Evaluation of the take-up and sustainability of new literacy and numeracy practices in NSW schools

Phase 3 – Sustainability

Progress Report 1

Project Brief DETSSNP1027

May 2013
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Evaluation of the Take-up and Sustainability of New Literacy and Numeracy Practices in New South Wales Schools

Phase 3 – Sustainability

Chapter 1: Introduction

On 28 November 2008 the Smarter Schools National Partnerships (SSNP) were agreed by the Council of Australian Governments (COAG). Three components of the SSNP were established:

- **National Partnership on Literacy and Numeracy (NPLN)**
  $540 million over four years between 2008-09 and 2011-12 to facilitate and reward evidence based strategies that improve student literacy and numeracy. For implementation in NSW, the Commonwealth invested $40.8 million, with an additional $58.9 received for meeting the reward targets of this Partnership.

- **National Partnership on Improving Teacher Quality (NPITQ)**
  $550 million over five years between 2008-09 and 2012-13 to improve the quality of the Australian teaching workforce. For implementation in NSW, $30.1 million was invested, with an additional $112 million received for meeting reward milestones.

- **National Partnership on Low Socio-economic Status School Communities (NP Low SES)**
  $1.5 billion over seven years between 2008-09 and 2014-15 to support education reform activities in low socio-economic status schools. For implementation in NSW, $593.3 million was allocated by the Commonwealth. NSW invested $237 million, which allowed 140 additional schools to participate in the four year Partnership and 100 schools to participate in a two year program.

Since implementation of the SSNPs commenced, an extension of the Improving Teacher Quality National Partnership has been announced:

- **Principal Professional Development (PPD)**
  Over the period 2012-2013 NSW was able to access a maximum of $11,898,742 in Commonwealth funding to develop and implement transformative professional learning for principals and aspiring leaders. The projects include leading improvement, innovation and change; the development of Principal Action Learning Communities and Learning Alliances and building instructional leadership capacity.

A stand-alone literacy and numeracy National Partnership is currently operating until the conclusion of the 2013 school year:

- **The Improving Literacy and Numeracy National Partnership (ILNNP)**
  ILNNP is a cross sectoral National Partnership involving 600 schools in New South Wales with $74.95 million in funding available, of which $5 million is tied to demonstrated improvement in local performance measures. The ILNNP will provide support for students who have fallen behind their peers in literacy or numeracy, or are at risk of doing so. The ILNNP will also
provide professional learning opportunities to build the capacity of teachers in literacy and numeracy instruction and the provision of personalised and differentiated support.

The three SSNPs align with the 2009 National Education Agreement in which States and Territories agreed that, 'all Australian school students need to acquire the knowledge and skills to participate effectively in society and employment in a globalised economy’. As a strategically significant suite of education reforms, numerous evaluations have been commissioned to investigate various aspects of SSNP implementation, impact and sustainability at both a State/Territory and Australian Government level.

In 2011, Erebus International (Erebus) was contracted by the National Partnerships Evaluation Committee to undertake an evaluation of the NPLN in NSW, titled Evaluation of the take-up and sustainability of new literacy and numeracy practices in New South Wales schools. This National Partnership, designed to deliver sustained improvements in literacy and numeracy outcomes for all NSW students and especially those falling behind, identifies the following priority areas for reform:

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

In view of these reform areas, the implementation of the NPLN has constituted an ambitious and innovative undertaking in NSW, unusual in its scope and scale. The initiative was delivered to identified schools across two financial years, 2009/2010 and 2010/2011. In late 2009, 147 schools across NSW had begun implementation of literary or numeracy initiatives, including 114 government schools, 26 Catholic schools and 7 independent schools. By 2012, 102 schools across NSW were undertaking literacy programs and 45 undertaking numeracy programs under the NPLN.

As observed in the Final Report for Phase 1 of this evaluation (Erebus 2012), the implementation of the NPLN in NSW differed from many reform efforts of the past by targeting multiple aspects of the educational enterprise deliberately and comprehensively, namely:

- leadership and school management;
- planning, pedagogy, programs and resources;
- student engagement, and school-community relationships.

On the whole, allocated funding met its objectives by facilitating and rewarding the deployment of evidence-based strategies to improve student literacy and numeracy skills in NSW.
1.1 Overview of evaluation reporting for Phase 3

This Progress Report sets out preliminary findings for Phase 3 Sustainability of the Evaluation of the take-up and sustainability of new literacy and numeracy practices in New South Wales schools. Phase 3 is concerned with evaluating the medium-term sustainability of NPLN i.e. what gains in literacy and numeracy outcomes, and what pedagogical and leadership practices, have been sustained in schools in the two year period following the cessation of NPLN funding in June 2011.

The evaluation process commenced in 2011 when Erebus was contracted on behalf of the NSW Minister for Education to undertake the evaluation of Phase 1 Implementation. Erebus delivered findings in the aforementioned Final Report for Phase 1 (Erebus 2012) in September 2012.

Since this time, work has been carried out towards the completion of Phase 2. This has included finalising a strategic review of the outcomes of literacy and numeracy program evaluations in NSW (Phase 2a) and developing a dissemination strategy and an online resource to share literacy and numeracy best practice (Phase 2b). See section 2.2 of this Progress Report for more detail.

As the last phase of this evaluation, project planning for Phase 3 Sustainability commenced in December 2012. In the first quarter of 2013, data analysis to inform the preliminary findings contained herein was undertaken. The final round of Phase 3 data gathering will commence following the delivery of this Progress Report and approval of refined data gathering instruments outlined in Chapter 5 Next Steps. This evaluation is due to conclude by January 2014 with the delivery of the Final Report for Phase 3. A timeline of key reporting deliverables from 2011 to the present is presented in Table 1 below.

Table 1: Progress against key timeline and deliverables, Phase 1 - Phase 3

<table>
<thead>
<tr>
<th>Project Activity</th>
<th>Activity Completed by</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finalisation of contract and signing of contract</td>
<td>January 2011</td>
</tr>
<tr>
<td><strong>Phase 1 – Implementation</strong></td>
<td></td>
</tr>
<tr>
<td>Finalise evaluation design and Research Plan.</td>
<td>June 2011</td>
</tr>
<tr>
<td>Progress Report 1</td>
<td>April 2011</td>
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<tr>
<td>Progress Report 2</td>
<td>December 2011</td>
</tr>
<tr>
<td>Submission and approval of Final Report for Phase 1</td>
<td>September 2012</td>
</tr>
<tr>
<td><strong>Phase 2a – Strategic Review of NPLN Program Evaluations</strong></td>
<td></td>
</tr>
<tr>
<td>Project commences</td>
<td>March 2012</td>
</tr>
<tr>
<td>Submission and endorsement of draft findings</td>
<td>July – August 2012</td>
</tr>
<tr>
<td>Delivery of Phase 2a Final Report (variation 2)</td>
<td>March 2013</td>
</tr>
<tr>
<td><strong>Phase 2b – Development of Interactive Resource</strong></td>
<td></td>
</tr>
<tr>
<td>Project commences following endorsement of draft findings of Phase 2a</td>
<td>August 2012</td>
</tr>
<tr>
<td>Submission and approval of Project Plan</td>
<td>January 2013</td>
</tr>
</tbody>
</table>
### 1.2 Methodology for Phase 3

The methodology and reporting requirements for Phase 3 Sustainability are specified in the Evaluation Plan submitted by Erebus to the Secretariat to the Centre for Education Statistics and Evaluation (CESE) Advisory Council and approved in June 2011. The Evaluation Plan notes that this Progress Report for Phase 3 will provide details on:

- The status of projected data gathering activities
- Issues affecting the data gathering (if any)
- Emerging trends and issues relating to the sustainability of NPLN initiatives and outcomes

#### Completion of projected data gathering activities

This Progress Report updates the student outcomes data—a continuation of the NAPLAN time series to including 2012 results on Reading and Numeracy scores for Year 3 and Year 5. This analysis includes a breakdown of results between NPLN schools and the rest of NSW and of Aboriginal and Torres Strait Islander (ATSI) students in NPLN schools and across the rest of NSW.

The timeline for twenty in-school case studies and key stakeholder interviews have been rescheduled to August/September 2013 to provide the richest possible account of the sustainability of changed teaching and learning practices. Given the extensions of the NPLN and the low SES Reform Extension Initiative, this rescheduled qualitative data collection also provides an opportunity to identify impacts on sustainability in cases (if any) where NPLN schools are involved in those extension activities.

#### Issues affecting the data gathering

Two issues that arose during data gathering are worth noting, although neither undermines the overall validity and soundness of the preliminary conclusions drawn in this report.

First, the Assessment Bank test data for the NSW government school sector was not available for this stage of the Phase 3 evaluation, although it should, be available for the Final Phase 3 Report. Second, the statistical significance of annual differences in performance at 2012 could not be provided as error data required for calculating confidence intervals was not available.
Emerging trends and issues relating to the sustainability of NPLN initiatives and outcomes

The remainder of this Progress Report outlines emerging trends and issues relating to the sustainability of NPLN initiatives and outcomes, essentially from a quantitative perspective. The preliminary findings contained here play a crucial role in the ongoing refinement of survey, case study and interview instruments so that the final round of data gathering are attuned to newly emerging trends and systemic issues flagged since Phase 1.

The Final Report for Phase 3, due at the beginning of 2014, will build on this Progress Report to provide a detailed account of the:

- extent to which NPLN initiatives and outcomes have been sustained,
- contexts that best support the sustainability of NPLN initiatives and outcomes, and
- implications to be drawn for NSW education systems/sectors for achieving sustainability in similar or future initiatives.

Data will be gathered from:

- key stakeholder interviews; school case study visits; online surveys, and student outcomes data, including 2013 NAPLAN data.

More detail on planned data gathering, to be presented in the Final Report, is contained in Chapter 5 Next Steps.

1.3 Structure of Progress Report for Phase 3

This Progress Report for Phase 3 is structured as follows:

- Chapter 2 focuses on how the Sustainability phase of the evaluation sits in relation to findings of Phase 1 and Phase 2, and highlights the strategic objectives of Phase 3 in view of wider education reforms.

- Chapter 3 examines key findings that relate to planning for sustainability which are contained in the Final Report for Phase 1 (Erebus 2012) and the report on the Cross Sectoral Impact Survey (ARTD 2012). Summarising these findings enriches the interpretation of Phase 3 data analysis, and informs the research questions for the final round of data gathering in the second half of 2013.

- Chapter 4 contains an analysis of 2008 - 2012 NAPLAN Reading and Numeracy data for Year 3 and Year 5, and is disaggregated by gender and ATSI. The terms of reference for the evaluation, in line with the emphases given within the overall NPLN bilateral agreements, seeks particularly to close the gap in achievement between Indigenous and Non-Indigenous students.

- Chapter 5 identifies the Next Steps to the evaluation to commence following the submission of this report. This chapter also reflects on possible refinements to the
data gathering instruments required for the successful delivery of the Final Report Phase 3, due at the beginning of 2014.
Chapter 2: Objective of Phase 3 in context

2.1 Objective of Phase 3

The objective of Phase 3 is to investigate what schools, systems and sectors have done to sustain gains made by the NPLN initiative. Phase 3 will clarify trends in student literacy and numeracy performance, and the cultural changes in pedagogical and leadership practice, observed in 2012-2013 following the cessation of NPLN funding.

In alignment with Focus Area 6 of the Evaluation Plan (June 2011), Phase 3 will not only consider what activities by school teachers, leaders and systems/sector have helped or hindered sustainability but will also inform an appreciation of why sustainability has, or has not, occurred. In doing so, Phase 3 will enrich an evidence-base to support future iterations of literacy and/or numeracy programs in NSW schools.

As a strategically-important evaluation in the context of a suite of education reforms, Phase 3 will also be critical in providing its primary audience—the Australian Government and NSW Governments and education sector representatives—with evidence of what changes (how, why and in what contexts) have been sustained beyond the immediate life of the NPLN. By informing the development of effective and sustainable policy-making and funding decisions for education reform at the state, systems/sector and individual school level, Phase 3 is a crucial component of the overall evaluation of literacy and numeracy practices in NSW schools.

Evaluating the objective of Phase 3 given ongoing activities in schools and systems/sectors between 2012-2013

Two priority areas for schools and systems/sectors to focus on following the cessation of NPLN funding were identified and enumerated in the Evaluation Plan (Erebus 2011:5):

1. Sustained implementation of literacy and numeracy programs, supported by capacity building in schools through continued engagement in whole-school teacher professional development, and executive engagement in leadership programs.

2. Growth in teacher capacity to assess student performance through the School Measurement, Assessment and Reporting Toolkit (SMART 2) by providing ongoing access to e-learning modules in SMART Data Analysis.

These priority areas also respond to the cumulative evaluation findings that the ongoing delivery of literacy and numeracy programs—when supported by growing teacher capacity in the context of strong leadership—may embed the cultural change required for a successful transition from implementation to sustainability.
2.2 Phase 3 in context

When considering Phase 3 in context of the wider NPLN evaluation in NSW, it is important to appreciate that the findings draw on a combination of unique data gathering events in 2013 and the accumulated body of evidence documented throughout Phase 1 and Phase 2.

Phase 3 reflects the iterative process that Erebus has engaged throughout this evaluation and is responsive to emerging findings, trends and challenges. The relationship between these three phases is illustrated in Figure 1.

Figure 1: Relationship between Phases of the NPLN evaluation

Phase 1 Evaluation of the Impact and Effectiveness of the NPLN

The purpose of Phase 1 of this evaluation was to give a strategic overview of the implementation of the NPLN in NSW, examining its impact and effectiveness. From January 2011 to May 2012, the Phase 1 evaluation employed a mixture of qualitative and quantitative data gathering from six sources: document analysis; interviews with key sector representatives and regional DEC staff; interviews with schools leaders and teachers in 12 schools; case studies with a sample of 20 schools; online survey of schools, and student outcomes data, including NAPLAN.

Guided by the Evaluation Plan, Phase 1 examined five Focus Areas:

- Focus Area 1: What change has been attempted?
- Focus Area 2: What effects and synergies can be discerned?
- Focus Area 3: How effective has implementation been, including cost-effectiveness?
- Focus Area 4: How have schools approached issues of sustainability, resilience and transferability?
- Focus Area 5: What are the implications for systems/sectors from the evidence gathered?
Two progress reports were delivered by Erebus in April 2011 and December 2011. Their focus was to identify the planning and rollout situation of the NPLN at a strategic/sectoral level and within schools.

The Progress Report 1 (April 2011) for Phase 1 reported findings of the initial document review and interviews with school leaders and key stakeholders. It reflected the experience of NPLN implementation at a relatively early stage and identified varying degrees of enthusiasm and trepidation in regards to the rollout of a reform so significant in scope and resourcing. Progress Report 2 (December 2011) represented a more considered reflection based on participants’ experience of the initiative over the life of the funding period.

The implementation of the NPLN was found to be well planned, managed and resourced, supported by cross-sectoral cooperation underpinned by a sound body of evidence about student learning, effective pedagogy and instructional leadership. Observations were made regarding the complex interplay between the local school context, the systemic education environment, and other state-wide and national initiatives—all of which affect the outcomes of any particular program.

Progress towards enhancing teacher and leadership capacity, and adopting an evidence-based approach to pedagogy and planning was demonstrable. The final stage of Phase 1 was informed also by the analysis of student outcomes data from NAPLAN results in Year 3 and 5 over the period from 2008 to 2011. At that point in time, the qualitative evidence of positive impacts on student learning had not yet been translated into improved NAPLAN scores.

The Final Report of Phase 1 (delivered by Erebus in September 2012) contained findings from the implementations stage of the evaluation, reported against the five Focus Areas. Focus Area 4 and Focus Area 5 contained findings about planning for sustainability, which are now relevant for Phase 3.

**Phase 2a Strategic Review of NPLN Evaluations & Phase 2b Development of Interactive Resource**

Phase 2 of the NPLN evaluation comprised two parts.

In March 2013, Erebus submitted the Report for Phase 2a (final draft). This phase involved a strategic meta-analysis of findings of program level evaluations of the eight literacy/numeracy programs implemented in NSW schools during the NPLN.

Four of these evaluations were conducted by Urbis Pty Ltd: Taking Off With Numeracy, Multilit, Mindful Learning, Mindful Teaching and Focus on Reading 3-6. The other four evaluations: Accelerated Literacy, Individualised Learning Plans, QuickSmart and Reading to Learn were conducted by SEPEB.

The analysis of these program-level evaluations provided a comparative overview of the findings to inform decisions about literacy and/or numeracy programs and practices at a local school and system/sector level. The findings identified the local school and system/sector contexts in which each program works best for enhancing student outcomes and the cost effectiveness of each program.
The methodology for the Phase 2a evaluation involved three components: document analysis of the eight program evaluations; interviews with key sector representatives in government and non-government school sectors, and school case studies.

The findings highlighted nine elements of the implementation of literacy or numeracy programs that have a positive association with student learning outcomes over time:

1. Purposeful student engagement
2. Differentiated teaching and learning
3. Evidence based decision making
4. Effective instructional leadership
5. Responsive teaching approaches
6. Agreed whole school reform agenda
7. Collaborative whole school culture
8. Targeted professional support
9. Tailored resource utilization

A key learning is that it is the combination of reform elements and not one aspect of a particular program that creates sustainable change in student outcomes and teacher/leadership capacity.

Planning for Phase 2b commenced following the NSW Minister for Education’s endorsement of draft findings of Phase 2a in August 2012. Phase 2b involved developing an online resource targeted at school leaders and teachers to share and promote the effective practices identified in Phase 2a, including authentic examples of the implementation of NPLN programs NSW schools and classrooms.

The approach to Phase 2b was iterative, involving extensive consultation, testing and refinement of concepts and ideas developed in early stages of the project. The following steps were identified in the Phase 2b Project Plan:

1. Test and validate the effective practices framework through relevant consultations.
2. Gather examples of practice from a sample of schools that participated in the NPLN.
3. Design a brief that will allow a website developer to assemble the collected material.
4. Implement the design brief to develop a draft prototype website.
5. Test the website with contributing schools to develop a final product.
6. Provide the DEC with a final copy of the online resource for wider dissemination.

At the time of writing, Phase 2b is nearing completion with the development of a dissemination strategy and the final draft of the resource well underway.

**Phase 3 Evaluation of the Sustainability of the NPLN**
The Phase 3 evaluation looks to the medium term sustainability of NPLN outcomes in student performance and at a pedagogical, whole-school leadership and sectoral/systemic level. “Medium term” sustainability refers to those changes that can be observed in 2012 and 2013, the two years following the cessation of NPLN funding.

The key questions for this phase are identified under Focus Area 6: To what extent has the reform change agenda been sustained post-funding?

- How sustainable has the impact of the National Partnerships strategy been?
- What has helped or hindered sustainability (including any systemic support)?
- What lessons can be learned for future implementation of literacy and numeracy initiatives?
- Which programs and strategies have proved to be most sustainable and resilient and how has this been achieved?
- What impediments to sustainability of initiative goals can be identified? How have they changed over the life of and beyond the SSNP? How have they been addressed?
- To what extent, how and under what conditions can successful strategies be scaled up to be replicated in other contexts?

Responding to Focus Area 6 also involves considering the findings reported under Focus Area 4 (How have schools approached issues of sustainability, resilience and transferability?) and Focus Area 5 (What are the implications for systems?). The implications of relevant findings from these areas are presented in Chapter 3 and serve to provide relevant context for interpreting Phase 3 findings.
Chapter 3: Implications of key findings from Phase 1 – planning for sustainability

This Progress Report builds on a rich body of evidence from a number of previous and simultaneous SSNP evaluations, especially those that pertain to implementation activities between 2009 and 2011 that were concerned with planning for sustainability. To that end, relevant findings from the Final Report of Phase 1 of the current evaluation (Erebus 2012), the Analysis of the NSW Smarter Schools National Partnerships Cross-sectoral Impact Survey: Phase 1 (ARDT 2012), and key findings reported under Focus Area 4 and Focus Area 5 which include the current progress towards achieving that sustainability in 2012-2013, are now presented.

3. 1 Findings from Final Report of Phase 1 (Erebus 2012)

At the most general level, the Final Report for Phase 1 (Erebus 2012) noted the following as crucial elements of sustainable implementation:

- Accessing external resourcing;
- Drawing on strong instructional leadership; and
- Planning for NPLN prioritisation.

Focus Area 4: How have schools approached sustainability, resilience and transferability?

How did schools plan for sustainability after SSNP funding was to cease? \(^1\)

Moves towards embedding sustainability were in an early stage by the end of 2011. However, some schools had progressed further than others and these schools could usefully identify specific activities and strategies to facilitate sustainability. These activities and strategies were:

- Planning for literacy and numeracy programs to ensure the initiative remains a priority.
- Ongoing capacity building of staff with a whole school approach to professional learning.
- Implementing longer-term structures, irrespective of staff turnover, to support cultural change.

While adopting these approaches up to and including 2011, some Principals were confident that, given adequate in-school levels of support, the impact of the NPLN initiative could be sustained into 2012 and 2013. The quantitative data from online school surveys reinforced these findings and clarified the two levels at which change must occur to impact positively on sustainability:

\(^1\) For complementary data, refer to Tables 22 – 24 in the Final Report – Phase 1 (Erebus 2012).
1. At a leadership/whole school level:
   - The adoption of a whole school approach to literacy or numeracy planning, and
   - The provision of identified leadership positions for literacy or numeracy coordination.

2. At the classroom teacher level:
   - The constant focus of teachers on data driven planning via NAPLAN and other measures, and
   - The enhanced teaching practices for literacy and numeracy learning.

Qualitative case study discussions supported findings pointing to the important relationship between building teacher capacity and effective instructional leadership and also drew attention to its significance with regards to processes of cultural change. One key aspect of cultural change observed in discussions with teachers was the affective enthusiasm felt when building pedagogical skills and when adopting new routines that become “business as usual”. However, some forms of professional learning are resource intensive and 85 per cent of those surveyed suggested that fewer resources for this purpose would impact negatively on sustainability to a “great” or “moderate” extent.

The integration of a whole-school commitment into system/sector wide imperatives is an important component of understanding how resourcing may impact upon sustainability. This also applies to appreciating the necessity of regularly monitoring the impact of change so as to motivate proactive staff. Over 70 per cent of survey respondents felt that a changeover of staff or school leader would inhibit sustainability to a “moderate” or “great” extent.

A final element of wider cultural change concerned the role of parents/carers. The engagement of parents/carers was found to be the most challenging of all strategies for sustainability.

*Have successful strategies been replicated in other contexts?*

The replication of NPLN strategies in schools was observed across a number of qualitative data sources. The transfer of NPLN strategies took place at two levels:

1. Many teachers reported that school leadership teams more consistently exhibited collaborative and democratic approaches to decision-making, particularly in relation to curriculum issues.

2. Some Principals recognised the importance of proactively leading the school with the support of the school executive, as opposed to adopting a reactive stance.

Another relevant finding was that participation in the NPLN led to a more consistent approach to “explicit teaching” and that this extended beyond the immediate NPLN programs. With teachers identifying key learning outcomes and combining this with relevant data monitoring, a more active engagement in cross-curriculum themes across a wider range of Key Learning Areas was achieved. This process of planning was also seen to be a learning opportunity for teachers themselves.
Survey data supported many of these findings. For example, over 77 per cent of those surveyed identified impacts from the NPLN in other key learning areas. However, the incidence of team teaching and peer observation was not frequent or embedded across other curriculum areas outside NPLN programs.

**Implications of Focus Area 4 for the Phase 3 evaluation**

A question for Phase 3 to consider is whether any structural/cultural changes have played a role in the transitioning of successful implementation strategies into ongoing drivers of sustainability, resilience and transferability. If this transition has not occurred, then it begs the question: *do shorter-term implementation strategies, when unaccompanied by cultural and systemic change, become inhibitors to sustainability in the medium and longer term?*

Inhibiting factors identified in the early stages of planning for sustainability:

- Dependence on external resourcing of professional learning;
- Reliance on strong instructional leadership; and
- Competing demands and priorities.

Related to this matter, it appears important that Phase 3 consider the readiness of schools, leaders and teachers to utilise the online resource that is under development for Phase 2b. The role of this resource in facilitating sustainability can be tested in the Final Report of Phase 3.

Phase 3 can also consider whether teacher capacity-building has continued (e.g. the ongoing use of data driven planning) and has been embedded into processes of cultural change at a whole-school level. Transitioning new pedagogical skills and literacy/numeracy planning into resilient routines that are transferrable to other aspects of curriculum development is also important. Whether practices of team teaching and peer observation—comparatively less resource intensive professional learning—have been strengthened during the sustainability phase requires further investigation.

Less resource intensive forms of professional mark a transition from the high degree of reliance on instructional leadership to a culture of shared best practice. As such, Phase 3 will consider what integrated systems are in place at an organisation level to ensure that reliance on instructional leadership does not turn into dependence on a particular member of staff over the longer term. Finally, determining whether positive inroads have been made in building partnerships with parents/carers is yet another question to be reviewed in Phase 3.

**Focus Area 5: What are the implications for systems/sectors from the evidence gathered?**

**What were the lessons learnt for systems?**

The *Final Report for Phase 1* (Erebus 2012) highlighted how the sustainability of the NPLN was supported at a systemic level:

- The *high-level of active leadership, guidance and strategic support* of NPLN lent credibility, legitimacy and priority to the NSW implementation across all sectors.
The strong degree of cross-sectoral cooperation ensured that the needs of students with low literacy and/or numeracy outcomes in all school sectors could be addressed.

The scope and scale of funding/resourcing for the NPLN in NSW had a significant bearing on the extent of change possible, and in turn, on the emerging impact on student learning outcomes.

The high degree of fidelity between NPLN conceptualisation, as expressed in the NSW Implementation Plan, and the reality of its implementation in schools and classrooms.

The investment of time and effort in advanced planning, with an early focus on the need for sustainability, paid dividends in terms of a well thought out and structured approach.

The commitment to in-kind support by securing buy-in from all systems, facilitated by thorough planning for the NPLN as an explicitly cross-sectoral initiative.

The lessons that may be drawn from attempts to transition from NPLN implementation to sustainability, can be identified under the five headings, below.

**Table 2: Strategic lessons from observed interactions between schools and sectors**

<table>
<thead>
<tr>
<th>Observed interactions between schools and systems/sectors</th>
<th>Strategic lessons</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Financial management</strong></td>
<td>Supporting schools to ensure good financial management is a crucial component to sustaining the viability and credibility of literacy and numeracy reforms.</td>
</tr>
<tr>
<td>The level of financial accountability and the large amount of funds made available through the SSNPs presented administrative challenges for some schools.</td>
<td></td>
</tr>
<tr>
<td><strong>2. Role of Principal/NPLN coordinator</strong></td>
<td>Engaging with current research into good leadership practice, especially instructional leadership, is an essential feature of sustainability.</td>
</tr>
<tr>
<td>The explicit acknowledgment of school leaders was at the heart of successful cultural change, and the role of an NPLN coordinator as an internal “champion” of this change, was crucial.</td>
<td></td>
</tr>
<tr>
<td><strong>3. School planning</strong></td>
<td>Directing time and resources towards planning for sustainability from the outset can support practices that are resistant to changes in funding, staffing and other resources.</td>
</tr>
<tr>
<td>Enhanced school-level planning was a key element of implementation that, given an adequate investment of time and resources, embedded evidence-based decision making.</td>
<td></td>
</tr>
<tr>
<td><strong>4. Teaching and Learning</strong></td>
<td>The fidelity of education reforms to quality teaching and learning fosters meaningful student/teacher interactions. In the longer term, these qualitative attitudinal shifts may underpin measurable and sustainable gains in student outcomes.</td>
</tr>
<tr>
<td>Improved quality of teaching and learning was at the heart of the conceptualisation of the NPLN initiative, and focused schools on their central mission. This focus was reflected in teacher enthusiasm towards improved classroom practices that enhanced student engagement.</td>
<td></td>
</tr>
</tbody>
</table>
5. Professional development of existing teachers

| Professional development of existing teachers | Well resourced and highly tailored professional learning for teachers and school leaders was vital for NPLN implementation, however less resource intensive approaches (e.g. peer observation) were slower to embed. | Attending to pedagogical training while recognising the resource cost requires an approach that retains, in the most efficient way possible, those professional learning programs that are shown to be most effective. |

Implications of Focus Area 5 for the Phase 3 evaluation

The findings highlighted above have implications for the Phase 3 investigation. The key issue appears to be whether, and how, implementing NPLN priorities can be maintained while being responsive to local challenges to sustainability arising at a school level.

It is important in Phase 3 to understand the role and extent of systematic support for the continued prioritisation of NPLN activities/outcomes from 2012 onwards. The interactions between system/sector representative and school principals or NPLN coordinators will assist in identifying what forms of active leadership and support have continued, and to observe whether practices of instructional leadership and peer mentoring have been embedded. It will also be important to determine the ways in which the early investment of time and effort into planning has led to cultural changes that go beyond any particular member of teaching or leadership staff. A related matter is whether cross-sectoral support or engaging in a community of surrounding schools has supported the efficient use of resources.

To understand the sustainability of the NPLN at a strategic level, it is also important that the Phase 3 evaluation remains up-to-date with new and emerging initiatives. These include extension of the NPLN (the Improving Literacy and Numeracy National Partnership) and NSW Government initiatives including those in the Literacy and Numeracy Action Plan, Local Schools Local Decisions 2012-2016 and Great Teaching, Inspired Learning 2013-2015.

3.2 Findings from Cross Sectoral Impact Survey Report (ARTD 2012)

The Analysis of the NSW Smarter Schools National Partnerships Cross-sectoral Impact Survey: Phase 1 (hereafter CSIS Report 2012) was prepared by ARTD Consultants for the Centre for Education Statistics and Evaluation. This report provides a snapshot of the extent of change in education practices achieved by all three SSNPs by September 2011. It is based on responses from 662 of 936 NSW schools participating in the SSNPs.

It is encouraging to observe that findings in the CSIS Report largely align with those contained in the Final Report of Phase 1 however, as the findings in the CSIS Report are generally not disaggregated between the different National Partnerships, it is difficult to discern what observations relate specifically to the NPLN.

General findings from the CSIS report that are relevant to the issue of sustainability in Phase 3 include:

- Investing in education reform can bring about improvements in schools. Such investment can reasonably be expected to result in improved academic performance and engagement.
Principals are actively leading reforms. Investment in building Principals’ instructional leadership is associated with school improvement and teacher capacity.

Investing in teacher learning and professional development is directly associated with increased teacher capacity. Mentoring and in-class support are particularly effective, and require fewer resources.

Future reform initiatives should recognise the time needed to achieve momentum and diffuse new practices through all levels of staff in a school.

Providing schools with funding and flexibility in staff arrangements can enable them to focus on professional development where it is needed most.

At the system level, more work and/or evidence may be needed to encourage schools to increase engagement with local communities.

At the system level, more may be need to be done to encourage and support collaborating with experts and professional staff outside school. (ARTD 2012:xxii-xxiii)

The strategic conclusions in the CSIS Report identified the following as ‘areas for further exploration’ (ARTD 2012:xxiii):

1. What are the mechanisms for driving differential improvements and take up of practices between teachers, Principals and executives?

2. What is the true extent of increases in teacher capacity given that teachers, executives and Principals report different magnitudes of improvement?

3. What is the relative impact of different SSNPs on key outcomes measures and the lessons for education reform?

4. What are the reasons behind the small perceived impact on schools engagement in local communities, parents and external partners?

5. What are the different perspectives of Principals and teachers about the magnitude of changes, especially in regards to increases in teacher skill and capacity?

6. For what reasons do contextual factors impact on outcomes for teacher capacity?

While it is beyond the research methodology of Phase 3 to answer these questions explicitly, the issues open up potentially fruitful lines of inquiry that are important for understanding the drivers of sustainability. Question 1, for example, directs thinking towards the different roles that teachers, Principals and executives hold as change-makers and sustainers. Questions 2, 3 and 5 draw attention to the import of clarifying the degrees of reported change in the context of a multi-faceted education environment. Question 4 highlights the challenge of engaging parents and, like Question 6, asks why certain contextual factors have differential impacts on program elements.

By keeping these issues front of mind during Phase 3, this evaluation takes an integrated and iterative approach to evidence and perspectives already at play in recent evaluations of literacy and numeracy reforms in NSW.
Chapter 4: Preliminary Phase 3 Findings

The following tables and figures track changes in average NAPLAN scores in NPLN schools and schools in the rest of NSW over 2008 to 2012, extending the time series beyond the immediate funding period of the NPLN initiative. In interpreting this data, it must be remembered that the NPLN was essentially implemented over a 15 month period in schools. As discussed in the Phase 1 and Phase 2 reports, embedding changes of the magnitude sought by the NPLN takes time, and may not be immediately evident in student outcomes scores.

NAPLAN data for 2008 was used when selecting schools eligible for the NPLN and is included here for comparative purposes, representing a baseline measure "before" the implementation of NPLN. Although the first full year of implementation was 2010, it has proved insightful to use this 2008 data as the 2009 data may have been affected by changes in the way that results were scaled in the process of calibrating NSW results to a national NAPLAN scale.

As funding for NPLN initiatives concluded in 2011, the NAPLAN scores for 2012 can be seen as indicators of literacy and numeracy improvements sustained beyond the immediate life of the initiative. However, caution should be exercised in drawing conclusions regarding long-term future trends on the basis of the inclusion of 2012 NAPLAN data alone. Not all year-to-year changes reflect changes in cohort performance or in program effects.

To strengthen the evidence base, a number of different measures of literacy and numeracy performance in Year 3 and Year 5 are considered in the analysis below. These measures include:

- mean NAPLAN scores;
- the percentage of the students below minimum standards, and at or below minimum standards; and
- mean growth of reading and numeracy scores for students over time.

The observations around sustainability outlined here remain preliminary, however in the Final Report for Phase 3 the extension of the time series to include 2013 NAPLAN data will provide an opportunity to investigate trends and findings further.

4.1 Trends in NAPLAN Scores – NPLN Schools vs Rest of NSW

Reading scores: Year 3 and Year 5 from 2008 - 2012

Figure 2 (below) shows that average Reading scores for Year 3 have increased in NPLN schools and students elsewhere in NSW since 2008. The gap in average Reading scores between NPLN schools and the rest of NSW remains significant, although it did reduce by 4.2 percentage points from 2008 to 2012, the year following the conclusion of NPLN funding.
Year 5 NAPLAN Reading scores (Figure 3, below) demonstrate similar trends, although commencing from a higher mean score. The average Year 5 Reading score has increased since 2008 in NPLN schools and in other schools in NSW. Accordingly, the gap between students in NPLN schools and other schools in NSW remains significant despite a small reduction of 5.8 percentage points between 2008 and 2012.
Most notable is the unexpected peak in average performance for all Year 5 students in 2009. Encouragingly, the subsequent increase in scores of NPLN schools between 2011 and 2012 appears to have occurred at a greater rate in comparison to schools across the rest of the NSW.

An alternative way of looking at the relative NAPLAN performance of students in NPLN schools and the rest of the state is to examine the percentage of students in each of these groups who do not meet the national minimum standard in Reading.

Figures 4 and 5 show that, in general, the percentage of students in NPLN schools who are below the NAPLAN minimum benchmark score for Reading has decreased over time since 2008. The results for 2009-2012 all indicate stronger NAPLAN performance in the NPLN schools than for the 2008 baseline year, but there is no consistent trend on a year to year basis. However, by 2012 the gap in performance between NPLN schools and non-NPLN schools has clearly closed by a considerable amount since 2008 at Year 3 level.

Figure 4: Year 3 NAPLAN Reading, Percent of students below National Minimum Standards, 2008-2012

As indicated in Figure 4, the 6.1 per cent of NPLN Year 3 students below the national minimum standard in Reading in 2012 marks the lowest percentage below that benchmark yet recorded. The rate of improvement has been greater in NPLN schools than in the rest of NSW, although all schools have shown improvements.

Figure 5 (below) indicates that there has been an overall decrease in the percentage of Year 5 students below the national minimum standard in NPLN schools since 2008. As with the Year 3 cohort, the year to year trend is not consistent.

While the overall result for Year 5 is positive, it is less positive than at Year 3 level, with a greater percentage of students fall below the minimum benchmark in Year 5 (e.g. 14.3 per cent in 2012) than in Year 3 (e.g. 6.1 per cent in 2012). The findings suggest that increasing numbers of students struggle to perform in Reading as they move from Year 3 to Year 5.
Figure 5 demonstrates that the percentage of Year 5 students in NPLN schools who are below the national minimum standard in Reading remains significantly greater than for the rest of NSW. The percentage of students below the benchmark has decreased in NPLN schools overtime, however, the gap between NPLN and the rest of NSW has decreased only marginally—highlighting the ongoing challenge of helping students in NPLN schools to achieve at the same level as students across NSW as a whole.

The Year 5 Reading scores also indicate a greater resistance or inelasticity to change than the Year 3 results. This observation aligns with the importance of securing literacy (and numeracy) gains in the earliest years of schooling.

As might be expected when examining results of students who are at or below the national minimum standard for Reading (rather than just students below the benchmark in Figures 4 and 5), the year-on-year variability is moderated by the greater proportion of students who are performing at the national minimum standard for Reading. This is evident in Figure 6 (below) by a more stable trend towards improvement in Year 3 Reading scores across 2008 to 2012.
Figure 6: Year 3 NAPLAN Reading, Percent of students at or below National Minimum Standards, 2008-2012

Figure 6 displays the performance gap between Year 3 students in NPLN schools and the rest of the state that has reduced slowly yet consistently over the period since the NPLN commenced. This trend has continued following the cessation of funding, and in 2012, the gap reduced to its smallest size of 9.8 percentage points. Reading scores at or below national minimum standards for Year 5 students shows a similar trend to the Year 3 scores, evident in Figure 7 (below).

Figure 7: Year 5 NAPLAN Reading, Percent of students at or below National Minimum Standards, 2008-2012
Another valuable measure of performance over time is the average growth for students between Year 3 and Year 5 as illustrated in Table 3.

**Table 3: Mean Growth between Year 3 and Year 5, NPLN Schools vs Rest of State**

<table>
<thead>
<tr>
<th>Matched students at same school</th>
<th>Reading Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NPLN Schools</td>
</tr>
<tr>
<td>Year 3 Cohort 2008 / Year 5 2010</td>
<td>85.8</td>
</tr>
<tr>
<td>Year 3 Cohort 2009 / Year 5 2011</td>
<td>75.6</td>
</tr>
<tr>
<td>Year 3 Cohort 2010 / Year 5 2012</td>
<td>79.3</td>
</tr>
</tbody>
</table>

Table 3 indicates that reading growth scores for students in NPLN schools have been consistently greater than those in schools in the rest of NSW (but the difference is not statistically significant. These results indicate that the NPLN initiative may not have markedly closed the gap in Reading between students in the lowest performing schools (NPLN schools) and their peers elsewhere in the state at this stage, but they have maintained growth at a comparable rate. The difference in outcomes may be partly explained by the fact that many students in NPLN schools enter the early years of schooling less well prepared than students elsewhere.

Thus, the finding reported in the *Final Report for Phase 1* (Erebus 2012:81) continues to have relevance: that is, the "value added" in the NPLN schools must be considered from the perspective that the initiative perhaps prevented a greater decline than might have occurred otherwise. Although long-term trends cannot be inferred from the inclusion of 2012 data alone, in regards to the sustainability of improvements in performance, it is encouraging that the rate of growth in Reading performance has been maintained following the cessation of NPLN funding at the end of 2011.
Numeracy scores: Year 3 and Year 5 from 2008 - 2012

The Figures in this section below highlight how performance in Numeracy reflects different and often more complex trends than Reading\textsuperscript{2}. Figure 8 (below) shows that between 2008 and 2011, average Year 3 NAPLAN Numeracy scores increased in NPLN schools while average scores declined in other schools in NSW. However, this peak in performance in 2011 was not sustained into 2012 when Numeracy scores declined and this decline was sharper in NPLN schools than across the rest of NSW.

It must be remembered that the Figures below tracking student performance refers to different cohorts of students each year, not the same cohort over time.

\textsuperscript{2} As a general caveat, it is important to note that, while data on the statistical significance of mean changes has not been made available for 2012, a larger change is usually required for statistical significance when observing a smaller sample size, as is the case here, given the fewer absolute numbers of NPLN schools participating in Numeracy programs.
The results in Figure 8 indicate a general decline in the Year 3 Numeracy mean scale scores in both NPLN schools and the rest of NSW over the period 2008-2012, but the year to year variations are not consistent. The 2012 results in repeated in future years, would indicate that the NPLN did not achieve a sustained impact on reducing the gap in performance between NPLN and non-NPLN schools. Despite the year-on-year variability in Numeracy performance across NSW, Figure 8 highlights that the gap between NPLN Year 3 Numeracy scores and the rest of the state has remained similar in 2008 and 2012. It cannot be demonstrated that this gap would have widened without the NPLN interventions. However, the challenge of maintaining scores in schools that commence from a below average performance, and are thereby at risk of accumulating further disadvantage over time, should be acknowledged.

The Year 5 NAPLAN Numeracy score represent students who were engaged in NPLN reforms for a longer period. In Figure 9, the more moderate trend commencing at a higher score level compared to Figure 8 could therefore reflect a beneficial effect on numeracy performance the longer students engage in NPLN activities.
Figure 9: Year 5 NAPLAN Numeracy, NPLN schools vs Rest of NSW, 2008-2012

Trends for Year 5 Numeracy as shown in Figure 9 demonstrate that average scores have varied at roughly similar rates for students in NPLN schools and those across NSW. Despite a small drop in scores between 2011 and 2012, the most recent Numeracy scores for NPLN schools and for the rest of the state have retained the overall gains made since 2008. While the gap between NPLN schools and schools in the rest of NSW does remain significant, the slight reduction of this gap over the course of the NPLN initiative has been sustained in the one year since NPLN funding ceased.

An alternative way of looking at the relative Numeracy NAPLAN performance of students in NPLN schools and elsewhere in NSW is to examine the percentage of students in each category who do not meet the national minimum standard in each learning area.

As with Reading scores, the Numeracy scores (Figures 10 and 11 below) indicate that, at all Year levels, the percentage of students below the national minimum standard remains considerably higher in NPLN schools than in the rest of NSW.
At Year 3 level (Figure 9), a marked decrease in the percentage of students who did not meet the minimum Numeracy benchmark between 2008 and 2011 can be observed. Over this period, the trend for Year 3 Numeracy towards improving performance against the benchmark in NPLN schools was mirrored that for NSW as a whole. By 2012, however, an increase in percentage students below the benchmark appears. This increase to 7.5 per cent of the cohort in NPLN schools reverses the apparent gains made up to 2011, and returns the percentage of students below the benchmark in NPLN schools to approximately 2008 levels.

The increase in Year 3 students below the Numeracy benchmark from 2011 to 2012 is evident in all schools across NSW, yet the rate of this increase is greater in NPLN schools. As such, the performance gap remains large over time. While this one year decline in performance shown in 2012 in Figure 9 may not be indicative of a negative trend, the notable year-on-year variations over this period from 2008 points to the challenge of simply stabilising performance and embedding sustainable change.

For Year 5 Numeracy scores the picture is similarly complex. As shown in Figure 11 (below), the percentage of Year 5 students below the national minimum standard for Numeracy fell between 2008 and 2011, although not consistently on a year-by-year basis. This variability is marked in 2012 when the percentage of Year 5 students in NPLN schools below the Numeracy benchmark rose to 9.5 per cent, the highest level recorded thus far.
As noted in regards to Figure 10, the one year decline in performance shown in Figure 11 may point to the challenge of stabilising performance and embedding sustainable improvements over time. However, the decline in Numeracy performance in NPLN schools in 2012 is mirrored – although, to a lesser degree–by all schools across the state, suggesting that contributing factors to this drop in performance may lie (at least in part) outside the NPLN intervention and attempts to sustain it.

In attempting to generate a reliable or comprehensive picture of sustainable NPLN impacts, different ways of disaggregating NAPLAN data as well as additional data sources to be collated in the final stages of Phase 3 will become especially valuable.

Figure 12 shows a similar trend to that observed for Reading. The percentage of students at or below the benchmark has tended to decrease in Year 3 Numeracy since 2009 – a welcome result. However, this trend was not sustained in NPLN schools in 2012. The reasons for this are not currently clear and further extension of the time series is required to ascertain whether this is a trend.
When comparing the percentage of Year 3 students at or below the benchmark for numeracy with Year 5 (Figure 13, below), trends within NPLN schools generally mirror those across the state. However, Year 5 scores show less improvement, as was the case with Reading scores at Year 5, reiterating the significance of making gains in the earlier years of learning.

These observations also suggest that successful numeracy teaching lifts performance for all but may require even more closely targeted interventions for those students who fall short of the minimum standards. It might be surmised that the NPLN programs for numeracy are
indeed serving some students well, but are not adequately serving those who are already most behind.

To shed more light on these trends, observing the average growth for students as they progress from Year 3 to Year 5 is another valuable measure of performance. Table 4 (below) shows the growth rates of students over two points in time (when in Year 3 and again in Year 5), and compares the growth within NPLN cohort to the rest of the state.

**Table 4: Mean Growth between Year 3 and Year 5, NPLN Schools vs Rest of State**

<table>
<thead>
<tr>
<th>Matched students at same school</th>
<th>Numeracy Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NPLN Schools</td>
</tr>
<tr>
<td>Year 3 Cohort 2008 / Year 5 2010</td>
<td>84.2</td>
</tr>
<tr>
<td>Year 3 Cohort 2009 / Year 5 2011</td>
<td>91.0</td>
</tr>
<tr>
<td>Year 3 Cohort 2010 / Year 5 2012</td>
<td>92.7</td>
</tr>
</tbody>
</table>

These results indicate that growth scores have continued to improve in both NPLN schools and those is the rest of the State since 2010. The difference in the growth rate in NPLN and non-NPLN schools has narrowed with successive group of students – a positive trend, but the significance of this difference remains to be tested.

On the whole, and as with Reading scores, the NPLN initiative has not yet significantly closed the gap in Numeracy between students who were in the lowest performing schools in 2008 and their peers in the rest of NSW. As noted in the *Final Report for Phase 1* (Erebus 2012), the "value added" in the NPLN schools might be considered from the perspective that the initiative has perhaps prevented a greater decline in Numeracy than might have occurred otherwise.

**4.2 Trends in NAPLAN scores - ATSI students**

The following analysis presents trends in NAPLAN scores for ATSI and non-ATSI students, in NPLN schools and in schools in the rest of NSW. To supplement the observations made here, the Final Report for Phase 3 will extend this time series to include 2013 NAPLAN results.

**Reading scores: Year 3 and Year 5 from 2008 – 2012**

Figure 14 (below) highlights the significantly lower starting point for performance in Reading among Year 3 ATSI students, whether in NPLN schools or otherwise. Following a peak in average scores across the board in 2009, the performance of ATSI students across the rest of NSW has been relatively stable, whereas the performance of ATSI students in NPLN schools has marginally declined. By 2012, however, the average performance for ATSI students in NPLN schools has remained above the 2008 benchmark. Nonetheless, the significant gap between scores for Year 3 ATSI students in NPLN schools and the rest of the state increased slightly over the period measured.
Given that Year 3 Reading scores for non-ATSI students, both across NSW and in NPLN schools, have increased at a faster rate compared to all ATSI students, Figure 14 arguably reflects the significant barriers to education that some children face on (and before) entry into school.

At the Year 5 level, NAPLAN Reading scores in Figure 15 (below) do not demonstrate a consistent trend.

Average Reading scores for non-ATSI students in Year 5, whether in NPLN schools or not, continue to be higher than for ATSI students. Scores for students in NPLN schools are, on average, lower for both ATSI and non-ATSI students relative to those scores for the students at schools in the rest of NSW. As with Year 3 Reading scores, Figure 15 indicates an increase in Year 5 average Reading scores in 2009. This is followed by a decline in subsequent years to
2011. Recovery from this decline by 2012 is mixed, with an accelerated gain in performance for ATSI students across the rest of NSW and, conversely, a further erosion of scores for ATSI NPLN students in 2012.

Another important observation from Figure 15 is that the performance gap between ATSI students in NPLN schools and ATSI students across the rest of the state widened in 2012. However, because this gap was largely stable across previous years, it will be important to consider 2013 NAPLAN data before drawing conclusions with regard to this observation.

The picture presented in this preliminary analysis suggests that it may be helpful for the upcoming round of Phase 3 data analysis to distinguish between ATSI students in NPLN schools and those also participating in the NP Low SES. It may also be helpful to reflect on Phase 2a findings as to the success or otherwise of particular in-class NPLN programs and interventions.

**Numeracy scores: Year 3 and Year 5 from 2008 - 2012**

Over the period of 2008 to 2012, the trends in Year 3 NAPLAN Numeracy results for ATSI students in NSW show significant year-on-year variation, making overall trends difficult to discern. As the total number of students in NPLN Numeracy schools was relatively small compared to those engaged in Reading the results need to be viewed caution. Despite these caveats, Figure 16 (below) indicates that the average Numeracy scores for ATSI students in NPLN schools rose significantly between 2008 and 2011. Indeed, 2011 marks a peak in performance across the board. However, this peak does not appear to have been sustained and in 2012, the sharpest decline in performance can be observed among ATSI students in NPLN schools. While a one-year decline cannot be seen as a trend, it is concerning that, by 2012, the gap in Year 3 Numeracy performance between ATSI and non-ATSI students in the NPLN initiative, and the gap between ATSI students in the NPLN initiative and those not in the initiative, increased and is now similar in size to that in 2008.

By comparison, Numeracy performance of non-ATSI NPLN students and of ATSI students across the rest of the state declined at a slower rate. What these different rates of change may suggest is that some factors contributing to the measured decline in Numeracy performance could lay, at least in-part, outside the NPLN initiative itself and beyond factors exclusive to the experience of ATSI students.
Figure 16: Year 3 NAPLAN Numeracy for ATSI and Non-ATSI students, 2008-2012

Figure 17 (below) shows trends in relation to NAPLAN Numeracy scores for Year 5 students, similar to those in Year 3, the key difference being the smaller one-year variation between 2011 and 2012.

Figure 17: Year 5 NAPLAN Numeracy for ATSI and Non-ATSI students, 2008-2012

Over the period from 2008, the gap between students, whether ATSI or non-ATSI, in NPLN schools and those elsewhere is largely unchanged. Figure 17 indicates relatively stable Numeracy scores for both ATSI and non-ATSI students in NPLN schools from 2009 onwards, and this has tended to mirror increases in Numeracy scores for students in other schools across NSW. It does appear that the NPLN is having a slightly greater impact on performance for Year 5 non-ATSI students. The overall impact of the NPLN on Numeracy for ATSI students in Year 5 remains unclear.
In comparing Figure 17 to Figure 16, it is encouraging that the higher degree of stability in Year 5 results suggests a remedial effect of the NPLN which occurs over time, affecting students the longer they are engaged in schooling—and this effect encompasses those ATSI students who commence school at greater levels of educational disadvantage.
Chapter 5: Next Steps

This Progress Report has laid the groundwork for the final stages of Phase 3 data gathering in 2013 and the preliminary findings herein will support the refinement of data gathering instruments. While the observations are not, at this early stage, able to endorse confident conclusions as to the sustainability of NPLN activities and outcomes, they do indicate potentially fruitful lines of investigation.

It is the task of the final stages of data gathering for Phase 3 to investigate emerging trends since the cessation of NPLN funding. In doing so, it is helpful to recall the key questions identified in the Evaluation Plan (June 2011) under Focus Area 6: To what extent has the reform change agenda been sustained post-funding?

- How sustainable has the impact of the national partnerships strategy been?
- What has helped or hindered sustainability (including any systemic support)?
- What lessons can be learned for future implementation of literacy and numeracy initiatives?
- Which programs and strategies have proved to be most sustainable and resilient and how has this been achieved?
- What impediments to sustainability of initiative goals can be identified? How have they changed over the life of and beyond the SSNP? How have they been addressed?
- To what extent, how and under what conditions can successful strategies be scaled up to be replicated in other contexts?

5.1 Data gathering for Final Report Phase 3

New data gathering will be required to inform the Final Report for Phase 3. As indicated in the Evaluation Plan (June 2011), the following four sources are planned to take place in the second half of 2013:

a. **School case study visits.** Each of the 20 original case study schools will be revisited to observe how the implementation of the NPLN has transitioned into sustainable practices and outcomes since the time of the initial case study visits. What plans for sustainability have been successful, why and in what contexts, will be observed. School leaders, classroom teachers and NPLN coordinators (or equivalent) will be interviewed.

b. **Key stakeholder interviews.** Face-to-face or telephone interviews will be held with appropriate stakeholders to document any changes in the overall policy and organisational context for the initiative. Stakeholders will be asked about their perceptions of the sustainability of NPLN practices in view of the wider education reform environment, and to reflect on factors at a systemic/sectoral level that facilitate or inhibit the resilience of NPLN activities in 2012-2013.
c. **Online survey.** All schools that received NPLN funding since 2009 and participated in the Phase 1 online survey will be asked to participate. A modified version of the survey will be used to identify what has changed and what has been maintained since the end of 2011, and what gains have been transferable with regards to whole-school leadership, teacher capacity building and classroom practices.

*d.* **Analysis of student outcomes data.** The continuation of NAPLAN time series data to include 2013 results will be analysed to identify whether the changes between 2011 and the cessation of funding indicate trends in student outcomes. For NSW public schools, any new Assessment Bank test data will also be analysed, if available.

**Erebus’ iterative evaluation approach: refining instruments towards the conclusion of Phase 3**

Final stages of data gathering need to identify the extent to which NPLN initiatives and outcomes have been sustained. They also need to uncover the contexts that best support sustainability and, in view of this, what implications can be drawn for educations systems/sectors for the future.

Thus, it is proposed that data gathering instruments be refined to ensure the following matters are investigated:

**School case study visits**

- What NPLN activities remain in place at schools and what are the resourcing impacts of any new initiatives/programs? Was the impact on resourcing of planning undertaken during the NPLN implementation stage, and how is this impact managed in 2012-2013?
- In what ways have school leadership and instructional roles of the NPLN Coordinator been maintained or transitioned over time? Is there a relationship between staff turnover, especially at the executive level, and the prioritisation or resilience of NPLN activities?
- How have pedagogical practices developed through NPLN professional learning been embedded in the classroom, and in what ways are these supported or hindered by whole-school priorities? Has a transition from explicit professional learning instruction to more resource-effective approaches occurred e.g. peer observation, teacher mentoring and cross-curriculum strategies?
- What progress has been made engaging parents and the wider community, and why/why not?
- What are the implications of each of the above for future strategic policy development and system/sector decision making?

**Key stakeholder interviews**

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3 These lists are not exhaustive of the final questions but are simply indicative of possible lines of inquiry on the basis of which new instruments will be drafted.
• How well do strategies to sustain NPLN activities “fit” with emerging directions in education reform and with new literacy and numeracy initiatives (e.g. Action Plan for Literacy and Numeracy)? What degree and forms of active leadership do schools require to be supported in sustaining NPLN activities and outcomes in this education reform environment?

• What are the different roles that teachers, Principals and executives hold as change-makers and sustainers, and what contexts facilitate this?

• Have arrangements since 2011 provided schools with funding and flexibility in staff arrangements to focus on professional development where it is needed most?

• Have relationships between clusters of schools maintained or developed over time, and what impact has this had on managing resourcing e.g. sharing skills/knowledge/practices?

• What are the implications of each of the above for future strategic policy development and system/sector decision making?

• What lessons from the NPLN might be transferable for the implementation of the Improving Literacy and Numeracy extension (2013-2014)?

**Online survey**

• What NPLN classroom, teacher and leadership activities continue to be implemented in schools in 2012-2013?

• Which teacher capacity-building activities have best supported the resilience of NPLN programs in classrooms? Has the use of SMART learning modules and DASA become routine in school and class planning? What is the role of mentoring and in-class support?

• How well have NPLN reforms, especially those targeting Numeracy, addressed the needs of students who are already most behind?

• How are Individual Learning Plans being utilised and what are the impacts and challenges, especially for integration with ATSI students’ Personalised Learning Plans?

• Have observed gains in student engagement and enjoyment of learning been sustained? Can a relationship between student engagement and literacy/numeracy performance be discerned?

• What are the implications of each of the above for future strategic policy development and system/sector decision making?

**Analysis of student outcomes data**

• In view of the mixed and complex picture of student outcomes provided by the extension of the NAPLAN time series to 2012, additional ways to disaggregate this data in 2013 may be suggested in view of the factors (identified in Chapter 4) as
helping or hindering planning for sustainability. For example, given the importance of active leadership for embedding the cultural change required to sustain the prioritisation of NPLN activities, it may be interesting to disaggregate the NAPLAN analysis between NPLN-only schools and those also implementing NP Low SES (or one of the Reform Extension Initiatives). Doing so may also shed light on some of the trends concerning ATSI students’ performance in NPLN schools and in schools across the rest of the state.

5.2 Proposed timeline towards the finalisation of Phase 3 Sustainability

<table>
<thead>
<tr>
<th>Project Activity</th>
<th>Activity Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>CESE to facilitate invitation to 20 selected schools from the three sectors to participate in the sustainability phase of project.</td>
<td>February/March 2013</td>
</tr>
<tr>
<td>CESE to facilitate meeting with External Relations Policy representative to brief re details of sustainability project and likely overlap with NPLN extension and MAGLN initiatives in NSW.</td>
<td>6 March 2013 (completed)</td>
</tr>
<tr>
<td>Key stakeholder interviews. Face to face or telephone interviews will be held with appropriate stakeholders.</td>
<td>August 2013</td>
</tr>
<tr>
<td>Organised 20 school visits to be conducted in September/October.</td>
<td>August 2013</td>
</tr>
<tr>
<td>Develop online survey tool.</td>
<td>August 2013</td>
</tr>
<tr>
<td>Conduct online survey of 147 original participating schools.</td>
<td>August/September 2013</td>
</tr>
<tr>
<td>School case study visits to the 20 schools involved in Phase 1 evaluation case studies.</td>
<td>Late August/September 2013</td>
</tr>
<tr>
<td>Analysis of results from school case study visits and online survey data</td>
<td>October/November 2013</td>
</tr>
<tr>
<td>Analysis of 2013 student outcomes data - continuation of NAPLAN time series data to include 2013 results For NSW public schools, add any new Assessment Bank test data.</td>
<td>December, 2013</td>
</tr>
<tr>
<td>Draft Final sustainability report</td>
<td>January 2014</td>
</tr>
<tr>
<td>Sustainability Final Report (Trigger for final payment)</td>
<td>Late January/February 2014</td>
</tr>
</tbody>
</table>
Bibliography


