost of a resource determining its availability. It is argued that it is imperative that students receive a good start to school; early intervention is the catch cry. Struggling students benefit from smaller classes in Year 1 and catch-up strategies such as Reading Recovery. This investment is designed to ensure that weak students progress normally for the rest of primary school. The students' needs for sustained support over a longer period of time are not considered because of the cost.

Unfortunately, not every struggling student has the same problem. Some of the factors limiting student progress are complex and while a student may benefit from two, three or four terms of additional support some will lapse once the support is withdrawn.

Conclusion

Most of the government funding of primary schools is not sharply targeted by central agencies. The base grants, comprising more than 90 per cent of a government primary school's income, are derived mainly from student enrolments.

Of the small proportion of government funding that is targeted, decisions about its expenditure are made during a multi-stage process involving government agencies and intermediary levels of bureaucracy before schools are notified of the resources available to them and the purpose of the allocation.

With few exceptions, centrally targeted funding is not tied to characteristics of individual children or restricted to the sole use of a particular group of students.

For these reasons school principals have considerable discretion over how they deploy their resources, whether centrally targeted or not. Moreover, teachers finally target the students who need their attention and support.

The targeting of government funding often begins with precise statements of intent. However, the audit trail is quickly blurred.

David Monk summarised the targeting problem in these terms:

If the goal of policy-makers is to reduce inequality among students, attention needs to be given to the reduction of inequality not only among school districts in terms of per-pupil expenditure levels, but also among students in terms of pupil-specific *flows* of resources. If, in contrast, the policy-makers seek to improve educational productivity by introducing resources which are more productive when supplied to some students than to others, it is essential to have some means of assuring that the resources in question actually reach the intended beneficiaries. In the absence of a thorough understanding of the allocatory process that transpires within districts, schools, and classrooms, attempts to promote equity and efficiency are likely to be stop-gap in their nature and unpredictable in their impact (Monk, 1982, p. 180).

The situation remains as opaque three decades later yet it is in the classroom that the 'rubber hits the road'.

These conclusions have several important implications.

First, attempts to understand how resources can be utilised to improve literacy and numeracy must take account of all the resources required to make a primary school operational as well as those additional resources targeted for the specific purpose of improving literacy and numeracy. To examine only the effect of the latter would ignore how the core school resources are being used to achieve the same purposes underpinning the supplementary funding.

The National Education Partnerships are examples of such supplementary funding, layered for a finite period on top of the general recurrent funding.

Second, ensuring that funding reaches targets will resolve only one half of the problem; funds must purchase interventions appropriate for students with unmet needs. Delivering the right mix of support to schools is difficult because the students in any school are likely to have a variety of unmet needs. For this reason, centrally developed programs may succeed in improving the achievement of some students but not others.

Third, 'looseness' in funding arrangements is neither necessarily good nor bad. The needs of schools vary considerably and principals require discretion to use resources where they are most needed. Too much central prescription can work against the interests of students.

3

Methods

Introduction

This chapter outlines the framework for the research study and describes its methods.

Use of demographic and achievement data to describe the characteristics of schools that were either included or not included in the National Partnerships is explained.

The characteristics of the 33 case study schools, their staff and students are described together with an overview of the survey instruments used in these schools.

Data quality issues have been summarised.

Research framework

Research questions

The TRIPS study was designed to acquire a deeper understanding of how best to deliver targeted support to primary school students failing to reach national minimum standards in literacy or numeracy. The study has focused on the additional support provided through the National Education Partnerships.

Four main research questions are addressed in this report.

1. What is the distribution of target students in primary schools?

2. What are the factors limiting the progress of target students and what forms of support did their teachers say they needed?
3. What additional instructional support was put in place for target students after the commencement of the National Partnerships? and
4. To what extent has the additional support met the needs of the target students?

Schedule of data collection

In 2009 the schools participating in the National Partnerships were advised of their selection by school authorities. In most cases resources began to flow to schools during 2010. Information about the National Partnerships was progressively displayed on the Smarter Schools website over this period. [Figure 3.1](#) shows the schedule that guided the collection of data.

Sample of school systems and schools

For logistical reasons the TRIPS study was confined to three states: Victoria, South Australia and Western Australia. All system authorities in these states agreed to participate. In 2009 the total number of primary schools in the three states was 42

Figure 3.1: Key events in the TRIPS study

	June - August 2009	Feb - March 2010	April - May 2010
Resource allocation	Schools function on pre-NP resource levels	Schools advised of NP resource allocations	Schools access the NP resources
Research activities	Identification of target students and support needed	Report student-level data to schools and systems	Review of target students and support made available

per cent of all such schools in Australia. The roll out of the National Partnerships, and the manner in which students were targeted, varied from state to state. Hence, the findings from the TRIPS study apply only to the participating states.

Key data sources

There were four key data sources:

1. Public documents about the National Partnerships;
2. Demographic and aggregated NAPLAN data provided by the Australian Curriculum and Assessment Authority (ACARA);
3. Survey data collected from the 33 case study schools; and
4. Explanatory information provided by staff members in the case study schools.

Each of these data sources is explained in more detail.

Context

Both the 'before and after' components of this study were conducted within 12 months, a relatively short period of time from a school education perspective. However, it was during this 12-month period that substantial policy initiatives changed the context of Australian schools.

In response to the Global Financial Crisis, the Australian Government disbursed funds for capital works and maintenance for every primary school in Australia. Because of this, most of the schools participating in the study had builders on-site often with a loss of playground space during the period of construction.

MySchool website was launched in January 2010. This published individual school results on NAPLAN 2008 and 2009 for the first time and was a shift in policy as previously published data was aggregated by broad categories such as state, gender and Indigenous status.

The MySchool data was not available when the TRIPS study commenced or when the National Partnership schools were selected. The availability of this data was a major change in the landscape of school education.

Also, during the period of the TRIPS study the Draft National Curriculum was released for comment.

The timing of the TRIPS data gathering is important. Principals were asked about their schools' experiences at the point when the National Partnership resources began to be disbursed.

Data about National Partnerships

Documents

Documents about the National Partnerships have been published on the Australian Government's Smarter Schools website. State annual reports provide brief descriptions of the initiatives planned during 2009 for delivery to schools in 2010. Since the conclusion of the TRIPS study, annual reports describing activities undertaken during the first six months of 2010 have also been published.

MySchool database

School measures

ACARA gave the researchers access to de-identified MySchool data related to all primary and combined schools in the three participating states: Victoria, South Australia and Western Australia. This database contained records for 3,381 primary and combined schools in the three states.

Both NAPLAN 2008 and 2009 results for individual schools were provided by ACARA. The two sets of data were analysed and yielded comparable patterns of results but only the NAPLAN 2009 results have been reported. The 2009 results were preferred because they more accurately reflect the standing of schools in 2009 and 2010, the period in which the TRIPS obtained data from the case study schools.

In addition the database contained a measure of socio-economic disadvantage known as the Index of Community Socio-Educational Advantage (ICSEA). This measure is employed by ACARA to compare the student intake of schools and is part of the data collection displayed on the MySchool website (ACARA, 2010b).

ICSEA is a composite index based on measures of most of the factors included in the Index of Relative Socio Economic and Disadvantage (IRSED), the index used to select schools for the Low-SES NP, but it also incorporates additional factors known to correlate with academic achievement.

The unit of analysis used is aggregated data for each school. The individual student results were not sought from ACARA so the average of the

school means are reported not means calculated using student-level data.

The 33 case study schools do not constitute a statistically randomised sample of the 3,381 schools contained in the ACARA de-identified database.

Missing or excluded cases

In a relatively small number of cases information was missing, for example ICSEA was not reported in regard to 43 schools. For this reason, the number of cases in each analysis varies slightly depending on the variables selected.

There was an additional consideration in regard to NAPLAN 2009. Some schools had very small numbers of students who completed a test thereby yielding unstable estimates of a school's true performance. Therefore, for the purposes of this study and following the MySchool protocol (ACARA 2010a), cells reporting fewer than 5 students were coded as missing. Depending on the assessment domain and year level under consideration, approximately 14 per cent of schools were excluded.

Schools in very remote locations were over-represented among excluded cases. Of the 105 very remote schools, 43 per cent were excluded. Of the remote schools that were excluded, nearly half were in the Low-SES NP. Therefore, analyses based on the Low-SES NP schools will reflect the omission of this group of schools.

Reliability and validity of indicators

The analyses in this report are based on demographic and achievement data and as such depend on the reliability and validity of the ICSEA and NAPLAN measures. Like all quantitative measures they have limits.

System officials who made decisions regarding the selection of schools had access to these statistics and in addition draw on other sources of information not recorded in the ACARA database such as the inability of a school to attract experienced teachers or a declining trend in attendance. It may be sound to attach more weight to such factors depending on the circumstances.

In other words, what may appear as a targeting error could in fact be a wise decision based on local knowledge. To mechanistically select schools using only ICSEA and NAPLAN is unlikely to be ideal. Hence, some of the unexplained choices

Table 3.1: Case study schools, sector, geographic location

LOCATION	Sector			All
	Gov	Cath	Ind	
Metropolitan	16	6	2	24
Provincial	6	0	1	7
Remote	1	1	0	2
All schools	23	7	3	33

The remote and very remote locations have been aggregated.

may be the result of system officials' superior knowledge of schools and student needs for additional support.

However, governments have sufficient confidence in ICSEA and NAPLAN to have used them to post the school results in the public arena as part of a transparency agenda. Hence, there is some justification in using the same measures to summarise the characteristics of schools selected or not selected for the National Partnerships.

Analysis of a particular aspect of the National Partnerships at the commencement of their implementation is not adequate to enable an evaluation of this substantial program of reform. The scope of the TRIPS study was limited and it was not designed to measure the efficacy of the National Partnerships.

Data from case study schools

Selection of schools

School system authorities were approached in January 2009 to identify schools that were likely to be included in the National Partnerships. The Australian Primary Principals Association assisted in this process.

For practical reasons the schools were drawn from the government, Catholic and independent sectors in three states: Victoria, South Australia and Western Australia. The practicalities related to the need for researchers to visit schools and for principals from the participating schools to meet. By limiting the number of states it was possible to include representation from provincial, remote and very remote localities.

Table 3.1 shows the TRIPS schools by sector and location code. Seventy per cent of the TRIPS schools were from the government sector and 73 per cent were located in metropolitan areas reflecting the greater representation of government and

Table 3.2: Case study schools, enrolment categories, ICSEA

ENROLMENT CATEGORY	ICSEA Mean
Small	873
Medium	898
Large	926
All schools	900

Secondary enrolments in combined schools not included. Mean enrolment of students in participating year levels = 242 students.

metropolitan schools in primary education.

Table 3.2 reports the mean ICSEA scores for the TRIPS schools in three enrolment categories. The mean ICSEA score for all the participating schools is 100 points below the national average.

Table 3.3 reports the participation of the TRIPS schools in the National Partnerships by state. Although selected for the TRIPS study because they were likely to be included in one of the National Partnerships, six of the case study schools were not been included. This came about because the final lists of National Partnership schools were not published until after the TRIPS study had commenced. Although 27 schools have been identified as National Partnership schools on the Smarter Schools website, 3 schools did not receive funds in 2010.

The 33 TRIPS schools constitute a sample that is broadly representative of Australian primary schools serving socio-economically disadvantaged communities. It is not a probability sample from which statistical inferences can be made to the general population of Australian primary schools.

Selection of target students

The TRIPS study is concerned with primary school students below the national minimum standards for literacy or numeracy.

In the TRIPS study, the selection of the target

students was based on teachers' professional judgments of students. Teachers were asked to refer to the students' NAPLAN results if they were available and to make use of their own observations and assessments of students.

Primary school students are tested by NAPLAN in alternate years from Year 3. In addition, state curriculum authorities have published documents that provide details of the learning outcomes that children should achieve in each year level. Teachers are conversant with these documents and use them in conjunction with NAPLAN to make judgments about standards. There is a high level of commonality in regard to state frameworks even though an agreed national synthesis has yet to be adopted.

The construct 'national minimum standards' refers to NAPLAN results within a 'band' or designated range of scaled scores. For example, Band 2 defines the minimum standard for students tested in Year 3. 'Below the minimum standard' refers to students with scaled scores in Band 1 and those students exempted.

NAPLAN tests students on five domains of achievement. The literacy domains are Reading, Writing, Spelling, and Grammar and Punctuation. Numeracy has only one domain. The TRIPS study has used students' scores in Reading and Numeracy as indicators of progress.

There are problems with relying exclusively on NAPLAN to identify target students. Not all students are tested or, if they are, their results generally do not follow them when they change schools.

A separate problem is the reliability of NAPLAN. Some individual student NAPLAN results will be subject to error, for example a student may have cheated. Therefore, the TRIPS study used teacher judgments to identify the target students.

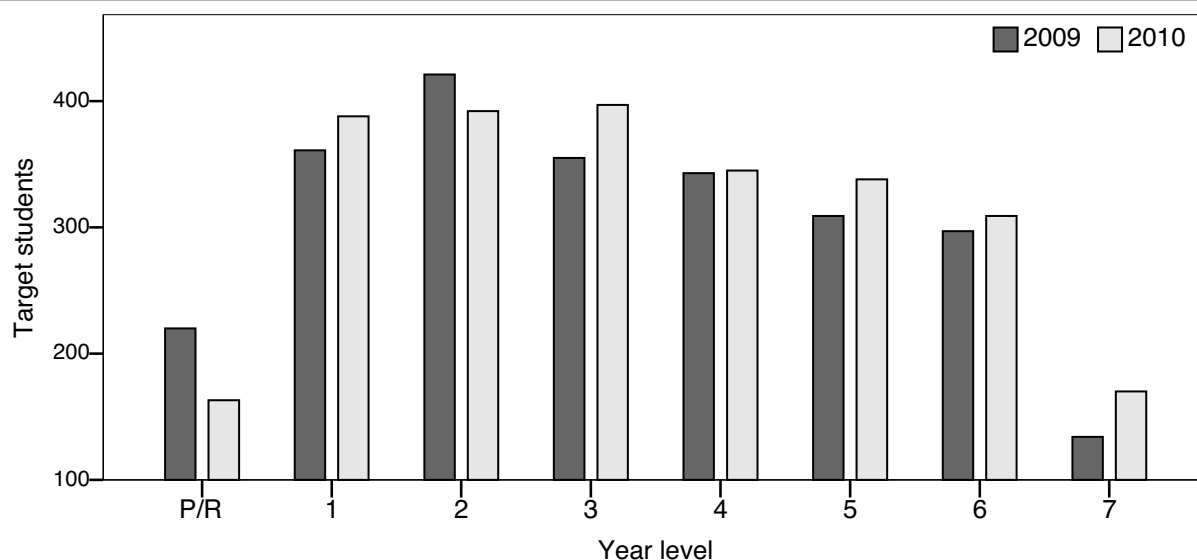
Figure 3.2 reports the number of target students

Table 3.3: Case study schools in National Partnerships, State

STATE	National Partnerships school lists			All
	Low-SES NP	Literacy and Numeracy NP	Not included on lists	
Victoria	5	3	4	12
South Australia	10	0	1	11
Western Australia	7	3	1	10
All schools	22*	6	6	33

Participating schools identified from lists published on Smarter Schools website. One school has been listed in both NPs. * Three schools listed in the Low-SES NP did not receive resources in 2010 so have been grouped as 'Not included in 2010' in Tables 5.7 and 6.3.

Figure 3.2: Target students, year level 2009, 2010



Students judged below minimum standards in literacy or numeracy by their teachers in 2009 = 2,440. Students judged below minimum standards in literacy or numeracy by their teachers in 2010 = 2,508.

in each of the year levels of interest in 2009 and 2010.

Participating teachers

Teachers of students in Years 1-7 in the case study schools were invited to participate by completing a Class Survey Form. In 2009, four class teachers opted not to participate: of these three teachers said they had no target students and one teacher said she had too many target students to find time to respond. In one school, only the junior primary year levels participated.

In 2010, one class teacher failed to respond and one school omitted target students who were new to the school or who had not been identified in 2009.

Some secondary teachers in the combined schools participated but this data has not been included in the analysis.

Some schools chose to report on students in the year prior to Year 1 even though they were asked about students in Years 1-7. Because this involved about half the participating schools this year level has been included in the analysis.

Through this process, 355 teachers reported on the students in their classes in 2009 of whom 68 per cent continued in 2010.

In 2009, 84 per cent of teachers were female, more than 99 per cent were non-Indigenous and 90 per cent worked as full-time teachers. Some of these were part-time classroom teachers because

they undertook other roles within their schools. These statistics changed little in 2010.

Table 3.4 shows that teachers reported an average of 13 years teaching experience and 6 years teaching in their current school. The years of experience did not increase in 2010 because the new classroom teachers were less experienced than those who did not continue.

Instruments

Class Survey Forms

A Class Survey Form was used to collect information about students in 2009 and 2010. The pages with instructions and questions are reproduced in Appendix C and Appendix E.

Table 3.4: Teachers' years of teaching experience and years in school 2009, 2010

TEACHERS	2009 Mean	2010 Mean
Continuing		
Teaching experience	13	14
Period in current school	6	7
Not continuing		
Teaching experience	11	10
Period in current school	5	4
All		
Teaching experience	13	13
Period in current school	6	6

Teachers in 2009 = 355. Teachers in 2010 = 359. Continuing teachers = 243.

Some of the items were repeated while others were administered in one year only. In both 2009 and 2010, teachers were asked to identify students below minimum standards in either literacy or numeracy and to report their level of achievement in the other domain. In 2009, this section asked for a judgment about 'literacy' and, in 2010, teachers were asked about each of the four literacy domains used to report NAPLAN results.

Both versions of the form contained a list of 18 factors that have the potential to limit a student's progress at school. Teachers were asked to indicate whether or not each of these items was a major factor for each of the target students.

In 2009, classroom teachers were asked about the additional support that would make a substantial difference to the student's progress in literacy and/or numeracy. A total of 17 forms of additional support were listed and teachers were asked whether the support was available or needed.

They were also asked whether they expected the student to reach minimum standards in future.

In 2010, teachers were asked about the supports in place for individual students and whether support had increased, decreased or remained constant since 2009.

Attendance and NAPLAN data form

Information about each student's attendance in Term 2, 2009 was collected. The page used to collect this data has been reproduced in Appendix C.

Teachers were asked to report the number of days absent, the number of absences that were explained and the number of separate events or episodes of absence that contributed to the total.

NAPLAN scaled scores for Reading and Numeracy were collected for students in Years 3 and 5 during 2008 and Years 3, 5 and 7 during 2009. Where the information was not available schools were requested to indicate if the student was exempted, withdrawn by parents, absent, or if the information was missing.

School Survey Form

Principals provided information about their school's enrolments, community, finances and instructional programs. This provided an overview of each school and enabled the data submitted by teachers to be validated.

Principals' responses

During the 2010 workshop principals were asked to complete a survey form which asked about the resource levels in their schools, the targeting of support, and their experience with the implementation of the National Partnerships.

Some principals opted to take the responses away and send them in after they had clarified the details of allocations related to the National Partnerships.

The proforma used is reproduced in Appendix D.

Quality of the data

Principals meetings

Two meetings of the principals of the participating schools were convened.

The first meeting in June 2009 enabled principals to make suggestions regarding the data instruments before they were finalised.

The second meeting held in March 2010 enabled discussion of the 2009 results and input before data gathering commenced in 2010. Principals were surveyed during this meeting and their responses systematically recorded. All completed the survey.

Both meetings were well attended and allowed for principals to discuss experiences with colleagues in similar circumstances.

Confidentiality

Undertakings of confidentiality were given to protect the privacy of schools and school systems as well as teachers and students.

Teachers and students were issued with numerical codes specific to the TRIPS study. Keys matching codes to names were retained in each school to enable data linkage.

These measures protected the privacy of participants beyond the school but allowed principals access to their own school's TRIPS data.

Professional judgments

The inferences in this study about targeting of resources at the school and classroom level are largely reliant on the professional judgments of teachers.

In 2009, teachers made their judgments in Term 3 after they had been teaching their classes for

more than six months. In 2010, most teachers had only been teaching their classes for approximately one term.

In some schools, classroom teachers' judgments were reviewed by another staff member, for example a literacy specialist, student services coordinator or the principal.

Completeness of the school and student data set

A member of the research team visited each school at every step of the data gathering process. In 2009, Class Survey Forms were collected and de-identified. In some cases follow-up visits were required to collect attendance data. In Term 4, 2009 further visits were made to collect and de-identify NAPLAN scaled scores.

In 2010, school visits were made prior to data gathering to ensure the 2010 data could be linked to the 2009 data. Further visits were made to de-identify the Class Survey Forms after they had been completed.

The result of this process was a high completion rate and opportunities for the researchers to discuss information provided with the participating principals and, in some cases, teachers.

4

National Partnership funding

Introduction

This chapter describes how the National Partnerships provide additional funding to improve literacy and numeracy achievement. The conditions under which the funds were made available, and how schools were selected, have been reported to explain why some students and not others may benefit from this additional support. This provides an outline of the decisions made 'up-stream' by government and system officials that have directed the resource flows to schools and classrooms.

Background

COAG

The Council of Australian Governments (COAG) was established in 1992 to foster cooperation between the Commonwealth and the states over financial reform and service delivery. The Commonwealth tables its reform and funding intentions through COAG and solicits the cooperation of the states.

The Australian Government is usually in a strong negotiating position in COAG because it has greater revenue raising capacities than the states. The states are dependent on the Commonwealth for supplementary funding to meet the rising costs of services such as health and education.

In 2008, COAG established two new kinds of agreement between the Commonwealth and the states that are being used to fund school reform: National Agreements and National Partnerships (COAG, 2008a).

National Agreements set the policy objectives for the major service sectors: education, health care, skills and workforce development, afford-

able housing and disability services. They specify the outcomes that are to be achieved and the performance indicators for reporting against these outcomes. Also, the National Agreements have enabled the Commonwealth to consolidate the large number of specific-purpose grants that had grown over the years.

The National Partnerships are an off-shoot of the National Education Agreements and are more limited in scope. They identify particular areas where reform and improvement are sought.

There are three types of payments to states through the National Partnerships: facilitation payments to enable the reforms to be undertaken, reward payments to provide an incentive to achieve the specified reforms, and project payments for particular initiatives. Payments may be held or reduced if a state fails to comply with agreed conditions or reach agreed benchmarks.

As a general principle, states are expected to match the Commonwealth's facilitation payments though such co-investment may be varied in bilateral agreements between the Commonwealth and each state.

The National Partnerships were designed to eliminate the practice of cost shifting that arises when the cost of providing a service is transferred from one level of government to another without the agreement of both parties.

To assist it implement the new funding arrangements, and to strengthen government accountability, COAG established the Reform Council, a body that is independent of government and charged with monitoring, assessing and publicly reporting on the achievement of the Commonwealth and the states in relation to the National Agreements.

National Education Agreement

The National Education Agreement provided the Commonwealth with a means of consolidating its funding for targeted programs, including literacy and numeracy programs, into a single, new Specific Purpose Payment. The states have been able to reallocate the funds and create or extend their own programs with this funding as long as they comply with the terms of the Agreement. This arrangement situates the Commonwealth as the funding provider and the states as the agencies responsible for delivering services.

One consequence of this realignment has been that it introduced a degree of additional turbulence into school funding during 2010. Commonwealth targeted programs to schools were changed to take effect in 2010. Hence, at the same time the National Partnerships were directing additional funds into selected schools, some schools suffered cuts when a new formula was applied.

National Partnerships for school education

There are three National Partnerships for school education through which the Commonwealth is providing an additional \$2.59 billion over their duration: the Low-SES NP, the Literacy and Numeracy NP and the Improving Teacher Quality NP.

The National Partnerships are a tool designed by COAG not only for education but also for other areas of government such as health care and housing. Hence, they contain standard sections relating to objectives, outcomes, outputs, performance indicators, reporting requirements and funding principles. Treasury officials played a major role in the design of the agreements. The net result is that the conceptual framework for the agreements has a managerial tone.

The Australian Government exercised a high level of oversight and control over the National Partnerships for school education and has tightly managed the negotiation process with the states. The development of the state Implementation Plans occurred *in camera*. As a consequence, the implementation has a 'top down' orientation.

The National Partnerships require the states to develop Implementation Plans that explain how they will use the funds. The negotiations between the states and the Australian Government regarding the content of the plans occurred over an extended period. Although the National Partnership Agreements were signed in December 2008, it was

not until September 2009 that the state education authorities announced the selected schools and described the substance of the reforms.

Once the state Implementation Plans had been approved, the Australian Government funded state treasuries the agreed amounts. The flow-on to schools then became a matter for state officials to determine. They could disburse funds to schools to be allocated by the staff on site or they could fund services delivered by central and regional agencies. The bottom line for the Australian government, once the level of funding and targets had been agreed, has been improvement in measures of agreed outcomes.

Participating schools are required to produce an implementation plan that is congruent with their state's overarching plan, and which shows how they will use the resources that they receive. In practice, some system authorities directed schools to incorporate school implementation plans into existing planning documents. In other systems, schools were directed to produce separate documents.

States are also required to supply school NAPLAN data to enable the Australian Government to determine whether their state's performance targets have been achieved. For primary schools, annual NAPLAN data and student attendance rates provide the main yardsticks used by the Reform Council to measure student achievement.

In the sections that follow the particular features of the Low-SES NP and Literacy and Numeracy NP are described.

Low-SES NP

Focus

The Low-SES NP differs from the Literacy and Numeracy NP in several important respects.

First, the reforms that have been specified in the Low-SES NP are more general and less immediately connected to the improvement of literacy and numeracy, though none-the-less ambitious. The overarching aim is to 'transform the way schooling takes place in participating schools and address the challenges facing students in disadvantaged communities' (COAG Reform Council, 2009, p. 17).

This is to be achieved by attracting high quality teachers and principals to the schools and providing support to them, promoting innovation and flexibility, tailoring the instructional programs

to suit the circumstances, building links with the community and with service providers and adopting more appropriate accountability mechanisms (COAG, 2008c).

There is no fixed set of strategies to achieve these reforms; it is left to systems to devise appropriate methods.

Funding

The agreement for the Low-SES NP (COAG, 2008c) states that the average school cost for full implementation amounts to \$500,000 met equally from Commonwealth and state contributions, however, the amount flowing to each school might be varied in each state's Implementation Plan.

The Low-SES NP agreement provides \$1.5 billion Australian Government funding over seven years (2008-09 to 2014-15) to support education reform activities. Selected schools can participate for up to four years. Approximately 1,700 schools in Australia drawing students from low socio-economic status communities will take part over the seven years. This funding is to be matched with co-contributions from state governments.

In order to acquire a sense of scale, this level of funding would amount on average to approximately \$220,000 per school per year assuming that all schools participated for four years. However, if systems deducted an administration charge of 18 per cent the amount per school would fall to approximately \$180,000. In a school with an enrolment of 260 students, this level of additional funding for a Low-SES NP school would amount to approximately an 8 per cent increase in the average cost of educating a student in a government primary school.

When calculated as an average per school the Low-SES NP funds schools at nearly three times the level of the Literacy and Numeracy NP schools. However, these are notional figures since the amount of funding spent on a school was a matter determined by school system officials.

Performance indicators

There is no reward funding for the Low-SES NP so specific targets have not been set. However, the performance indicators for primary schools in the National Education Agreement apply: NAPLAN results and student attendance rates. Other measures can also be used.

Literacy and Numeracy NP

Focus

The Literacy and Numeracy NP focuses on three key areas: strong school leadership that engages the whole school, effective evidence-based teaching approaches, and the use of student achievement data to identify where students need support. These strategies are expected to lead to improvements in literacy and numeracy outcomes for all students with a 'priority focus on those primary aged students most in need of support, especially Indigenous students' (COAG, 2008b, p. 5).

The Australian Government has not specified the particular interventions to be applied.

The state Implementation Plans associated with the Literacy and Numeracy NP are based on an assumption that pedagogy constitutes the major obstacle to student progress in literacy and numeracy since the improvement of teaching is the objective of most of the investment.

Funding

Approximately 930 schools in Australia were selected to participate in the Literacy and Numeracy NP. If the facilitation funding of \$150 million were spread evenly across selected schools each school would nominally receive slightly more than \$80,000 per year over two years. However, if states deducted service fees of 18 per cent the average amount per school would fall to \$66,000 per year.

To place the scale of funding into perspective, this level of funding would not fully meet the costs of employing an experienced teacher in each school.

This analysis is indicative and based on Commonwealth funding without taking account of any co-investment by the states. It should be noted that the National Partnership funds do not flow directly to schools but follow convoluted paths from the Commonwealth through state treasuries to school systems which in turn determine whether the funds will be paid to schools as dollar amounts or services shared among a group of schools.

If the states meet their targets by the end of the second year then an additional \$350 million will be made available to state treasuries. No commitment has been made to the participating schools beyond the first two years.

Reward payments

Pressure to reach performance targets

The Literacy and Numeracy NP is of special interest because it incorporated reward payments for states that meet agreed performance targets. It is the state that is rewarded not the individual school but there is a strong incentive for state officials to achieve the best results possible, hence the pressure on system officials is transmitted through line management to principals in schools.

NAPLAN forms the linchpin for the agreements because it is a common measure that applies across all states and all systems. Without NAPLAN it would not be possible to evaluate the effectiveness of the state initiatives. Other performance indicators are to be applied but the use of NAPLAN is mandatory. Hence, from a funding perspective it has been in the interests of state officials to ensure that all opportunities are seized to demonstrate improvement on NAPLAN.

Variations in state measures

States negotiated complex sets of measures based on NAPLAN and their own instruments as performance targets. These are different for each state.

The Victorian Implementation Plan contains mandated NAPLAN measures for each year level in Reading and Numeracy in each calendar year as reward targets. For example the 2010 target for Year 3 Reading is 83.05 per cent of all students above minimum standards. Two local measures of staff and student feedback have also been included.

The South Australian Implementation Plan lists four methods for measuring improvement on NAPLAN Reading and Numeracy. These measures provide a framework for reporting on particular groups of students identified by achievement levels and include reporting by Indigenous status.

Western Australia has included measures derived from state assessments that pre-date NAPLAN as well as specified NAPLAN targets.

The end result is a detailed matrix of targets, each assigned a small percentage of the reward funding if it is achieved. The weightings were determined during bilateral negotiations. The detailed methodology by which the reward payments will be calculated is yet to be declared.

The agreed performance targets have also been applied to schools. For example a typical West-

ern Australian government school plan for the Literacy and Numeracy NP contains five targets for NAPLAN Reading and five for Numeracy. It introduces refinements by referring to closing gaps between the school's aggregated results and those of 'like schools'. It also refers to comparisons based on 'stable cohorts'.

In summary, it is evident that states have slightly different sets of reward targets and have set the targets for participating schools in ways that take account of each school's previous results.

Selection of schools for National Partnerships

Number of schools

The procedure employed to select schools for the National Partnerships is an important aspect of the targeting process since the number of schools able to participate was limited.

Altogether nationally, about 2,500 schools are expected to receive support from one or other of the National Partnerships during their life. This amounts to approximately a quarter of Australia's primary and secondary schools.

Different selection criteria were applied for each of the National Partnerships.

Selection for Low-SES NP

For the Low-SES NP, funds were allocated to each state based on the Index of Relative Socio-economic Disadvantage (IRSED) scores provided by the Australian Bureau of Statistics for the schools in that state. States were able to adjust the IRSED rankings using their own information about the schools.

While about 17 per cent of schools are to be funded through the Low-SES NP some states had higher per student allocations than others. For example, New South Wales, with 32.5 per cent of the nation's students, received 39.6 per cent of the National Partnership funds whereas Western Australia, with 10.1 per cent of the nation's students, received 6.5 per cent.

Selection for Literacy and Numeracy NP

For the Literacy and Numeracy NP, each state's share of funding was indexed to their NAPLAN 2008 results. The measure used was the total number of students at or below minimum standards in Years 3, 5 and 7 Reading and Numeracy. Hence, a state with lower NAPLAN results will receive a higher per student amount of funding.

The number and selection of schools in the Literacy and Numeracy NP was left to the states to determine.

Selected schools can participate for up to two years.

There is no national formula for funding individual schools. States received their allocation from the Commonwealth and then disbursed the funding, or services acquired with the funding, according to their own estimates of need.

Characteristics of schools selected for the National Partnerships

Basis for comparison

The analysis of the schools selected for the National Partnerships is restricted to the three states in which the TRIPS case study schools were located. A description of the data supplied by ACARA to enable this analysis and the methods used is provided in Chapter 3.

Sectors

Of the total number of primary and combined schools in the three states, 70 per cent were in the government sector and 18 and 12 per cent in the Catholic and independent sectors respectively.

Table 4.1 shows the proportion of schools selected in the Low-SES NP by sector. The percentages in the right-hand column broadly correspond with the proportions in the population as a whole.

Government schools were slightly over-represented in the Low-SES NP; nearly 76 per cent of schools in the Low-SES NP were government

schools. This reflects the lower socio-economic status on average of schools in the government sector.

The mean ICSEA for all schools in the government, Catholic and independent sectors were 1,002, 1,028 and 1,042 respectively.

The pattern of selection in the Literacy and Numeracy NP was noticeably different. Almost identical numbers of schools from the government and Catholic sectors were selected in the Literacy and Numeracy NP even though the Catholic sector is much smaller.

It is not known why government schools are under-represented and Catholic schools over-represented in the Literacy and Numeracy NP.

Location

Location was a significant factor in the selection of schools for the National Partnerships.

Table 4.1 shows that schools in very remote locations are over-represented in the Low-SES NP; 15 per cent of the schools selected in the Low-SES NP were in very remote locations. This compares with 3 per cent of schools when the schools selected and not selected are combined.

The geographic distribution of Literacy and Numeracy NP schools was in proportion to the distribution of all schools in the three states included in the analysis.

Indigenous enrolments

One explicit aim of the National Partnerships is to reduce the achievement gap between Indig-

Table 4.1: Percentage of primary schools selected in National Partnerships

SECTOR AND LOCALITY	National Partnership participation			All
	Low-SES NP	Literacy and Numeracy NP	Not included	
	%	%	%	%
SECTOR				
Government	76	43	72	70
Catholic	16	42	16	18
Independent	8	14	13	12
LOCALITY				
Metropolitan	51	57	58	57
Provincial	31	39	36	36
Remote	3	3	4	4
Very remote	15	1	1	3

The schools selected to participate in each NP category = 100 per cent. Twenty-one schools have been included in both the Low-SES NP and Literacy and Numeracy NP. All schools with primary level students in Victoria, South Australia and Western Australia = 3,381. Of these, 2,914 schools reported aggregated NAPLAN data.

enous and non-Indigenous students.

The percentages of Indigenous enrolments were greatest in the Low-SES NP schools: 24 per cent of the students were Indigenous. In the Literacy and Numeracy NP schools, 6 per cent of students were Indigenous. In the schools not selected in a National Partnership, 3 per cent of students were Indigenous.

The proportion of all the Indigenous students in schools in Victoria, South Australia and Western Australia selected in a National Partnership is estimated to be approximately 60 per cent of all Indigenous students. The remaining 40 per cent of Indigenous students were enrolled in one of the 74 per cent of schools not selected in a National Partnership.

ICSEA

As expected, the mean ICSEA of the Low-SES NP schools was substantially lower than for the schools selected in the Literacy and Numeracy NP, and the schools not selected in either National Partnership. The mean ICSEA for the Literacy and Numeracy NP schools was lower than average for all schools but the difference was small.

The mean ICSEA score for all schools in the three states was 1,012.

The mean ICSEA for the Low-SES NP schools was 886. For the Literacy and Numeracy NP schools, the mean was 987 and for schools not selected in a National Partnership the mean was 1,041.

The ICSEA standard deviation for the 2,469 schools not selected in a National Partnership was 69 points suggesting a wide distribution of scores around the mean. The mean ICSEA score for the lowest 10 per cent of these schools was 928.

During the period states selected schools to participate in the National Partnerships ICSEA was not available. Instead, disadvantage was measured by IRSED.

Targeting schools through the National Partnerships

Students below minimum standards

The question that will now be addressed is whether the schools selected to participate in the National Partnerships are those that contain the highest proportions of students struggling to reach national minimum standards in either literacy or numeracy.

In the analyses that follow schools included in a National Partnership are compared with the schools not selected. The measures used for these comparisons are: mean scaled scores, the proportions of students below minimum standards, and the number of schools without any student below minimum standards. Each of these measures was calculated for each school first then the school-level scores were used for the comparisons.

Mean scaled scores

[Table 4.2](#) shows that the mean scaled scores of the Low-SES NP schools were lower than those of the Literacy and Numeracy NP schools.

The question arises whether some schools were not selected in a National Partnership because they had low results. To address this question schools in the lowest achieving quintile of non-selected schools were identified and the mean scores for this group were calculated.

[Table 4.2](#) shows means of the scaled scores of schools in the 1st quintile that were not included in a National Partnership. These schools numbered approximately 250 depending on the year

Table 4.2: NAPLAN 2009 scaled scores

SCALED SCORES NAPLAN 2009	National Partnership participation			All Mean
	Low-SES NP (all quintiles)	Literacy and Numeracy NP (all quintiles)	Not included (1st quintile)	
	Mean	Mean	Mean	
READING				
Year 3	369	397	359	413
Year 5	453	482	446	493
NUMERACY				
Year 3	358	379	346	396
Year 5	453	472	441	484

Means have been calculated from primary schools reporting mean NAPLAN 2009 scaled scores in the relevant year level and domain. The 1st quintile has grouped the lowest achieving one-fifth of schools based on their mean NAPLAN 2009 scaled scores.

Table 4.3: Mean percentage per primary school of students below minimum standards

STUDENTS BELOW MINIMUM STANDARDS NAPLAN 2009	National Partnership participation			All
	Low-SES NP	Literacy and Numeracy NP	Not included	
	%	%	%	
READING				
Year 3	11	6	3	5
Year 5	18	9	5	8
NUMERACY				
Year 3	15	8	4	6
Year 5	11	5	3	4

Means have been calculated from 2,914 primary schools reporting a percentage of students below the minimum standards in the relevant year level and domain. Low-SES NP = 435 schools, Literacy and Numeracy NP = 323 schools, schools not included in a National Partnership = 2,049, missing data = 11 schools.

level and domain under consideration. The means of the scaled scores of this group were considerably lower than the means of the scaled scores of the Literacy and Numeracy NP schools. They were also lower than the means of the Low-SES NP schools but not sufficiently to be of practical significance.

These results indicate that among the schools not included in a National Partnership, some reported lower NAPLAN results than those that were included.

Proportions of students below minimum standards

One of the key statistics for this study is the proportion of students below minimum standards.

Table 4.3 shows that the percentages of students below minimum standards in the Low-SES NP schools were double the percentages found in the Literacy and Numeracy NP schools. Furthermore, the percentages of students below minimum standards in the Low-SES NP schools were three times greater than the percentages found in the schools not selected in a National Partnership.

These results indicate that there is a considerably higher concentration of students below minimum standards in Low-SES NP schools compared to other schools. The Low-SES NP schools also enrol greater numbers of students below minimum standards than the Literacy and Numeracy NP schools.

More than half the students below minimum standards in the three states were not enrolled in a school selected in either of the National Partnerships. They were spread among three-quarters of all primary schools not selected.

Schools without students below minimum standards

A substantial number of schools in each of the National Partnerships did not report students below national minimum standards in literacy or numeracy.

Table 4.4 shows that among the Low-SES NP schools, 30 per cent had no student below minimum standards in Year 3 Reading. For the Literacy and Numeracy NP schools the corresponding figure was 35 per cent. The percentage varies

Table 4.4: Percentage of primary schools with no student below minimum standards 2009

STUDENTS BELOW MINIMUM STANDARDS NAPLAN 2009	National Partnership participation			All
	Low-SES NP	Literacy and Numeracy NP	Not included	
	%	%	%	
READING				
Year 3	30	35	54	48
Year 5	16	20	37	32
NUMERACY				
Year 3	22	26	45	39
Year 5	30	36	60	53

Schools reporting student results in NAPLAN Reading and Numeracy 2009 in bands in relevant year level and domain = 100 per cent.

somewhat depending on the domain and year level though in nearly all comparisons it ranges between a third and a fifth of the National Partnership schools. In all comparisons, however, the percentage is larger in the category of schools not included in a National Partnership.

An analysis was conducted of schools with no student below minimum standards on NAPLAN Reading or Numeracy in Year 3 or Year 5 in 2009. Among the Low-SES NP schools, 22 schools had no student below minimum standards. Among the Literacy and Numeracy NP schools, 18 schools had no student below minimum standards. Combined, these 40 National Partnership schools represent 12 per cent of the 328 schools that had no student below minimum standards on NAPLAN Reading or Numeracy in Year 3 or Year 5.

Conclusion

Improving the achievement of Australian students in literacy and numeracy, particularly of students below minimum standards, has been on the radar of Australian governments since national testing was first introduced two decades ago. Results have consistently shown that a proportion of students do not reach minimum standards. Further, the results show a higher proportion of Indigenous students than other students below minimum standards. There has been a long-held undertaking to reduce these proportions.

It is anticipated that over the next seven years the National Partnerships will provide nearly \$2.6 billion for approximately a quarter of Australia's schools.

The National Partnership Agreements guide the flow of resources through several organisational tiers: from the Commonwealth government to state treasuries, then to school system authorities and finally, to individual schools. In the context of the TRIPS study, these financial resources are a form of additional support with the potential to be targeted towards the students below minimum standards in literacy and numeracy.

The schools selected in each of the National Partnerships have been chosen according to different criteria and as a result they have different characteristics.

In Victoria, South Australia and Western Australia, the Low-SES NP schools tended to be smaller, were more likely to be found in remote locations, had higher percentages of Indigenous students, the mean scaled scores were lower, they

had higher concentrations of students below minimum standards, and fewer had no students below minimum standards. More than half the Low-SES NP schools were grouped in the lowest one-fifth of schools based on mean NAPLAN scaled score rankings.

The Literacy and Numeracy NP schools were a more diverse group of schools with a more diffuse set of characteristics. The proportion of Indigenous students in these schools was closer to the average. The concentration of students below minimum standards was higher than average but not by a large amount. The mean scaled scores were lower than average but not greatly.

Allocations to states to fund Literacy and Numeracy NP were calculated on the basis of state-level NAPLAN 2008 data. However, the selection of schools for the Literacy and Numeracy NP was left to the discretion of system officials who had to balance various considerations, including the needs of the school and its likelihood of achieving the performance targets that activate reward payments.

More than half the population of students below minimum standards was dispersed among the schools not selected in either National Partnership. Further, among this large group of schools were hundreds with characteristics similar to the schools selected in the National Partnerships.

Among each of these groups of schools, the Low-SES NP schools, the Literacy and Numeracy NP schools and the schools not selected in a National Partnership, there is evidence of selections that appear to be anomalous. It is not clear why some schools have been included or excluded.

The results suggest that the performance targets set for reward payments have influenced school selections. The manner in which the performance targets have been structured has broadened the focus of the National Partnerships to include students at or above minimum standards. This has led to the omission of schools with relatively high proportions of students with substantial needs for support.

Chapter 5 examines detailed information about high-need students in the 33 case study schools.

5

Target students

Introduction

This chapter describes the group of students identified by their teachers in the case study schools as achieving below national minimum standards in literacy or numeracy. For the purposes of this study, they are referred to as 'target students'.

The distributions of the target students within the schools, and among the schools, are analysed. As well, the factors that teachers believe were limiting the progress of each target student are summarised. The results for 2009 and 2010 are compared.

These results form an important part of the TRIPS study since the interventions, provided through the National Partnerships, to improve the academic achievement of these students must take account of the size of the target student population, its distribution, the factors limiting the progress of the students, variations among subgroups, and changes from year to year.

Size of target group

Classroom teachers in 33 case study schools identified nearly a third of the students in their classes as achieving below minimum standards in literacy or numeracy.

In 2009, this group consisted of 2,440 students. In 2010, this number increased by 3 per cent to 2,508.

Table 5.1 shows that, in 2009, 60 per cent of the target students were boys.

Indigenous students were also over-represented. They composed 15 per cent of all students in

the case study schools yet 20 per cent of the target students were of Indigenous background. There is a similar pattern of results in 2010.

Student mobility was a feature of the target group. Nearly a quarter of the students identified in 2009 either transferred or graduated between data points with the greater proportion transferring (14 per cent).

The stability of teachers' judgments from year to year was also a feature. Of the students in the target group in 2009 who continued in 2010, 85 per cent were judged below minimum standards again in 2010.

Table 5.1: Characteristics of target students 2009, 2010

CATEGORIES	2009 %	2010 %
GENDER		
Female	40	39
Male	60	61
INDIGENOUS STATUS		
Indigenous	20	20
Non-Indigenous	80	80
CONTINUITY		
Ongoing	77	72
Transferred	14	–
Graduated	9	–
New	–	28

Target students in 2009 = 2,440. Target students in 2010 = 2,508. 267 target students identified in 2009 were judged by their 2010 teachers to be meeting minimum standards and so were not included in the 2010 analyses of target students.

Table 5.2: Percentage of target students reported below minimum standards 2009, 2010

CATEGORIES	2009			2010		
	Literacy %	Numeracy %	Both %	Literacy %	Numeracy %	Both %
GENDER						
Female	90	86	76	95	80	74
Male	96	79	74	98	72	70
INDIGENOUS STATUS						
Indigenous	96	88	84	98	82	80
Non-Indigenous	93	80	73	97	73	69
CONTINUITY						
Ongoing	93	81	74	97	74	71
Transferred	95	83	78	–	–	–
Graduated	94	86	80	–	–	–
New	–	–	–	98	77	74
TARGET STUDENTS						
All	94	82	75	97	75	72

Target students in calendar year = 100 per cent.

Composition of the target group

Student characteristics

Target students were more commonly identified below minimum standards in literacy than numeracy. Table 5.2 shows that the gap between literacy and numeracy was 12 percentage points in 2009 and 22 percentage points in 2010.

Teachers reported that three-quarters of target students in 2009 were below minimum standards in both literacy *and* numeracy suggesting that the factors limiting one may have an impact on the other. The proportion of target students below minimum standards in both literacy *and* numeracy declined slightly in 2010 to 72 per cent.

Gender differences were evident. Boys were more likely than girls to be identified below mini-

num standards in literacy whereas in numeracy the trend was reversed; girls were more likely to be identified below minimum standards in numeracy. This pattern was evident in both 2009 and 2010.

Indigenous students were identified below the minimum standards in *both* literacy and numeracy at a higher rate: in both 2009 and 2010 the difference was 11 percentage points.

Teacher judgments and NAPLAN

Classroom teachers identified more students below minimum standards than was indicated by NAPLAN 2009 Reading and Numeracy.

Table 5.3 shows the proportion of target students above the minimum standard, at the minimum standard, below the minimum standard and

Table 5.3: Achievement of target students on NAPLAN 2009

NAPLAN 2009	Scaled scores available			Scaled scores not available %
	Above minimum standard %	At minimum standard %	Below minimum standard %	
READING				
Year 3	30	28	18	24
Year 5	20	25	34	21
Year 7	19	33	25	24
NUMERACY				
Year 3	30	22	24	24
Year 5	19	42	19	20
Year 7	30	28	17	24

The students in a year level (rows) = 100 per cent. Target students who were exempted and absent have been included in the 'scaled scores not available' column. Target students: Year 3 = 344, Year 5 = 288 and Year 7 = 123.

for whom a scaled score was not available. If there had been a perfect correlation between the teachers' judgments and NAPLAN, 100 per cent of the target students would be below minimum standards. In fact, teachers identified approximately twice as many target students in Years 3, 5 and 7 as the tests.

Teachers identified the target students after NAPLAN was administered but prior to the results becoming available.

This discrepancy was not a surprise to principals and teachers in the participating schools who gave greater weight to the professional judgments than the tests. It suggests that teachers have internalised a higher standard than the standard that was applied in the calibration of NAPLAN.

Reading was the only literacy domain of NAPLAN obtained in relation to the target students and it is likely that some students' weaknesses were specific to the domains testing written work. However, NAPLAN measures numeracy as a single domain and the differences were just as evident.

Target students and NAPLAN

Table 5.4 shows the mean scaled scores for the population of all Australian students and the target students in the case study schools in Years 3, 5 and 7. The target students scored at considerably lower levels than the population. It is also noteworthy that the target students performed at a relatively higher level for Numeracy than Reading.

The differences in mean scaled scores between the target students and the population are substantial, for example Year 5 target students performed below the average of the population's Year 3 students. The differences for Reading were: 105, 113 and 95 points in Years 3, 5 and 7 respectively.

The gap between the target students and the population was smaller for Numeracy with differences of 84, 85 and 82 points in Years 3, 5 and 7 respectively.

Concentration of target students

There was an average of 7 target students per class group in 2009 and 2010 though there was considerable variation in schools and classrooms. Some classes had no target student while the maximum number of target students per class in 2009 was 18 students. In 2010, the maximum number rose to 23.

Table 5.4: Population and target students, NAPLAN 2009 scaled scores

NAPLAN 2009	Population* Mean	Target students Mean
READING		
Year 3	411	306
Year 5	494	381
Year 7	541	446
NUMERACY		
Year 3	394	310
Year 5	487	402
Year 7	544	462

*Source: National Assessment Program Literacy and Numeracy (MCEETYA, 2009).

Variations were also evident when the target students per class were aggregated at the school level.

The schools with the lowest number of target students per class had 3 target students per class. The school with the lowest concentration of target students had 3 target students per 26 class members.

The school with the highest concentration of target students had 15 target students per class group of 18 students. This was also the school with the highest average number of target students per class.

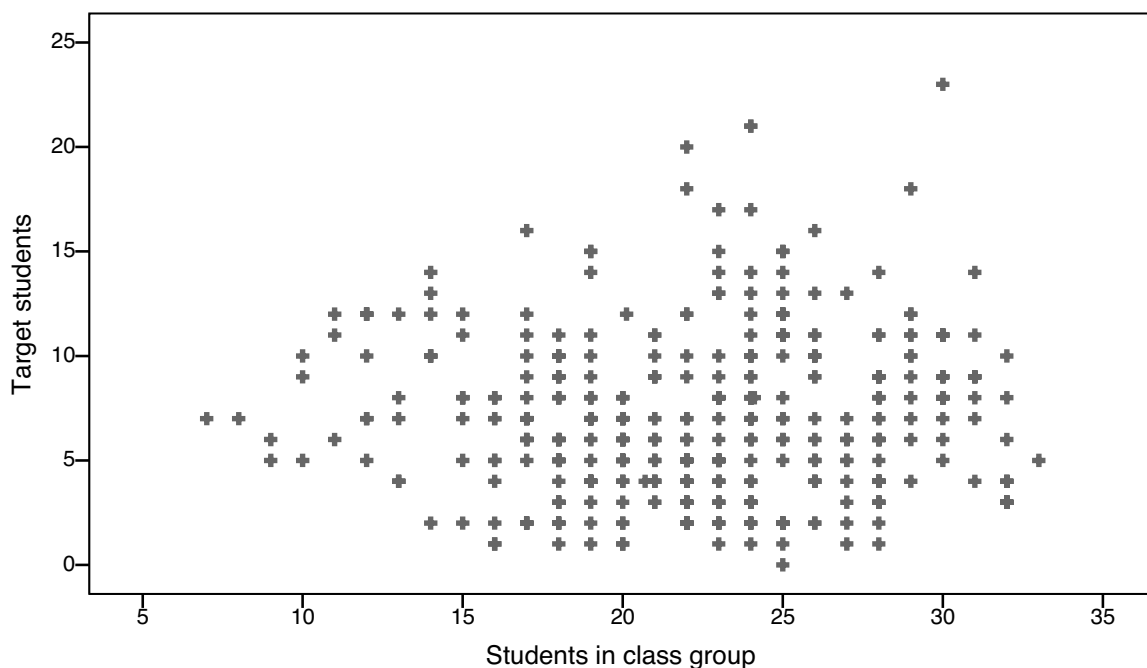
The average number of students per class group was constant in 2009 and 2010: 22.3 students per class. The smallest class had 5 students in 2009 and 7 students in 2010. The largest classes in 2009 and 2010 had 33 students.

There was no relationship between the number of students in a class group and the number of target students reported by the teachers. Figure 5.1 shows a scatter plot of the number of students in a class and the number of target students. The pattern is almost random and suggests that there is no systematic process for ensuring that classes with high concentrations of target students are smaller than classes in general.

In 2010, 41 per cent of the target students were supported by a teachers assistant during literacy lessons. In numeracy lessons, 32 per cent of the target students were supported by a teachers assistant.

It was less common for class teachers to be supported by another teacher; less than a fifth of the target students had access to additional teacher support in literacy or numeracy classes.

Figure 5.1: Target students per class group



Notes: Calculations based on 359 classes. Target students per class: mean = 7.0, SD = 3.9. Students per class group: mean = 22.3, SD = 5.2.

Identifying the limits to progress

Framework

If additional resources are allocated to schools to improve the achievement of students then it is important that they are used to mitigate the particular factors that are impeding each student's learning. As indicated in Chapter 2, it is possible that the failure of previous attempts to lift the achievement of students may be explained by the adoption of general interventions that do not match the actual needs of students and therefore have weaker effects.

It is also the case that the design of interventions often assumes that most students below standards are limited by the same factors when, in fact, there may be considerable variation in a typical school or classroom.

The analyses that follow will explore the range of factors limiting target students.

Teacher reports

Teachers were asked to consider factors that could limit a student's progress in literacy and numeracy and indicate which, if any, applied to each of the students they identified. The options were: 'Is not a major factor', 'Is a major factor' and 'Not enough knowledge'. Teachers were not restricted in the number of major factors they could report in regard to an individual student.

The factors were grouped into four categories: health and cognitive factors; behavioural and attitudinal factors; out-of-school influences; and student's prior knowledge and skills.

Teachers rated target students in 2009 and again in 2010 using the same list of factors and generating an extensive data set based on their personal knowledge of the children they teach. Because this data set is so extensive, detailed tables have been included in Appendix A.

Health and cognitive factors

Among the health and cognitive factors in 2009, 26 per cent of target students were limited by a 'Specific cognitive or learning difficulty', 21 per cent by a 'General intellectual disability or developmental delay' and 19 per cent by a 'Speech or language disorder'. These ratings were reduced in 2010 so that less than one-fifth of target students were rated on any one of the health and cognitive factors.

Teachers were more likely to report 'Not enough knowledge' for health and cognitive factors than for most other factors. Some annotated their ratings with comments such as 'Has difficulty concentrating', 'Cannot retain information' or 'Suspected autism', implying that there might be some underlying disorder but a diagnosis was not available.

Table 5.5: Target students as class members 2010

STATEMENTS ABOUT TARGET STUDENTS	Teachers' ratings		
	Never or rarely	Sometimes	Nearly always or always
	%	%	%
This student is able to concentrate when I am providing instruction to the whole class as a group.	22	51	27
This student gives up quickly if work is challenging.	24	45	30
This student gets more of my attention than average for students in my class.	24	45	30

Target students = 2,483.

Behavioural and attitudinal factors

Among the group of items on behavioural and attitudinal factors, 'Lack of effort' was rated a major factor most frequently (43 per cent of all target students in 2009). Among all factors 'Lack of effort' was second only to the factor most frequently rated: 'Lack of prerequisite knowledge and skills'. This was the case in both 2009 and 2010.

In 2010, 'Poor attitude to learning or school' became the third most frequently rated factor limiting progress after 'Lack of prerequisite knowledge and skills' and 'Lack of effort'.

While 'Problem behaviour at school' was not rated as often as three of the items in this category of factors, it was rated more often than any of the health and cognitive factors. This suggests that behavioural and attitudinal factors may have an adverse impact on more students than health or cognitive factors.

Because of the high incidence of these factors in 2009, teachers were asked in 2010 about the target students' capacity to function and learn as members of a class.

Table 5.5 shows that the capacity of target students to function as independent learners was variable.

Half the target students could 'sometimes' concentrate during instruction and more than a quarter (27 per cent) could concentrate. This left approximately one-fifth of the target students who have difficulty concentrating during lessons.

Less than half the target students 'sometimes' give up if work is challenging while 30 per cent 'nearly always or always' give up if work is challenging. This left nearly a quarter of the target students who appear to be exerting considerable effort.

Thirty per cent of target students draw a disproportionate amount of their teacher's attention relative to other class members.

These results indicate that a minority of target students are able to concentrate, persist and undertake tasks set for them. A greater proportion, however, struggle to concentrate, make an effort and work independently on a consistent basis.

Out-of-school influences

'Intermittent or irregular attendance' was the most frequently rated among the out-of-school influences. Teachers reported that approximately a quarter of the target students were limited by this item in 2009 and approximately a fifth in 2010.

'Regularly arrives late for school' was a major factor for 16 per cent of target students in 2010. Annotations on survey forms reported teachers' frustration when target students arrived after the block of time quarantined for literacy instruction. These teachers were concerned that late students were recorded as having attended school even though they had missed hours of the most structured and intensive teaching provided during the school day.

Attendance records showed the average period of absence for all target students during Term 2, 2009 was equivalent to more than half a day per week though 13 per cent of target students attended regularly. In the case of target students whose teachers had indicated that 'Intermittent or irregular attendance' was a major factor, the average period of absence equated to a day-and-a-half per week.

Teachers identified 'Insufficient parent or carer support', 'Lack of sleep' or 'Poor nutrition' as a major factor for 14, 12 and 11 per cent of target students respectively in 2010.

Table 5.6: Number of major factors limiting progress of target students 2009, 2010

CATEGORIES	2009 Mean	2010 Mean
GENDER		
Female	3.9	3.1
Male	5.1	4.0
INDIGENOUS STATUS		
Indigenous	5.1	4.3
Non-Indigenous	4.5	3.5
CONTINUITY		
Ongoing	4.4	3.6
Transferred	5.3	–
Graduated	5.2	–
New	–	3.6
TARGET STUDENTS		
All	4.6	3.6

Gender and Indigenous status differences were significant in both 2009 and 2010. Continuity differences were significant in 2009.

Prior knowledge and skills

Teachers reported in 2009 that for over two-thirds of target students ‘Lack of prerequisite knowledge and skills’ was a major factor limiting their progress. This was reduced to 57 per cent in 2010 but maintained its position as the most frequently identified major factor. In 2010, it was rated 20 percentage points ahead of the next most frequently rated item: ‘Lack of effort’.

‘Limited knowledge of English’ was reported to be a major factor for a quarter of the target students in 2009 reducing to one fifth in 2010. ‘Lack of familiarity with Standard English’ was identified for a larger number of the target students than ‘Limited knowledge of English’.

Total factors limiting a student’s progress

Table 5.6 shows that the average number of factors limiting the progress of target students was more than four factors in 2009 and just under four factors in 2010.

Approximately a quarter of the target students in 2009 had 7 or more major factors limiting their progress. This fell to 10 per cent of target students limited by 7 or more factors in 2010.

In 2009, teachers were asked to rate students’ oral language and social skills as well as their standards in literacy and numeracy. Students who were rated below minimum standards in oral language and social skills as well as literacy and

numeracy composed a quarter of the target students in that year. On average these students had 6.6 major factors limiting their progress.

In 2009, three-quarters of target students were limited by factors in two or more of the four factor categories. In 2010, 60 per cent of target students were limited by factors in two or more of the factor categories. While 14 per cent of target students in 2009 were limited by factors in all four categories, this reduced to 9 per cent of target students in 2010.

The students below minimum standards in literacy, numeracy, oral language and social skills in 2009 were limited by a wide range of factors. Sixty-five per cent were limited by factors spanning three or more categories.

There was a decline in the frequency of limiting factors attributed to target students in 2010 compared to 2009. Teachers’ judgments may have been influenced by changes in the professional context. Schools participating in the National Partnerships were actively involved in planning for student improvement so questions about the limiting factors were analysed more systematically, that is, a teacher’s judgments were moderated by discussions with colleagues or a child’s parents.

Variations among subgroups

Gender

Teachers reported that the progress of boys was limited by more factors than girls. This difference was evident in both 2009 and 2010 and is shown in Table 5.6.

The greatest differences between male and female target students were found in the behavioural and attitudinal factors. ‘Problem behaviour at school’, ‘Lack of effort’ and ‘Poor attitude to learning or school’ showed the most significant gender differences in both 2009 and 2010. As shown in Appendix A, boys were twice as likely to be limited by these factors as girls.

Smaller differences were evident in the health and cognitive factors, however, male target students were identified more often than females for all factors in this category in both 2009 and 2010.

In the remaining categories the gender differences were small.

Percentages for each of the factors limiting the progress of target students by gender are reported in Appendix A.

Indigenous status

The largest differences between Indigenous and non-Indigenous students were among the out-of-school influences. All the factors in this category were identified more frequently for Indigenous students than non-Indigenous students and the differences were statistically significant in both 2009 and 2010.

For Indigenous target students, 'Intermittent or irregular attendance' was the second most frequently rated factor after 'Lack of prerequisite knowledge and skills' in both 2009 and 2010. This contrasts with target students generally for whom 'Lack of effort' was the second most frequently rated factor.

'Regularly arrives late', 'Insufficient family or carer support', 'Lack of sleep', and 'Poor nutrition' were all reported as factors limiting progress at a higher rate for Indigenous target students. These differences were evident in both 2009 and 2010.

Although the Indigenous target students as a group were limited by factors among the out-of-school influences category, for 36 per cent of Indigenous target students none of the out-of-school influences was a major factor.

Teachers rated health and cognitive factors as limiting non-Indigenous target students more often than Indigenous students but none was statistically significant in both the 2009 and 2010 surveys.

Differences according to Indigenous status among the behavioural and attitudinal factors, and the knowledge and skills factors were less evident.

The profile of major factors limiting the progress of Indigenous male target students reveals a subgroup with needs that are both broad and deep.

Indigenous male target students had a higher total number of major factors limiting their progress than the subgroups based on gender and Indigenous status: 5.6 major factors in 2009 and 4.8 in 2010. Teachers also identified 84 per cent of male Indigenous target students below the minimum standards in both literacy and numeracy, a higher rate than the other subgroups mentioned.

Despite the high concentration of major factors relative to other subgroups, Indigenous male target students were not a uniform group. In 2010, the modal number of limits to progress identified as major factors was 2, lower than the mode for

the population of all target students. Teachers identified 2 or less major factors for 29 per cent of Indigenous male target students.

Percentages for each of the factors limiting the progress of target students by Indigenous status are reported in Appendix A.

Transient target students

Target students identified in 2009 who subsequently transferred were compared with those who continued in 2010.

Teachers were more inclined to identify out-of-school influences as factors limiting progress for the transient target students. Of these, 'Intermittent or irregular attendance' was a factor for 35 per cent of transient target students. Teachers also identified as factors: 'Regularly arrives late for school', 'Insufficient family or carer support', 'Lack of sleep' and 'Poor nutrition' at a higher rate for the transient target students.

Differences were evident in the behavioural and attitudinal factors. In this category, 'Problem behaviour at school' was identified in regard to 37 per cent of transient target students compared to 26 per cent who continued.

The differences in most of the health and cognitive factors were small or nonexistent except for the factor 'Psycho-social or mental health problem' which was identified among the transient target students more frequently.

Some of the transient target students had a wide range of factors limiting their progress; half were limited by factors in three or more of the factor categories and one-fifth were limited by factors in all four of the factor categories.

Principals and teachers commented that the transient students often re-enrolled and for some families multiple transfers and re-enrolments were the norm.

Percentages for each of the factors limiting the progress of transient students are reported in Appendix A.

It is difficult for a primary school to identify the support needs of a transient target student and almost impossible to provide a remedial intervention during a short period of enrolment.

Teachers reported transient target students transferring soon after interventions commenced leading staff to speculate that for some families a school's attempt to intervene was the reason they left.

Experienced school administrators said that transient students had become more difficult to track since the introduction of electronic information systems. Previously, the need to keep manual lists of children whose whereabouts were unknown meant a system-level officer could acquire extensive knowledge of transient families. The privacy requirements of electronic data management systems have made it more difficult to track students between schools, particularly when students cross between jurisdictions or sectors.

Some transient students move between two or three schools but with multiple iterations, however, there was no evidence from the TRIPS study of effective processes to track these students for the purposes of targeting support. The procedures in place were probably adequate for the majority of children who transfer from one school to another but were inadequate for chronic transients achieving below minimum standards.

Non-target students

Two participating primary schools surveyed all students in their schools in both 2009 and 2010.

Altogether, classroom teachers in the two schools identified nearly half their students as target students in 2009 declining to 45 per cent in 2010. The target students were limited by approximately 4 factors in 2009 and 3 factors in 2010. The non-target students were limited by fewer factors: 1.4 factors in 2009 and 1.2 factors in 2010.

Analysis shows a statistically significant difference between the target and non-target students for most items. The items with no differences in both 2009 and 2010 were 'Recently enrolled and not yet settled', 'Limited knowledge of English' and 'Regularly arrives late for school'.

Four items were major factors in both 2009 and 2010 for 10 per cent or more of the non-target students. These were: 'Peer group relationships', 'Lack of effort', 'Problem behaviour at school' and 'Intermittent or irregular attendance'. This suggests some of the non-target students posed challenges for classroom teachers even though their literacy and numeracy attainments were higher.

Percentages for each of the factors limiting the progress of the target and non-target students in the two schools are reported in Appendix A.

Clusters of factors

Cluster analysis

Given the considerable variation in the number and types of factors limiting the progress of target students the question arises whether they can be described more simply. Could the target students be divided into a small number of definitive sub-groups based on the prevalence of factors reported to influence the students' learning? Some factors may be common to all groups but other factors may be confined to the students in a particular group.

Two-Step Cluster analysis was conducted for all target students in 2009 with a full set of responses to the items listed as possible factors. This analysis indicated that the most definitive grouping was one in which the target students were divided into two clusters. Thirty-eight per cent of students were grouped into Cluster 1 and the remainder into Cluster 2.

Defining characteristics

'Poor attitude to learning', 'Problem behaviour at school' and 'Lack of effort' were the defining factors that separated target students into the two clusters; in general the target students in Cluster 1 were limited by their attitude and behaviour and those in Cluster 2 were not. Moreover, students in Cluster 1 were limited by twice as many factors: 7 factors on average compared to 3 factors.

These results suggest that it is possible to construe the population of target students as forming two groups of unequal size, with the students in the smaller group limited by multiple factors, compounded by attitudinal and behavioural problems. The larger group of target students (Cluster 2) is limited principally by their lack of knowledge and skills and one or two other factors.

Disengaged students

All target students present challenges for classroom teachers but the students in Cluster 1 are hard to teach because they are disengaged.

Disengaged students are inclined to arrive late and are frequently absent. They have a short attention span, make little effort and give up on tasks that are challenging. Their interests lie outside the classroom and, over time, a poor attitude to school can deteriorate into a generally negative disposition (Angus et al., 2009).

Some of the target students displayed characteristics consistent with this profile of disengage-

ment. This set of problems is difficult to resolve and literacy and numeracy interventions are not likely to be successful unless it can be addressed.

Participation in National Partnerships

The majority of target students in the case study schools were enrolled in schools that commenced in the Low-SES NP in 2010. This group of 19 schools accounts for 69 per cent of all the target students.

One of the schools in the Literacy and Numeracy NP is also listed in the Low-SES NP. Depending on whether this school is included, either 16 or 19 per cent of the target students were enrolled in schools in the Literacy and Numeracy NP.

A quarter of the target students were enrolled in schools that did not commence in a National Partnership in 2010 but this will be reduced when three of these schools begin to benefit from the Low-SES NP in 2011 and 2012.

Table 5.7 shows a higher concentration of target students in classes in the Low-SES NP schools. On average target students comprised 37 per cent of class groups in the Low-SES NP schools compared to 25 per cent in the Literacy and Numeracy NP schools and 23 per cent in the schools not included in a National Partnership in 2010.

The average number of factors limiting the progress of target students attending Low-SES NP schools in 2010 was 3.9 factors. This was above the average for all target students and greater than 3.1 factors limiting target students in the Literacy and Numeracy NP schools and 3.5 factors limiting target students in the schools not included in 2010.

Overall, the Low-SES NP schools have a higher proportion of target students below minimum standards in both literacy and numeracy, the classes have a higher concentration of target students and the students have more factors limiting their progress. When considered cumulatively, the target students in the Low-SES NP schools have greater needs on average than the target students in the Literacy and Numeracy NP and the schools not included in the National Partnerships in 2010.

Summary and conclusion

The teachers have identified more than twice the number of students below national minimum standards in literacy or numeracy than identified by NAPLAN. Principals and teachers were not surprised by this discrepancy and attributed greater validity to the judgments of classroom teachers.

The target students performed well below the general population. On average, Year 5 target students were at least two years behind the general population.

In the case study schools, the average class size was 22 students with 7 students below minimum standards in literacy or numeracy. The concentration of target students was variable; some classes had no students below minimum standards while others had no students above minimum standards. Variation was also evident when the target students per class were aggregated by school. The lowest number of target students per class on average was 3 and the highest number on average per class was 15 target students.

Three-quarters of the target students were below minimum standards in both literacy and numeracy.

Most target students were limited by multiple factors. For approximately 60 per cent of the target students the factors were spread across two or more broad areas: health and cognitive factors, behavioural and attitudinal factors, out-of-school influences and the student's prior knowledge and skills.

In regard to some factors, particularly the cognitive factors and some out-of-school factors, teachers were more likely to indicate they did not know whether the factor had limited the student's progress in literacy or numeracy, suggesting the teachers thought these factors may have had an impact but they were not certain.

Students' attitudes to learning and their classroom behaviour appear to be key mediating influences on academic progress. Strategies to improve

Table 5.7: Number of students per class group in National Partnerships 2010

STUDENTS PER CLASS GROUP	National Partnership participation			All
	Low-SES NP	Literacy and Numeracy NP	Not included in 2010	
Target students	8	6	6	7
All students	21	23	25	22

Calculations based on 360 classes.

the literacy and numeracy achievement of target students need to take these factors into account.

Boys were more likely to be limited by behavioural and attitudinal factors than girls.

Indigenous students were more likely to be limited by out-of-school influences including poor attendance than non-Indigenous students.

The prevalence of multiple factors limiting the progress of target students is an important finding. The majority of the target students were below minimum standards in literacy *and* numeracy and were limited by multiple factors.

The needs of the target students cannot easily be categorised. For example, 36 per cent of Indigenous target students were not limited by any of the factors in the out-of-school influences despite the higher ratings in this category generally among the Indigenous target students. This variability among the target students poses challenges for school personnel and system officials alike.

The kind of support that the teachers considered necessary to lift the achievement of the students is presented in Chapter 6.

6

Support for target students

Introduction

The aim of this chapter is to describe the support provided to the case study schools to lift the achievement of target students to minimum national standards in literacy and numeracy.

The chapter begins by examining the resources that in 2009 teachers said were required to enable target students to reach an acceptable standard in literacy and numeracy. These results are then compared with the support provided through the National Partnerships by the end of Term 1, 2010.

The chapter concludes by considering some of the issues that arise from the analysis of what teachers sought and what was delivered.

Support teachers said was needed

The survey

In 2009, teachers in the case study schools were provided in the Class Survey Form with a list of 17 forms of support that a target student might need to reach an acceptable standard in literacy or numeracy.

The teachers were asked to rate each form of support on whether a target student 'Does not need this', 'Has enough of this' or 'Needs more of this'. There was no restriction on the number of items of support that might be needed for a particular student.

The results are therefore derived from the aggregated assessment by teachers of the needs of *a particular student* in their class they judged to be below minimum standards rather than their assessment of what target students need in general.

A summary of responses for each of the 17 forms of support is contained in Appendix B.

In 2010, the Class Survey Form asked teachers about the instructional support in place in regard to each of the target students in their class. Teachers rated four statements about the contribution to the literacy and numeracy programs of a teachers assistant or another teacher. The possible responses were: 'Never or rarely', 'Sometimes' or 'Nearly always or always'. This provides a measure of the extent to which support was in place in classrooms.

Concentration of adult support

Teachers of three-quarters of the target students reported that they need a teachers assistant in class if the students are to reach an acceptable standard. This is the resource that has been rated second most frequently of all the items listed for them to choose from.

Teachers also reported that over 60 per cent of target students would benefit from class-size reductions and 45 per cent from an additional teacher to work with the students.

The high priority assigned by teachers to more adult support should be interpreted in conjunction with the behavioural and attitudinal problems of target students reported in Chapter 5. Approximately a quarter of target students have behaviour problems and more than a third do not make an effort. In classrooms where attitudes or behaviour are an issue it is difficult for teachers to direct their attention on a student, or a small group of students, without providing adult supervision for the remainder of the class.

Table 6.1: Teachers' ratings of statements about target students 2009

STATEMENTS ABOUT TARGET STUDENTS	Teachers' ratings		
	Disagree %	Neutral %	Agree %
There are too many students needing additional support for me to work with each one individually.	17	10	73
I focus on these students to such an extent that I cannot give the other students the attention they need.	44	14	42
I am confident strategies I am using will lift these students to an acceptable standard in literacy and numeracy.	16	37	47
I have a clear understanding of what is limiting these students' achievement in literacy and numeracy.	7	11	82

The two positive responses and the two negative responses have been aggregated. Teachers who responded = 334. All responses in each row = 100 per cent.

In addition to specifying the factors limiting student progress and the support needed by each student in 2009, teachers were asked to respond to a series of statements about their work with target students. These are reported in [Table 6.1](#).

Over 70 per cent of teachers indicated they had too many target students to work with each one individually. Further, over 40 per cent expressed concern that the non-target students in their class were not getting the attention they needed.

The responses of teachers were cross-tabulated with the number of target students in their class.

The teachers who indicated that they had the greatest difficulty individualising their teaching were on average those with the largest classes and the most target students. For example, teachers who strongly agreed that they had too many students to work with each one individually had on average 8.4 target students in their classes.

The teachers who strongly disagreed taught an average of 5.5 target students. This difference of three students may seem to a layperson to be small but under some circumstances it may point to a threshold that defines what is pedagogically viable or not.

While there is a broad consensus in the research literature that investments in across-the-board reductions of class sizes do not lead to measurable improvement in literacy and numeracy, this finding does not necessarily mean that a purposeful increase in adult support in selected classrooms would be wasteful.

[Table 6.1](#) also highlights a dilemma felt by many teachers. They recognise that it is impera-

tive that every effort is made to assist the target students to reach minimum standards, however, they are also responsible for assisting the non-target students to reach their potential. Over 40 per cent of the teachers struggle with this problem of allocating their time so that all students achieve success.

In 2010, teachers were asked about the support in place when they were teaching literacy and numeracy to the target students. [Table 6.2](#) shows that support for target students was more frequently available in literacy than numeracy and was more likely to be provided by a teachers assistant than a teacher.

Literacy support from a teachers assistant was provided nearly always or always to two-fifths of target students. Less than a third received numeracy support from a teachers assistant on a routine basis.

Support from another teacher was not regularly available for the majority of target students. Only a fifth of target students regularly received literacy support from a teacher and a tenth regularly received numeracy support.

Specialist teaching expertise

Teachers reported that four-fifths of students would benefit from specialist instruction in literacy. This was the resource teachers reported most needed. 'Specialist instruction in numeracy' was also rated highly relative to other items but at a lower rate than literacy.

Teachers indicated that well over half of target students needed 'Diagnostic information about individual's [target student's] learning'. Most

teachers also said they were confident they knew what was restricting target students' achievement in literacy and numeracy as shown in [Table 6.1](#). This apparent contradiction is explained by the need for a formal diagnosis by an expert before an individual high-need student is supported. So a teacher may have a clear understanding of a student's needs but these needs will not be recognised until the child is assessed and a diagnosis is established.

Given all the information provided about each student, these results can be best explained as an assessment on the teacher's part that without some clearly focused, additional instruction by a specialist literacy or numeracy teacher the student will maintain a trajectory of low achievement. As shown in [Table 6.1](#), in 2009 less than half the teachers indicated that they were confident that the strategies they were using were effective for their target students.

Among the target students, 20 per cent were reported to need additional instruction in English as a second language. 'Limited by knowledge of English' was a major factor for 80 per cent of these target students.

More professional learning

Approximately two-fifths of target students were expected to benefit from training for non-teaching staff members and almost as many from training for teaching staff. The question of which particular bodies of knowledge and skills should form the focus of training was not canvassed.

The need for further professional learning for non-teaching staff is noteworthy because the value

of a teachers assistant is tied to the professional competence and expert knowledge of the individual. A competent assistant in some circumstances can undertake many of the duties of a teacher whereas an unskilled person may be associated with a net loss of support rather than a net gain. For example, a position provided through an employment program is created to develop the skills of the assistant rather than to provide support to the teacher and students.

The construct of a 'compound' resource discussed in Chapter 2 is apposite: the benefit of providing an assistant to a teacher is contingent on the individual in the role being sufficiently competent to support literacy and numeracy instruction.

Health and ancillary services

Teachers reported that approximately a quarter of target students need more services from psychologists or speech pathologists. Other health and medical services were needed by a smaller proportion of target students.

Details of the nature of the services sought from these health and ancillary professionals were not requested. Teachers may be seeking assessments of target students or services to support them.

Out-of-class support

The most frequently requested out-of-class support was an 'Academic program before or after school' requested in regard to almost half the target students.

Teachers also indicated that approximately a third of target students would benefit from more

Table 6.2: Instructional support for target students 2010

FORM OF SUPPORT	Teachers' ratings		
	Never or rarely %	Sometimes %	Nearly always or always %
TEACHERS ASSISTANT			
A teachers assistant makes an important contribution when this student is learning literacy.	29	30	41
A teachers assistant makes an important contribution when this student is learning numeracy.	41	27	32
TEACHER			
I am supported by another teacher who makes an important contribution when this student is learning literacy.	51	30	19
I am supported by another teacher who makes an important contribution when this student is learning numeracy.	69	21	10

Target students = 2,481.

'Intensive home liaison'. Annotations suggested this increased home liaison could inform parents about how they could support the instructional program. 'Regular liaison with welfare providers' was recommended for a smaller proportion of target students.

Variations in the support mix

The question arises whether schools sought similar mixes of supports. It is possible that the kind of support required for the target students may vary from class to class within a school but the aggregate of all the target students in a school may not be very different from schools in general.

One way to determine the difference in the support needs of schools is to calculate the percentage of target students in each school whose teachers indicated that a particular form of support was needed and then measure the range among all the case study schools.

Take the example of target students teachers said needed a 'Teachers assistant in class'. In 2009, teachers in the case study schools reported that 75 per cent of all target students needed this form of support. However, if the requests for all target students in the school are aggregated the range between the school with the highest frequency and lowest frequency is 100 percentage points; there was at least one school that reported every target student would benefit from more teachers assistant support in classrooms and one school that reported this form of support was not needed by any of the target students.

This is a broad range by any standard. Similarly broad ranges were also present for 'Additional teacher in class', 'Specialist instruction in English as a second language', 'Strategic playground supervision', 'Class size reduction', 'Training for teaching staff' and 'Training for non-teaching staff'.

There were smaller school differences evident in the items teachers less frequently rated as needed.

The variations among schools was moderate for 'Specialist instruction in literacy' and 'Specialist instruction in numeracy'.

The school-level analyses indicate that the support mix sought differed from school to school. Hence, even though teachers typically sought 6 or 7 forms of additional support there were wide differences among schools regarding the particular supports sought. This helps to explain why tar-

geting support is such a difficult process particularly in contexts where resources cannot easily be 'banked' or converted to a more useful form.

Delivery of National Partnership support

Menus of support

Devolution to states and school systems

When formulating the National Partnerships the states had latitude to design the interventions most likely to achieve the agreed outcomes specified in the National Education Agreement. Though the Low-SES NP and the Literacy and Numeracy NP had different aims and strategies they shared performance indicators. The bottom line was defined as improved achievement in literacy and numeracy and increased rates of student attendance, particularly for Indigenous students.

States were required to describe how they intended to achieve the negotiated performance indicators in Implementation Plans and annual reports. The Implementation Plans remain confidential but the annual reports are publicly available.

The annual reports for 2009 describe the various interventions that the states adopted. They vary considerably from state to state and system to system. Notwithstanding the diversity of nomenclature, they are unified to a degree by the common performance indicators. This is particularly the case regarding the Literacy and Numeracy NP.

Analysis of the annual reports 2009

In Victoria, the 2009 Annual Report states that its overarching strategy is to integrate the various initiatives being undertaken through the three National Partnerships into a 'cohesive and comprehensive approach to school improvement' (Department of Education and Early Childhood Development, 2010, p. 3). In general terms, it appears that the Victorian education authorities have viewed the National Partnerships as an opportunity to create a pool of supplementary funding to augment the various initiatives already in place or proposed.

While a 'cohesive' approach has merit it complicates the mapping of resource usage attributable to the 'new' resources made available through the National Partnerships.

It is clear from the Victorian 2009 Annual Report that initiatives to improve literacy and numeracy form a core part of the Low-SES NP. There is considerable overlap between the activities

reported under the Low-SES NP and the Literacy and Numeracy NP, for example the provision of leadership training, literacy and numeracy coaches, and assessment tools. A point of difference is the additional emphasis in the Low-SES NP on the involvement of families in the education of their children and on building partnerships with local businesses and community groups.

In South Australia, the Low-SES NP has been renamed 'Communities Making a Difference' and has generated a number of initiatives in the three school sectors including the case management of at risk students, mentoring of students, pre-school programs, leadership training, access to specialist consultants and diagnostic school reviews (South Australian National Partnerships Council – Schooling, 2010). A large proportion of the activities relate to Indigenous students. The sectors vary in regard to the emphasis placed on literacy compared to numeracy.

The South Australian Literacy and Numeracy NP adopted a similar menu of activities to Victoria, in some cases building on initiatives that were already underway. An important aspect was the training of coaches and consultants who were then engaged in professional learning for teachers. Leadership training for principals in literacy and numeracy also formed an important component.

In Western Australian, the Low-SES NP provides a strong focus on literacy and numeracy improvement. Some of the programs were developed in association with the Literacy and Numeracy NP but adapted to meet the particular circumstances of schools. This thrust is being supported with various programs aimed, for example, at the early cognitive and social development of pre-school children, improving the behaviour of children, developing inter-agency collaboration, providing professional development for Indigenous teachers assistants, and extending the length of the school day (Department of Education, 2010).

The Western Australian 2009 Annual Report lists various literacy and numeracy programs provided through the Literacy and Numeracy NP in the three sectors. These include: Specialist Teachers, Targeted Literacy Intervention for Individual Students, Reading to Learn, Reading Recovery, Changing the Future, Reading Intervention Years 4-7, Raising School Achievement, Bridging the Gap, Targeted Numeracy Support for Individual Students, Linking Number Sense and Computational Skills in the Early Years, Developing a Repertoire of Calculation Strategies in Years 4-7, A

Focus on Measurement Skills to Improve Numeracy Skills, Extending Mathematical Understanding, and WOMBAT, a Mathematics Diagnostic Assessment Tool.

Although these programs are numerous, they are predominantly concerned with literacy and numeracy instruction.

When the Victorian, South Australian and Western Australian 2009 Annual Reports are considered together three generalisations can be made.

First, the guiding principle has been that central agencies should develop a range of initiatives and schools should select what they need from that menu of initiatives. The adoption of this principle has generated activity and investment in central infrastructure. Schools have had little opportunity to use the National Partnership support to consolidate or extend their own programs.

Second, the dominant focus of both National Partnerships has been on developing the professional knowledge and skills of principals and teachers. It is assumed that this is the best way to improve the literacy and numeracy of students.

Third, systems were encouraged to be innovative when designing their menus. There are so many programs listed it will be difficult to associate measurable improvement with particular strategies. Equally, it will be easy for the proponents of any one of these strategies to claim an association with success.

School perspectives on National Partnership support

Schools participating from 2010

The principals in the National Partnerships schools during 2010 were asked to report their experiences with the initial implementation. Therefore, the information in this section is drawn from responses of principals in the 22 case study schools that participated in the National Partnerships from the beginning of 2010.

Feedback from principals

Funding cuts

The base funding of schools can be predicted from year-to-year and varies according to changes in school enrolments. Targeted literacy and numeracy and other special needs funding programs, on the other hand, are more liable to change because they usually operate for a finite period and education authorities more frequently

restructure the basis on which funds are allocated. Also, treasuries may enhance or cut the allocations to departments the consequences of which eventually trickle down to schools. Hence there is a degree of fluidity in primary school funding from year to year as 'soft money' is allocated and then withdrawn.

At the same time that the case study schools became eligible for additional support through one of the National Partnerships, slightly more than half received cuts in the 2010 calendar year as system authorities reduced the resources that had previously targeted literacy and numeracy and particular groups of students. Schools not included in a National Partnership in 2010 also received cuts.

The way in which the cuts took effect, and their scale, varied from system to system. The most common form of reduction was a cut in the hours of employment for centrally employed specialist teachers and teachers assistants or in the funds allocated to provide for their employment. In one case specialist support was withdrawn and the principal was told to apply for it to be reallocated. One school lost an experienced teacher who was recruited to serve as a coach for a number of schools in the district. In several schools the principal was taken out of the school for extended periods to support central planning for the National Partnerships or to mentor other principals. And there were instances of on-costs being passed on to schools for the first time.

Some of the cuts were the consequences of the introduction of new methods for determining entitlement to resources. Others were a direct consequence of the introduction of the National Partnerships.

Most common forms of support

According to the feedback from principals, the most common form of support provided through the National Partnerships was professional development: 95 per cent of principals reported their school had received additional support of this kind in 2010. Approximately three-quarters of principals indicated that coaching for their teachers had been made available and over half of the principals had access to some form of leadership training. It is clear that there has been a large investment in staff development, particularly in relation to literacy and numeracy.

The next most frequently reported forms of support put in place were: the diagnostic assess-

ment of students, whole school planning, and networking with other schools.

Only 10 per cent of principals reported that the National Partnership support provided smaller class groups and 15 per cent that they provided teachers assistants in classrooms.

No principal reported that there had been an improvement in the recruitment and retention of staff.

Most valued forms of additional support

Principals were asked to rate the usefulness of the additional support they had received.

In general, they were more likely to rate the additional support as making a moderate difference than a substantial difference. In a relatively small number of cases, they considered that the additional support would not benefit target students.

Teacher professional development, coaching of teachers, diagnostic assessment of students and whole school planning had the strongest endorsement of principals.

Efficacy of the support

The views of principals about the efficacy of the additional support were mixed.

Half of the principals agreed that the National Partnerships had taken account of the particular needs of the target students in their school. However, 40 per cent disagreed.

Nearly two-thirds of principals expected that the additional support would make a significant, positive difference to the target students in their school. Less than a third of principals said that some of the additional support allocated to the school would not be useful.

The most strongly expressed view concerned principal autonomy. Over half the principals strongly agreed that their school's results would improve if they had greater control over the available resources. Only one principal disagreed with this proposition.

Mixed views of principals

Principals held a range of views about the initial implementation phase.

In cases where schools had acquired a significant and tangible boost in resources, the principals were not concerned about the selection process or the lack of transparency.

However, principals of schools that did not benefit and who discovered their school had received less than similar schools were critical of the process through which schools had been selected. Principals were aware of the aggregated amount of funding announced on the Smarter Schools website but, in cases where schools received less than the nominal amount suggested, they were unable to find out why their school had been allocated a smaller share.

The negativity of some principals appeared to stem from the apparently uneven allocation of support to schools and the pressure to demonstrate measurable improvement regardless of the level of support allocated.

The experience of one school illustrates the confusion around the allocatory processes.

The principal was unhappy because the school received a smaller allocation from the Low-SES NP than expected. This school was not listed in regard to either the Low-SES NP or the Literacy and Numeracy NP on the Smarter Schools website so for the purposes of this study was 'not included'. However, the school received some resources through the Low-SES NP and was under considerable pressure to improve its test results. In the principal's mind, the additional resources were not commensurate with the increased expectations and both were associated with the Low-SES NP.

The process of being allocated or not allocated funds was confusing for most of the principals. The obscurity of the process was due to several factors.

First, as explained in Chapter 4, the basis for the selection of schools was not published. Principals were advised of the amount of funding (or support) their school was to receive but the amounts (or levels of support) were not made public on a school-by-school basis.

Second, the pre-National Partnership special purpose funding for some schools was cut at the same time that they received supplementary funding from the National Partnerships.

Third, system authorities retained undisclosed amounts of the National Partnership funding for administrative and development purposes.

Finally, some systems preferred to merge the activities funded by the National Partnerships with ongoing activities funded from other sources.

Two schools provide examples that are broadly representative.

The first school, included in the Literacy and Numeracy NP, acquired a full-time literacy coach, a half-time Reading Recovery teacher, and a half-time teachers assistant. The principal was positive about the school's participation in the National Partnership and optimistic that the additional resources would benefit the target students.

The second school was included in the Low-SES NP. It received considerably less additional support than expected and the support on offer was not of a kind the school had sought. The principal was dismayed.

While some principals felt that the support they received was not the kind they wanted, most approached the rollout pragmatically, recognising that some support was better than none and that it was up to them to use what was on offer to the school's advantage.

Allocating resources within schools

Decisions about where to focus the available support have moral as well as technical implications. This has always been the case.

The principals in the case study schools were polarised on the question of whether there was a moral obligation for teachers to share their time equally among students; half agreed that teachers should share their time equally and half disagreed.

There were differences among the principals about whether students most likely to show measurable progress would be given more support than other students. Approximately half the principals said they would not allocate more resources to the students likely to improve and a third said they were neutral.

Two principals said the students most likely to show measurable improvement would receive more support than other students. Both principals were in Literacy and Numeracy NP schools. One principal said programs were in place for the students not likely to make measurable progress and the National Partnership funds were allocated for the expressed purpose of providing additional support to students likely to improve with additional support. The other principal said additional support would be provided to students in the year levels tested by NAPLAN between February and May and then the support would be re-allocated

to take account of the needs of students who had not benefited initially.

There were other examples of resource allocation decisions. Some schools reported making full attendance a requirement of access to the Reading Recovery program. The explanation given was that Reading Recovery is expensive, there were generally more children in need of the program than places available and there was a sense that the resource was being wasted if a child failed to attend every session. This is an illustration of the way multiple limiting factors can compound disadvantage.

Feedback from teachers

Changes to level of support

An important criterion for the effectiveness of the National Partnerships is the extent to which teachers and students in need of support actually received it. In 2010, teachers were asked on the Class Survey Form whether there had been a change in the support available to each target student during Term 1 compared to the previous year.

Table 6.3 shows that there was no change in the level of support for more than half of the students identified below minimum standards in both 2009 and 2010. A decrease was reported in regard to 12 per cent of these target students.

According to classroom teachers, approximately one-fifth of all the continuing target students benefited from an increase in support during Term 1, 2010.

Only 13 per cent of continuing target students in the Low-SES NP benefited from increased support compared to 32 per cent of continuing target students in the Literacy and Numeracy NP.

If fewer than half of the target students received additional support, then this raises the question of why this is so. There are several possible explanations.

First, it is possible that some of the support had been allocated to schools but not yet come on stream as teachers were surveyed relatively early in the year.

Second, some of the support may have been provided for purposes indirectly related to teaching literacy and numeracy so that teachers were not aware of it, for example professional learning for principals or support to families of children yet to commence school.

A third explanation is that the resources were allocated to schools but not for the instruction of the target students, the only group the teachers were asked to report on.

Even if teachers' ratings reported in Table 6.3 are explained by misperceptions on the part of the teachers regarding the support provided to their school, their views are of significance. If the achievement of target students is to improve as a result of the National Partnerships, this will require something in the teaching-learning process to have changed, whether inside the classroom, in the school or in the community. The prospects of success will be enhanced if such changes occur with the knowledge and backing of teachers.

Support needs of individual students

There was no attempt during 2009 or 2010 to systematically gather qualitative data, however, during the process of collecting survey forms a common topic of conversation between teachers and researchers was individual children with high support needs.

Two boys in two different schools with very high support needs are briefly described as examples of the range of individual student circumstances that challenge teachers.

The first boy has a hearing impairment and attends a remote school. In Year 1 and after having attended school for two years he was yet to be fitted with a hearing aid.

Table 6.3: Percentage of target students with changes to level of support 2010

LEVEL OF SUPPORT	National Partnership participation			All
	Low-SES NP	Literacy and Numeracy NP	Not included in 2010	
	%	%	%	
Decreased	15	11	14	12
Not changed	56	48	51	53
Increased	13	32	18	19
Not known	15	9	17	16

Target students in 2009 who continued in 2010 = 1,538. All responses in each column = 100 per cent.

An audiologist visits the nearest town at intervals of 6 months and sees a small number of children per visit. Notifications of appointments are sent to parents 6 months in advance and transport is not provided. For these and other reasons delays occurred.

The day before the audiologist was due to visit in 2010, the child was with an uncle in a town hundreds of kilometres away. The principal was aware that after the audiologist had departed there would be at least another six months before he had another opportunity.

Legally the boy was in the care of his mother who was in a town to the west of the community. The boy was with his uncle in a town to the east. As the principal said: 'What do you do?'

After school on the day before the appointment, the principal drove into town, found the boy's mother and together they located the boy and took him back to the community. Fortunately, this was all achieved without incident but the boy, his mother and the principal arrived back at the community at midnight after a round trip of over 500 kilometres.

The following morning the child saw the audiologist and was fitted with a hearing aid. He was amazed when he discovered the sounds of the school and the principal felt that sharing this experience was the reward for her efforts.

Her question: 'What do you do?' was genuine. She asked: 'What would you have done?'

In the second example a boy started at a metropolitan school in Year 1 without having attended pre-primary because his mother said she was not aware that five-year-olds were expected to attend school.

It was decided the boy should be eased in with part-days because the boy and his mother both needed support. Initially, only one day per week of teachers assistant time was allocated because the child's needs had not been formally assessed.

Although the boy lived across the road from the school two staff members collected him from home and then returned him. This was a big commitment for the school but given his failure to enrol the previous year, it was seen as necessary.

As the year progressed other sources of support were put into place. After he was diagnosed on the autism spectrum, three days per week of teachers assistant support became available. An

out-of-school funding source enabled a psychologist to support his mother to take responsibility for ensuring he attended school. When the grant for this service was spent, the boy and his brother were absent from school for three weeks.

The teacher said that providing the support the mother needs to get the boy to school is 'like having another child in the class'. Despite the difficulties she said the boy had progressed: 'he has ability, he just doesn't have an environment of home support'. She expects he is capable of becoming functionally literate and numerate despite this. 'He's fed, he's loved', she said to explain the limits of the support available.

The school increased the expectations regarding attendance in Term 4. They asked that the mother deliver the child at 8.30, 10.30 or 12.30, the break times, in order to minimise the disruption to the rest of the class when he arrives.

At one level, there is a contrast between a 500 kilometre trip in the dark so a child can get a hearing aid and a child who lives over the road from his school but who still had difficulty arriving each morning. However, at another level there is a similarity: the teachers had an in-depth understanding of each child's needs and made the most of the resources available to them to the best of their abilities. And both teachers were flexible focusing on the child's needs rather than rules that could stop them from intervening.

Conclusion

Large numbers of teachers indicated in 2009 that if they were to have a realistic hope of lifting the achievement of target students to minimum standards they would need considerable additional support. Teachers sought much higher levels of support than were provided through the National Partnerships.

A majority of teachers indicated they would not be able to give each student the individualised attention he or she required without an increase in adult support in the form of a teachers assistant, a reduction in the number of students in their class or another teacher. However, the National Partnerships have not provided teachers with additional day-to-day adult support of this kind.

Instead, a major focus of the National Partnerships has been to provide classroom teachers with advice from literacy and numeracy experts on how to improve their teaching. This advice has been provided by coaches who work with teachers

in their classrooms and through various forms of professional learning held on and off school sites.

The extension of professional learning was a high priority for teachers in the case study schools in 2009 and its provision through the National Partnerships suggests accurate targeting. Nearly half the principals of case study schools participating in one of the National Partnerships said they expected these kinds of interventions would provide a substantial benefit to target students.

The variation among the forms of support sought by teachers from school to school has posed a challenge to systems with centrally devised and packaged interventions. The variation among the schools means some schools will be offered resources that are either not needed or are unlikely to be effective.

This leaves principals to make the most of what is available in the school and teachers to make the most of what is available for their classes.

7

Expectations

Introduction

This chapter examines the extent to which teachers and principals in the case study schools predicted target students would reach or exceed the minimum standards in literacy and numeracy by the end of primary school.

The classroom teachers made their predictions about individual target students in their classes in 2009. The principals made general predictions about students in their schools in 2010.

Power of expectations

One of the axioms in the school improvement literature is that effective teachers set high expectations for their students. It is common for critics to attribute poor achievement in schools in low socio-economic communities to beliefs shared by teachers and students that the students are not capable of reaching the standards set for the wider population.

There is some debate about the proportion of students in regular schools who cannot realistically be expected to reach minimum standards. Special education experts argue that under *optimal* conditions even students with serious impairments can achieve some of the literacy and

numeracy outcomes specified in school curricula. They also point out that many students who have a medical disability are not intellectually impaired (Quenemoen, 2009). US research suggests that less than 2 per cent of the entire US student population has intellectual impairments arising from mental retardation, developmental delay, autism and multiple disabilities (Thurlow et al., 2009).

In theory, students from disadvantaged communities are capable of achieving the same academic standards as the general population and the National Partnerships are designed to enable this. However, in practice no nation has succeeded in eliminating the influence of socio-economic disadvantage though there is wide agreement that the setting of high and achievable expectations is a pre-condition for success.

The principals of the case study schools were aware of the debate about expectations and have sought to ensure that low expectations do not work against the interests of the children in their schools.

Teachers' predictions 2009

Classroom teachers were asked to predict whether their target students would make satis-

Table 7.1: Percentage of target students expected to reach minimum standards 2009

WILL REACH OR EXCEED MINIMUM STANDARDS	Target students	
	Below minimum standards in both literacy and numeracy %	All %
This school year	5	8
Before completing primary school	16	23

Target students in 2009 = 2,389. Teachers were asked: 'With the resources currently available, do you expect this student to reach or exceed the minimum standard?'

Table 7.2: Percentage of target students expected to reach minimum standards, subgroups 2009

WILL REACH OR EXCEED MINIMUM STANDARDS BEFORE COMPLETING PRIMARY SCHOOL	Target students	
	Below minimum standards in both literacy and numeracy %	All %
GENDER		
Female	18	27
Male	14	20
INDIGENOUS STATUS		
Indigenous	13	18
Non-Indigenous	16	24
SUBGROUPS		
Indigenous female	15	21
Non-Indigenous female	19	28
Indigenous male	12	16
Non-Indigenous male	15	21

Target students in 2009 = 2,341. Teachers were asked: 'With the resources currently available, do you expect this student to reach or exceed the minimum standard?'

factory progress in future based on the assumption that the 2009 levels of resources continued. Teachers made their predictions before the National Partnership schools had been selected.

Table 7.1 shows teachers had modest expectations for the target students. They expected 23 per cent of all target students to reach or exceed an acceptable standard before completing primary school. Predictions for improvement before the end of the 2009 school year, a period of approximately four months, were very low; only 8 per cent of target students were predicted to reach minimum standards by the end of the year and almost none to exceed these standards.

There was a slight trend related to the year level of the target students. It was predicted that 35 per cent of the target students identified in the year before Year 1 would reach or exceed minimum standards before completing primary school. Lower percentages of target students in Years 5, 6 and 7 were expected by their teachers to reach the minimum standards. Teachers in the early years were more reluctant to make predictions about target students.

Teachers' predictions were also related to whether target students had been identified below minimum standards in literacy or numeracy or below in both literacy and numeracy. Table 7.1 shows that teachers were less optimistic about the prospects of students who were below minimum standards in both literacy and numeracy.

Teachers were also less optimistic about the prospects of students limited by a relatively high

number of the major factors limiting progress reported in Chapter 5.

Differences among subgroups

Table 7.2 shows that teachers predicted a greater proportion of female target students than male target students would reach or exceed minimum standards by the end of primary school: 27 per cent of girls compared to 20 per cent of boys.

Teachers predicted 24 per cent of non-Indigenous target students compared to 18 per cent of Indigenous target students would reach or exceed the minimum standards.

Only ten per cent of target students identified through the Two-Step Cluster analysis as being principally limited by attitudinal and behavioural factors (Cluster 1) were expected to reach or exceed minimum standards. This compares with 29 per cent for the remaining target students (Cluster 2).

These predictions were consistent with the number of factors teachers reported to be limiting the progress of the target students. Male target students had more factors limiting their progress than female target students. Similarly, Indigenous target students had more factors limiting their progress than non-Indigenous target students and Cluster 1 target students had more limiting factors than Cluster 2 target students.

Table 7.2 shows that, in each of the subgroups, target students below minimum standards in both literacy and numeracy were considered less likely to reach the standard than all target students.

Only 12 per cent of male Indigenous target students below minimum standards in literacy and numeracy were predicted to reach or exceed minimum standards.

Principals' predictions 2010

At the 2010 workshop principals were asked to predict the performance of students in 2011 in Reading and Numeracy. They were asked to make these judgments separately in relation to the students identified by teachers as below minimum standards and the students identified by NAPLAN as below minimum standards. In addition they were asked whether they expected the mean NAPLAN scaled scores to increase in 2011.

The principals of schools in the Literacy and Numeracy NP were considerably more optimistic than their colleagues in the Low-SES NP. All the Literacy and Numeracy NP principals expected that their target students would show an overall improvement, whether identified by NAPLAN or their teachers in 2011. Further, they predicted an improvement in their schools' mean NAPLAN scaled scores.

On the other hand, approximately a quarter of the principals in the Low-SES NP did not expect in 2011 a reduction in the percentage of students below minimum standards or an increase in the mean NAPLAN scaled scores. Most expected some improvement but not on all these measures.

The predictions made by the principals may reflect the different circumstances of schools, including the nature of the problems limiting the progress of target students. The case study schools in the Low-SES NP on average had more target students in each class, more students limited by multiple factors and more students achieving below minimum standards in both literacy and numeracy than their counterparts in the Literacy and Numeracy NP. The strategies to alleviate socio-economic disadvantage may require a number of years to fully take effect. Principals in such schools may therefore be making realistic appraisals.

Conclusion

There is a paradox in the expectations teachers communicated during 2009.

Teachers have identified students as below minimum standards at twice the rate of the NAPLAN domain tests implying that the standards of the classroom are higher than the standards of national tests.

However, the teachers expected less than a quarter of the target students to reach or exceed minimum standards by the time they complete primary school, assuming that the level of support available to them was unchanged. The teachers expected a relatively small proportion of the target students to meet the higher standards they set. The teachers' expectations should be interpreted in the light of their assessments of the factors limiting the progress of the target students and of the support that the students need.

It is plausible that the teachers' minimum standards reflect the reality of the classroom and further that students require a higher standard of knowledge and skills than implied by the NAPLAN standards if they are to engage with the curriculum.

The expectations of the principals of the National Partnership schools communicated during 2010 are of a different order; most expected the schools will progress towards performance targets to some extent. However, the difference in the levels of confidence of the principals in the Low-SES NP schools compared to the Literacy and Numeracy NP schools raises issues that pertain to the purpose of the National Partnerships.

There is a judgment call about the optimal level at which expectations are set so that they acknowledge reality but tilt towards ambitious goals. As one of the principals in a case study school said: 'We don't want to compare ourselves to our current like-schools; we want to compare ourselves to the like-schools of the school we want to become'. This principal leads a Low-SES NP school that received a tangible increase in resources in 2010.

Conclusion

Introduction

The National Partnerships are driving an ambitious school reform agenda. They are guided by goals agreed by all Australian governments, underpinned by a framework for action by education agencies, and resourced with a large pool of additional funding to be allocated according to student need.

Though the National Partnerships are intended to support all students, priority is to be given to the students referred to in the National Partnership documentation as ‘students with additional needs’, ‘students achieving low-end results’ and ‘those falling behind’.

Meeting the needs of these students poses a significant challenge since national assessment results indicate that over recent decades there has been limited progress, even after major national and state initiatives, to improve their achievement.

Additional resources from the National Partnerships are being delivered to schools. The Low-SES NP continues until 2014-15 and the Literacy and Numeracy NP continues throughout 2011. Therefore, the findings in this report should not be read as summative judgments about the efficacy of the National Partnerships. Rather, the report is intended to inform stakeholders as implementation proceeds.

This final chapter considers the main implications of the findings. For a synopsis of the findings themselves, readers are directed to the executive summary at the front of the report.

Issues arising from findings

How low is ‘below’?

Teachers report a larger group of students to be below the minimum standards than indicated by the scales applied in Australia’s testing program known as NAPLAN. This raises the question of which estimate is the more accurate.

The NAPLAN summary reports indicate that approximately 10 per cent of Australia’s primary school children are below a standard defined as ‘minimum’. However, this figure is based on results for each domain (assessment area) considered separately. Some students may be below the minimum standards on one domain but not on others. Other students may be below the minimum standards on all domains.

The NAPLAN summary reports do not indicate the percentage of *students* who are below the minimum standard on one or more domains. There may be considerably more than 10 per cent of students who fall into this category; it is not known.

The question of which source of evidence is the more reliable was discussed among the principals and teachers of the case study schools. There was agreement that while some individual teachers may over-identify students below minimum standards, a much larger number of students than is indicated by NAPLAN results are functioning below the level required to engage with the curriculum.

This finding has important implications if the teachers’ judgments prove to reflect the real world of the classroom and the NAPLAN standards are found to be lacking in practical application. Reliance on NAPLAN could lead governments

to underestimate the scale of the problem and the resources that are needed to address it.

Hence, in collaboration with professional bodies ACARA should launch an examination of the construct of national minimum standards with a view to reconciling the discrepancy between teacher judgments and the NAPLAN scales.

Limits of centrally designed interventions

There are wide variations in the needs of the students who are below minimum standards and they should not be considered as a homogenous group. A considerable number of the target students involved in this study were restricted by a range of factors and are likely to need a combination of interventions if they are to have a realistic chance of catching up.

Some students have medical problems, unhelpful home environments and complex behavioural problems. They may need access to health experts, home liaison and other professionals. Schools often find such support is tightly rationed. Pedagogical strategies may be a necessary part of the intervention that is needed but not a substitute for the other elements.

Further, there may be a logical sequence for intervening. For example, students who are transient or frequently absent have more factors limiting their progress than the average for students below minimum standards. Better literacy and numeracy pedagogies can only yield positive outcomes if students attend a school that is aware of their needs and the students engage with the programs put in place to address these needs.

These are issues that can be informed by feedback from the Low-SES NP schools which will employ a wider range of strategies including the provision of ancillary health and social services.

Strengthening school problem-solving capacity

Standard school improvement blueprints created by central agencies can be generally helpful but there are limits to what should be expected from them. Some of the problems faced by schools will be particular to the circumstances of the school and arise at unpredictable or inconvenient times. These problems may not be directly related to classroom teaching but unless they are quickly resolved can undermine the school or even bring it to a standstill.

Schools need either staff with the capability of responding to an unforeseen problem or the

capacity to draw on immediate support from elsewhere. This is hard to accomplish when the school's resources are fully taxed maintaining the status quo. The challenges are likely to be even greater in schools with large numbers of target students.

The significance of this kind of support may not have been adequately recognised in the menus of interventions provided by system authorities. It may explain why principals were strongly of the view that if they had greater control over the use of their resources they could achieve better outcomes for their target students.

In some cases, schools have had no option other than to accept the central support under the conditions on which it was offered or miss out altogether on National Partnership funding.

Hence, governments should undertake a review of the National Partnerships to examine strategies that aim to make schools less reliant on central agencies for the design of programs and more capable of using the available resources to best effect.

Practitioners' voice in the reform

The National Partnerships have expended considerable funds on the professional development of teachers and principals but have struggled to engage them in the initial stage of implementation. It is unlikely that the reforms will achieve their goals, however, without principals and teachers being invited into the policy tent.

Cohen and Moffitt (2009), after reviewing four decades of US national school reforms to reduce inequality, comment on the limits of central initiatives:

Policy makers define problems and devise remedies. Yet policy ultimately relies on practice: it depends on the people and organizations that have the problems to solve those problems (p. 14).

Although staff members in schools are principally responsible for the implementation of policy, it is both practical and reasonable that they have a voice in the formation of frameworks that support good practice.

If there is to be a lasting benefit from the National Partnerships then a candid sharing of what is working and what is problematic is an essential part of the process of improvement. Through this report, the TRIPS study has made an initial contribution to this process. As the first phase of

the National Partnerships proceeds, opportunities to learn from the experiences of delivery will grow and can only benefit the schools in the tranches yet to commence and the process of sharing with schools not included in the National Partnerships.

Funding according to need

Funding for the Low-SES NP was allocated to states according to a nationally agreed measure of socio-economic disadvantage. Schools with relatively low scores were defined as having higher needs for support than those with relatively high scores. The evidence suggests the single selection criterion for the Low-SES NP was systematically applied during the selection process. Nearly all the schools in the Low-SES NP had relatively low scores on ICSEA, the measure now used by the Australian Government to determine socio-economic disadvantage in schools.

Some of the Low-SES NP schools performed at a relatively high level on NAPLAN 2009. This is not a surprising result as a school's socio-economic status and school performance are not perfectly correlated. There will always be exceptions to the general rule because of the different circumstances that apply in each school.

Funding for the Literacy and Numeracy NP was allocated to states according to the proportion of students in each jurisdiction at or below the minimum standards in Reading and Numeracy on NAPLAN 2008.

However, the schools included in the Literacy and Numeracy NP were not necessarily those with the largest proportions of students achieving at or below the minimum standards. School system authorities selected schools according to various criteria, including NAPLAN results. As a consequence, the schools that had the lowest NAPLAN results were not automatically included.

These results raise the question of how best to allocate supplementary funding to improve literacy and numeracy achievement. For practical reasons the funding has been allocated to schools rather than students and within most schools students vary according to their need for extra support. This issue should be examined during the national review of school funding that is currently underway.

Indigenous disadvantage

Indigenous students have been identified as a group of particular interest in the National

Partnerships. The evidence of the TRIPS study points to Indigenous students as one of several subgroups of target students identified as below minimum standards at a higher rate and who were more frequently limited by multiple factors. In particular, Indigenous target students were more often limited by out-of-school influences than non-Indigenous students.

However, the Indigenous target students were not defined by these limits. In 2010, teachers reported that more than half the Indigenous target students were not limited on each of the out-of-school influences when the items were considered separately. For 36 per cent of the Indigenous target students, none of the out-of-school influences was rated as a major factor.

This suggests that prescribing programs to students simply on the basis of Indigenous status will lead to a continuation of failure to meet the needs of many Indigenous target students.

Reward payments

The reward targets set for the Literacy and Numeracy NP have influenced both the selection of schools and practice. Schools are being encouraged to ensure that NAPLAN improves in designated target areas so states can attract reward payments from the Commonwealth.

The evidence regarding this finding is circumstantial because the reasons for including schools and the allocation of funds made to them have not been published. However, it appears that resources have been allocated to students more likely to respond within a planning and evaluation cycle so that improvements can be measured and performance targets met. In this context the needs of some students below minimum standards who are limited by multiple factors may be overlooked because the resources available are not sufficient for all students.

In addition, the targets have been articulated in such a way that gains in average performance are valued equally with reductions in the number or proportion of students achieving below minimum standards.

There was no consultation with the profession about the targets and reward payments that have been written into the terms of the National Partnership Agreements. The current targets have the potential to undermine the goals of the National Partnerships since they can divert resources from target students because they are the most resource

intensive and least likely to show measurable improvement.

While it is desirable that the National Partnerships produce a gain in the average achievement of all students it is important that this outcome is achieved with a corresponding reduction in the proportion of students below minimum standards. There is a strong case to be made that the most disadvantaged students are those who finish their schooling functionally illiterate and innumerate.

This is a policy with perverse effects and the levers that are driving it need to be reset to take account of unforeseen and unintended consequences.

Concluding comment

Australia's primary school population has reached nearly 2 million students; an extrapolation of the 2008 and 2009 NAPLAN results suggests that there are approximately 200,000 who are below minimum standards for their year level. These students are dispersed in 7,000 schools overseen by dozens of government and non-government authorities.

However, feedback from teachers suggests the number of students below minimum standards is considerably larger than predicted by NAPLAN. The scale of the problem of delivering assistance to this larger group is compounded by the geographic location and the administrative complexity of Australia's education system.

While education authorities subscribe to policies that promote 'personalised' education that takes account of the uniqueness of each student, in practice they are reliant on schools to put those policies into effect. From a position of some distance, education authorities tend to privilege the general over the particular, building on commonalities among students rather than differences and on abstractions rather than actualities. This is why targeting is so difficult. Given the diverse range of limiting factors the most likely outcome of any systemic innovation is that it will assist some students and not others.

Therefore, consideration should be given to extending the focus of the National Partnerships to include building the capacity of schools to solve their own problems in ways that complement the interventions developed centrally.

It is clear from the first year of the National Partnerships that most schools have been able to

put the supplementary funding to good use – they have been able to assist students in ways that were not possible without the additional support. Yet the goals of the National Partnerships are ambitious and for reasons explained in this report will break new ground if they are realised. No developed country has yet found a way to eliminate the effects of differences in students' socio-economic backgrounds.

If the large injection of National Partnership funding is to achieve its purposes then its prospects of doing so will be increased with a stronger feedback loop to those responsible for public policy from the practitioners upon whom the implementation of policy depends.

APPENDIX A: Limiting factors 2009, 2010

A1: Teachers' ratings of major factors limiting target students as a percentage 2009, 2010

FACTORS IN CATEGORIES	2009			2010		
	Not a major factor	Major factor	Not enough knowledge	Not a major factor	Major factor	Not enough knowledge
	%	%	%	%	%	%
HEALTH AND COGNITIVE						
Specific cognitive or learning difficulty	47	26	27	56	19	24
General intellectual disability or developmental delay	59	21	20	63	18	18
Speech or language disorder	68	19	13	74	16	10
Medical diagnosis or physical or sensory disability	69	15	16	74	13	13
Psycho-social or mental health problem	73	11	16	77	8	14
BEHAVIOURAL AND ATTITUDINAL						
Lack of effort	55	43	1	62	37	1
Peer group relationships	63	35	2	75	24	1
Poor attitude to learning or school	65	34	1	71	28	1
Problem behaviour at school	70	29	1	76	23	1
Recently enrolled and not yet settled	94	5	1	94	5	0
OUT-OF-SCHOOL INFLUENCES						
Intermittent or irregular attendance	73	26	1	78	21	1
Regularly arrives late for school	78	22	1	84	16	0
Insufficient family or carer support	65	21	14	70	14	15
Lack of sleep	56	19	25	62	12	26
Poor nutrition	68	16	16	70	11	19
KNOWLEDGE AND SKILLS						
Lack of prerequisite knowledge and skills	26	68	6	39	57	4
Lack of familiarity with Standard English	66	31	3	72	26	3
Limited knowledge of English	73	25	2	79	19	2

Target students 2009 = 2,411. Target students 2010 = 2,485.

APPENDIX A (continued)

A2: Factors limiting target students as a percentage, gender, Indigenous status 2009

FACTORS IN CATEGORIES	Gender			Indigenous status		
	Female %	Male %	Chi	Indig %	Non-Ind %	Chi
HEALTH AND COGNITIVE						
Specific cognitive or learning difficulty	21	30	**	18	28	**
General intellectual disability or developmental delay	17	24	**	15	22	**
Speech or language disorder	16	22	**	15	20	*
Medical diagnosis or physical or sensory disability	11	18	**	11	16	*
Psycho-social or mental health problem	8	13	**	11	11	
BEHAVIOURAL AND ATTITUDINAL						
Lack of effort	29	53	**	48	42	*
Peer group relationships	28	39	**	32	36	
Poor attitude to learning or school	22	41	**	37	33	
Problem behaviour at school	15	38	**	30	29	
Recently enrolled and not yet settled	5	6		7	5	*
OUT-OF-SCHOOL INFLUENCES						
Intermittent or irregular attendance	26	25		51	19	**
Regularly arrives late for school	24	20	*	38	18	**
Insufficient family or carer support	19	22		27	19	**
Lack of sleep	15	21	**	28	16	**
Poor nutrition	14	17	*	24	14	**
KNOWLEDGE AND SKILLS						
Lack of prerequisite knowledge and skills	65	71	**	68	68	
Lack of familiarity with Standard English	31	31		34	30	
Limited knowledge of English	25	25		18	27	**

Pearson Chi-Square asymmetrical significance level (2-sided):** p<.01; * p<.05.
Target students by gender = 2,396. Target students by Indigenous status = 2,367.

APPENDIX A (continued)

A3: Factors limiting target students as a percentage, gender, Indigenous status 2010

FACTORS IN CATEGORIES	Gender			Indigenous status		
	Female %	Male %	Chi	Indig %	Non-Ind %	Chi
HEALTH AND COGNITIVE						
Specific cognitive or learning difficulty	16	21	**	16	20	*
General intellectual disability or developmental delay	16	20	**	15	19	*
Speech or language disorder	13	17	*	11	17	**
Medical diagnosis or physical or sensory disability	9	15	**	11	14	
Psycho-social or mental health problem	6	10	**	7	9	
BEHAVIOURAL AND ATTITUDINAL						
Lack of effort	26	44	**	42	36	*
Peer group relationships	20	27	**	23	25	
Poor attitude to learning or school	18	34	**	33	26	**
Problem behaviour at school	11	30	**	24	23	
Recently enrolled and not yet settled	4	6	*	7	5	*
OUT-OF-SCHOOL INFLUENCES						
Intermittent or irregular attendance	22	20		43	16	**
Regularly arrives late for school	17	15		32	12	**
Insufficient family or carer support	12	16	*	22	13	**
Lack of sleep	9	14	**	21	10	**
Poor nutrition	11	11		19	10	**
KNOWLEDGE AND SKILLS						
Lack of prerequisite knowledge and skills	55	58		62	55	**
Lack of familiarity with Standard English	26	26		32	24	**
Limited knowledge of English	19	18		16	19	

Pearson Chi-Square asymmetrical significance level (2-sided):** p<.01; * p<.05.
Target students by gender = 2,484. Target students by Indigenous status = 2,459.

APPENDIX A (continued)

A4: Factors limiting Indigenous male target students and others 2009, 2010

FACTORS IN CATEGORIES	2009			2010		
	Indig- enous males %	Compared to:		Indig- enous males %	Compared to:	
		Non-Ind M %	Ind F %		Non-Ind M %	Ind F %
HEALTH AND COGNITIVE						
Specific cognitive or learning difficulty	20	32 **	15	18	22	13
General intellectual disability or developmental delay	16	25 **	12	18	20	11 *
Speech or language disorder	16	23 *	14	13	18 *	8
Medical diagnosis or physical or sensory disability	12	19 **	9	11	17 *	10
Psycho-social or mental health problem	11	14	11	9	11	5
BEHAVIOURAL AND ATTITUDINAL						
Lack of effort	56	52	36 **	50	43 *	32 **
Peer group relationships	37	40	24 **	25	28	21
Poor attitude to learning or school	43	41	28 **	41	32 **	23 **
Problem behaviour at school	39	38	17 **	32	30	14 **
Recently enrolled and not yet settled	8	5	7	8	6	6
OUT-OF-SCHOOL INFLUENCES						
Intermittent or irregular attendance	51	18 **	50	43	15 **	43
Regularly arrives late for school	39	15 **	38	33	11 **	30
Insufficient family or carer support	30	20 **	24	24	14 **	19
Lack of sleep	30	18 **	25	23	12 **	20
Poor nutrition	27	15 **	21	18	10 **	20
KNOWLEDGE AND SKILLS						
Lack of prerequisite knowledge and skills	71	70	63	67	56 **	56 *
Lack of familiarity with Standard English	37	29 *	31	33	24 **	30
Limited knowledge of English	19	26 *	16	16	19	15

Pearson Chi-Square asymmetrical significance level (2-sided): ** p<.01; * p<.05.
Male students in 2010 = 1,524. Indigenous students in 2010 = 499.

APPENDIX A (continued)

A5: Factors limiting target students, continuing and others 2009, 2010

FACTORS IN CATEGORIES	2009			2010		
	Ongoing %	Transferred %	Chi	Identified 2009 %	New %	Chi
HEALTH AND COGNITIVE						
Specific cognitive or learning difficulty	26	27		19	15	*
General intellectual disability or developmental delay	21	19		18	15	
Speech or language disorder	20	18		14	15	
Medical diagnosis or physical or sensory disability	15	15		13	10	
Psycho-social or mental health problem	10	15	**	9	6	
BEHAVIOURAL AND ATTITUDINAL						
Lack of effort	42	46		36	34	
Peer group relationships	33	40	*	23	25	
Poor attitude to learning or school	31	38	*	27	25	
Problem behaviour at school	26	37	**	21	24	
Recently enrolled and not yet settled	5	11	**	1	16	**
OUT-OF-SCHOOL INFLUENCES						
Intermittent or irregular attendance	23	35	**	20	22	
Regularly arrives late for school	20	29	**	15	17	
Insufficient family or carer support	20	26	**	14	13	
Lack of sleep	17	25	**	12	11	
Poor nutrition	15	19	*	11	12	
KNOWLEDGE AND SKILLS						
Lack of prerequisite knowledge and skills	66	74	**	53	56	
Lack of familiarity with Standard English	31	32		24	27	
Limited knowledge of English	26	23		18	19	

Pearson Chi-Square asymmetrical significance level (2-sided):** p<.01; * p<.05.

Students who graduated from primary education at the end of 2009 have not been included.

APPENDIX A (continued)

A6: Factors limiting target and non-target students, 2 schools, 2009, 2010

FACTORS IN CATEGORIES	2009				2010			
	Target %	Non- target %	All %	Chi	Target %	Non- target %	All %	Chi
HEALTH AND COGNITIVE								
Specific cognitive or learning difficulty	21	1	10	**	17	0	8	**
General intellectual disability or developmental delay	20	3	11	**	20	5	12	**
Speech or language disorder	14	3	8	**	15	5	10	**
Medical diagnosis or physical or sensory disability	16	6	11	**	11	5	8	*
Psycho-social or mental health problem	10	4	7	*	10	3	6	**
BEHAVIOURAL AND ATTITUDINAL								
Lack of effort	42	16	28	**	34	14	23	**
Peer group relationships	37	19	28	**	22	12	17	**
Poor attitude to learning or school	36	8	21	**	22	9	15	**
Problem behaviour at school	31	10	21	**	18	12	15	
Recently enrolled and not yet settled	7	9	8		4	3	3	
OUT-OF-SCHOOL INFLUENCES								
Intermittent or irregular attendance	23	15	19		18	10	14	*
Regularly arrives late for school	18	14	16		11	7	9	
Insufficient family or carer support	27	10	18	**	23	8	15	**
Lack of sleep	16	5	10	**	7	7	7	
Poor nutrition	20	9	14	**	10	4	7	**
KNOWLEDGE AND SKILLS								
Lack of prerequisite knowledge and skills	47	9	27	**	37	12	23	**
Lack of familiarity with Standard English	10	2	6	**	10	5	8	
Limited knowledge of English	5	2	4		6	4	5	

Pearson Chi-Square asymmetrical significance level (2-sided):** p<.01; * p<.05.

All students in 2 schools in 2009 = 361. Target students in 2009 = 48 per cent of students included.

All students in 2 schools in 2010 = 430. Target students in 2010 = 45 per cent of students included.

Mean limits to progress 2009 all students in 2 schools = 2.6, target students = 3.9, non-target students = 1.4.

Mean limits to progress 2010 all students in 2 schools = 2.0, target students = 3.0, non-target students = 1.2.

APPENDIX B: Support needs 2009

B1: Support needed by target students as a percentage 2009				
CATEGORY OF SUPPORT	Target students n	Not needed %	Has sufficient %	Needs more %
CONCENTRATION OF ADULT SUPPORT				
Teachers assistant in class	2,426	14	11	75
Class size reduction	2,417	32	8	60
Additional teacher in class	2,414	44	11	45
SPECIALIST TEACHING EXPERTISE				
Specialist instruction in literacy	2,415	7	13	80
Specialist instruction in numeracy	2,409	13	12	74
Diagnostic information	2,381	18	24	58
Specialist instruction in ESL	2,406	75	5	20
PROFESSIONAL LEARNING				
Training for non-teaching staff	2,402	47	12	41
Training for teaching staff	2,396	47	15	39
HEALTH AND ANCILLARY SERVICES				
Psychologist	2,388	69	5	26
Speech pathologist	2,393	71	4	25
Health or medical professional	2,380	78	6	16
OUT-OF-CLASS INTERVENTIONS				
Academic program before or after school	2,388	46	5	49
Intensive home liaison	2,396	54	12	34
Regular liaison with child welfare providers	2,389	79	5	16
Nutrition provided through school	2,401	70	14	16
Strategic playground supervision	2,406	76	9	15

Notes: 100 per cent = target students in each row.

APPENDIX C: Class Survey Form 2009

Information for class teachers

The questions in this survey ask you about the support needed to teach low performing students *you* have identified as struggling to reach nationally acceptable standards in literacy and/or numeracy for their year level. While a student's NAPLAN results may provide you with a guide, your own assessment of the adequacy of their level of performance is also important.

Please answer the questions based on your knowledge of the student at the time you are responding.

Every effort has been made to keep the questions as simple as possible and avoid local terminology as this study involves schools in government and non-government systems in several states.

If there are matters you consider important but which have not been covered, please provide details in any of the white spaces. Your comments will be noted and will help us reflect the views of classroom teachers in our report.

Thank you for agreeing to participate in this study.

School	
Name of researcher collecting form:	T0.1
Date of collection:	T0.2
Teacher ID	
Teacher's name:	
Teacher consent form completed:	

PLEASE NOTE THIS PAGE WILL BE DETACHED ONCE THE CODES HAVE BEEN CHECKED AGAINST THE SCHOOL'S TRIPS KEY.

APPENDIX C (continued)

1 INFORMATION ABOUT THE CLASS AND TEACHER/S

1.1 Teacher information					
T1.1.1	School ID				
T1.1.2	Teacher ID				
T1.1.3	Gender	F	<input type="checkbox"/>	M	<input type="checkbox"/>
T1.1.4	Years teaching				
T1.1.5	Years in school				
T1.1.6	Full-time	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
T1.1.7	Indigenous	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>

1.2 Second teacher information (if applicable)					
T1.2.1	Teacher ID				
T1.2.2	Gender	F	<input type="checkbox"/>	M	<input type="checkbox"/>
T1.2.3	Years teaching				
T1.2.4	Years in school				
T1.2.5	Full-time	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
T1.2.6	Indigenous	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>

1.3 Teacher/s comment	
T1.3	Do you have particular experience, skills or training that led you to be assigned to teach this class?

1.4 The class as a group	
T1.4	Is this class atypical in any respect?

1.5 Class size	
T1.5	How many students do you have in your class?

APPENDIX C (continued)

2 THE TARGET STUDENTS

T2.1	How many students in your class do you consider to be struggling to reach an acceptable standard in either literacy or numeracy or both?	
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3 BALANCING THE NEEDS OF YOUR STUDENTS

Please indicate the extent to which you agree with the following statements. 'These students' refers to the students you have identified as struggling to reach an acceptable standard in literacy and/or numeracy.	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
T3.1 I have a clear understanding of what is restricting these students' achievement in literacy and numeracy.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
T3.2 I am confident strategies I am using will lift these students to an acceptable standard in literacy and numeracy.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
T3.3 I organise my class so that I have extra time to work with these students.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
T3.4 There are too many students needing additional support for me to work with each one individually.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
T3.5 I focus on these students to such an extent that I cannot give the other students the attention they need.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
T3.6 The social and emotional wellbeing of these students is more important than their academic performance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
T3.7 For these students achievement in literacy and numeracy is more important than achievement in the other learning areas.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4 THE STUDENTS YOU HAVE IDENTIFIED



Please complete one two-sided page of questions about *each* of the students you have identified.



APPENDIX C (continued)

STUDENT 1

4.1 Description of student					
S4.1.1.1	School ID				
S4.1.2.1	Teacher ID				
S4.1.3.1	Year level				
S4.1.4.1	Gender	F	<input type="checkbox"/>	M	<input type="checkbox"/>
S4.1.5.1	Indigenous	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
S4.1.6.1	Survey completed				

4.2 Your judgements				
How would you rate this student in these learning areas?	Below minimum standard	On minimum standard	Above minimum standard	Not enough knowledge
S4.2.1.1 Literacy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S4.2.2.1 Numeracy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S4.2.3.1 Oral language	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S4.2.4.1 Social skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4.3 Factors limiting progress			
To what extent do you believe this student's performance in literacy and/or numeracy has been limited by the factors listed?	Is <u>not</u> a major factor	Is a major factor	Not enough knowledge
S4.3.1.1 A medical diagnosis or physical or sensory disability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S4.3.2.1 A psycho-social or mental health problem	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S4.3.3.1 A general intellectual disability or developmental delay	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S4.3.4.1 A specific cognitive or learning difficulty	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S4.3.5.1 Limited knowledge of English	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S4.3.6.1 Lack of familiarity with Standard English	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S4.3.7.1 A speech and language disorder	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S4.3.8.1 Lacks prerequisite knowledge and skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S4.3.9.1 Intermittent or irregular attendance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S4.3.10.1 Regularly arrives late for school	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S4.3.11.1 Recently enrolled in school and has not settled	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S4.3.12.1 Poor nutrition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S4.3.13.1 Lack of sleep	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S4.3.14.1 Student has insufficient family or carer support	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S4.3.15.1 Problem behaviour at school	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S4.3.16.1 Peer group relationships	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S4.3.17.1 Poor attitude to learning or school	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S4.3.18.1 Lack of effort	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S4.3.19.1 Other factors, please specify	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

APPENDIX C (continued)

4.4 Resources to support Student 1				
What resources are needed to enable this student to reach an acceptable standard in literacy and/or numeracy for his or her year level? Check the category that best describes the current situation.		Does not need this	Has enough of this	Needs more of this
S4.4.1.1	Diagnostic information about individual's learning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S4.4.2.1	Specialist instruction in literacy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S4.4.3.1	Specialist instruction in numeracy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S4.4.4.1	Specialist instruction in English as a second language	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S4.4.5.1	Training for teaching staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S4.4.6.1	Training for non-teaching staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S4.4.7.1	Additional teacher in class	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S4.4.8.1	Teachers assistant in class	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S4.4.9.1	Class size reduction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S4.4.10.1	Strategic playground supervision	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S4.4.11.1	Academic program before or after school hours	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S4.4.12.1	Nutrition provided through school	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S4.4.13.1	Intensive home liaison	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S4.4.14.1	Regular liaison with child welfare providers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S4.4.15.1	Psychologist	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S4.4.16.1	Speech pathologist	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S4.4.17.1	Health or medical professional	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S4.4.18.1	Other resources, please specify	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4.5 Your predictions							
With the resources currently available, do you expect this student to reach or exceed the minimum standard?	I expect this child will:		Perform below the standard	Reach the standard	Exceed the standard	Can't predict	
	S4.5.1.1	This school year		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	S4.5.2.1	Before completing primary school		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
What do you see as this student's greatest challenge? <small>S4.5.3.1</small>			What do you see as this student's greatest strength? <small>S4.5.4.1</small>				

APPENDIX D: Principals' responses 2010

Session 3 – What has changed for 2010: strategies

<p>Is your school adopting major new strategies to improve the literacy and numeracy performance of students?</p>	<p>YES <input type="checkbox"/> / NO <input type="checkbox"/></p>
<p>IF YOU ANSWERED 'YES', PLEASE COMPLETE THIS PAGE.</p>	
<p>Give a brief description of the major new strategies.</p>	
<p>Do you expect the major new strategies will lead to noticeable improvements in the performance of the target students?</p>	<p>YES <input type="checkbox"/> / NO <input type="checkbox"/></p>
<p>Please explain the reason for your answer.</p>	

APPENDIX D (continued)

Session 4 – What has changed since 2010: Resources

Please check the cell that shows the source of any additional supports for 2010. If there has been no increase, check the right hand cell.

Form of additional support:	Source of support			None extra
	Low-SES NP	Literacy & Numeracy NP	Other	
1 Leadership training for principals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2 Teacher professional development	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3 Coaching for teachers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4 Teachers in classrooms	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5 Smaller class groups	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6 Teachers assistants in classrooms	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7 Diagnostic assessment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8 One-on-one instruction for students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9 Out-of-school hours program	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10 Attendance program	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11 Student information systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12 Whole school planning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13 Networks with other schools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14 Improved staff recruitment/retention	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15 Program for students pre-Year 1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16 Parent support program	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17 Community support program	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18 Support from other agencies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19 Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

APPENDIX D (continued)

Session 4 (continued)

IF YOUR SCHOOL HAS NO ADDITIONAL SUPPORT FOR 2010, GO TO PAGE 4.			
Please check the cell that shows the extent to which you expect students below the minimum standard will improve 2010-2011 as a result of each form of additional support identified above.			
Form of additional support:	This form of support will:		
	Make a substantial difference	Make a moderate difference	Not make a difference
1 Leadership training for principals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2 Teacher professional development	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3 Coaching for teachers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4 Teachers in classrooms	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5 Smaller class groups	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6 Teachers assistants in classrooms	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7 Diagnostic assessment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8 One-on-one instruction for students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9 Out-of-school hours program	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10 Attendance program	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11 Student information systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12 Whole school planning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13 Networks with other schools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14 Improved staff recruitment/retention	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15 Program for students pre-Year 1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16 Parent support program	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17 Community support program	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18 Support from other agencies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19 Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

APPENDIX D (continued)

Session 4 (continued)

Have any forms of support been withdrawn or reduced for 2010?	YES <input type="checkbox"/> / NO <input type="checkbox"/>
If you answered 'YES', please list the forms of support withdrawn or reduced.	
Do you expect the percentage of students teachers judge below the minimum standard in literacy will be smaller next year?	YES <input type="checkbox"/> / NO <input type="checkbox"/>
Do you expect the percentage of students teachers judge below the minimum standard in numeracy will be smaller next year?	YES <input type="checkbox"/> / NO <input type="checkbox"/>
Do you expect the percentage of students below the minimum standard in NAPLAN Reading will be smaller next year?	YES <input type="checkbox"/> / NO <input type="checkbox"/>
Do you expect the percentage of students below the minimum standard in NAPLAN Numeracy will be smaller next year?	YES <input type="checkbox"/> / NO <input type="checkbox"/>
Do you expect your schools' NAPLAN mean scores in Reading will increase next year?	YES <input type="checkbox"/> / NO <input type="checkbox"/>
Do you expect your schools' NAPLAN mean scores in Numeracy will increase next year?	YES <input type="checkbox"/> / NO <input type="checkbox"/>

APPENDIX D (continued)

Session 6 – Targeting high-needs students

ALL PRINCIPALS ARE ASKED TO COMPLETE THIS SECTION.					
Check a box to show whether you agree with the statements below.	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1 The principal has been directed which students should be given extra support.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2 In practice, the teachers in the school will decide which students will be given extra support.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3 Teachers are morally obliged to share their attention equally among all class members.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4 Students below the minimum standard were assigned to the best class teachers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5 The students most likely to show measurable progress will receive more support than other students.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6 The school will direct considerable effort to preparing students for this year's NAPLAN tests.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7 The targets set for the school are achievable.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8 The targets will help teachers to focus on improving the quality of their instruction.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9 The principal has been informed that failing to meet targets will lead to negative consequences.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10 The targets have become more important than the priorities in the school's plan.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

APPENDIX D (continued)

Session 9 – The administrative context

IF YOUR SCHOOL HAS BEEN INCLUDED IN AN NP, PLEASE COMPLETE THIS SECTION.					
Check a box to show whether you agree with the statements below.	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1 The principal is clear about the outcomes expected of the school communicated through the NPs.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2 School-level planning associated with the introduction of the NPs has been a useful exercise.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3 The system took account of the particular needs of our students when resources were allocated.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4 Some of the additional support notionally allocated to this school is not expected to be useful.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5 The principal expects that the support allocated through the NPs will make a significant positive difference to our students.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6 The school's results would improve if we had greater control over the available resources.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

APPENDIX E: Class Survey Form 2010

Information for class teachers

The questions in this survey ask you about students whose teachers reported in 2009 that they were struggling to reach minimum standards in literacy or numeracy.

This year we would like you to reassess these students based on your observations this year if they are in your class.

In addition, could you please identify and assess any other students in your class who in your judgement are performing below the minimum standard in literacy or numeracy.

TEACHER AND CLASS

T1 Teacher information				
T1.1	Teacher ID	<input type="text"/>	<input type="text"/>	<input type="text"/>
T1.2	Gender	F <input type="checkbox"/>	M <input type="checkbox"/>	
T1.3	Years teaching	<input type="text"/>		
T1.4	Years in school	<input type="text"/>		
T1.5	Full-time	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
T1.6	Indigenous	Yes <input type="checkbox"/>	No <input type="checkbox"/>	

T2 Class size and target students	
T2.1	How many students do you have in your class?
T2.2	How many students are performing below the minimum standard in either literacy or numeracy or both?



Please complete one two-sided page of questions about *each* of the students identified.



APPENDIX E (continued)

STUDENT

S1 Description of student				
S1.1	Year level			
S1.2	Gender	F	<input type="checkbox"/>	M
S1.3	Indigenous	Yes	<input type="checkbox"/>	No
S1.4	Date completed			

S2 Your judgments				
How would you rate this student in these learning areas?	Below minimum standard	On minimum standard	Above minimum standard	Not enough knowledge
S2.1 Reading	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S2.2 Writing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S2.3 Spelling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S2.4 Grammar and punctuation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S2.5 Numeracy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

S3 Factors limiting progress			
To what extent do you believe this student's performance in literacy and/or numeracy has been limited by the factors listed?	Is <u>not</u> a major factor	Is a major factor	Not enough knowledge
S3.1 A medical diagnosis or physical or sensory disability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S3.2 A psycho-social or mental health problem	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S3.3 A general intellectual disability or developmental delay	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S3.4 A specific cognitive or learning difficulty	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S3.5 Limited knowledge of English	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S3.6 Lack of familiarity with Standard English	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S3.7 A speech and language disorder	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S3.8 Lacks prerequisite knowledge and skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S3.9 Intermittent or irregular attendance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S3.10 Regularly arrives late for school	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S3.11 Recently enrolled in school and has not settled	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S3.12 Poor nutrition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S3.13 Lack of sleep	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S3.14 Student has insufficient family or carer support	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S3.15 Problem behaviour at school	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S3.16 Peer group relationships	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S3.17 Poor attitude to learning or school	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S3.18 Lack of effort	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S3.19 Other factors, please specify	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

APPENDIX E (continued)

S4 This student's learning context			
Please indicate which of the following statements was true during Term 1, 2010.	Never or rarely	Sometimes	Nearly always or always
^{T4.1} A teachers assistant makes an important contribution when this student is learning literacy.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
^{T4.2} A teachers assistant makes an important contribution when this student is learning numeracy.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
^{T4.3} I am supported by another teacher who makes an important contribution when this student is learning literacy.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
^{T4.4} I am supported by another teacher who makes an important contribution when this student is learning numeracy.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
^{T4.5} This student is able to concentrate when I am providing instruction to the whole class as a group.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
^{T4.6} This student gives up quickly if work is challenging.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
^{T4.7} This student gets more of my attention than average for students in my class.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

S5 Targeting resources				
Has there been a change in the support available to this particular student during Term 1, 2010 compared to 2009?	Decreased	Not changed	Increased	Not enough knowledge
^{T5.1} Overall, the support available to this student has:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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