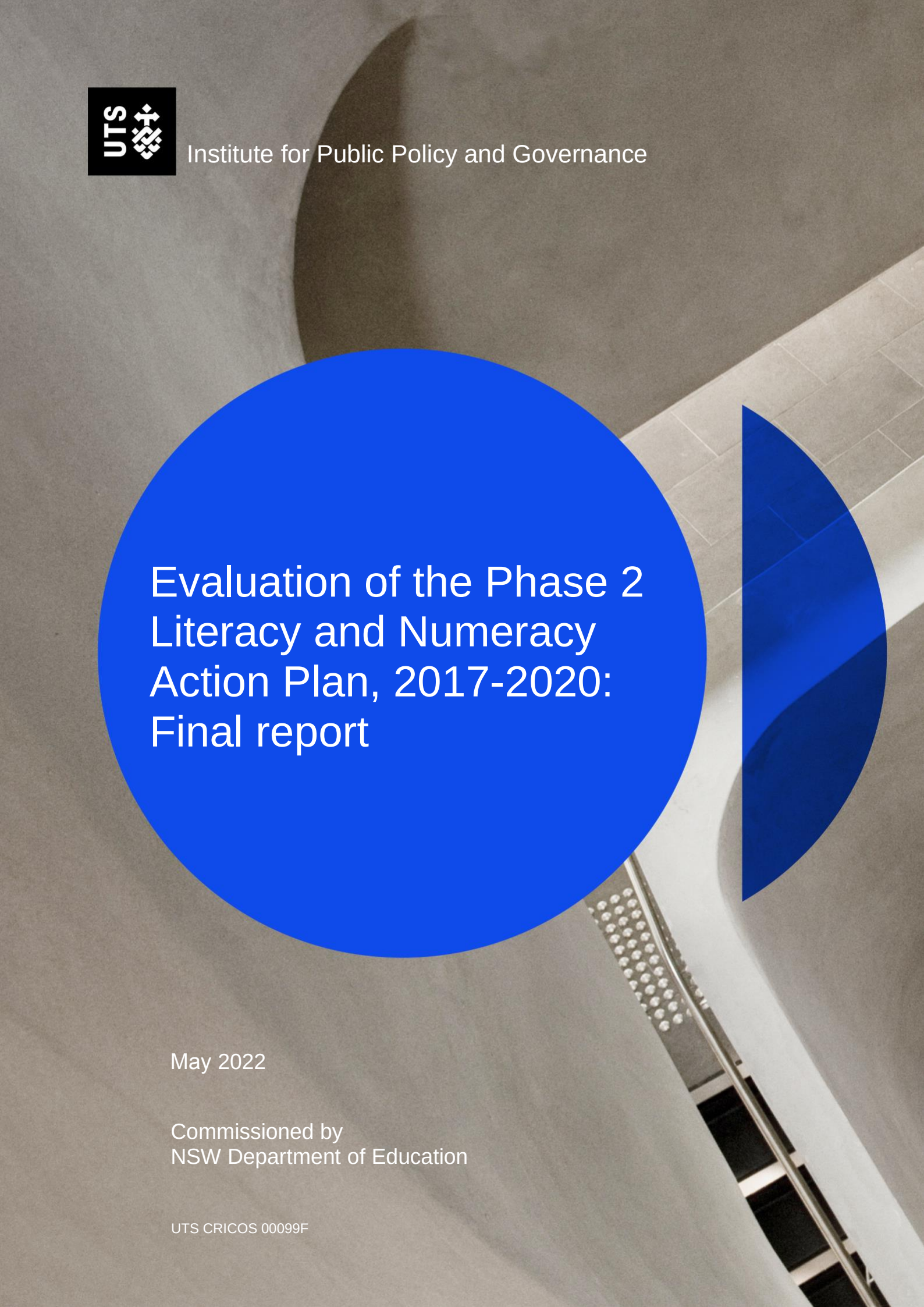

Institute for Public Policy and Governance

# Evaluation of the Phase 2 Literacy and Numeracy Action Plan, 2017-2020: Final report

May 2022

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NSW Department of Education

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# Acronyms

| | |
|---|---|
| ACARA | Australian Curriculum, Assessment and Reporting Authority |
| AISNSW | Association of Independent Schools New South Wales |
| AP | Action Plan (see LNAP Phase 2 below) |
| AP schools | Action Plan schools |
| ATSI | Aboriginal or Torres Strait Islander |
| BSKA | Best Start Kindergarten Assessment |
| CESE | Centre for Education Statistics and Evaluation |
| CSNSW | Catholic Schools New South Wales |
| DoE | NSW Department of Education |
| EAfS | Early Action for Success |
| ERG | Evaluation Reference Group |
| ESTA-L | Early Screening Tool App – Literacy |
| FTE | Full Time Equivalent |
| ICSEA | Index of Community Socio-Educational Advantage |
| IPPG | Institute for Public Policy and Governance, UTS |
| K-2 | Kindergarten to Year 2 |
| LNAP Phase 2 | Phase 2 of the NSW Literacy and Numeracy Action Plan, 2017-2020 |
| NAPLAN | National Assessment Program – Literacy and Numeracy |
| NMS | National Minimum Standard |
| Non-AP schools | Non-Action Plan schools |
| PLAN2 | Software developed by the NSW Department of Education to support literacy and numeracy assessment and reporting using the Progressions |
| SEA | Socio-economic advantage |
| The Progressions | National Literacy and Numeracy Learning Progressions |
| UTS | University of Technology Sydney |

# Executive summary

## About LNAP Phase 2

The NSW Literacy and Numeracy Action Plan (LNAP) was a two stage NSW Government funded, cross-sector initiative that formed part of the NSW Government's Literacy and Numeracy Strategy 2017-2020.

LNAP's goal was to improve the performance of Kindergarten to Year 2 (K-2) students attending schools with a high proportion of students performing in the lowest quartile of NAPLAN in literacy and numeracy. It involved schools from Catholic Schools NSW (CSNSW), the Association of Independent Schools NSW (AISNSW) and the NSW Department of Education (DoE).

LNAP was delivered in two phases:

- Phase 1 ran from 2012 to 2016 and involved 448 schools.
- Phase 2 built on Phase 1 and ran from 2017 to 2020. It included 670 schools, comprising 533 government, 99 Catholic and 38 independent schools.

Phase 1 schools served communities characterised by social disadvantage and were among the lowest-achieving in NSW. Phase 2 schools included some schools from Phase 1 and other schools new to the initiative. The latter were selected by the government, Catholic and independent sectors using an agreed methodology:

a) schools with a higher proportion of students in the lowest two performance bands in NAPLAN Year 3 (Band 1 and Band 2); and

b) schools with higher levels of disadvantage, as reflected by the Family Occupation and Employment Index (FOEI).

To assess the impact of LNAP Phase 2, two categories of schools were included in this evaluation: participating schools (known as Action Plan Schools) and a sample of schools that were not part of the program (non-Action Plan) schools.

There were two sub-categories of **Action Plan (AP) schools**:

- **Funded AP schools**, which met the criteria to be involved in LNAP Phase 2 were required to fully participate and were directly funded under the program.
- **Self-funded AP schools**, comprising 39 government schools which did not meet the LNAP Phase 2 eligibility criteria but opted to be involved by funding instructional leadership (a core element of LNAP Phase 2) through their own resources. These schools were also able to access to sectoral support and professional learning opportunities available to funded AP schools.

**Non-Action Plan (non-AP) schools** included:

- **Supplementary schools**, which shared some similar demographic characteristics to LNAP Phase 2 schools and received some support to assist them to implement the learning progressions component of LNAP Phase 2 (see Section 2.1.1 for more detail). The main role of these schools was to provide a relevant comparison group to AP schools for NAPLAN analysis. A total of 147 supplementary schools joined the program in 2017, however, only 115 were still participating in 2019, comprising 95 government, 15 Catholic and 5 independent schools.
- **Other non-AP schools**, that is, all remaining 1,156 government primary schools not involved in LNAP Phase 2.[1]

The LNAP Phase 2 program comprised four key pillars (or components):

1. **Instructional leadership**: Funded, or self-funded, roles designed to work with classroom teachers to build skills and knowledge in teaching and assessing literacy and numeracy in K-2; and to help teachers customise interventions for individual students.

[1] CSNSW had over 100 additional non-LNAP schools that participated under the LNAP principles and delivered assessments such as BSKA/ PLAN2 under a commercial agreement but were not part of the formal program and were not included in the evaluation.

2. **Diagnostic assessment**: Aimed at gathering data on students' knowledge, skills and understanding prior to instruction. This data was used to inform differentiation and targeted teaching; and to enable assessment of student performance over time.
3. **Differentiated teaching**: Involved providing instruction tailored to the differing learning needs of all students in the class.
4. **Tiered interventions**: A tailored approach, ranging across whole-of-class, group and individual teaching, based on identifying and supporting students with additional learning needs. The interventions were broken into three specific levels: differentiated teaching within a whole class setting (Tier 1); differentiated teaching with a small group (Tier 2); and personalised strategies for individual students (Tier 3).

## The evaluation of LNAP Phase 2

This is the Final Report of a three-year evaluation of LNAP Phase 2. It draws on the findings of a September 2020 Interim report (unpublished). The evaluation was guided by nine Key Evaluation Questions (KEQs). Eight of these were determined in collaboration with a multi-sector Evaluation Reference Group (ERG) at the start of the evaluation, and an additional question regarding the impact of COVID-19 was added in 2020. These KEQs are organised into two categories. Questions 1 to 4 and question 9 support a process evaluation of the overall implementation of LNAP Phase 2, and questions 5 to 9 relate to an outcome evaluation of the overall impact of LNAP Phase 2 on student learning and teacher capacity. The specific KEQs were:

1. How has LNAP Phase 2 been implemented?
2. How have implementation approaches and components evolved over time and why?
3. Which aspects of LNAP Phase 2 are working well? Which aspects can be improved, and how?
4. To what extent did LNAP Phase 2 support schools to manage the impact of COVID-19?
5. To what extent has LNAP Phase 2 increased the skills, confidence and understanding of K-2 teachers to respond to students' learning needs?
6. To what extent has LNAP Phase 2 (overall) improved literacy and numeracy outcomes for K-2 students?
7. To what extent are each of the four components of LNAP Phase 2 associated with improved literacy and numeracy outcomes for K-2 students?
8. To what extent are specific combinations of the four components associated with improved literacy and numeracy outcomes for K-2 students?
9. To what extent are specific components of instructional leadership associated with improved K-2 student outcomes?

### Data sources and methods

The evaluation was based on the following data sources:

- Literacy and numeracy assessment data (Best Start Kindergarten Assessment and NAPLAN Year 3 and Year 5) and other student and school level information, 2012 to 2019 provided by the Department
- Literacy and numeracy assessment data – NAPLAN Year 3, 2017 to 2019 provided by the non-government sectors
- Survey data gathered in 2019 and 2020, representing the views and experiences of 1,022 principals, 502 instructional leadership staff and 3,107 K-2 teachers in 2019; and 625 teachers in 2020
- Qualitative data from 227 interviews during school site visits with principals, instructional leadership staff and K-2 teachers at a total of 57 government, Catholic and independent schools over 2019 to 2021. The 2021 interviews included questions that captured the experiences of school personnel with regard to the impact of disasters and COVID-19
- Twenty-four (24) in-depth interviews with key stakeholders across the school sectors in 2018 and 2019.
- Desktop analysis of relevant sectoral implementation documents
- A Results and Framing Workshop conducted with key stakeholders to discuss implications of key evaluation findings.

### Limitations of data sources and methods

It should be noted that these data sources had a number of methodological limitations that arose during the course of implementing LNAP and the other demands that schools faced, especially in 2020 and 2021. These need to be considered when interpreting the evaluation findings. To overcome concerns that NAPLAN data may not have been a sufficient indicator of student performance, it was originally intended that a number of additional data sources would be used. These included: NSW Education Standards Authority (NESA) developed tests; other independent diagnostic tests; Best Start Kindergarten Assessment (BSKA); and the Learning Progressions. There were, however, a number of reasons why this was not possible. In particular:

- NESA developed tests were not available in time to be used for the evaluation.
- Other measures of student attainment that may have shown student progress identified in discussions with stakeholders, such as independent diagnostic tests, were not standardised across all sectors.
- Non-government schools did not begin using Best Start Kindergarten Assessment (BSKA) data until 2018 and therefore could not inform NAPLAN analysis during the evaluation timeframe, however was used for internal formative assessment purposes.
- The data from the Learning Progressions (a tool for internal formative assessment and planning purposes) were impacted by issues that prevented these data being used for statistical analysis.

It should also be noted that COVID-19 caused the cancellation of NAPLAN in 2020, thereby restricting the time-series data by one year. Methodological limitations are discussed in detail in Section 2.4.

## Key evaluation findings

Qualitative findings indicated a number of positive outcomes from the program, including increased use of student data; the critical role of instructional leadership in improving interventions in teaching; and the significant increase in collaboration among teachers, schools and across sectors. In particular, outcomes included:

- A lift in the capability of K-2 teachers in LNAP schools in terms of catering for the learning needs of students in literacy and numeracy
- A shift in school culture related to collective responsibility for student growth, with teaching and non-teaching staff both identifying a tangible uplift in:
  - the ambition of the school to see each student grow and develop
  - the extent to which individual student growth across K-2 was seen as a shared responsibility of all Early Stage 1 and Stage 1 teachers and school leaders
  - a consistent use of meta-language and shared practices within schools; with some principals making changes to school routines and planning to extend Action Plan practices to higher grades
- Changes to school culture exemplified by the opening up of classrooms to other teachers for lesson observations, the increased use of collaborative analysis, and shared accountability through the use of data
- Improvement in teacher capability, understanding and practices (as reported by AP school leaders in surveys and field visits)
- Recognition of the value of instructional leadership staff during disruption
- Progressive improvement in the use of data to inform teaching practice
- More support is needed to ensure that high quality differentiated teaching continues to be delivered
- Difficulty in recruiting, training and retaining sufficient instructional leadership staff
- Increased networking among schools to support their practice in K-2 literacy and numeracy.

Notwithstanding concerns about the limitations of NAPLAN as an outcome measurement tool, the evaluation did not identify improvements in student learning outcomes, as measured by Year 3 and Year 5 Reading and Numeracy scores.

### How has LNAP Phase 2 been implemented and how have implementation approaches and components evolved over time and why?

A key feature of LNAP Phase 2 was that, while funding had to be used only for instructional leadership purposes, there was significant local autonomy for sectors and individual schools to determine how to implement the instructional leadership role and how the four pillars would operate.

This autonomy was intended to ensure that the program would be responsive to a school's context and needs. This flexibility did, however, impact on the evaluation's capacity to determine which of the variations across schools and sectors were the most successful.

Overall, it was found that LNAP Phase 2 was well implemented and as planned, in line with sectoral implementation plans. Schools used the flexibility built in to LNAP to apply its principles according to their respective needs and context.

The evaluation found that active instructional leadership for K-2 literacy and numeracy was in place in all participating AP schools. Schools reported placing a 'very strong' focus on instructional leadership priorities and that instructional leadership was highly valued by school executive and teachers. Moreover, most schools created new instructional leadership positions to embed the practices they were using even after the cessation of LNAP funding.

Instructional leadership staff reported that with each year of LNAP the teachers they worked with developed a better understanding and appreciation of data analysis, and were more likely to seek out meetings to discuss student learning data.

Teachers consistently reported the use of data had improved their practice and student learning outcomes by enabling them to assess strategies that were not working and the reasons why. While most teachers reported finding the program reporting requirements to be initially daunting, they ultimately found that the effort resulted in tangible benefits.

LNAP Phase 2 placed an emphasis on differentiated teaching, with the goal of minimising unnecessary withdrawal of students from the classroom. As a result, differentiated teaching, coupled with the use of data to inform practice, was prioritised by almost all principals, and teacher professional learning on differentiation was widely implemented.

With over 500 participating schools, the scale of LNAP Phase 2 proved to be an implementation challenge in the government sector. Many schools reported it was difficult to recruit, train and retain sufficient instructional leadership staff, which is possibly symptomatic of the wider teacher shortage across NSW. DoE representatives reported that the State Office coordination team and instructional leadership trainers also found it hard to keep pace with the influx of new AP schools and the numbers constrained their ability to manage the range of instructional leadership expertise across the state.

There was also an unintended benefit associated with the implementation of Phase 2. This was that program facilitated increased collaboration across the three school sectors. Key stakeholders appreciated this, particularly the opportunity to learn from different experiences and contexts, and there was strong support for this cross-sector collaboration to continue.

### Which aspects of LNAP Phase 2 are working well? Which aspects can be improved, and how?

School site visits and interviews with AP teachers, instructional leadership staff and principals revealed considerable support for LNAP Phase 2.

The evaluation found positive outcomes resulting from instructional leadership (Pillar 1) on schools' capabilities in: administering diagnostic assessments; data analysis; lesson planning; modelling; team teaching; and lesson observation. There were signs of progressive improvement in these areas over time.

Most schools prioritised three areas of instructional leadership practice:

- Using annual planning to identify and meet professional learning needs of teachers with regards to K-2 literacy and/or numeracy teaching strategies
- Keeping up to date with evidence-based practices in K-2 literacy and/or numeracy teaching strategies
- Keeping up to date with evidence-based practices in K-2 literacy and numeracy assessment.

LNAP Phase 2 schools were also able to identify and describe targeted literacy and numeracy interventions (Pillar 4) and approaches in place for students who required them.

Sectoral progress reports demonstrated that schools felt supported by their sectors through: the recruitment of instructional leadership staff for the delivery of professional learning across all four pillars; assistance in implementing the Learning Progressions; and during the COVID-19 lockdown.

Instructional leadership was found to be particularly effective in supporting early career teachers. Most school executives reported that this was due to the early exposure to evidence-based numeracy and literacy teaching practice made possible by LNAP Phase 2.

The evaluation found that sustained improvement requires attention to both the practice of diagnostic assessment and using the data it generates. Teachers reported value in receiving on-going support to understand evidence-based approaches to differentiated teaching and tiered interventions. Overall, the evaluation findings suggested that more support is needed, particularly in the third pillar of LNAP Phase 2, to ensure that high quality differentiated teaching is delivered.

Most instructional leadership staff reported that the role improved their own leadership skills and teaching practices, which they found helpful when transitioning back into classroom teaching and when seeking other leadership roles.

### To what extent did LNAP Phase 2 support schools to manage the impact of COVID-19?

With approximately 90% of teachers reporting that their school had been 'significantly' affected by COVID-19, the evaluation found that LNAP Phase 2 supported schools to respond effectively to many of the challenges the pandemic presented for student learning, including the innovative use of digital technologies.

According to the evaluation findings, school closures due to COVID-19 and the additional impact of bushfires and floods in some areas of NSW in 2020, challenged tasks such as: keeping students on track to meet benchmarks; engaging with parents and carers online; providing students with a range of opportunities to practice and apply literacy and numeracy skills and strategies; and keeping students engaged. Schools with more vulnerable student populations also reported facing additional difficulties in maintaining LNAP activities during the learning from home period, particularly for Indigenous and Culturally and Linguistically Diverse students, and were concerned about the loss of learning.

Most schools responded to these multiple challenges by adopting new ways of conducting differentiated teaching and professional development. Evaluation data from progress reports from all three sectors highlighted how professional development activities were adapted to the challenges of 2020 and 2021. As a result, while a few principals stated school closures limited face-to-face professional learning opportunities for teachers, others observed greater collaboration and learning within their teaching teams.

Many teachers particularly valued the support provided by instructional leadership staff during this period. Examples given included: meeting with K-2 teachers to analyse and interpret student assessment data; conducting professional learning, including online, in literacy and numeracy; and providing instructional coaching on teaching strategies. Teachers also reported improved information and communication technology skills given the need to adopt online and hybrid teaching and learning activities.

The evaluation found that schools with more experienced and consistent instructional leadership staff dealt with the impacts of COVID-19 more effectively than schools with less experienced instructional leadership staff, or a high staff turnover during 2020 and 2021.

Overall, however, the response to the pandemic appears to have increased the resilience of the education sector and its ability to respond to unexpected events and natural disasters in the future.

### To what extent has LNAP Phase 2 increased the skills, confidence and understanding of K-2 teachers to respond to students' learning needs?

The evaluation found that LNAP Phase 2 both increased professional development and capacity building in K-2 teachers and supported broader cultural change in schools across all sectors. This cultural shift was particularly evident in schools involved throughout LNAP Phases 1 and 2, where an emphasis on evidence-based teaching and learning practices for staff was observed.

All teachers in LNAP Phase 2 reported improved practice and a heightened knowledge of pedagogy, resources, data collection and analysis. Most teachers also reported that reviewing student data with their instructional leadership staff was 'very useful'. Teachers in all AP schools also reported slightly higher growth in confidence across a range of different teaching activities across both numeracy and literacy. The difference in the growth in confidence in AP schools was ranged from 4-10% when compared with supplementary schools.

An unintended outcome of LNAP Phase 2 was that schools appeared to have developed a more consistent meta-language and approach to teaching. This was an important contribution of the program as it enabled schools across all sectors to develop a similar understanding of literacy and numeracy practice.

The evaluation also found that schools placed considerable emphasis on capacity building of principals and instructional leadership staff. Furthermore, some instructional leadership staff have progressed in their careers as a result of LNAP Phase 2 to executive roles due to, at least in part, the quality of training this opportunity provided to them.

An analysis of NAPLAN Year 5 data was also conducted to assess any longer-term impact of LNAP Phase 2 on Reading and Numeracy scores. This modelling was only possible for government AP and non-AP schools, due to the fact that data did not align sufficiently between sectors to allow inclusion in the modelling. The analysis found no measurable association between LNAP Phase 2 and Year 5 NAPLAN scores. Further analysis of NAPLAN Year 5 data also showed that, in reading, the performance of AP schools may have declined.

Reasons for this lack of measurable improvement may be the inherent limitations of NAPLAN as an indicator of student learning outcomes; or that NAPLAN may not be sensitive to any specific student learning outcomes that LNAP Phase 2 may have achieved. Another possible explanation for this, especially for the Independent sector, was the high turnover of participating schools between LNAP Phase 1 and Phase 2. Moreover, as intended LNAP Phase 2 was implemented flexibly, it was difficult to observe a generalised impact on NAPLAN scores. Differences among the cohorts of students across the two Phases of LNAP could also have limited the potential to detect a trend over the program.

The very large proportion of schools from all sectors, and particularly the non-government sectors, that entered LNAP for the first time in Phase 2, may also partially explain the lack of measurable improvement in NAPLAN scores given these schools may have not been in the program for sufficient time to observe any benefits flowing into student NAPLAN assessment.

To further explore whether LNAP Phase 2 contributed in any way to improving learning outcomes, as originally anticipated, measures of student progress other than NAPLAN would need to be assessed.

As the integrated and flexible nature of the delivery of the four pillars within LNAP Phase 2 meant that there were limitations on the ability of the evaluation to determine any causal attribution through the quantitative analysis, three contingent KEQs (6, 7 and 8) – relating to LNAP components, their combinations and the extent to which they are associated with improved outcomes for students – were difficult to address.

## Challenges and opportunities

A range of implementation challenges were reported during the evaluation. The challenge of recruiting and retaining staff for such a large number of instructional leader positions while simultaneously managing the impact of instructional leadership staff vacating their substantive roles, was significant. Related to this was the issue of maintaining continuity in the instructional leadership role, as illustrated by the fact that most instructional leadership staff interviewed had been in the position for less than a year.

Instructional leadership staff also reported that their role did not necessarily have the authority needed to ensure their recommendations were implemented. This highlighted the need for careful negotiation of structural relationships, strong interpersonal skills and consideration of power dynamics between instructional leadership staff and others, particularly support staff working alongside K-2 classroom teachers.

While for many teachers, receiving support from experienced instructional leadership staff led to them feeling confident about the sustainability of their LNAP Phase 2 practices, as noted above, the evaluation found that teacher confidence in teaching literacy was greater than in teaching numeracy. This suggests a need for further strategies targeting numeracy, although the result may also be due to different relative starting points in knowledge of literacy and numeracy.

The evaluation findings also suggest that more support is needed, particularly in the third pillar of LNAP Phase 2, to ensure that high quality differentiated teaching is delivered.

A key concern of stakeholders and school-based staff was that of sustainability, specifically embedding and normalising practices initiated under LNAP Phase 2. Many stakeholders felt that more time was required to maximise impact and that continued investment in instructional leadership was therefore needed.

For example, the findings highlighted the value of a continued focus on the practice of diagnostic assessment, and on teachers' use of the data it generates. This would need to be supported by a deep understanding of evidence-based approaches to differentiated teaching and tiered interventions.

In summary, while this evaluation did not identify quantitative improvements in NAPLAN results arising from LNAP Phase 2, the program was shown to have resulted in many improvements for participating schools. Most notably these included: enhancing teachers' ability to implement interventions for individual students; increasing a culture of collaboration within and across schools and sectors with regard to effective early years teaching practice; and considerable benefits experienced by the majority of schools as a result of the establishment instructional leadership roles to support classroom teachers.

# 1 The NSW Literacy and Numeracy Action Plan

The NSW Literacy and Numeracy Action Plan (LNAP) was a cross-sector initiative to improve the literacy and numeracy skills of students through a targeted approach in the early years of schooling. The initiative targeted schools that had a high proportion of students performing in the lowest quartile of NAPLAN in literacy and numeracy. It was supported by a very significant investment of $601 million by the NSW Government between 2012 and 2020. LNAP Phase 2 formed part of the broader NSW Government's Literacy and Numeracy Strategy 2017-2020.

## 1.1 Key features of LNAP Phase 2

LNAP Phase 2 aimed to improve the literacy and numeracy of students through a targeted approach in the early years of schooling based on four pillars (components) that had been developed for Phase 1.

There were four key pillars, or components, of LNAP:

- Instructional leadership (Section 3.1): Instructional leadership staff were trained over the period of LNAP Phase 2 to build skills and knowledge in teaching and assessing literacy and numeracy in K-2; and to assist teachers to customise interventions for individual students.
- Diagnostic assessment (Section 3.2): K-2 teachers, with support from instructional leadership staff, gathered baseline data on students' knowledge, skills and understanding prior to instruction. The data provided information to differentiate and target teaching strategies, and to measure student learning improvement over time.
- Differentiated teaching (Section 3.3): K-2 teachers tailored instruction to accommodate the different learning needs of all students in the class, so that students received the particular type of support needed to for them to learn.
- Tiered interventions (Section 3.4): A multi-tiered approach to the identification and targeted support of K-2 students with additional learning and behaviour needs.

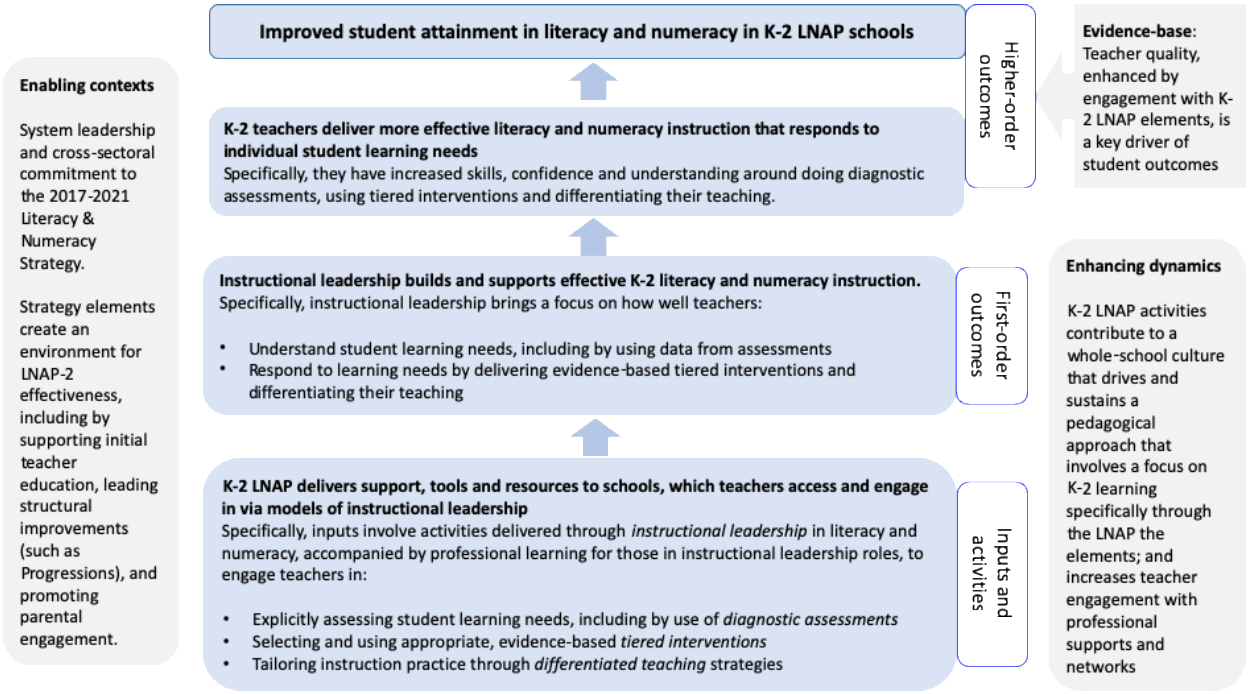
While the pillars and associated practices were not limited to LNAP Phase 2, Action Plan (AP) schools were expected to focus on them in order to strengthen their literacy and numeracy teaching practices in K-2.

The choice of these key pillars stemmed from a 2016 Centre for Education Statistics and Evaluation (CESE) research paper, 'How schools can improve literacy and numeracy performance and why it (still) matters', which detailed the benefits of early intervention and evidence-based school practices to improve literacy and numeracy performance.[2]

The broad aims and objective of LNAP Phase 2 are presented in Figure 1. This program logic was developed by an Evaluation Reference Group (ERG) made up of representatives of the NSW Department of Education (DoE), NSW Education Standards Authority (NESA), Catholic Schools New South Wales (CNSW), Association of Independent Schools New South Wales (AISNSW) and the Institute for Public Policy and Governance (IPPG). The program logic informed the overall evaluation and the articulation of a set of Key Evaluation Questions (KEQs) designed to examine the implementation and overall impact of LNAP Phase 2 on student performance.

[2] https://www.cese.nsw.gov.au/publications-filter/how-schools-can-improve-literacy-and-numeracy-performance-and-why-it-still-matters

Figure 1: Program Logic for LNAP Phase 2




## 1.2 LNAP Funding

LNAP was made possible by a major NSW Government investment of $601 million over the period 2012 to 2020. This was broken into $261 million for Phase 1 (2012-16) and $340 million for Phase 2 (2017-20).

The NSW Government funding for Phase 2 was targeted to fully support instructional leadership in AP schools. Participating schools were required to make a financial co-contribution towards the teacher professional learning components of the program. Schools also met the costs associated with the implementation of initiatives identified to support student learning.

## 1.3 Schools involved in LNAP

The NSW Literacy and Numeracy Action Plan was delivered in two phases:

- Phase 1, which ran from 2012 to 2016 and involved 448 schools[3]
- Phase 2, which ran from 2017 to 2020 and involved a total of 670 schools.

Action Plan (AP) schools funded to participate in LNAP Phase 2 were selected across all three sectors using an agreed methodology.[4] This methodology prioritised:

- Schools with a higher proportion of students in the lowest two performance bands in NAPLAN Year 3 (Band 1 and Band 2).
- Schools with higher levels of disadvantage, as reflected by the Family Occupation and Employment Index (FOEI).

LNAP Phase 2 specifically funded:

- 533 government schools (including 310 schools that participated in Phase 1)
- 99 Catholic schools (including 66 of the 109 schools that participated in Phase 1)

[3] Phase 1 was the subject of an earlier review, conducted by Erebus International and published in its *Report of the Evaluation of the NSW Literacy and Numeracy Action Plan 2012-2016.*

[4] For more detailed information about the policy context for LNAP, see the NSW Literacy and Numeracy Strategy 2017-2020 (available at https://education.nsw.gov.au/literacy-and-numeracy-strategy).

- 38 independent schools (including 9 that participated in Phase 1).

All government schools that were part of Phase 1 continued into Phase 2, however, a further 223 schools were also added. Nine of the AISNSW schools that participated in Phase 1 also participated in Phase 2, with a further 29 schools joining in Phase 2, so that 38 independent schools in total were involved in Phase 2. According to the Catholic Education Commission NSW Implementation Plan (2017: 6), 66 of the 109 schools that participated in Phase 1 also continued into Phase 2, with an additional 33 schools joining.

A number of other government schools self-funded some elements of LNAP Phase 2. In 2019, there were 34 government schools that did not meet all of the criteria to be included in LNAP but chose to self-fund the program and are therefore considered part of LNAP. LNAP Phase 2 extended a focus on 'early intervention and instructional leadership' from Phase 1 for students at risk of not meeting literacy and numeracy standards in the early years of schooling. While the approach and key features of LNAP were similar in both phases, the design and implementation of LNAP Phase 2 varied between and within the three sectors (see Sections 2.2 and 2.3). Specifically, LNAP Phase 2 allowed considerable flexibility in the way it was implemented at the sectoral and individual school levels to be responsive to the needs and context of each school, as illustrated in the Vignettes in Section 4.4.

## 1.4 Governance and support across the three sectors

As noted, LNAP Phases 1 and 2 were cross-sectoral initiatives. Sectoral authorities had different characteristics and contexts, with each playing a slightly different role in supporting the delivery of LNAP Phase 2. Each sector developed annual implementation plans on which they reported in October each year.

In government schools, LNAP Phase 2 was known as Early Action for Success (EAfS). EAfS was first developed in 2012 as part of LNAP Phase 1, initially with 50 participating schools. It scaled up by a factor of more than ten to become one of the most significant programs for improving student outcomes and capacity building for teachers within the DoE. Schools participating in EAfS were provided with ongoing support from the Literacy and Numeracy Team within the DoE. This included:

- Developing fact sheets and resources
- Training of principals, deputy principals, instructional leadership staff, and Literacy and Numeracy trainers
- Monitoring school and student data to report back to participating schools
- Ongoing development of common performance measures against which student performance could be measured
- Using case studies to illustrate the key implementation strategies on the Early Action for Success website.

Catholic Schools NSW (formerly known as the Catholic Education Commission NSW) provided general coordination, oversight and guidance to diocesan school authorities and religious institutes to help Catholic schools meet their state and federal compliance requirements. The overarching CSNSW implementation plan for LNAP was informed by the 11 dioceses across NSW, each of which developed their own implementation plans.

All dioceses had an LNAP Manager (also known as Leader of Pedagogy) who coordinated the implementation of LNAP Phase 2 in their respective area. Each diocese also applied its own resources to support key elements of LNAP, build school capacity and coordinate professional learning.

The Association of Independent Schools NSW is the peak body representing independent schools across the State. Each of its AP schools entered into a contractual arrangement with the AISNSW to achieve the goals of LNAP Phase 2, with school executives working collaboratively with AISNSW Student Services team to meet specified outcomes. Ongoing support provided by the AISNSW included:

- 'masterclass' professional learning events, attended by school leaders as well as leaders of literacy and numeracy in the school
- coaching support and professional learning provided by literacy and numeracy consultants
- development and support of 'screener' assessment tools and associated dashboards for analysis and reporting
- development of fact sheets and resources (one of the fact sheets is referred to later in the report)

- development of case studies to highlight instructional leadership and teaching practices.

## 1.5 This report

This Final Evaluation report assesses the implementation and effectiveness of the NSW Literacy and Numeracy Action Plan Phase 2. This Final Evaluation report is organised as follows:

Section 2 provides background information on the delivery of LNAP Phase 2 and explores the extent to which it delivered support, tools and resources to schools. It also summarises the data sources and analytic methods used for this evaluation.

Section 3 focuses on the implementation approaches undertaken by sector administrators and schools against the key components of LNAP Phase 2.

Section 4 explores the extent to which schools and K-2 teachers delivered more effective literacy and numeracy instruction corresponding to individual student learning needs. It also explores the extent to which LNAP Phase 2 increased the skills, confidence and understanding of K-2 teachers to respond to students learning needs and considers the impact of COVID-19 on LNAP implementation in 2020 and 2021.

Section 5 provides evidence relating to student outcomes and explores the extent to which student attainment in K-2 literacy and numeracy improved in LNAP Phase 2 schools.

Section 6 provides an overview of the main findings and also discusses implications arising from the student outcome analyses on the sustainability of LNAP practices and the future of similar cross-sectoral education interventions.

A Technical report also accompanies this report containing detailed data and analysis.

# 2 The evaluation of LNAP Phase 2

This Report concludes the evaluation of LNAP Phase 2. It extends an evaluation presented in the 2020 'Interim Evaluation report' by drawing on new data sources. The Interim report and this Final Report include both process and outcomes evaluations, guided by Key Evaluation Questions (KEQs).

The full set of nine Phase 2 KEQs are set out in Table 1. These first four relate to the evaluation of the implementation of LNAP, and the following five to the evaluation of the outcomes for LNAP.[5]

Given the unique circumstances that occurred in 2020 and 2021, this Final Report also addresses the impact of COVID-19 on the implementation of LNAP Phase 2.

Table 1: Key Evaluation Questions

| | |
|---|---|
| **Implementation questions** | 1. How has LNAP Phase 2 been implemented? (Section 3)<br>2. How have implementation approaches and four pillars evolved over time and why? (Section 3)<br>3. Which aspects of LNAP Phase 2 are working well? Which aspects can be improved, and how? (Section 3, 4, 5)<br>4. To what extent did LNAP support schools to manage the impact of COVID-19? (Section 4) |
| **Outcome questions** | 5. To what extent has LNAP Phase 2 increased the skills, confidence and understanding of K-2 teachers to respond to students' learning needs? (Section 3 and 4)<br>6. To what extent has LNAP Phase 2 (overall) improved literacy and numeracy outcomes for K-2 students? (Section 5)<br>7. To what extent are each of the four pillars of LNAP Phase 2 associated with improved literacy and numeracy outcomes for K-2 students?<br>8. To what extent are specific combinations of the four components associated with improved literacy and numeracy outcomes for K-2 students?<br>9. To what extent are specific components of instructional leadership associated with improved K-2 student outcomes? |

## 2.1 School groupings for the evaluation

Two primary categories of schools are covered in this evaluation: those that participated in the LNAP Phase 2 program and comparison schools.

1. **LNAP Phase 2 Action Plan (AP) schools**, which were either:
    - **Funded AP schools**, which met the criteria to be involved in LNAP Phase 2; were required to fully participate; and were directly funded under the program
    - **Self-funded AP schools**, comprising 39 government schools which did not meet the LNAP Phase 2 eligibility criteria but opted to be involved by funding instructional leadership through their own resources. These schools were able to access to the sectoral support and professional learning available to funded AP schools.
2. **Non-Action Plan (non-AP) schools**, which did not participate in LNAP Phase 2 activities. These included:
    - **Supplementary schools**, which shared similar demographic characteristics to LNAP Phase 2 schools. These schools received some support to assist them to implement the learning progressions component of LNAP Phase 2. A total of 147 supplementary schools joined the program in 2017, however, only 115 were still participating in 2019, which included 95

[5] As detailed later in the Report, the lack of observable improvements in literacy and numeracy that were assessed to answer to KEQ 6, meant that KEQs 7 to 9, which were intended to investigate the causes of performance improvement, were not relevant.

government, 15 Catholic and 5 independent schools. The main role of these supplementary schools in the evaluation was to provide a relevant comparison group to AP schools for the NAPLAN analysis and for survey responses.

- Other non-AP schools, which were the remaining 1,156 government primary schools that were not involved in LNAP Phase 2.

### 2.1.1 A note about supplementary schools

Supplementary schools were originally intended to provide a comparison with AP schools. Supplementary schools, however, differed from AP schools. For example, government supplementary schools, for which the most comprehensive data were available and represented the bulk of supplementary schools, differed from government AP schools in the following ways:

- A higher SEA as compared to AP schools (7.5% in supplementary schools as compared to AP schools)
- A higher school ICSEA (957 in supplementary schools as compared to 918 in AP schools)
- A lower percentage of ATSI students (12% in supplementary schools as compared to 17% in AP schools)
- A lower percentage of students living in metropolitan areas (55% in supplementary as compared to 62% in AP schools)
- A lower percentage of students needing English language support (22% in supplementary schools as compared to 29% in AP schools)

These differences were due to the intended operation of LNAP; if supplementary schools had the same level of disadvantage as AP schools then they would have been selected as AP schools.

While supplementary schools differed from AP schools in terms of key demographics, they shared some of the elements of LNAP. Supplementary schools were required to enter PLAN2 data and answer LNAP related surveys and participate, if requested, in interviews. Compensation for the time these activities consumed was provided through the opportunity to engage in some, if not all, of the professional learning sessions offered to AP schools. Supplementary schools, however, did not receive the funding that AP schools received and may or may not have funded their own instructional leadership staff.

Therefore, while supplementary schools were more similar to AP schools than 'other non-AP schools', they were different in some aspects and had opportunities for learning that, without LNAP, would have been different or absent. The intended comparison between AP and supplementary schools should therefore be treated with some caution throughout this report, both due to the differences in school characteristics and also because the supplementary schools received some parts of the LNAP program.

The other limitation with using supplementary schools as a comparison with AP schools is their small number, which limits statistical comparison. In Sections 3 and 4 supplementary and other non-AP schools have been combined as 'all non-AP schools' for responses from principals and instructional leadership staff, due to the small number of respondents.

## 2.2 The impact of COVID-19 on the evaluation

As noted, a decision was made in 2021 to extend the KEQs to consider the impact of COVID-19 on teaching and learning under LNAP Phase 2. The pandemic also impacted on data collection and the evaluation plan had to be adjusted to take this into account as set out below.

COVID-19 also caused the physical closure of schools for extended periods in 2020 and 2021 and led to the cancellation of NAPLAN in 2020.

In addition to managing the many impacts of the pandemic (such as the large-scale transition to online learning and adjustments to teaching and professional development practices), some schools within NSW also experienced trauma among their school community as a result of natural disasters such as the Black Summer bushfires in 2020 and floods in 2021.

These events impacted the availability of relevant primary and secondary data for the evaluation. In response, the evaluation methodology was adapted in the following ways:

- School site visits aimed at understanding the implementation of LNAP Phase 2 across a range of school types and contexts over the 4 years were conducted virtually. An unintended benefit was that a larger number of educators and executives across different schools in all sectors were able to be engaged.
- An online forum with instructional leadership staff scheduled for Term 2 2021, was not able to proceed due to lockdown restrictions across NSW and it was decided to not place additional burden on school-based staff. To compensate, interview questionnaires designed for school site visits were adapted to incorporate topics planned for discussion at the online forum.

## 2.3 Description of data sources

The evaluation of LNAP Phase 2 drew on numerous data sources, summarised below. Details of data collection methods and analysis are in the Technical report, which also includes a summary of the key evaluation questions as they correspond to the data sources.

### 2.3.1 NAPLAN and other student and school data (2013-19)

De-identified Year 3 and 5 NAPLAN Reading and Numeracy, 2013-19 assessment data from government, Catholic and independent schools. This was supplemented by student level demographics and school level variables corresponding to NAPLAN (see the Technical report Section I for details).

De-identified Best Start Kindergarten Assessment (BSKA) results from government schools, 2010-16. According to the 'Literacy and Numeracy Strategy 2017-2020', BSKA would be used "to give teachers an immediate and clear picture of the literacy and numeracy skills of students on entry to Kindergarten". BSKA data thereby provided information about students during the early weeks of Kindergarten to support diagnostic assessment as part of LNAP. As BSKA had been used by government schools from 2010, the evaluation also used the BSKA scores of Kindergarten children to control for differences among students when they began school in the analysis of NAPLAN Year 3 scores (Section 5). The first collection of BSKA data by non-government school occurred in 2018 and, while the results could be used by schools for the original purpose of diagnostic assessment, they could not be used as a comparison measure with 2021 NAPLAN Year 3. The 2021 NAPLAN data were not available until after closure of the evaluation period. Subsequently, Section 5 only incorporates BSKA data from government schools in the analysis of NAPLAN data.

The evaluation originally planned to also use data from the Learning Progressions, a tool for internal formative assessment and planning purposes. Due to issues that prevented these data being used for statistical analysis, the Learning Progressions could not be used for the evaluation.

### 2.3.2 Survey of principals and instructional leadership staff (2019)

In 2018, evaluation surveys were drafted via workshops with Centre for Education Statistics and Evaluation (CESE) representatives based on the Bandura Teacher Efficacy Scales. Surveys of principals and instructional leadership staff were undertaken during Terms 3 and 4 2019:

- The Principal survey explored topics relating to the leadership of literacy and numeracy teaching in their school. It was circulated in August and September 2019 across all government schools in NSW and to the supplementary schools in the Catholic and independent sectors. The survey was also unintentionally distributed to 21 non-AP Catholic schools by DoE, however, due to the small response rate, their responses have been included in only the qualitative thematic analysis. Overall, responses were received from a total 1,022 principals in AP and non-AP schools, with 852 respondents fully completing the survey.
- The Instructional Leadership survey was modelled on the Principal survey and also administered in August and September 2019. It was sent to instructional leadership staff in government and Catholic AP schools. It was not undertaken in independent AP schools as principals in these schools had responsibility for instructional leadership (see Section 3.1.1) and their views were therefore captured in the Principal survey. The survey was not distributed to non-AP schools, including supplementary schools. Responses were provided by 520 K-2 instructional leadership staff from government and Catholic AP schools, with 462 fully completing the survey.

The survey instruments are presented in the Technical report, annotated with the results for each question. Survey data for government schools have been weighted to be representative of the full school population, while Catholic and independent school data remain unweighted as the surveys were sent only to AP schools therefore full school population data was unavailable.

### 2.3.3 Survey of K-2 teachers (2019 and 2020)

A K-2 teacher survey was also undertaken during Terms 3 and 4 in 2019. The survey was distributed across all government schools in NSW, but only to AP schools and supplementary schools in the Catholic and independent sectors. A total of 3,107 K-2 teachers responded, with 2,579 fully completing the survey.

In contrast to the principal and instructional leadership staff surveys, accurate response rates could not be calculated by AP status. This was due to the difficulty in obtaining precise K-2 teacher numbers in AP schools and because the survey was disseminated via an anonymous link in some sectors. However, 19% of K-2 teachers across all government schools completed the survey.

An additional online survey was also completed by K-2 teachers in government AP and non-AP schools, and by AP Catholic and AP independent schools in Terms 3 and 4 in 2020. A total of 625 K-2 teachers across all sectors attempted the survey. This survey was originally intended to provide comparison data for AP schools to assess the impact of LNAP over time. However, this original approach had to be modified as a result of COVID-19.

To reduce teacher burden following the re-opening of schools after the COVID-19 lockdown in 2020, a simplified version of the 2019 K-2 teacher survey was used. It mainly focused on the impact of 2020 events on student learning and teaching activities; the use of information and communication technologies (ICTs); instructional leadership support; and professional learning and capacity building of K-2 teachers

The survey instruments are presented in the Technical report annotated with the results for each question. As with 2019 survey, results for government schools were weighted to be representative of the full school population, while Catholic and independent data remained unweighted given they were only issued to AP schools in those sectors. This meant that non-AP data from the survey of K-2 teachers excludes non-government schools. Selected qualitative data from the surveys, presenting the change in sentiment towards the four pillars of LNAP, has been presented via quotes in the Technical report.

### 2.3.4 School site visits and interviews (2018-21)

Between 2018 and 2021, the evaluation team conducted a total of 227 interviews of school-based staff from 57 AP and 10 non-AP schools across all three sectors. The AP schools visited included 26 government schools, 19 Catholic schools and 12 independent schools. A full breakdown of the schools, interview guides and ethics form can be found in the Appendix.

### 2.3.5 Key stakeholder interviews (2018, 2019 and 2021)

Over the evaluation period (2018-2021), a total of 24 in-depth interviews (mostly face-to-face) were held with key stakeholders across the three sectors and staff from the NSW Education Standards Authority (NESA). Interviewees were all selected because of their involvement in the higher-level implementation of LNAP Phase 2 and the overarching direction of the strategy. The relevant interview guide is in the Appendix.

### 2.3.6 Review of sectoral implementation documents (2018-21)

Initial LNAP Phase 2 implementation plans from each sector were reviewed, as well as a sample of key professional learning products and public-facing documents that were produced for LNAP Phase 2, such as AISNSW fact sheets on the four pillars and the DoE websites for literacy and numeracy and EAfS. Other documents reviewed included:

- Literacy and Numeracy Strategy 2017-2020
- Independent Schools and Catholic Schools NSW Implementation Plans and Progress Reports (2017-2019)
- Report of the Evaluation of the NSW Literacy and Numeracy Action Plan 2012-2016
- K-2 Literacy and Numeracy Action Plan 2017 Process Evaluation

- Principals as Literacy Leaders: Confident, Credible and Connected, Principals as Literacy Leaders (PALL) Pilot project (2012)
- Exploring Effective Pedagogy in Primary Schools: Evidence from Research, University of London (2014)
- Fullan, M. (2001). The New Meaning of Educational Change, 3rd Edition. New York: Teachers College Press
- Fullan, M. (2001). Leading in a Culture of Change. San Francisco: Jossey Bass
- Newmann, F., King, B. & Youngs, P. (2001). Professional development that addresses school capacity. Paper presented at the annual meeting of the American Educational Research Association.

### 2.3.7 Results and Framing workshop (2021)

While not officially a part of the formal data collection process, a collaborative Results and Framing workshop was conducted online with key stakeholders across the three sectors in August 2021. This workshop considered preliminary evaluation findings and provided an opportunity for stakeholders to help 'make sense' of the results, to provide context to the findings and collectively draw implications, particularly in the context of each sector's implementation of LNAP.

## 2.4 Methodological limitations

Due to the extended and dynamic nature of this evaluation, it is recognised that there are some methodological limitations affecting the evaluation findings. These include:

- Complete time series data for NAPLAN scores over the relevant period were unavailable for Catholic and independent schools because of historical data sharing agreements
- Historical BSKA data were unavailable for Catholic and independent schools prior to 2018. BSKA is a DoE assessment that was not available until recently to non-government schools. This meant that the analysis of student-level growth from Kindergarten to Year 3 (see Section 5) was limited to government schools only
- In the absence of 2020 NAPLAN, Learning Progressions (the Progressions) was suggested as a possible supplementary data source. For some time, schools across all sectors have worked to collect Progressions data for internal formative assessment and planning purposes. CESE undertook a thorough analysis of the properties of the Progressions (recorded using PLAN2) and concluded it does not have the properties needed to contribute to the evaluation of LNAP at this stage. (The Educational Statistics and Measurement team within CESE are currently working on developing a revised methodology to address this issue for future projects)
- There may be interaction between LNAP Phase 2 and other educational interventions also intended to influence student literacy and numeracy learning outcomes
- As noted earlier, the intended comparison between AP and supplementary schools was limited by differences in demographic and socioeconomic characteristics, and had been able to access LNAP professional learning opportunities. For this reason, comparisons between AP and supplementary schools should be treated with caution throughout this report
- The practices promoted by LNAP Phase 2 are not unique, and certain practices associated with the program in participating schools were present (to a greater or lesser degree) in supplementary and non-AP schools
- The impact of COVID-19 meant that planned surveys in 2020 were refocused to explore this issue, rather than to gauge changes that may have occurred from previous surveys. As a result, comparisons over the time were limited
- The length of time each individual school was involved in LNAP varied across the sectors, with 76% of independent sector schools, 40% of government schools, and 33% of Catholic schools, new to the program at the start of Phase 2
- NAPLAN as a measure of student learning may not capture the full impact of LNAP on student progress. NAPLAN provides a common, universal and standardized measure of student learning outcomes across a long time-period and across the three sectors. However, NAPLAN cannot capture the full extent of learning outcomes that may have come about as a result of LNAP. The cancellation of NAPLAN in 2020 reduced the intended data set by a year so that data trends could not 'play out' fully. In the Results and Framing workshop some stakeholders also noted that some learning outcomes, such as

phonological awareness, phonics, vocabulary and fluency – essential early reading skills – are not able to be measured independently by NAPLAN. This view suggests other measures of student learning may have been more sensitive to any improvements LNAP may have brought about. Stakeholders from the Catholic and independent sectors indicated that they had used other means of assessing learning outcomes, which suggest more positive results than those based on NAPLAN alone (see Section 5). These other means of assessing learning outcomes were unfortunately not standardised across all three sectors or, as is the case with the Progressions data, could not be used for the purposes of summative evaluation. As a result, they could not be incorporated into our analysis.

# 3 Implementation of LNAP

The implementation of LNAP Phase 2 occurred at two levels: the sector and the school level.

- Each sector had its own leadership organisation that coordinated LNAP. These bodies provided professional learning for instructional leadership and school staff, as well as establishing business processes and supporting intervention programs and personnel.
- Each participating school was also empowered to make decisions about how LNAP was implemented in the local context. Influencing considerations included school size, location, socioeconomic context, staffing structure and student profile, as illustrated by the Vignettes in Section 4.4.

In this context, this section explores the four implementation-focussed Key Evaluation Questions (KEQs):

1. How has LNAP Phase 2 been implemented?
2. How have implementation approaches and four pillars evolved over time and why?
3. Which aspects of LNAP Phase 2 are working well? Which aspects can be improved, and how?
4. To what extent did LNAP support schools to manage the impact of COVID-19?

Data have been drawn from several sources to inform this Section:

- Survey data gathered in 2019 and 2020, representing the views and experiences of 1,022 principals, 502 instructional leadership staff and 3,107 K-2 teachers in 2019; and 625 teachers in 2020
- Qualitative data from 227 interviews during school site visits with principals, instructional leadership staff and K-2 teachers at a total of 57 government, Catholic and independent schools over 2019 to 2021
- Twenty-four (24) in-depth interviews with key stakeholders across the school sectors in 2018 and 2019.

As noted in Section 2, a number of limitations with the analysis in this Section need to be borne in mind:

- There may be interaction between LNAP Phase 2 and other educational interventions also intended to influence student literacy and numeracy learning outcomes
- The intended comparison between AP and supplementary schools limited by the degree to which supplementary schools was limited by differences in demographic and socioeconomic characteristics and had been able to access LNAP professional learning opportunities. For this reason, comparisons between AP and supplementary schools should be treated with caution throughout this report
- The practices promoted by LNAP Phase 2 are not unique, and certain practices associated with the program in participating schools were present (to a greater or lesser degree) in supplementary and non-AP schools
- The impact of COVID-19 meant that planned surveys in 2021 were refocused to explore this issue, rather than to gauge changes that may have occurred from previous surveys. As a result, comparisons over the time were limited.

The findings presented below indicate broad, high-level trends across all three sectors broken into each of the four LNAP Phase 2 pillars. That is, instructional leadership (Section 3.1), diagnostic assessment (Section 3.2), differentiated teaching (Section 3.3) and tiered interventions (Section 3.4).

## 3.1 Instructional leadership models varied between sectors and within sectors

Instructional leadership staff in LNAP Phase 2 worked directly with teachers to build their capacity in literacy and numeracy. By drawing on expert teaching, instructional leadership staff were responsible for the development and implementation of effective practices to collect, analyse, track and monitor student progress. This allowed them to contribute towards evidence-based decision making by, for example, using end of year expectations data to determine learning needs and identify 'at risk' students. Instructional

leadership staff also assessed the effectiveness of the professional learning and mentoring initiatives they implemented to ensure teachers gained expertise in differentiated and targeted instruction.[6]

Under LNAP Phase 2, the conceptualisation, structure and scale of instructional leadership positions varied within and between sectors.

In government and Catholic AP schools, LNAP Phase 2 involved the appointment of one or more dedicated instructional leadership staff within individual schools. These personnel had a range of titles, including 'K-2 literacy and numeracy leader', 'Instructional Leader', 'Literacy and Numeracy Coach' or 'Literacy and Numeracy Focus Teacher'. They were expected to play a leadership role by exclusively dedicating their time to building literacy and numeracy teaching capacity of K-2 staff within their school. To prepare for this role instructional leadership staff in government schools were provided with training and other support from the DoE. In total, 408 instructional leadership staff positions were created for government schools, and 70 positions were created in the Catholic sector.

In independent AP schools, responsibility for instructional leadership was a function, not a position. The school principal was the focal point for instructional leadership in LNAP Phase 2, working in collaboration with the school executive and/or teaching staff. Most independent AP schools did, however, choose to create dedicated roles for either or both literacy and numeracy leadership, mirroring the approach taken in the government and Catholic sectors.

### 3.1.1 The evaluation found no direct association between specific forms of instructional leadership implementation and improved student performance

The implementation of instructional leadership among the AP schools varied widely, according to school context or needs, so that it was difficult to attribute any particular form of implementation to student performance. For example:

- Many AP schools created a single instructional leadership role responsible for leading both literacy and numeracy across K-2 (this is the default position in government AP schools). However, some schools chose to share this equating to 2 FTE
- LNAP Phase 2 government funding for instructional leadership was exclusively for Kindergarten to Year 2. However, some schools chose to self-fund to cover Kindergarten to Year 6
- Some instructional leadership staff were engaged full-time, others less than half a day per week.
- Some instructional leadership staff worked at just one school, while other others worked across multiple schools
- Some instructional leadership staff were appointed from within the school, while others were recruited externally.

This wide variation in the detailed implementation of instructional leadership may also partially explain the results reported in Section 5 regarding NAPLAN outcomes.

### 3.1.2 Instructional leadership responsibilities were typically allocated to a staff member other than the principal

While instructional leadership is an inherent part of the role of the school principal, how this is performed is impacted by factors such as school context and personal approaches to leadership. Ninety eight percent (98%) of principals who responded to the 2019 survey reported that someone else within their school had specific instructional leadership responsibilities in K-2 literacy and numeracy. Most often this was an 'instructional leader' (75%), assistant principal (31%), deputy principal (17%) or other members of the school executive team. This was irrespective of whether they were staff at AP or non-AP schools.

[6] This definition has been taken from the 'Early Action for Success Phase 2 – Assisting the Literacy and Numeracy Strategy 2017-2020' (NSW Department of Education).

### 3.1.3 Strong investment in instructional leadership priorities

According to the 2019 survey, principals at both AP and non-AP schools reported making a wide range of instructional leadership investments in K-2 literacy and numeracy. This highlighted the fact that instructional leadership was not limited to AP schools. For instance:

- Most non-AP schools (80%) reported that they someone in addition to the principal had instructional leadership responsibilities in K-2 literacy and/or numeracy - most often an assistant principal (60%)
- In some Catholic dioceses, the decision was made that all schools within their diocese would embark on instructional leadership in K-2, with all instructional leadership staff accessing the same professional learning
- Across all three sectors, LNAP Phase 2 style instructional leadership was initiated and self-funded for older age groups in many schools.

Examples of instructional leadership also took many forms, including:

- Annual planning to identify and support the professional learning needs of teachers with responsibility for K-2 literacy and/or numeracy (reported by 65% of AP principals and 55% of non-AP principals)
- Keeping up to date with evidence-based practices in K-2 literacy and/or numeracy teaching strategies (65% of AP principals, 54% of non-AP principals)
- Keeping up to date with evidence-based practices in K-2 literacy and numeracy assessment (58% of AP principals, 48% of non-AP principals).

Overall, professional learning to develop teaching strategies attracted relatively more attention than other focus areas – including professional learning to develop assessment. Only one area was described as a 'very strong focus' by fewer than half of AP principals. This related to meetings between school leaders to plan resourcing based on K-2 student assessment data.

One finding was that despite both AP and non-AP utilising instructional leadership, the focus was greater in AP schools by an average margin of 10 per cent. This was statistically significant but not a large contrast in a practical sense.

### 3.1.4 Instructional leadership staff focused on supporting teachers in the identification and selection of differentiated approaches for their students

In the 2019 survey of instructional leadership staff in AP schools, respondents were given a list of 17 different strategies for working with K-2 teachers, developed in consultation with the ERG. As demonstrated in Table 2, the results showed that many of these strategies were widespread across AP schools, including providing support with differentiation (89% 'very strong' or 'strong' focus); helping teachers identify and select targeted intervention approaches (85%); and instructional coaching (82%).

Table 2: Focus that instructional leadership places on activities when working with K-2 teachers (Instructional leadership staff perspective)

| Amount of focus placed on… | Strong focus | Very strong focus | 'Very strong focus' or 'strong focus' |
|---|---|---|---|
| Supporting K-2 teachers to differentiate their teaching to accommodate the range of student needs in their class (n=478) | 41% | 48% | 89% |
| Supporting K-2 teachers to identify and select targeted intervention approaches for individual student needs (n=478) | 42% | 43% | 85% |
| Instructional coaching for K-2 teachers in classroom strategies for literacy and numeracy learning (n=480) | 39% | 43% | 82% |
| Team teaching and classroom modelling for K-2 teachers to assist with differentiated teaching techniques (n=479) | 37% | 44% | 81% |
| Supporting reflection on literacy and numeracy practices (n=483) | 40% | 41% | 81% |
| Supporting K-2 teachers to tailor or design targeted intervention approaches for individual student needs (n=478) | 41% | 40% | 81% |
| Providing feedback to K-2 teachers from classroom observations (n=480) | 41% | 34% | 75% |
| Meetings at a stage and/or class level to plan teaching strategies based on student assessment (n=479) | 42% | 33% | 75% |
| Meetings at a stage and/or class level to interpret student assessment data (n=480) | 40% | 33% | 73% |
| Planning lessons collaboratively (n=482) | 37% | 30% | 67% |
| Supporting K-2 teachers to identify and select appropriate assessments for their students (n=478) | 41% | 24% | 65% |
| Facilitating (formal or informal) peer-to-peer discussions between teachers about student assessment data (n=478) | 37% | 27% | 64% |
| Inputting student assessment data into systems/databases (n=482) | 36% | 27% | 63% |
| Supporting K-2 teachers to tailor or design assessments for their students (n=477) | 35% | 18% | 53% |
| Supporting K-2 teachers to administer assessments with their students (n=477) | 35% | 17% | 52% |
| Supporting students in the classroom while the classroom teacher instructs (n=478) | 31% | 17% | 48% |
| Advising teachers on classroom management strategies (n=477) | 30% | 17% | 47% |

Note: Results are sorted in descending order by the combined total of 'very strong' and 'strong focus'. This table excludes the bottom two scale points 'moderate focus' and 'little or no focus'. The 'n' refers to the total number of responses for each strategy, used as the denominator in percentage calculations.

### 3.1.5 Supporting teachers with assessment, data analysis, lesson planning, and modelled and guided practice received a strong focus from instructional leadership staff

This section sets out how various instructional leadership strategies corresponded to the cycle of (a) student assessment, (b) data analysis, (c) lesson planning, and (d) modelling, team teaching, lesson observation and feedback. Delivery of other classroom management support is addressed under heading (e).

#### a) Support with assessment

Over half of practising instructional leadership staff surveyed reported that they placed a 'strong' or 'very strong' focus on supporting K-2 teachers with assessment. This included helping teachers identify and select appropriate assessments for their students (65%), tailoring or designing assessments (53%) and supporting teachers to administer assessments (52%) (for further discussion of assessment, see Section 3.2).

### b) Support with data analysis

Almost three-quarters of instructional leadership staff surveyed reported that they placed a 'strong' or 'very strong' focus on supporting K-2 teachers with data analysis.

Almost two thirds (63%) of instructional leadership staff said that their role involved either a 'strong' (27%) or 'very strong' (36%) focus on inputting student assessment data into systems or databases. Based on school site visits it appeared that most instructional leadership staff considered that to be an additional layer of support given in times of need, rather than their main form of support. Opinions varied across the AP schools visited about how appropriate this was as a use of instructional leadership time and expertise, and some concerns were expressed about the risk of these assessment practices being unsustainable without clerical support to enter data (for further discussion of analysis and use of assessment data, see Section 3.2).

### c) Support with instructional design for literacy and numeracy

The broad category of 'instructional design' was reported to be the strongest area of focus for instructional leadership. A large majority (81%) of instructional leadership staff said they placed a 'strong' or 'very strong' focus on supporting K-2 teachers to reflect on their literacy and numeracy practices; differentiate their teaching for all students (Tier 1 – 89%); and either put in place targeted approaches for individual student needs (Tier 2 and 3) – either by selecting interventions (85%) or designing them (81%) (for further discussion of differentiation and tiered interventions, see Sections 3.3 and 3.4).

Instructional leadership staff reported using a range of techniques for classroom instruction, including instructional coaching (82% 'strong' or 'very strong' focus), class or stage meetings (75%) and collaborative lesson planning (67%). The school site visits revealed that a number of instructional leadership staff played a pivotal role in facilitating collaborative lesson planning sessions among K-2 teachers from the same year group, or stage.

### d) Modelling, team teaching, lesson observation and feedback

Most instructional leadership staff (81%) said they placed a 'strong' focus (37%) or 'very strong focus' (44%) on team teaching and classroom modelling to assist K-2 teachers with differentiated teaching techniques.

School site visits showed that both teachers and instructional leadership staff tended to describe team-teaching as a deliberate capacity building exercise, undertaken on an 'as-needs basis', as part of a gradual release of responsibility framework (I do while you observe → we do together → you do while I observe).[7]

According to staff interviewed at site visits, modelling and team teaching tended to be directed towards early career teachers then, as the confidence and skills of teachers grew, the extent of modelling and demonstrations reduced.

> 'So, we might decide together, all right well, for this lesson, I am going to model how all this works. And the next lesson they might do it and then we could give the feedback as to how that worked.' **School executive**

Lesson observations were also a common instructional leadership strategy (75% reporting a 'strong' or 'very strong' focus) for the purposes of giving feedback as part of the gradual release of responsibility noted above. Although common, this strategy was less of a focus than team teaching and modelling (81%) or instructional coaching (82%).

During the school site visits, it was noted that various types of observations occurred on a regular basis in most AP schools. K-2 teachers described it as one of the more common and effective methods of professional learning delivered by instructional leadership. Schools participated in 'walk throughs', investigative studies and instructional rounds; while a number of instructional leadership staff instigated peer observations for K-2 teachers to provide staff with opportunities to learn from their peers.

[7] Pearson, P. D., & Gallagher, M. C. (1983). The instruction of reading comprehension. *Contemporary Educational Psychology*, 8, 317-344.

Initially, for some K-2 teachers, being formally observed and receiving feedback was reported to be a confronting and intimidating process, especially when this type of professional learning had not previously been part of the school culture. However, despite the initial wariness to being observed by instructional leadership and other school staff, once observations became an embedded practice in school culture, teachers' receptiveness towards having an 'open-door' increased and was highly valued as a professional learning tool. Observations worked well when there was trust between the teachers and instructional leadership staff; when feedback was timely and constructive; and when teachers were given options about what type of observations/feedback were conducted. Many K-2 teachers also reported that observations and the associated feedback has added a greater level of accountability to their teaching practice.

> 'I feel like whenever [the Instructional Leader] comes in… I'm actually getting that real feedback and she's able to help me, whereas before I didn't have that. So I'm getting a lot more mentoring and getting lessons observed, and I'm observing her lessons as well. So, for me, it's so helpful.' K-2 teacher

#### g) Other forms of support

The stated role of instructional leadership did not include classroom management. However, a significant proportion of instructional leadership staff surveyed did spend time supporting students in the classroom while the classroom teacher instructs (48% 'very strong' or 'strong' focus) and advising teachers on classroom management strategies (47%).

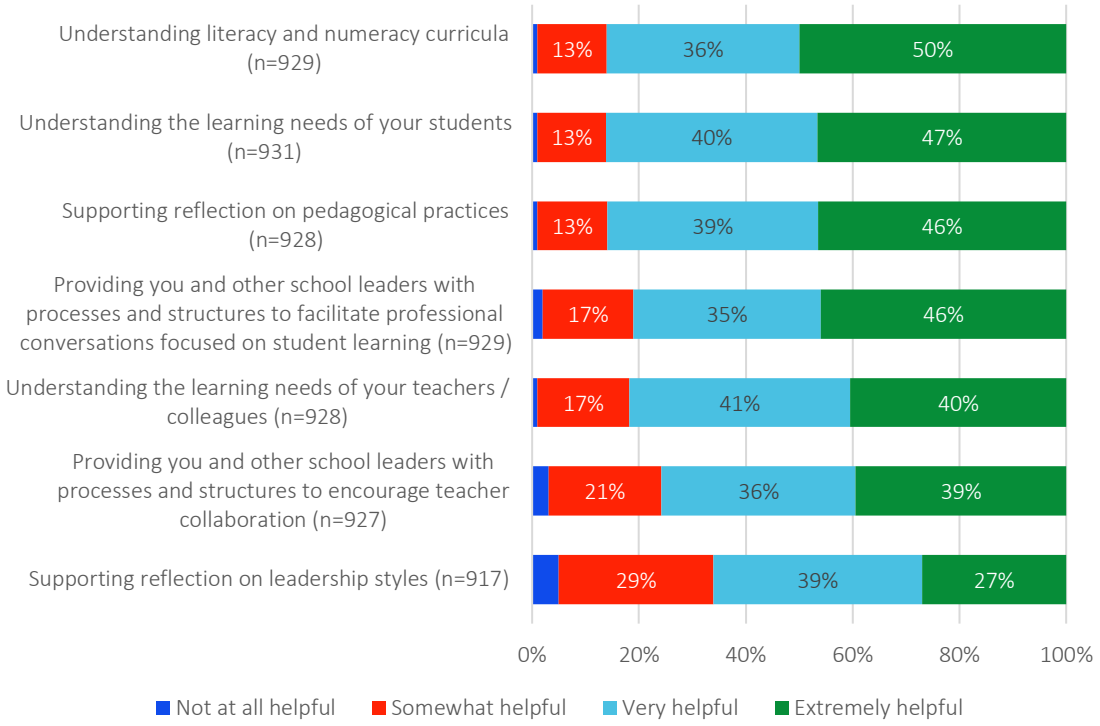
Around half of the instructional leadership staff surveyed said that these forms of support were usually something they provided. Opinions varied among instructional leadership staff about whether these were appropriate areas of focus for the role.

### 3.1.6 Professional learning support were seen as valuable instructional leadership activities

Professional learning for instructional leadership staff was generally well-regarded. Figure 2 shows the perceived helpfulness of other areas of professional learning, as rated by principals and instructional leadership staff in AP schools. These professional learning options were developed in consultation with members of the ERG.

The equivalent results for principals at non-AP schools can be found in the Technical report. They were consistently weaker than the results from principals in AP schools (by an average of 11 percentage points below the 'extremely helpful' response). This suggests that LNAP Phase 2 exposed those with instructional leadership responsibilities to professional learning opportunities that were more helpful than the options available to others, although not by a large margin.

**Figure 2: Helpfulness of professional learning opportunities (AP principals and instructional leadership staff combined)**

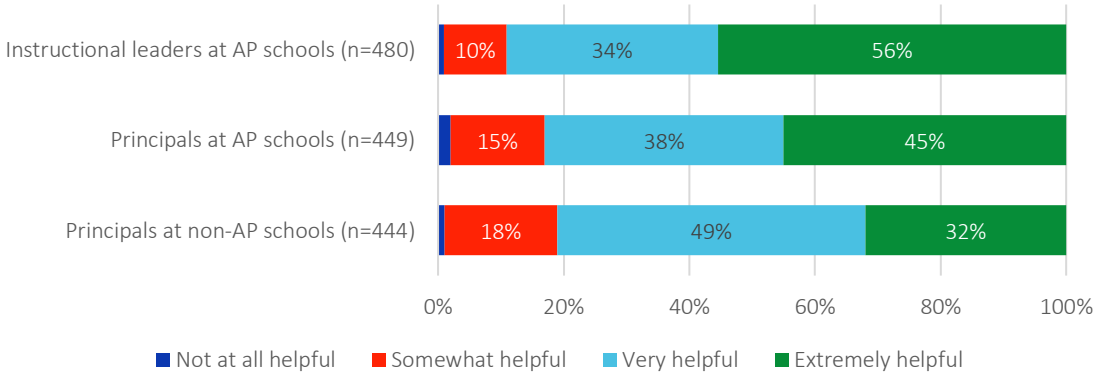



Note: Results are sorted in descending order by 'extremely helpful'. Percentages are combined between principals and instructional leadership staff from AP schools.

Figure 3 compares different sub-groups of respondents within the learning intention 'understanding literacy and numeracy curricula', which shows that:

- At AP schools, instructional leadership staff thought more highly of the professional learning available to them than did their principals. This was the only learning area where the gap between principals and instructional leadership staff was large. One implication is that, if modules were offered to instructional leadership staff but not principals, an expansion of these opportunities to principals may be worthwhile.
- Principals at non-AP schools were less likely to report that the professional learning they received was 'extremely helpful' compared to principals at AP schools.

**Figure 3: Helpfulness of professional learning for understanding literacy and numeracy curricula (principals and instructional leaders)**



Most principals of AP schools said that their school engaged in professional networking with AP (91%) and non-AP schools (88%) as a way of supporting their practice in K-2 literacy and numeracy (see Technical report). This was mostly seen as time well spent:

- Four out of five principals at AP schools said that networking with other AP schools was 'extremely valuable' (42%) or that they 'get some value out of this' (36%)
- The same proportion of AP principals (80%) also said that their school benefited from networking with non-AP schools. However, principals from non-AP schools were significantly less likely to say they obtained value from networking with AP schools (some value 13%, extremely valuable 9%).

The high proportion of principals reporting that networking was a benefit suggests that LNAP Phase 2 may have had a spillover effect, whereby its principles and practices were adopted indirectly by non-AP schools. However, the evaluation design could not investigate this possibility in more detail.

Overall, all professional learning activities were considered 'extremely helpful' or 'very helpful' by principals and instructional leadership staff. Most staff with instructional leadership responsibilities interviewed in 2021 reported that the instructional leadership function had improved their over-all leadership skills and their own teaching practices, which had been helpful when they transitioned back into non-leadership roles or moved into a different leadership role.

### 3.1.7 Finding time to get everything done is a key challenge for instructional leadership, while other challenges focus on the logistics of staffing recruitment and retention

In the relevant surveys, principals and instructional leadership staff were shown a list of ten risks that qualitative research from school site visits in 2018 had found to be potential challenges for instructional leadership. Based on the results in Figure 4:

- Only one challenge exceeded the midpoint of 'reasonably challenging' for AP schools. This was the challenge of finding the time each week to get everything done. Sector stakeholders noted that this was not unique to instructional leadership staff and was reported across many school-based positions. However, this challenge was less keenly felt in AP than in non-AP schools.
- Only one issue was reported to be more challenging in AP than non-AP schools. This was the addressing classroom management alongside a focus on literacy and numeracy teaching.
- Instructional leadership staff regarded two issues as more challenging than principals in AP schools. One was getting all staff 'on the same page' when it comes to evidence-based approaches to K-2 learning. The other was building a shared understanding across the school about the nature of instructional leadership and what the role entails. This was also raised as an issue in the survey open text. In site visits, part-time instructional leadership staff often spoke of the challenges of instructional leadership responsibilities being blurred with other roles. This was especially the case when one person had to manage instructional leadership alongside executive responsibilities (such as school administration, student discipline and wellbeing responsibilities).

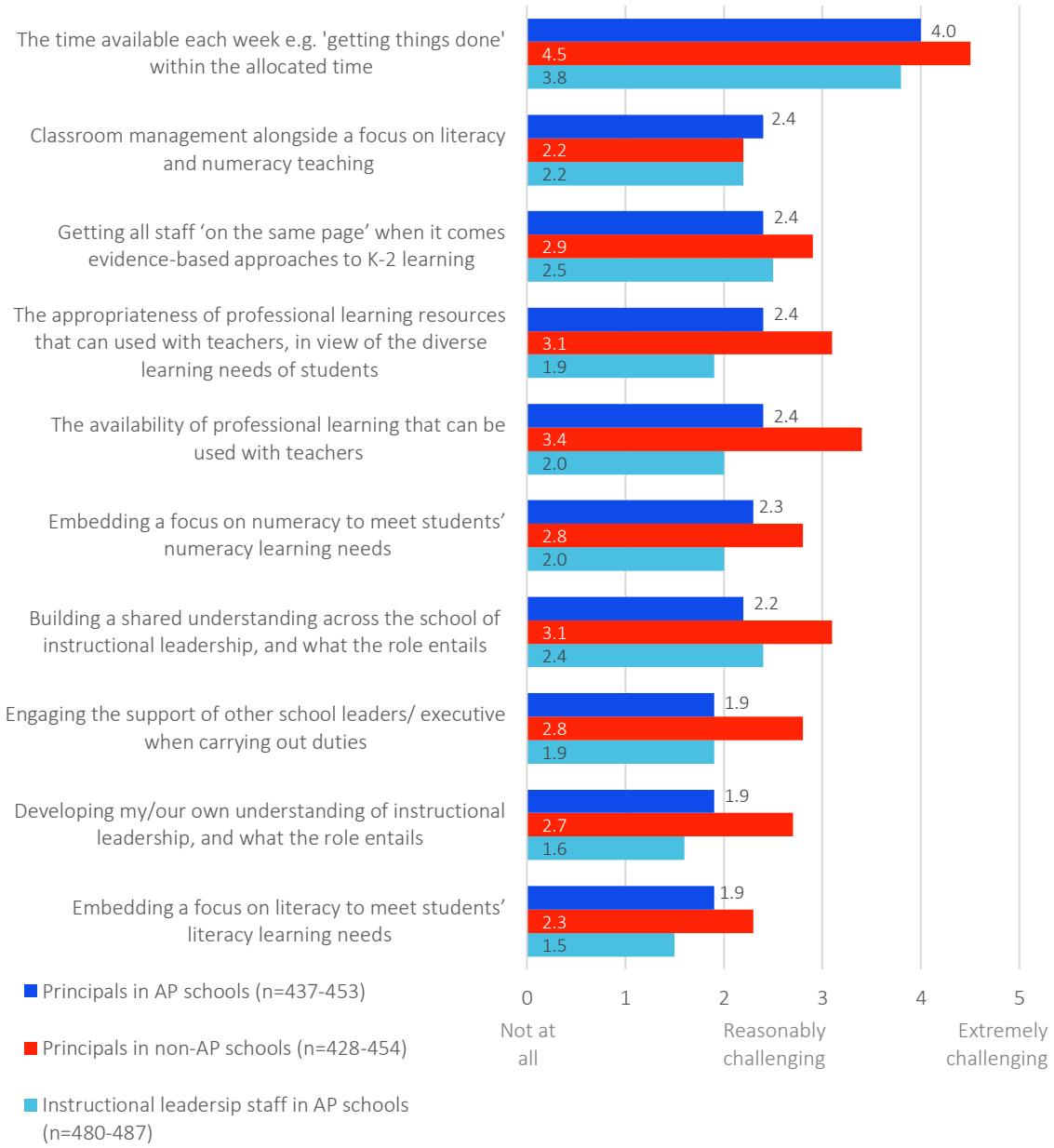
  'It's a big role, and sometimes it's difficult. I have to sacrifice those classroom visits and modelling because of things that happen during the day… I have to be flexible because it could be children's behaviour or the principal has to be out of the office and something's come up where I have to take over.' Instructional leadership staff/Assistant Principal

The surveys and site visits also identified a number of other significant challenges experienced by schools and staff with instructional leadership responsibilities. These included:

- High turnover among K-2 teachers in some AP schools had prevented people with instructional leadership responsibilities from building a sustained understanding of pedagogy and good practice within K-2 teachers.
- Teachers and school leaders not having an explicit understanding the function of instructional leadership and its responsibilities.

- Logistical and staffing challenges for regional and remote schools. Long distances made it difficult for instructional leadership staff and principals from non-metropolitan schools to be able to attend face-to-face professional learning, although this perception was not held as strongly once online professional learning began due to COVID-19.
- The logistical and relational challenges of backfilling teaching roles vacated by people who had secured temporary instructional leadership contracts, as well as finding and funding casuals to relieve teachers who needed time away from class to work with their instructional leadership staff, to undertake data analysis, or to attend professional learning.
- The need for careful negotiation of structural relationships and power dynamics between instructional leadership staff and other people who work alongside classroom teachers in K-2. This included learning support teachers as well as members of the school executive, particularly Early Stage 1 and Stage 1 coordinators/assistant principals.
- Issues of continuity in the instructional leadership role, particularly as these staff were often strong candidates for promotion or relieving in executive roles.
- Compared to previous years, more instructional leadership staff interviewed during the 2021 school site visits were concerned their role did not have the authority to ensure their recommendations were put into practice.
- All of the above issues were exacerbated by the problem of recruiting and retaining instructional leadership staff. Most instructional leadership staff interviewed in 2021 had been in the role for less than a year. The high turnover of staff in this position affected the continuity of instructional leadership in many schools. Regional and remote schools were particularly worried about this issue.

**Figure 4: Mean rating of challenges faced by those with instructional leadership responsibilities (principals and instructional leadership staff)**




AP school executive and teachers greatly appreciated instructional leadership staff who demonstrated specific knowledge and skills. A number of skills were considered to be important for instructional leadership staff:

- Being well respected by teaching staff and school leaders
- Having strong 'soft skills', particularly around collaboration as well as diplomacy when identifying and addressing problems of practice
- Having deep expertise in literacy and numeracy
- Knowing their limits and ability to source additional expertise as required
- Being clear about their role and vigilant about maintaining their focus on it
- Being part of the executive team, incorporated into the school planning process
- Being present on-site for 'just in time' learning and support
- Being sensitive to (and supportive of) teacher wellbeing issues
- Being able to explain and demonstrate the value of data collection and analysis.

Consultations also identified three benefits flowing from the work of the instructional leadership staff:

- Support for early career teachers in AP schools, who typically expressed gratitude for the mentoring and professional development that they received from their instructional leadership staff.[8]
- Career progression for mid-career teachers – a number of these teachers noted that they did not aspire to being a principal, but they did like the idea of working towards an instructional leadership role.
- Instructional leadership staff playing a role in sharing knowledge *across* schools and bringing the community together. This was particularly the case in outer regional and remote areas, where instructional leadership staff worked across a number of schools.

### 3.1.8 A focus on 'staying the course' and 'finishing the work' is the clear message given by school leaders with regard to the future direction of instructional leadership

The main message from school leaders about future directions for instructional leadership was one of staying the course and bringing what had been started to fruition. Most principals at AP schools (92%) said that their focus on instructional leadership was not yet fully implemented and mature. Thirty nine percent rated their school as being 'in the middle of it' and 44% considered that implementation was 'advanced, but there is more to do'.

At school site visits it was observed that instructional leadership staff across most schools appeared to have greater strength and focus in either literacy or numeracy rather than equal on both and that in fact literacy appeared more strongly embedded than numeracy. This may have been a result of school data indicating a greater need to focus on literacy, but it could also be due to the stronger confidence of K-2 teachers with literacy relative to numeracy (Section G in the Technical report).

## 3.2 Diagnostic assessment

Diagnostic assessment is the second of the four pillars of LNAP Phase 2.

Diagnostic assessment refers to the practice of gathering data about students' knowledge, skills and understanding, prior to instruction. It provides information necessary for differentiation and targeted teaching. It also enables the assessment of growth over time and allows teachers to assess the impact of teaching and learning strategies they have focused on during that period.

Teachers could use a range of different assessment approaches and tools, ranging from informal group-level observational rubrics through to formal individual assessment tasks. In some cases, tools were selected at the school level, in other cases it will be driven by sectoral policies.

Detailed feedback from schools is explored in this section according to the following assessment tools:

- the Best Start Kindergarten Assessment (BSKA), which is conducted by teachers in the early weeks of Kindergarten to assess student ability when starting school. BSKA has been used by government schools since 2016 and by non-government AP schools since 2018 (BSKA data are also used for evaluation purposes in Section 5 as part of the NAPLAN analysis)
- the National Literacy and Numeracy Progressions (Progressions), a tool to monitor student progress
- PLAN2, the online tool that allows teachers to record, analyse, and monitor student progress using the Progressions.

### 3.2.1 A mix of diagnostic assessment strategies was typically decided according to school or sector needs

A key part of instructional leadership is to provide significant support to K-2 teachers around the use of diagnostic assessments. School site visits indicated that this support was delivered using a mix of strategies, including delivery of professional learning and mentoring about how to use particular assessments, covering classes while teachers administered assessments, and collaborative analysis of assessment data.

[8] Note that this report uses the NESA definition of professional development which includes courses or programs designed to provide opportunities to teachers to extend their learning and improve their practice.

In NSW Catholic schools, some of the key decisions about the assessments should be undertaken (and when) are made at the Diocesan level rather than at the school level. For government and independent schools, these decisions are all made at the school level (with the exception of BSKA in government schools, which is mandated). As part of the LNAP Phase 2:

- Catholic and independent AP schools joined government schools in undertaking the BSKA; this was a requirement from the start of 2018
- All AP schools used the Progressions
- Independent AP schools have also made use of 'screener' assessments developed by AISNSW to measure student progress and to inform teaching practice.

Independent AP schools co-contribute their own resources on diagnostic assessment. In 2019, non-AP independent schools administered the Best Start Kindergarten Assessment, joining independent AP schools which had begun using BSKA from 2018. Year 1 and 2 teachers then used PLAN2 to record data using the Progressions. By the end of Term 4, all K-2 teachers entered 'end of year' Progressions data. K-2 teachers also used the AISNSW paper-based Numeracy Screening Tool and ESTA-L® app for screening literacy in Terms 1, 2 and 4. School executive led the data analysis, identifying areas of strength and areas for improvement, drawing on templates that were introduced at Masterclasses. K-2 teachers identified students who required either extension or support, through all of these tools.

In the government sector, the revised BSKA and the National Literacy and Numeracy Learning Progressions (the Progressions) were also being systematically rolled out to non-AP schools. Progressions were developed in 2017 by the Australian Curriculum, Assessment and Reporting Authority (ACARA) with contributions from the DoE. The Progressions map core literacy and numeracy skills from Kindergarten to Year 10. AP schools began using the Progressions in Term 1 2018, ahead of all other NSW primary schools.[9]

Principals at AP schools rated the helpfulness of the Progressions for their K-2 staff more highly than those at non-AP schools to understand student learning needs in literacy and numeracy. They also reported that the Progressions became easier to use and more meaningful over time. The Progressions were seen as equally helpful for literacy and numeracy.

Teachers reported that it took time to fully use the Progressions. School site visits undertaken in 2018 and 2019 were during the initial phases of implementing the Progressions. During the visits some teaching staff noted they had a limited understanding of the Progressions, while a small number of instructional leadership staff were struggling to apply the Progressions to their specific school context.

> 'It's something that we're just going to have to embed slowly into practice.'
> Instructional leadership staff

While there was wide-spread recognition that the Progressions were a conceptually strong tool many school staff found them time-consuming to implement, especially in relation to entering data using PLAN-2 or other systems. This, coupled with the ongoing need for professional learning to become familiar with the Progressions, meant that a large number of schools visited struggled to use and interpret the data effectively. Moreover, a number of classroom teachers viewed the Progressions solely as a requirement of LNAP Phase 2, and not as a new learning tool being progressively made available to all schools across the State. In these schools, the Progressions appeared to be 'administered', rather than being used in a meaningful way to track student learning needs and progress.

The implementation of the Progressions was supported by instructional leadership staff in only a small number of schools visited. In these locations, instructional leadership staff acted as champions, delivering professional learning to staff and, importantly, helping minimise teachers' anxiety associated with the collection and interpretation of student data. Teachers at these schools tended to be positive about the impact the Progressions were having on classroom teaching, report writing, and teacher understanding of the syllabus.

[9] Some non-AP government schools may still be using the NSW Literacy and Numeracy Continua, which predated the Progressions.

Staff also spoke of the Progressions as having given teachers a common meta-language to assess student progress.

> 'It's good that [the Progressions] are aligned to the syllabus so you can see where the [students] should be; that's helpful. And the teachers have found them very helpful in actually writing report comments.' Instructional leadership staff

Overall, during the period under evaluation, staff with instructional leadership responsibilities increasingly reported that their teachers had developed a better understanding of data analysis and were more likely to seek out meetings to discuss their data. Interviews with K-2 teachers in 2021 also demonstrated that while initially considered as 'too cumbersome' and sometimes even a 'waste of time' the sentiment on collecting data to guide teaching practice has changed over the course of LNAP Phase 2.

> 'The biggest challenge in learning to use the progressions was feeling comfortable with [them]. And then establishing a … data system that works for us. We have changed the way we collected, collated and analysed progression data several times, and we're still doing it. We've still got room for further improvement ... that's where the networks come in…you can go and ask other instructional leadership staff what they're doing and how they're using it.' Principal

There was also a similarly positive shift in perceptions of BSKA between 2018 and 2021, however, many schools still reported implementation challenges. BSKA has been undertaken in government schools since 2010 and was extended to Catholic and independent AP schools as part of their participation in LNAP Phase 2.

Several continuing implementation challenges were reported:

- BSKA having a disruptive impact during the first five weeks of school when Kindergarten teachers are primarily focused on developing routines and relationships with their students
- The duration of the assessment interview. Teachers reported that the assessment could take up to 40 minutes, with students struggling to maintain attention through to completion
- The administration of the assessment to students who speak English as an additional language or dialect (noting that the planned introduction of a Bilingual BSKA in 2021 may assist with this issue.)

Unsurprisingly, since BSKA had been expected in government schools since 2010, school site visits revealed that government schools were more familiar with the BSKA process than other LNAP Phase 2 schools, were tending to make greater use of the BSKA data, and saw it as 'business as usual' rather than something associated with LNAP Phase 2.

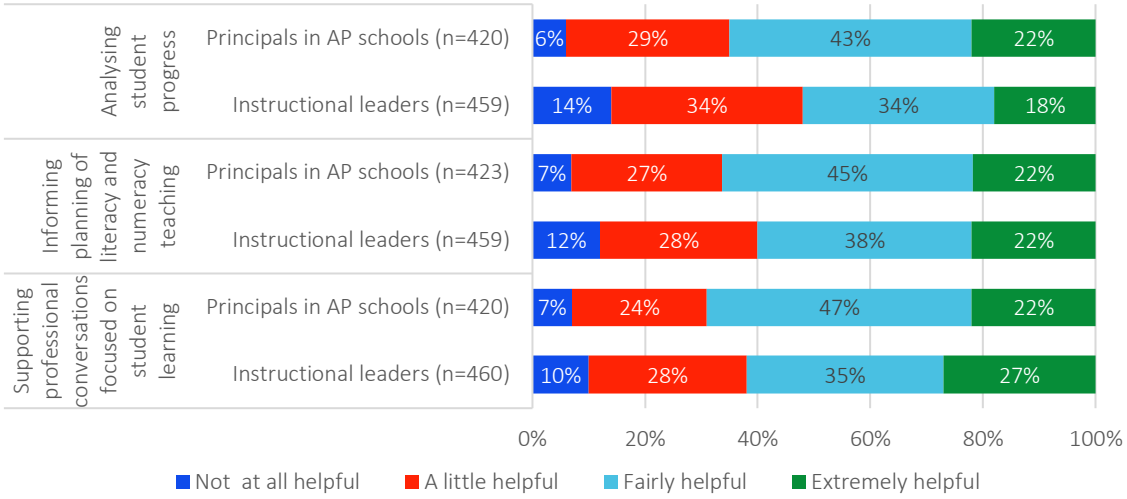
### 3.2.2 AP principals reported that PLAN2 was helpful in supporting professional conversations amongst staff

PLAN2 is a dynamic tool that has received a number of improvements since 2018. It was developed by DoE and released to AP schools in Term 1 2018 alongside the Progressions, and later released to all NSW government schools in Term 1 2019. The tool is called PLAN2 because it represents a major update of the PLAN software (Planning Literacy and Numeracy) that government schools have used to record and monitor information using the NSW Literacy and Numeracy Continua (which predated the Progressions). Non-government AP schools are not required to use PLAN2 beyond their required reporting in Term 1 and Term 4, but they can use the platform to a greater extent if they choose.

Around two-thirds of principals from AP schools reported that PLAN2 was a 'fairly helpful' or 'extremely helpful' tool for supporting professional conversations focused on student learning, informing planning of literacy and numeracy teaching and analysing student progress. Feedback was more positive from AP schools than non-AP schools.

Within AP schools, instructional leadership staff are less positive than principals about the helpfulness of PLAN2 (Figure 5). It is unclear why this is the case, but it could suggest that there is still room for improvement in PLAN2, particularly with regard to its analytical capability (65% of principals found PLAN2 fairly or very helpful for analysing student progress compared with 52% of instructional leadership staff).

Figure 5: Helpfulness of PLAN2 for K-2 teachers (principals and instructional leadership staff, AP schools)




### 3.2.3 Principals of AP schools reported that their teachers needed less support in diagnostic assessment practices than principals in non-AP schools

More principals from AP schools compared to principals in non-AP schools believed that their teachers required less support with regard to using diagnostic assessments in literacy or numeracy. AP principals were consistently less likely than their counterparts in non-AP schools to identify assessment-related support gaps, although these differences were relatively small and not statistically significant (Table 3). This result is mirrored in the reported improvements in teacher capability discussed later in Section 4.1.

Table 3: Gaps in support needed for teachers – diagnostic assessments being used in schools (all principals)

| Gaps in the support needed for… | Principals in AP schools (n=411-429) | | Principals in all non-AP schools (n=400-419) | |
|---|---|---|---|---|
| | Literacy | Numeracy | Literacy | Numeracy |
| Using assessment data to identify ways of supporting high achieving students | 63% | 66% | 68% | 68% |
| Deciding on suitable interventions that respond to student need | 56% | 59% | 62% | 66% |
| Selecting assessments best suited to student need | 54% | 60% | 57% | 62% |
| Interpreting assessment data to understand student skills and needs | 52% | 53% | 58% | 59% |
| Using assessment data to identify which students may benefit from different modes of instruction (e.g., small group and/or one-on-one) | 49% | 54% | 61% | 63% |
| Routinely administering assessments into daily teaching and learning | 48% | 53% | 54% | 56% |
| Using assessment data to inform programming for their class as a whole | 48% | 52% | 61% | 61% |
| Using assessment data to inform and monitor personal / individual learning plans | 45% | 50% | 53% | 56% |
| Interpreting assessment data to monitor student progress | 45% | 48% | 56% | 56% |
| Using assessments as intended | 34% | 45% | 45% | 48% |

Note: Results are sorted in descending order by AP schools for literacy assessments. This was a binary choice, with the alternative being 'No, current support levels are adequate'. A full breakdown of responses can be found in the Technical report

In terms of literacy in Table 3, the largest distinctions between AP and non-AP schools were seen in:

- Using assessment data to inform programming for their class (13 percent difference), to inform and monitor individual learning plans (8 percentage points difference) and to monitor student progress (11 percent difference)

- Using assessment data to identify students that may benefit from different modes of instruction (12 percent difference)
- Use of assessments as intended (9 percent difference).

This positive result for AP schools may indicate one of two things: that the level of support currently provided in AP schools is already greater than non-AP schools (a likely scenario, given the professional learning and instructional leadership role associated with LNAP Phase 2); or that teachers in AP schools have fewer needs in this regard (unlikely, in light of teachers' self-reported level of confidence with assessment and years of experience – see Section 4.1.1).

## 3.3 Differentiated teaching

LNAP defines tiered interventions as delivering tailored learning support for students in literacy and numeracy. It involves evidence-based learning, regular monitoring and assessment of learning, and using targeted interventions to positively influence learning outcomes.

There are 3 tiers of interventions in teaching instruction designed to provide teachers with the skills and tools to deliver targeted learning support for students that require it at each Tier (see Section 3.4 Tiered Interventions for more detail). These are:

- Tier 1 – the practice of tailoring whole-class instruction to accommodate the different learning needs of all students
- Tier 2 – differentiated and strategic small group instruction for students identified as being at risk of not achieving minimum literacy and/or numeracy standards
- Tier 3 – intensive, individualised interventions for students with complex needs in relation to their acquisition of literacy and numeracy skills. It is provided through specialist assessment and teaching for individual students after evidence shows that Tier 1 and Tier 2 interventions have not had a significant enough impact on student learning.

Independent AP schools, according to the AISNSW Fact Sheet on differentiation (see Box 1) co-contribute their own resources to tiered support. Principals and school leaders are expected to monitor the effectiveness of tiered interventions and ensure that clear criteria, guidelines and data collection procedures in place. AISNSW consultants support school leaders to work with teachers in:

a) conducting and analysing a range of comprehensive diagnostic assessments, which in turn

b) develops effective whole class instruction that meets the needs of the range of students.

Consultants also monitor student data to gauge the effectiveness of the teaching strategies received by students in all three tiers. Demonstrations of high quality, explicit instruction that address the breadth of learning needs in the classroom are undertaken by school leaders in partnership with AISNSW consultants.

**Box 1: Excerpt from the AISNSW fact sheet on differentiated teaching, prepared during LNAP Phase 2 for independent AP schools** (Source: www.aisnsw.edu.au)

> 'The most effective teachers determine how successfully students are learning whilst they are teaching by frequently checking their students' understanding and adjusting instruction based on student responses.
>
> Teachers provide multiple opportunities for students to respond through writing answers on white boards, pair-sharing, responding with gestures, providing verbal responses and orally answering targeted questions. Teachers take note of students who provide delayed, partially correct or incorrect responses and adjust their teaching in response. They may vary the pace of the lesson, reteach content in smaller steps, give specific feedback, provide extra guided practice and/or scaffold instruction to provide additional teaching.
>
> … Worked examples are effective for students when they are learning new content and teachers keep worked examples in place longer for students who require them.
>
> … Scaffolds such as models, prompts, 'think-aloud', checklists and cue cards enable teachers to tailor support to all students. Teachers initially provide high levels of guidance using scaffolds and they gradually withdraw scaffolds as students demonstrate understanding of the new material.
>
> Teachers provide these variations during whole class lessons while presenting material, during guided and independent practice and when students are working in small groups.

### 3.3.1 Most schools focus on differentiating teaching, with varying approaches across the schools

Effective differentiated teaching requires teachers to use a variety of assessment approaches, tools and feedback mechanisms to monitor and support learning progress. Teachers are able to adjust the pace and challenge of lessons to suit the needs of all students in the class across all Tiers.

Principals were surveyed about the level of attention their school places on 'providing different learning activities to different groups of students based on their learning needs' and 'developing personal/individual learning plans for all students' across all Tiers. Over 90% of principals from both AP and non-AP schools, said their school places a strong focus (36-39%) or very strong focus (55-57%) on differentiating learning activities. There were no substantial differences between principals at AP or non-AP schools in terms of their approach to differentiation.

The practice of developing personal/individual plans tends to be part of a targeted approach for certain students who required these plans in AP schools (57% very strong focus) rather than something done for all students (35% very strong focus).

During our school site visits, teachers and classroom support staff described a variety of models and strategies that they used to differentiate their teaching to meet the individual learning needs of students. The two most frequently mentioned approaches were:

- Adjusting or modifying the process and/or the learning product, for example, allowing students to work at their own pace, varying the activity and facilitating open-ended questioning
- Adjusting or modifying the content, for example, providing students with smaller or larger numbers for addition in mathematics or viewing syllabus content from other stages to adjust the learning.

When talking about this topic, school staff would often move fluidly from describing whole-class differentiation strategies (such as the above) through to tiered interventions that involve working intensively with small groups or withdrawing students from the classroom to work with a specialist teacher or student learning support officer.

### 3.3.2 Principal survey results suggest a marginally stronger focus on differentiation practices in AP schools to schools not in the program

Most principals at AP schools said their focus on differentiated teaching was still in development – that is, they were either 'in the middle of it' (41%-44%) or that implementation was 'advanced, but there is more to do' (31%-45%) (Table 4). AP schools tended to be slightly further ahead than non-AP schools. Out of the two aspects asked in the survey, greater progress in AP schools was reported with providing differentiated learning activities to different groups of students (45% 'advanced but more to do') than with the implementation of individual learning plans for all students (31%).

Table 4: Stages of differentiated teaching activities (all principals)

| Stage of progress | Developing personal / individual learning plans for all students | | Providing different learning activities to different groups of students, based on their learning needs | |
|---|---|---|---|---|
| | Principals in AP schools (n=426) | Principals in all non-AP schools (n=442) | Principals in AP schools (n=461) | Principals in all non-AP schools (n=492) |
| In the planning stages | 7% | 7% | 2% | 1% |
| Just started | 11% | 17% | 5% | 8% |
| In the middle of it | 44% | 41% | 41% | 43% |
| Advanced, but there is more to do | 31% | 29% | 45% | 40% |
| Fully implemented / mature | 7% | 6% | 8% | 8% |

During the school site visits, the evaluation team observed that while K-2 teachers and other school staff tended to use the relevant meta-language around differentiated teaching, many demonstrated a modest conceptual understanding of the subject. There may be an ongoing need for strengthening conceptual understanding of what differentiated teaching actually involves.

During school site visits of 2021, multiple teachers reported use of data had motivated them to consider which differentiation strategies were not working and that they would welcome more support in order to understand why.

AP principals were more inclined than non-AP principals to state that current support levels are adequate (see Table 5). However, the margin here was no greater than 10 percentage points for any particular topic, and the pattern of support needs is very similar.

**Table 5: Gaps in the support needed for teachers – catering for individual student learning needs (all principals)**

| Gaps in the support needed for… | Principals in all AP schools (n=382-416) | Principals in all non-AP schools (n=388-409) |
|---|---|---|
| Teaching to high-achieving students' learning needs | 72% | 75% |
| Determining what (if any) externally-developed or purchased programs would best address specific learning needs | 60% | 65% |
| Taking part in open-ended questioning with students | 59% | 67% |
| Teaching students with additional or specific learning needs | 59% | 58% |
| Providing students with problem-solving opportunities | 58% | 65% |
| Providing one-on-one feedback to students | 53% | 58% |
| Conducting student observations to further inform teaching strategies that cater to individual student needs | 49% | 58% |
| Teaching students according to their school readiness | 47% | 45% |
| Planning daily timetabling to incorporate one-on-one and small group instruction | 36% | 45% |

Note: Results are sorted in descending order by AP schools. Alternatives options were 'Yes, additional support needed' and 'No, current support levels are adequate'. A full breakdown of responses can be found in the Technical report.

In summary, these findings suggest more support is needed in this third pillar of LNAP Phase 2, to ensure that high quality differentiated teaching is being delivered across AP schools. This may include exploring the way in which the concepts that underpin differentiated teaching and tiered intervention have been articulated, and where needed, strengthen conceptual understandings and clarify terms.

## 3.4 Tiered interventions

Tiered interventions are a tailored approach, ranging across whole-of-class, group and individual teaching based on identifying and supporting students with additional learning needs. The interventions were broken into three specific levels: differentiated teaching within a whole class setting (Tier 1); differentiated teaching with a small group (Tier 2); and personalised strategies for individual students (Tier 3). There was also an overlap between Pillar 3 and Tier 1 of Pillar 4. The intent of differentiated teaching in Tiers 2 and 3 is to supplement differentiated teaching in Tier 1, whole class instruction, by taking a more focused approach to students requiring support.

In independent schools, Tier 2 interventions were generally led by the teacher, although they also drew on specialist teachers or learning support personnel from within the school. Tier 2 interventions in independent schools were described as 'a double dose of instruction' and Tier 3 interventions as 'a triple dose' as students were provided with individual instruction as opposed to small group instruction (Tier 2). Tier 3 interventions tended to be initiated only where Tier 2 interventions had proven unsuccessful, and may have include support by external professionals.

According to the Catholic Schools NSW *Progress Reports*, Catholic schools applied consistent practices to support differentiation and targeted Tier 2 interventions for groups of students to ensure learning operates in the zone of proximal development for literacy and numeracy. Tier 3 interventions approaches varied across dioceses, but across all diocese approaches were articulated in the student's Personalised Learning Plan and were closely monitored by classroom teachers and specialists. Instructional leadership staff worked closely with Learning Support Teachers (or equivalent) to enact personalised plans in partnership with parents and classroom teachers. All plans were systematically monitored and reviewed throughout the year.

School site visits and analysis of the implementation documents from DoE also demonstrated that Tier 1 and 2 interventions were mostly led by the teacher. For Tier 3 interventions, teachers worked closely with instructional leadership staff as well as any other specialist staff, particularly if a student had special needs, to ensure teaching practices were appropriate to their circumstances and capabilities. Schools provided annual progress reports to DoE which documented their overall progress in the four pillars including tired interventions conducted in detail.

### 3.4.1 AP principals worked with teachers to focus on Tier 2 and Tier 3 interventions

Under LNAP Phase 2, the intent of intensive interventions (Tier 2 and Tier 3) is to supplement whole-class learning opportunities and instruction (Tier 1).

Principals were surveyed about the amount of focus their school placed on 'developing personal or individual learning plans for certain students who require them' and 'implementing targeted literacy and/or numeracy approaches or interventions for certain students who require them'. Over 90% of AP principals said their school placed a strong or very strong focus on these practices.

Instructional leadership staff indicated in their survey that they have a strong or very strong focus on 'developing personal/individual learning plans for **particular** students who require them' (90%), yet 'developing personal/individual learning plans for **all** students' received less focus at 59% (a strong or very strong focus).

For some teachers the emphasis on individual (Tier 3) interventions was somewhat new:

> 'In my class, I've got a couple of kids who are on a Tier 3, at the moment. That's only, kind of, been brought in maybe last year that, this year, that tiered approach. We never really looked at it from that, kind of, perspective. And everyone just, kind of, got the same support before that.' K-2 teacher

One difference that did emerge between AP and non-AP schools was that principals from AP schools were more likely to report a 'very strong focus' on supporting K-2 teachers to tailor and design targeted intervention approaches for individual student needs (40% compared with 29%).

Results from school site visits showed that tiered interventions worked well in schools that had taken a team approach to K-2 literacy and numeracy. The model was found to be most successful when the instructional leadership staff member was also a school leader; was providing pedagogical leadership across K-2; and was co-ordinating programs and personnel to support evidence-based practice.

In most schools, specific personnel assist teachers in and out of the classroom with students in need of additional attention and support. The terms used to refer to these staff differ across systems but they are generally either:

1. support **staff** who are not trained teachers and would typically follow the directions of a teacher or a planned program when working with individual students and small groups
2. support **teachers** who may have responsibility for developing and implementing plans or programs for individual students and small groups.

In particular instances, instructional leadership staff have effectively partnered with support staff as a classroom resource and included them in their wider professional learning. Schools also reported the value of drawing on multiple perspectives to take an evidence-based approach to tiered interventions and co-ordinating their support staff to provide interventions based on data analysis.

> 'And then when our instructional leader had worked with those students, she then skilled up our support staff to continue those sorts [tiered intervention] of practices happening in the classroom.' Principal

> 'We've realised that we really need to meet regularly with the support teacher so that we together can focus on particular areas as a result of our data analysis in helping to implement new interventions.' Instructional leadership staff

Support staff routinely assist K-2 teachers in differentiating classroom lessons and strategies and also provide targeted additional assistance to small groups of students (Tier 2 interventions) either in or outside

of the classroom, depending on the preference of the school and the physical spaces available. At times, some support staff provide individualised Tier 3 interventions, although these are more commonly provided by support teachers.

Considerable variations were observed in the role of support teachers, particularly among AP schools visited. In some schools, support teachers worked with students quite separately from the Tier 1 classroom program activities, with the result that Tier 2 or 3 interventions were often not aligned with the classroom program.

> 'The ones that are external [Tier 3 interventions], we don't have much say at all about what goes on in those half-an-hour lessons – that's directed by the [support teacher]. Whereas [what the support staff does], we drive that – we write the program.' K-2 teacher

> 'The support teachers are not being used as teachers. They're being used as support staff, just to support – to work with kids and give the teacher some time. So, that's something that I've identified coming in straight away. I'm like, we're not using these teachers and they're experts in what they do, so let's use them. So, I've been actually gathering a lot of data and working with the teachers to target particular children, so that we can best use our learning support teachers.' Instructional leadership staff

Many schools advised they were taking steps to incorporate the role of the support teachers more efficiently into LNAP Phase 2 strategies. However, the intersection between the instructional leader role and support staff roles appeared to be inconsistent in some schools. Many instructional leadership staff were providing Tier 1, Tier 2 and, to a lesser extent, Tier 3 interventions as part of their role. There are questions about whether the delivery of interventions ought to be within the remit of instructional leadership, particularly if their role is temporary.

Schools also provided examples of tension between instructional leadership and support staff. It was observed that a contributing factor was likely due to the support staff role has existing for a considerable period in the school structure, with many staff having a strong sense of ownership of the interventions, whereas the instructional leadership role was relatively new. In some school settings, there was still a lack of clarity about whether the role of support teachers and other support staff should have changed following the creation of the instructional leadership position.

> 'I work closely with the support teacher. And she looks after the Tier 3 students and we've identified probably one to two in each grade and she has a separate timetable for those students who are actually removed from the classroom. My role is more in-classroom intervention. So I look after the Tier 2 students and then obviously the classroom teachers are looking after the Tier 1 students.' Instructional leadership staff

Overall qualitative and quantitative findings show that growth in confidence here was at the lower end of the spectrum, both for literacy and numeracy, and has come from a low base (this aspect of literacy and numeracy instruction attracted lower self-reported confidence levels than all other aspects – see Section 4.1.1). This could indicate that teachers are yet to receive professional support that addresses this aspect of their practice, or that they remain distant from the implementation of tiered interventions – particularly for students with greater learning needs (Tier 3). Overall, most principals at AP schools said their focus on implementing targeted literacy and/or numeracy approaches or interventions for certain students was still in development i.e. they were either 'in the middle of it' (41%-44%) or that implementation was 'advanced, but there is more to do' (31%-45%). This suggests that there is further scope to continue building and developing the use of these tiered interventions.

## 3.5 Benefits for NSW education

### 3.5.1 The education sectors, through the administration and tangible support of the sectors, has experienced positive outcomes in LNAP Phase 2

Throughout school site visits and during interviews with AP teachers, instructional leadership, and principals, the support of sectors in LNAP Phase 2 implementation of has been viewed positively. Sectoral progress reports demonstrate that the provision of support through the recruitment of instructional

leadership staff, in the delivery of professional learning, assistance in implementing PLAN2 as a data collection tool, the recognition of schools' efforts, and especially the support given during COVID lockdown are just a few of the ways in which schools had felt supported by the sectors and the education system.

Further to this, instructional leadership staff and school leaders commented on the way in which the professional learning and experience of LNAP Phase 2 had played a role in developing emerging school leaders:

> 'I have seen a lot of my colleagues go on to become principals and receive promotions out of the experiences that we've had in this particular initiative.' Instructional leadership staff

According to key stakeholders, LNAP Phase 2 has facilitated collaboration across the three sectors to a degree that had not existed before. While not a focus of the evaluation, the interviews with key stakeholders identified signs of collaboration and networking among schools and sectors as a result of the implementation of LNAP Phase 2. This was particularly related to DoE's support for the whole education system in relation to funding and the use of the Progressions.

> 'It's been great to work across the three sectors, and have an NSW position. Phase 2 has provided us with a unified approach to address literacy and numeracy outcomes for K-2 students and it's a great opportunity to strengthen relationship across the sectors.' Key stakeholder

> 'The increase in networking between schools across all three sectors has been much more intense as compared to Phase 1. While Phase 1 was quite flexible across the four pillars of LNAP, Phase 2 allowed the sectors to learn from each other's experience to ensure that we are all on the same page.' Key stakeholder

The evaluation process itself gave the sectors a chance to raise issues emerging during the implementation phase and share opportunities for improvement in student outcomes, professional capacity building of school-based staff, the development of syllabi, future cross sectoral initiatives, and for improving the use of the Progressions data. A number of executive staff from all sectors requested that they receive their respective interview recordings to allow internal reflection and improvement at their schools.

> 'The learning curve of learning the Progressions has taken years. I think the work that we've done in terms of building a lot of it into the backend is important, but focusing on the comms on Progressions is equally important. It doesn't have to be something that's considered to be this sort of monster that you can't get your head around. Really, I think, just some better comms, some better thinking beforehand about its practical applications and how best to utilise the data obtained from it.' Key stakeholder

## 3.6 The impact of COVID in 2020-21

### 3.6.1 The impact of COVID on teaching and learning activities was experienced similarly in both AP and non-AP schools

The impact of COVID, along with bushfires and floods in some areas of NSW, posed a great challenge for student learning activities during 2020 and 2021. According to the K-2 Teachers Survey 2020, approximately 90% teachers felt their school had been 'significantly' affected by COVID. The extent of this impact was similar in AP (88%) and non-AP school teachers (93%).

Both AP and non-AP schools voted the same five activities as being most challenged by the impacts of 2020:

- Keeping students on track to meet benchmarks
- Engaging online with parents and carers
- Opportunities for professional development in 2020
- Providing students with a range of opportunities to practice and apply literacy and numeracy skills and strategies
- Student engagement.

With regards to use of ICT resources, K-2 students found it 'extremely challenging' to access ICT resources. This sentiment was echoed across principals, instructional leadership staff and teachers in AP and non-AP schools during school site visits in 2020. Similarly, K-2 teachers also found providing support to students in accessing ICT resources 'extremely challenging'. However, when we followed up with the same question with K-2 teachers in virtual site visits in 2021, most teachers stated that they have become more confident in delivering online lessons and expressed a need to continue refining accessible online resources and teaching practices to improve resilience to future disasters. Further to this, it was noted by some that when children returned to school they were able to adopt the same routines prior to lockdown with little difficulty.

> 'Due to the consistency and structure of the LNAP program, even the kindergarteners were able to slide back in and we just picked up where we left off.' K-2 teacher

Despite the COVID based challenges, the adoption of hybrid teaching and learning activities through an increased use of ICTs was a key achievement of schools across all sectors. School executives also stated that an increase in parental involvement in student learning and the ability to provide increased feedback to schools were also positive impacts of the increased use of ICT to support learning from home.

### 3.6.2 Instructional leadership staff became increasingly valued as support during disrupted periods of learning, however, schools with more vulnerable students still need more support

Instructional leadership was increasingly valued by K-2 teachers during periods of learning disruption due to COVID-19 in 2020-21 in all AP schools and non-AP schools alike. The top 3 areas where the instructional leadership support was most valued included:

- Meeting with K-2 teachers to analyse and interpret student assessment data
- Running professional learning in literacy/numeracy
- Providing instructional coaching on teaching strategies.

There was also evidence that LNAP supported transitions in teaching caused by COVID-19 disruptions.

However, schools with more vulnerable student populations reported facing extra difficulty with maintaining LNAP activities during home learning. They found it particularly hard to connect with parents of Indigenous students or with an EALD background and have requested more support in this area.

> 'COVID-19 impacted our teaching to a great extent. Transferring the type of teaching we do onto a home learning platform is very difficult because you're relying on a certain level of knowledge of parents and many don't have any of that knowledge. It was really hard to get that across.' K-2 teacher

In 2021 teachers also identified challenges to time and additional processes required when students resumed on-site post COVID-19 lockdowns.

> 'When classes returned as normal, the time used up for extra hand washing had a large impact on class learning time. Not being able to do group work and having to sit spaced apart has been challenging for the young year 1 students. Children with hay fever have had to miss extra days of school due to symptoms being listed with COVID symptoms.' K-2 teacher

### 3.6.3 The impact of COVID on professional learning differed across schools with most able to find positive benefits and some feeling constrained

COVID-19 related school shut-downs constrained instructional leadership and professional learning opportunities for teachers in some, but not all, schools in 2020 and 2021. As illustrated in the quotation, a sample of principals actually observed an increase in collaboration and learning within their teaching teams as a result of COVID-19 conditions.

> 'Previously we would physically visit a few schools and share knowledge, however with meetings and instruction moved to Zoom or Teams, our teachers have far more insight into how other schools are practising instructional leadership.' Principal

Evaluation data from government, Catholic and independent Sectors' progress reports also highlighted how professional development activities continued despite school closures. For example, in 2020 Independent AP schools had designed Masterclasses to address schools' requests for support on building sustainable instructional leadership initiatives beyond the term of the Action Plan. These Masterclasses were successfully moved online. Similarly, in Catholic schools, class observation and professional learning conducted by designated officers from the Diocese continued to take place via Zoom throughout 2020.

School staff across all sectors praised how professional learning proceeded to be conducted online using a combination recorded presentations, podcasts, dedicated portals for some AP schools, and online resources for teachers to support remote learning across all sectors. These products encouraged teachers to upskill themselves in ICT and to continue benefitting from professional learning opportunities despite the physical closure of schools.

Further details of these issues are in the Technical report, which provides the full results for the K-2 Teachers survey 2020, and which summarises qualitative data obtained from school-based staff including the perceived positive and negative impacts of COVID-19 and other events of 2020-21.

## 3.7 Implementation of LNAP summary

The instructional leadership model was implemented in a variety of ways between and across sectors with most AP and non-AP schools choosing to give instructional leadership responsibilities to someone other than the principal. Consultations in AP schools have revealed that instructional leadership is being greatly appreciated by the school executive and teachers alike.

Overall, it was found that:

- Instructional leadership staff focused on supporting teachers in the identification and selection of differentiated approaches for their students
- Instructional leadership staff also supported teachers with assessment, data analysis, lesson planning, and modelled and guided practice
- Professional learning through networking was viewed as a valuable instructional leadership activity

AP school executive and teachers were positive about the role of instructional leadership staff who demonstrated specific knowledge and skills. In terms of challenges, instructional leadership staff have found it challenging to find time to complete all their responsibilities. School also found the logistics of instructional leadership staff recruitment and retention challenging. Schools have asked for system support around this issue.

According to individual schools or sector directions, a mix of diagnostic assessment strategies were typically adopted. Two thirds of AP principals reported that PLAN2 was helpful in supporting professional conversations amongst staff. Most principals also reported that Progressions were helpful for their K-2 staff in understanding student learning needs in literacy and numeracy. There was also evidence that Progressions became easier to use and more meaningful over time. Similarly, perceptions on the value of Revised Best Start Kindergarten Assessment (BSKA) increased between 2018 and 2021, however, many schools still reported implementing challenges. It was also found that principals of AP schools perceived that their teachers needed less support in diagnostic assessment practices than those in non-AP schools. There appears to be a need for ongoing investment in professional learning about the Progressions and PLAN2 and their relevance to practice – not just about what they are and how they work.

In terms of **differentiating learning,** it was found that while AP and non-AP schools had a focus on differentiating learning, the approaches varied considerably between the schools. There was evidence of a marginally stronger focus on differentiation practices in AP schools than in non-AP schools, however it is apparent that more principal support is needed in this area. To further strengthen implementation, principals at AP schools should be encouraged to continue with work in this space and see it through to its natural conclusion.

In AP schools, teachers and principals worked closely on **Tier 2 and Tier 3 interventions**. There were some tensions in the introduction of the instructional leadership role within schools which required careful management to develop a cooperative relationship with other long-term school roles, particularly teaching support staff.

The provision and/or organising of additional support through targeted intervention approaches warrants extension within the LNAP. The evaluation found that growth in teacher confidence had increased from a low base for both literacy and numeracy but was still not rated highly. This could indicate that teachers are yet to receive professional support that addresses this aspect of their practice, or that they remain distant from the implementation of tiered interventions – particularly for students with greater learning needs (Tier 3).

The **impact of COVID-19** on teaching and learning activities was experienced similarly in both AP and non-AP schools. The evaluation found that instructional leadership staff became increasingly valued as support during disrupted periods of learning, however, schools with more vulnerable students still needed more support. The impact of COVID-19 on professional learning differed across schools with most able to find positive benefits. LNAP Phase 2 allowed schools to promptly transition between the disruptions caused by COVID-19 and to use ICT to support student learning during the pandemic.

Finally, NSW education through the administration and tangible support of the sectors, has also experienced positive outcomes in LNAP Phase 2. Throughout school site visits and during interviews with AP teachers, instructional leadership staff, and principals, the support of sectors in the implementation of LNAP Phase 2 has been commended.

# 4 Outcomes for teachers and schools

This section addresses the following Key Evaluation Question:

- To what extent has LNAP Phase 2 increased the skills, confidence and understanding of K-2 teachers to respond to students' learning needs?

Qualitative evidence and sectoral progress reports (2017, 2018, 2019, 2020) revealed that the strongest impacts of LNAP Phase 2 were experienced in the professional development of teachers and in bringing about a change in overall school culture. Both were identified as key 'enablers' of improved student learning outcomes in the LNAP program logic.

This section draws on survey data, online forums and school visits to identify the emerging impact of LNAP Phase 2 on teacher skills, confidence and understanding in K-2 literacy and numeracy (Section 4.1) and on school culture more broadly (Section 4.2). Wherever possible comparisons are made between supplementary and AP school only. Where sufficient supplementary school data are not available, and to provide a comparison group, non-AP school response are also included. As previously noted, comparisons between AP, supplementary schools, and non-AP schools should be treated with caution as they had different school profiles in terms of demographic and socio-economic characteristics, and also the extent to which they implemented aspects of LNAP.

## 4.1 Self-reported teacher confidence

The ability of LNAP Phase 2 to change teacher confidence is a crucial underpinning of its potential success.

To explore the impact of LNAP on K-2 teacher confidence, the 2019 teacher survey asked respondents to report their current level of confidence and if they had noticed any changes in their level of confidence in various aspects of teaching K-2 literacy and numeracy in the previous three to four school terms. An overview of the results for changes in confidence is found in Table 6 and a complete breakdown of responses by AP, supplementary and non-AP status is provided in the Technical report.

Overall, teachers in non-AP schools had higher levels of confidence in literacy than both supplementary and AP school teachers in all aspects of teaching. In terms of being 'confident and able to help other', teachers in supplementary schools and AP schools had very similar levels of confidence in all tasks (between 45-55% of teachers).

Teacher confidence in numeracy was similar to literacy, however supplementary school teacher confidence was more often one or two percentage points higher than AP school teachers. In terms of challenges, similar proportions of teachers in AP and supplementary schools found the following two teaching tasks to be challenging:

- Differentiating your teaching of numeracy to accommodate the range of student needs your class (approximately 9%)
- Providing and/or organising additional literacy support for certain students to meet their individual needs (approximately 12%).

Table 6 shows that teachers in AP schools reported slightly higher growth in confidence across the range of teaching tasks across both numeracy and literacy. The growth in confidence was slightly larger in AP schools than supplementary, with differences ranging from 4-10% when compared with supplementary schools.

Table 6: Change in teacher confidence by teaching task

| Teaching tasks | Literacy | | | Numeracy | | |
|---|---|---|---|---|---|---|
| | AP schools | Supplementary schools | non-AP schools | AP schools | Supplementary schools | non-AP schools |
| Tailoring or designing assessments | | | | | | |
| I have lost confidence | 5% | 5% | 5% | 5% | 3% | 4% |
| No real change | 28% | 34% | 41% | 36% | 46% | 49% |
| My confidence has lifted | 67% | 61% | 54% | 59% | 51% | 47% |
| Administering assessments | | | | | | |
| I have lost confidence | 2% | 1% | 3% | 4% | 1% | 3% |
| No real change | 31% | 40% | 44% | 36% | 48% | 51% |
| My confidence has lifted | 67% | 59% | 53% | 60% | 52% | 46% |
| Understanding and interpreting assessment data | | | | | | |
| I have lost confidence | 4% | 3% | 5% | 4% | 3% | 4% |
| No real change | 24% | 32% | 38% | 31% | 41% | 47% |
| My confidence has lifted | 72% | 65% | 57% | 65% | 56% | 49% |
| Planning lessons using literacy assessment data | | | | | | |
| I have lost confidence | 4% | 2% | 6% | 4% | 2% | 5% |
| No real change | 24% | 36% | 39% | 31% | 45% | 47% |
| My confidence has lifted | 71% | 62% | 55% | 65% | 53% | 48% |
| Understanding key concepts and skills as outlined in the syllabus | | | | | | |
| I have lost confidence | 3% | 4% | 5% | 4% | 2% | 3% |
| No real change | 25% | 33% | 40% | 32% | 43% | 48% |
| My confidence has lifted | 72% | 63% | 55% | 65% | 55% | 49% |
| Providing classroom instruction focused on early skills | | | | | | |
| I have lost confidence | 3% | 3% | 3% | 4% | 1% | 3% |
| No real change | 22% | 28% | 34% | 28% | 41% | 44% |
| My confidence has lifted | 75% | 69% | 63% | 68% | 58% | 53% |
| Providing students with a range of opportunities to practice and apply skills and strategies | | | | | | |
| I have lost confidence | 3% | 3% | 3% | 4% | 1% | 4% |
| No real change | 23% | 27% | 34% | 30% | 38% | 44% |
| My confidence has lifted | 74% | 70% | 63% | 66% | 60% | 52% |
| Providing students with feedback on their progress | | | | | | |
| I have lost confidence | 2% | 2% | 3% | 4% | 1% | 4% |
| No real change | 26% | 31% | 36% | 35% | 44% | 49% |
| My confidence has lifted | 71% | 67% | 61% | 62% | 55% | 48% |
| Differentiating your teaching to accommodate the range of student needs in your class | | | | | | |
| I have lost confidence | 5% | 4% | 6% | 5% | 1% | 6% |
| No real change | 24% | 26% | 34% | 30% | 42% | 43% |
| My confidence has lifted | 71% | 70% | 60% | 65% | 57% | 50% |
| Providing and/or organising additional support for certain students to meet their individual needs (e.g. through targeted intervention approaches) | | | | | | |
| I have lost confidence | 5% | 1% | 6% | 6% | 2% | 6% |
| No real change | 26% | 38% | 37% | 34% | 44% | 49% |
| My confidence has lifted | 68% | 61% | 57% | 60% | 54% | 45% |

Differences of over 8% between school groups for 'My confidence has lifted' are statistically significant at the 0.05 level, using a two-sample *z*-test of proportions.

However, the slightly higher reported growth in confidence on some items for AP school teachers was largely explained by the higher proportion of early career teachers at those schools (24% of AP schools teachers had less than 2 years of teaching experience compared with 21% for supplementary schools and 18% for non-AP schools). When controlling for teacher experience, there was no substantial difference in confidence change between teachers at AP and supplementary schools (details are in the Technical report).

## 4.2 Receiving professional learning, observing model lessons and team teaching were considered very valuable

K-2 teachers in the 2019 survey were asked to rate the helpfulness of a range of teaching practices (a full breakdown of these results is presented in Section C of the Technical report). Table 7 summarises these results by showing for each activity the percentage of respondents from each school group that reported 'Has been very valuable for my teaching'.

K-2 teachers reported that the support and professional development they had accessed over the previous three to four school terms had been valuable for their teaching of literacy or numeracy. Responses were consistently more positive here from teachers at AP and supplementary schools than non-AP schools. Specifically, AP schools had a higher proportion of respondents who reported that professional learning activities were 'very valuable' to their teaching practice, while supplementary schools had a higher proportion of teachers who reported that professional learning activities had contributed towards adding 'some value' to their teaching practice.

**Table 7: Teacher survey, helpfulness of professional learning and support in 2019: 'Has been very valuable for my teaching responses'**

| Activities | AP schools (n=968) | Supplementary schools (n=147) | non-AP schools (n=1159) |
|---|---|---|---|
| Reflecting on your own teaching practices | 67% | 60% | 55% |
| Participating in professional learning in literacy and/or numeracy | 65% | 60% | 52% |
| Taking release time from face-to-face teaching for analysis or planning* | 63% | 51% | 62% |
| Observing model lessons that demonstrate differentiated teaching strategies | 61% | 56% | 55% |
| Team teaching* | 61% | 51% | 54% |
| Receiving support from people with instructional leadership responsibilities in your school | 58% | 50% | 44% |
| Meeting with teaching colleagues to plan lessons based on student assessment data | 57% | 52% | 50% |
| Receiving instructional coaching on teaching strategies* | 57% | 48% | 51% |
| Receiving support from other teachers in your school | 56% | 62% | 50% |
| Meeting with teaching colleagues to analyse and interpret student assessment data | 55% | 47% | 45% |
| Receiving feedback on your teaching based on observation of your lessons | 52% | 53% | 42% |
| Providing feedback to other teachers based on observation of their lessons | 45% | 40% | 38% |
| Professional networking with teachers from other schools | 41% | 40% | 36% |
| Receiving support to enter student assessment into suitable systems/databases | 41% | 34% | 32% |
| Having literacy and/or numeracy goals set for the school, based on student assessment data | 40% | 35% | 29% |
| Interacting with parents and carers | 35% | 36% | 30% |

* Indicates a statistically significant difference between AP schools and supplementary schools, using a *z*-test of proportions at the 0.05 level.

In 2019, the most valuable forms of support and professional learning that teachers at AP schools identified were:

1. Reflecting on your own teaching practices
2. Participating in professional learning in literacy and/or numeracy
3. Taking release time from face-to-face teaching for analysis or planning
4. Observing model lessons that demonstrate differentiated teaching strategies
5. Team teaching

The least valuable forms of support and professional learning reported by K-2 teachers from AP schools were interactions with parents and carers, having literacy and/or numeracy goals set for the school based on student assessment data, and professional networking with teachers from other schools.

However, when these results were not substantially different from supplementary schools or non-AP schools. compared with supplementary schools. The only activities for which there was a statistically significant difference between AP schools and supplementary schools for example, were:

- Taking release time from face-to-face teaching for analysis or planning
- Team teaching
- Receiving instructional coaching on teaching strategies

The last of these is particularly relevant to LNAP, but even here the difference was only 9%.

The discussion that follows focuses on the AP school experience. The 2019 survey asked teachers how helpful they found the professional learning and support provided through the LNAP program. The results were:

a) **Data analysis and lesson planning**: Sixty-three per cent of K-2 teachers from AP schools reported that having release time from face-to-face teaching for analysis or lesson planning as 'very valuable' for their teaching. Similar levels of value were placed on meeting with colleagues to plan lessons based on student assessment data (57%) and meeting with teaching colleagues to interpret and analyse student assessment data (55%).

b) **Team teaching and modelling**: Approximately 60% of K-2 teachers reported that observing modelled lessons (61%) and team teaching (61%) had been 'very valuable' to their teaching practice over the past school year. This aligns with findings from the instructional leadership staff survey, where 81% stated that they placed a 'strong focus' (37%) or 'very strong focus' (44%) on team teaching and classroom modelling to assist K-2 teachers with differentiated teaching techniques.

c) **Peer-to-peer support from other teachers**: Just over half of the teachers from AP schools felt that the support provided to them by their peers had been 'very valuable' to their teaching of K-2 literacy and/or numeracy (56%). Open text responses confirmed this finding as teachers spoke of the invaluable support and mentorship they had received from colleagues.

d) **Instructional leadership and instructional coaching**: A number of items in the survey focused on specific instructional leadership strategies, such as, observing model lessons that demonstrate differentiated teaching strategies (61% 'very valuable'), 'team teaching (61% 'very valuable') and 'receiving support from people with instructional leadership responsibilities in your school' (57%, very valuable).

Some items though, elicited adverse responses. For example, approximately one in five K-2 teachers (11%) stated that the support they received from people with instructional leadership responsibilities had made no difference to their teaching, or in fact made things harder (7%). A smaller percentage of teachers reported 'receiving instructional coaching on teaching strategies' (9%) and 'having literacy and/or numeracy goals set for the school, based on student assessment data' (5%) 'made things harder'. This sentiment correlates with qualitative data gathered from the school site visits, where some teachers spoke of increased pressure associated with the expectations of those in instructional leadership roles. These findings also suggest that some teachers did not see the need for instructional leadership or possibly found coaching bothersome. Despite this, AP school leaders reported that changes in teacher capability, understanding and practices had markedly improved, suggesting that something else may have influenced these teacher perspectives.

These reported adverse effects are also consistent with the concept of 'implementation dips' in change management literature. Fullan defines an implementation dip as "a dip in performance and confidence as one encounters an innovation that requires new skills and new understandings."[10]

[10] Fullan, M. (2001). The New Meaning of Educational Change, 3rd Edition. New York: Teachers College Press; Fullan, M. (2001). Leading in a Culture of Change. San Francisco: Jossey Bass

In context of LNAP's implementation, the dip was particularly evident around the acceptance and adoption of the Progressions using PLAN2 suggested in interviews with key stakeholders and school executives in 2019 and 2020/21. By the end of the evaluation period, consultations with school and system-based stakeholders found that teachers across all schools were increasingly valuing the collection of data for Progressions using PLAN2, but may require ongoing communication and support some teachers to move past this implementation dip.

The majority of principals indicated that, over the last three years, the capability of their K-2 teachers had lifted in terms of catering for the learning needs of students in literacy and numeracy. The observed capability growth was markedly greater in AP schools than in non-AP schools by a margin of over 20 percentage points. For example, 75% of AP principals reported that in literacy teaching capability teachers 'increased greatly', compared with 52% of principals in non-AP schools.

School site visits found that teachers in AP schools demonstrated a deeper understanding of pedagogy and the relative merits of different resources available to them, and stronger data literacy (collection and analysis) compared to their peers from non-AP schools.

During school site visits, schools consistently reported significant changes in teacher practice and the classroom strategies adopted since their involvement in LNAP Phase 2. In particular, school staff referenced how the instructional leadership role, and LNAP Phase 2 as a whole, had normalised healthy rhythms of evidence-based practice, both in the use of student assessment data to target instructional priorities and the adoption of evidence-based practices in the instruction itself.

> 'Having that opportunity where you have some evidence-based practice, professionals coming, you know, regularly, frequently into your classroom, educating your staff, which then trickles down.' Principal

A number of schools in school site visits stated that K-2 teachers were now more frequently using explicit instruction as a teaching strategy, with particular emphasis on warm-ups, success criteria and learning intentions for each lesson.

> 'It's changed their whole teaching philosophy and practice, because of how they're seeing this evidence-based stuff working in their classrooms, because they've been able to adapt it correctly.' Principal

> 'I found that my children – since last year, like comparing last year and this year, they're way more ahead of where they were last year. And I think that's been because of the explicit teaching in their review every morning. I think that's been very helpful – the best part of LNAP, in my opinion.' K-2 teacher

With funding reduced in some schools, teachers who had been trained by instructional leadership staff in the past have taken up the role themselves in addition to their teaching responsibilities already. LNAP Phase 2 was consistently praised for generating a team approach to improve K-2 student level outcomes as compared to leaving it only to the classroom teacher.

When presented with these findings, stakeholders reflected in the Results and Framing Workshop suggested that given the variation in professional learning opportunities, and their impact across geographic contexts, consideration could be given to segmented or tailored support for different roles involved in LNAP. They also suggested that these be more accessible for those in regional or remote areas or for when schools need remote professional learning.

## 4.3 LNAP Phase 2 and school culture

### 4.3.1 Collective responsibility for student growth was reported as a positive shift in AP school culture

School leadership staff were asked about aspects of their school culture and the extent to which they 'ring true' when it comes to teaching K-2 literacy and numeracy. While results were similar between AP and non-AP schools, principals from AP schools were slightly more positive on average than those from non-AP schools. Within AP schools, instructional leadership staff tended to be slightly less positive in their assessment of school culture than principals.

One important shift in school culture related to collective responsibility for student growth. This emerged as a strong theme in school visits, with teaching and non-teaching staff both identifying a tangible uplift in:

- the ambition of the school to see each student grow and develop
- the extent to which individual student growth across K-2 is a shared responsibility of all Early Stage 1, Stage 1 teachers and school leaders.

### 4.3.2 The opening of classrooms to other teachers through the use of lesson observations, collaborative analysis and data walls

A number of the AP schools visited also suggested that 'opening up of the classroom' to other teachers and school staff had been a cultural impact in the school. This was seen to stem from the introduction and/or normalisation of lesson observation, but was also associated with both practices of collaborative analysis of student assessment data and of visualisation of this in staff environments (for example, data walls). AP schools described the impact of LNAP Phase 2 in this regard as being consistent with a broader shift towards more of an 'open-door' culture in their school, for example, with regular observation being incorporated into the PDP process in government schools.

> 'We observe each other a lot more, and we know that I'm not here to judge you, I'm just here to watch what you do because I need help with this' K-2 teacher

### 4.3.3 A consistency of meta-language and shared practices within AP schools was noted between 2019 and 2021, with some principals making changes to school routines and planning to extend AP practices to the higher grades

The evaluation team also observed:

- a fairly consistent use of meta-language among teaching and non-teaching staff at AP schools
- shared approaches to teaching across K-2, aligned with the way LNAP Phase 2 had been positioned and structured in their school.

However, the use of meta-language was not necessarily consistent across AP schools, even when they were in the same sector (although the evaluation could not assess whether this had any practical consequences). It was also sometimes difficult to determine whether some of the LNAP practices described were, in fact, actually established practices described in new terms.

The review examined what initiatives AP schools had undertaken to ensure the sustainability of LNAP Phase 2 practices. Schools provided examples such as:

- Structural changes to staff meetings, release time and staff development days
- Efforts to normalise and routinise practices
- Ongoing professional learning in evidence-based teaching strategies for early literacy and numeracy.

Discussion of sustainability often also extended to decisions a school had made, or was considering to extend the model to the upper years of primary school and even into secondary settings. Many principals and school staff interviewed had formed a view that the model had worked effectively in K-2 and that it was important to consolidate these learnings and practices in Stage 2 and beyond.

> 'I want to see whether we can make sure we facilitate this as an ongoing initiative and also we've felt the benefits in K-2 but we're also seeing that we want to make sure that it flows through to three to five and in fact even further.' Principal

School site visits also explored efforts that AP schools had made to ensure the sustainability of the practices they had adopted through LNAP Phase 2. School staff spoke of making small but important structural changes to activities such as staff meetings, release time and staff development days, in an effort to normalise and routinise the collection, analysis and use of student assessment data, as well as ongoing professional learning in evidence-based teaching strategies for early literacy and numeracy.

> 'The networks that have been developed will continue because we've been on this journey together for the last four and a half years, and I am looking forward to seeing where we go from here.' Principal

'I'm probably my 25th year in education, 8th year as a principal, and I strongly believe that this is the best program so far for staff and students. I hope its learnings can continue even without the funding. In fact, I don't want to call it a program, it's really a cultural shift.' **Principal**

## 4.4 Vignettes demonstrating varied implementation approaches across schools

During the course of the evaluation, it was observed that schools with similar enrolment sizes and geographical locations (i.e. metro, regional, rural or remote) had comparable LNAP experiences. This qualitative data allowed the evaluation team to draw from all three sectors to develop Vignettes that capture the contexts, range of implementation approaches and the shared positive experiences and challenges faced by different school types. These are set out below.

**Box 2: LNAP Phase 2 experience at a large Action Plan School**

### School A: LNAP Phase 2 at a large Action Plan School

School A, with over 500 enrolments, had at least 80% of its students from a language background other than English (LBOTE, and located in an area of low socio-economic status. School A initially had one instructional leadership staff role, however by using flexible funding, it was able to recruit two additional instructional leadership staff. The support team for the K-2 LNAP included the principal, deputy principal, three instructional leadership staff, and about nine K-2 teachers. From 2017, two of the instructional leadership staff were engaged with K-2 students and staff, while one worked with Years 3-6 students and staff. One instructional leader left the school after 2 years in 2019 but the school hoped that these current instructional leadership staff would continue.

### What worked?

School staff agreed that instructional leadership had a profound impact on the capacity building of staff and student learning. While the instructional leadership staff worked with different stages, they used similar goals and the same techniques to ensure consistency across the school.

Increased team teaching provided the classes with multiple opportunities for differentiated teaching while also allowing frequent triangulation of school-based needs and assessment data consistently captured in the previous three years. Other positives from School A's LNAP Phase 2 participation included:

- Early career teachers believe the mentoring process had been extremely valuable.
- Teachers increasingly understood the importance of regular data collection to inform teaching practices
- Teachers found that the focus on early intervention at K-2 was important for improvement in later years
- Teachers found it easier to target and challenge high achieving students using Progressions, which had been difficult to achieve in the past.
- Teachers increasingly valued teamwork and collaboration internally and across schools
- Despite its challenges, COVID created a 'positive pressure' for staff to upskill themselves and engage in teaching and learning via a hybrid model.

### Opportunities for improvement

Some key issues identified by staff included:

- Given the high proportion of students who come from disadvantaged backgrounds, they need more time to see their changed practices actually impact student outcomes
- Differentiation was more challenging with a linguistically diverse student population
- While experienced staff found using Progressions had become easier over time for, early career teachers required constant support to ensure it was consistently applied
- The approach of instructional leadership mattered. Some teachers stated that an instructional staff member was demanding and unapproachable and that this had negatively impacted the uptake of new practices

- High levels of staff turnover may have a negative impact on the sustainability of the lessons learnt from Phase 2
- Staff needed time to build relationships with parents and observe the results of COVID-19 imposed learning from home, especially for students for whom English was not the main language of and who came from very large families.

Box 3: LNAP Phase 2 experience at a medium sized Action Plan School

### School B: LNAP Phase 2 at medium sized Action Plan School

School B participated in both Action Plan phases. With just over 350 enrolments and located in a multicultural neighbourhood, at least 40% of the school's students have a language background other than English (LBOTE). School B has a large proportion of early career teachers and a high turn-over of teachers. The school used in-school and community resourcing to assist in implementing the Action Plan. They employed two extra staff to work in instructional leadership, one specifically for K-2. The school's staffing formula meant that, in addition to the principal and the K-2 teachers, they also had an assistant principal who focused on Numeracy K-6, teachers' aides, a learning support teacher, two specialist reading teachers, and a community volunteer who supported reading in the K-2 classes.

### What worked?

In 2020, the school embraced technology and new teaching techniques using its 'data room' fairly quickly. To support learning from home, instructional leadership staff promoted opportunities for parents to authentically support their child's learning, for example, by recording their child's reading and sharing this with the teacher. This had a positive impact on collaborative goal-setting between teachers, parents, and students.

Other positive outcomes include:

- Sectoral progress reporting helped keep LNAP Phase 2 on track
- Collaborative goal setting and reflective practices at schools became a norm
- The instructional leadership staff role was seen as invaluable in this school B given its large number of early career teachers
- Experienced teachers found that LNAP provided them with professional development not previously available
- Even the more experienced staff found being observed by an instructional leadership staff member to be helpful, as it validated their understanding of the LNAP practices
- Teachers valued data collection, as a way to guide their classroom teaching practices using differentiation.

### Opportunities for improvement

Concerns of school staff included:

- Challenges in securing and retaining good staff meant that some teachers required constant mentoring from instructional leadership staff, and making it more difficult to embed LNAP practices being in K-2
- Some instructional leadership staff appeared over-worked and teachers were not comfortable in reaching out to one person all the time. Some teachers expressed that perhaps an additional instructional leadership staff member (even if part-time) would have been beneficial
- Demonstrating results from LNAP, required constant data collection and reporting which executives considered 'exhausting' for staff and they were concerned about increasing workloads
- Prior to COVID-19 disruptions, School B regularly received professional learning (PL) opportunities provided by their sector involving classroom observation as evidence of best teaching practice. Staff considered the shift to online PL via Zoom was not an adequate substitute.

Box 4: LNAP Phase 2 experience at a small Action Plan School

### School C: LNAP Phase 2 at a small Action Plan School

School C was a small AP school that participated in LNAP Phases 1 and 2. It was located in regional NSW, had under 200 enrolments and a high proportion of Indigenous students. The AP was supported by the principal, an Instructional Leader, a learning support and curriculum coordinator and the K-2 teachers. Each year most school staff were able to attend PL opportunities. Learning from home became a catalyst for School C to expand its use of ICT in classroom. It had struggled with this aspect previously.

#### What worked?

Personnel with responsibilities for instructional leadership continued to provide direct assistance to classroom teachers in planning, designing and presenting remote literacy and numeracy lessons. Other benefits included:

- In 2020 and 2021, school staff received PL specifically on developing the sustainability of the instructional leadership initiatives
- Given the small size of School C it was easier to heavily focus on the students requiring appropriate intervention
- With support from the instructional leadership staff and the system over the past few years, the teachers had increasingly used data to inform their assessments and interventions.
- LNAP provided School C with an opportunity to connect with regional and rural schools to collaborate and also build connections with metropolitan schools
- School C regularly revisited its engagement strategies to maintain current good practice.

#### Opportunities for improvement

While the overall sentiment was positive, School C was particularly concerned about the sustainability of LNAP Phase 2 after its funding ends. Other concerns included:

- It was difficult for a principal to juggle instructional leadership with executive responsibilities
- K-2 teachers were aware that despite the AP practices in place, some K-2 students still struggled with their learning outcomes
- School leaders and teachers in School C sought more certainty on the future of the program and available resources
- School leaders found that embedding the LNAP pillars would take time and staff had only recently begun to understand how their evidence-based contribute to improved student outcomes in later years
- School C requested ongoing training with PLAN2 to ensure that in the future it could appropriately capture data even when students are learning from home
- Teachers found connecting with the family of Indigenous students more challenging during remote learning. There is opportunity to provide School C more support on this.

The Vignettes highlight the flexibility of schools in using resources available to make the Action Plan work in their context. Schools utilised extra funding and community resources to ensure a range of support, in addition to instructional leadership, for their teachers. The rate of take up of Action Plan practices varied according to the size of the schools and the diversity of the contexts yet for all it seems that early career teachers were well supported by the instructional leadership and that professional learning was valued by most if not all teachers regardless of their teaching experience. Staff turnover, recruiting and retaining instructional leadership staff and time to truly embed practices and approaches are real concerns that appear to face many schools yet overall there is a sense that LNAP has given schools a solid foundation upon which they hope to build.

## 4.5 Summary and conclusions

This section explored the impact of LNAP Phase 2 on outcomes for teachers and schools. Key findings have been summarised below:

### Impact on teacher confidence and the value of professional learning

- Regardless of being an AP school or a non-AP school, teachers' self-reported confidence levels were similar with most differences only marginal
- More teachers in AP schools than those in non-AP schools reported growth in confidence with both literacy and numeracy teaching tasks
- Reflecting on practice, receiving professional learning, observing model lessons and team teaching were considered by approximately 60% of AP teachers as very valuable
- AP school leaders reported in surveys and field visits that changes in teacher capability, understanding and practices had markedly improved.

### Changes to school culture

- More AP than non-AP principals believed that positive aspects of their school culture completely or almost completely 'rang true' for their K-2 teaching staff
- One frequently observed shift in AP school culture was the opening up of classrooms to other teachers through the use of lesson observations, collaborative analysis and data walls
- A consistency of meta-language and shared practices within AP schools was noted between 2019 and 2021, with some principals making changes to school routines and planning to extend Action Plan practices to the higher grades.

The Vignettes identified common themes in terms of the impact of LNAP Phase 2. Schools flexibly implemented LNAP according to their own contextual needs and found that professional learning and instructional leadership were of most benefit to teachers, especially early career teachers. Many schools remain concerned about recruitment and retention of instructional leadership staff moving into the future and would appreciate ongoing support for it.

# 5 Learning outcomes for students: NAPLAN Year 3 and Year 5 results

This section addresses the Key Evaluation Question:

- To what extent has LNAP Phase 2 improved literacy and numeracy outcomes for K-2 students?[11]

Student outcomes were analysed using NAPLAN data from 2013-19. These years enabled a detailed analysis of LNAP Phase 2, which commenced in 2017, and allowed some observations about LNAP as a whole, particularly given some comparisons can be made with schools that were not part of either LNAP Phases. NAPLAN was not held in 2020 which means that any effects of Phase 2 that may have emerged in 2020 cannot be assessed.

The following analysis was not able to consider whether initiatives with the same objectives as LNAP were being implemented at schools over the same period. If such initiatives were implemented, it would be more difficult to detect the specific contribution of LNAP to student learning outcomes.

At the beginning of the evaluation process, DoE determined that NAPLAN Literacy and Numeracy scores should be used as the relevant measure of student outcomes because they are collected in a systematic and consistent way across all relevant years and across all sectors and student cohorts. As stated in the methodological limitations (see Section 2.4), NAPLAN as a measure of student learning may not have captured the full impact of LNAP on student progress. NAPLAN provides a common, universal and standardized measure of student learning outcomes across a long time-period and across the three sectors. However, NAPLAN cannot capture the full extent of learning outcomes that may have come about as a result of LNAP. The cancellation of NAPLAN in 2020 also reduced the intended data set by a year so that data trends could not 'play out' fully.

For government schools, the data included information from AP schools, supplementary schools, and other non-AP schools. A quasi-experimental design was used in the statistical modelling in this section, that controls for differences that existed between these school groups. These differences ideally could have been better controlled for had an experimental design been possible.

The Best Start Kindergarten Assessment (BSKA) was an integral part of LNAP to support diagnostic assessment (see Section 2.3 and 3.2). BSKA was also used in this evaluation to take account of differences among students in literacy and numeracy when they began school when assessing NAPLAN Year 3 and Year 5 scores.

Although NAPLAN scores were available for non-government schools, data on other key variables at the student and school level were not available from the Catholic and independent sectors. Most notably, the non-government schools had only begun using BSKA from 2018, and therefore would not have had an impact on any of the NAPLAN data from these sectors within the timeframe of the evaluation. As a result, the main analyses concentrate on only government schools. The limitations of using NAPLAN data to assess student learning outcomes, discussed in more detail in the following analysis, should also be noted.

A full breakdown of the data provided as input to the evaluation, and the variables used in the analyses, are in the Technical report.

[11] Two additional KEQs were originally set for the evaluation to investigate: 'To what extent are each of the four pillars of LNAP Phase 2 associated with improved literacy and numeracy outcomes for K-2 students?' and 'To what extent are specific combinations of the four components associated with improved literacy and numeracy outcomes for K-2 students?' However, this section does not directly address these questions for two reasons. The first is that the analysis in this Section finds no improvement in numeracy and literacy outcomes as measured by Year 3 and Year 5 NAPLAN scores in government schools. Therefore, there is no improvement to try and attribute to LNAP pillars of components. Moreover, even if a measurable improvement was observed, it would not be possible to attribute this to any specific components or pillars of LNAP. The great variation in the combination of LNAP components adopted across schools and across sectors would make it difficult to assign any causal connection between them and overall NAPLAN results.

## 5.1 NAPLAN mean scores from 2013 to 2019 in government schools

NAPLAN results reveal that, while there seems to have been a general performance improvement in the period 2013 to 2019, there has also been considerable variability from year-to-year in the average scores. This combination of both upward trend and year-to-year variation is an important consideration when interpreting the analyses below.

To assess the outcomes in government LNAP schools, students were grouped according to the base year in which their respective school joined the initiative. This produced five LNAP groups as set out in Table 8.

Table 8: LNAP school groups used in analysis (all government AP schools)

| School groups | Number schools | LNAP start year |
|---|---|---|
| Phase 1: Group 1 | 90 | 2012/13 |
| Phase 1: Group 2 | 74 | 2014 |
| Phase 1: Group 3 | 142 | 2015 |
| Phase 2: Group 4 | 247 | 2017 |
| Phase 2: Group 5 | 14 | 2018 |

Note: Five AP schools were excluded from the analyses, based on issues discussed in the Technical report.

### 5.1.1 For LNAP Phase 2 government schools we see that, in the years we would expect to see a program effect (2018-2019), there was no change in NAPLAN Reading and Numeracy scores

Table 9 breaks down the mean Year 3 NAPLAN Reading and Numeracy scores for each of the government LNAP school groups. Schools not involved in LNAP were also included for comparison purposes. Data reveal slight improvements in NAPLAN mean scores over 2013-19 occurred across all schools, regardless of whether or not they were involved in LNAP.

Table 9 confirms that, as intended, LNAP was implemented in schools where student performance was well below the rest of the state. Group 1 schools had lower mean NAPLAN scores than non-AP or supplementary schools. Phase 2 schools had mean scores much closer to non-AP and supplementary schools than those in Phase 1.

The shading in the table indicates the years in which LNAP **should** have been having an effect. The lighter shade indicates years in which the effect should only be expected to be partial, as students completing Year 3 NAPLAN in that year would not have been part of LNAP for the entire K-2 period. The darker shading indicates years in which students sitting for Year 3 NAPLAN would have been part of LNAP from the beginning of Kindergarten.

Table 9: Mean Year 3 NAPLAN scores by school group, 2013-2019 (government schools only)

| School groups | Year | | | | | | |
|---|---|---|---|---|---|---|---|
| | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
| Reading | | | | | | | |
| Other non-AP schools | 436 | 437 | 443 | 440 | 448 | 448 | 447 |
| Supplementary schools | 409 | 402 | 406 | 398 | 406 | 407 | 406 |
| Phase 1: Group 1 (started 2012/2013) | 366 | 355 | 365 | 364 | 372 | 374 | 373 |
| Phase 1: Group 2 (started 2014) | 381 | 380 | 386 | 386 | 393 | 388 | 389 |
| Phase 1: Group 3 (started 2015) | 374 | 367 | 378 | 376 | 383 | 388 | 379 |
| Phase 2: Group 4 & 5 (started 2017/18) | 401 | 396 | 399 | 400 | 407 | 407 | 405 |
| Numeracy | | | | | | | |
| Other non-AP schools | 415 | 420 | 414 | 418 | 427 | 422 | 425 |
| Supplementary schools | 389 | 388 | 381 | 377 | 390 | 384 | 389 |
| Phase 1: Group 1 (started 2012/2013) | 352 | 348 | 345 | 349 | 359 | 358 | 360 |
| Phase 1: Group 2 (started 2014) | 368 | 372 | 365 | 367 | 378 | 374 | 373 |
| Phase 1: Group 3 (started 2015) | 361 | 361 | 359 | 361 | 368 | 371 | 370 |
| Phase 2: Group 4 & 5 (started 2017/18) | 384 | 384 | 375 | 379 | 389 | 387 | 386 |

Table 9 demonstrates that LNAP Phase 2 schools exhibited there was no change in NAPLAN Reading and Numeracy scores in 2018 or 2019, despite the fact that at this time LNAP Phase 2 would be expected to start having an effect. This mirrors the pattern for the other LNAP school groups and for supplementary schools in this period.

The results for AP government schools improved by around 10 marks during the whole period of LNAP (2013-19) in both Reading and Numeracy when compared with the government supplementary schools. However, this improvement primarily occurred in 2016, **regardless of whether the AP schools had commenced in LNAP or not**.

It is also noticeable that the **difference** between each of the LNAP school groups and other non-AP schools remained relatively constant throughout the period, although there is some year-to-year variation. Numeracy scores of LNAP schools were slightly closer to non-AP schools throughout than Reading scores. For example, Group 1 schools in Reading were on average scoring 70 points lower than other non-AP schools in 2013, and 74 points lower in 2019, with a mean difference of 75.7 during this entire period. For all LNAP school groups, the 2019 difference between their respective mean grades and that for other non-AP schools was slightly larger than it was in 2013.

## 5.2 Effect sizes and mean NAPLAN scores

Before undertaking more detailed statistical analysis of the NAPLAN data, it is important establish an understanding of differences in NAPLAN scores required to demonstrate LNAP's success. This can be described as the 'desired effect'. It identifies whether any *statistically* significant difference is also a *meaningful* difference in terms of improving student learning outcomes. This is particularly important when working with very large samples, as is the case in this evaluation, as even very small or trivial differences can be *statistically* significant.

By way of example, a meaningful improvement in Year 3 NAPLAN scores would be the 'extra' marks a student in the middle of Band 2 would need to move up to Band 3. In 2019, this would have equated to 24 NAPLAN marks for Reading and a similar number for Numeracy. Therefore, a change in NAPLAN scores of less than 12 marks would not have a meaningful impact on student distribution across bands.

## 5.3 Other factors that could influence NAPLAN scores in government schools

The analysis in Table 9 did not account other factors that may have affected NAPLAN. In order to assess the potential impact of factors such as such as differing socioeconomic status or need for English language support a multi-level regression analysis was conducted to account for variables that may have impacted on Year 3 NAPLAN results between 2013 and 2019. A multi-level regression model achieves this by separating school and individual student characteristics when assessing differences in the mean NAPLAN scores.

The dependent variables for this analysis were student Year 3 NAPLAN Reading and Numeracy scores in all government schools. The independent variables in the analysis were:[12]

- AP status as per NAPLAN mean scores from 2013 to 2019 in government schools
- Each student's BSKA score for numeracy and for literacy. These variables allow us to control for variation in student ability when they entered Kindergarten
- Characteristics at the student level, such as socioeconomic status, gender, school commencement age, and Aboriginality
- Characteristics at the school level, such as school location (metropolitan or non-metropolitan)
- Socioeconomic status.

[12] See the Technical report for full details of these variables, the selection criteria and their impact of these criteria on the number of students included.

Table 10 presents the outcomes of the regression modelling. Results for variables other than the LNAP school groups and government supplementary schools, are not presented in order to focus on the effect of LNAP (the full results including all other independent variables is also in the Technical report.) Numbers in bold indicate values that are statistically significantly different from 0 at the 0.05 level.

To isolate differences in scores for each AP school group that can be explained by LNAP from the general upward trend and the year-to-year variations in NAPLAN scores, all variables were centred so that 2013 was a point of comparison for subsequent years (full details of the multilevel results, using various modelling approaches are presented in the Technical report). Values were also rescaled so that a 'reference student' in 2013 received an estimated score of zero in NAPLAN for Reading and for Numeracy. The 'reference student' had the following characteristics in all the models:

- Female
- Attending other non-AP school (i.e. non-supplementary)
- Had the mean age of all other students in 2013
- Was not of Indigenous background
- Attended a metropolitan school with 2013 average socio-economic status
- Achieved the 2013 mean BSKA literacy and numeracy scores in Kindergarten.

The scores for this 'reference student' appear as the intercept values in the following tables.

**Table 10: Differences in Year 3 NAPLAN scores, 2013-2019 (government schools only)**

| School groups | Year | | | | | | |
|---|---|---|---|---|---|---|---|
| | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
| Reading | | | | | | | |
| Intercept | 0 | -2.1 | **6.1** | **0.9** | **6.7** | **4.3** | 3.4 |
| Supplementary schools | 2 | **-2.2** | **0.1** | **-3.6** | **-2.8** | **-1.1** | **-0.4** |
| Phase 1: Group 1 (started 2012/2013) | -4.2 | **-13.2** | -2.7 | -3.9 | 2.5 | 1.6 | 1.7 |
| Phase 1: Group 2 (started 2014) | -5 | -3.4 | -0.3 | 3.3 | 4.5 | 0 | 2.0 |
| Phase 1: Group 3 (started 2015) | **-9.7** | **-15.4** | -3.6 | -4.3 | 2.6 | 4.0 | -5.1 |
| Phase 2: Group 4 & 5 (started 2017/2018) | 0 | -2.0 | 0.1 | -1.3 | 2.2 | 3.4 | 1.4 |
| Numeracy | | | | | | | |
| Intercept | 0 | **5.3** | **-3.9** | **-7.4** | **6.6** | **-0.4** | **2.7** |
| Supplementary schools | 0.3 | -2.8 | -1.2 | -2.7 | -1.9 | -5.1 | -1.6 |
| Phase 1: Group 1 (started 2012/2013) | -5.0 | **-13.0** | -5.1 | 1.2 | -1.5 | -2.3 | -2.3 |
| Phase 1: Group 2 (started 2014) | -2.1 | -1.6 | -1.8 | 2.4 | 2.6 | 1.3 | -0.6 |
| Phase 1: Group 3 (started 2015) | **-9.4** | **-13.7** | -2.6 | 1.7 | -2.1 | 1.0 | -3.5 |
| Phase 2: Group 4 & 5 (started 2017/2018) | -0.1 | -3.4 | -2.3 | -1.3 | -0.5 | 0.8 | -2.1 |

The values in Table 10 estimate the Year 3 NAPLAN marks for a student in each LNAP school group. These values allow us to make comparisons that control for other student and school characteristics.

We would expect, if LNAP was achieving its objectives, that the values for each of the LNAP school groups increase as we move across the table from left to right, and these increases correspond with the years in which each group joined LNAP.

If any differences observed over time for LNAP school groups were meaningful, as discussed in Section 5.3, we could then compare them to any differences in the values for the supplementary schools so that we can assess whether this was due to LNAP or some other system-wide factors that improved all schools.

The following observations can be made on the basis of these results in Table 10:

1. **There was no significant improvement in the NAPLAN results for AP government schools**. Comparing 2019 results for each LNAP school group with the year in which they first joined LNAP shows very small increases in Year 3 NAPLAN scores for both Reading and Numeracy.
2. **AP schools were already showing an improvement before they joined LNAP in either Phase 1 or 2**. For example, Group 3 Reading scores improved by 11.8 between 2014 and 2015, which were the years

before LNAP could have had any effect. This pre-LNAP increase is greater than improvements observed after they joined LNAP.

3. **All schools showed their biggest increase in 2015, particularly in reading, regardless of whether a school was in LNAP or not.** This suggests a need for caution in attributing changes in Year 3 NAPLAN marks to the operation of LNAP. It is possible that improvements in NAPLAN observed during the LNAP period for each school group came about, at least partially, from other factors affecting all schools, regardless of LNAP.
4. **In the most recent year for which Year 3 NAPLAN data (2019) are available, the effect of LNAP appears to weaken for all Government LNAP school groups, especially in Numeracy.** This may suggest that any initial 'burst' attributable to LNAP, over and above year-to-year variation, tapers off over time.
5. **When controlling for other factors, results were generally better for Reading than for Numeracy**. This is consistent with the survey results and school site visits data, which found that teachers and instructional leadership staff were more confident and capable working on literacy than numeracy.

## 5.4 NAPLAN band performance in government schools

### 5.4.1 A small decrease in the proportion of government school students in Bands 1-2 is observed in Reading, but not in Numeracy

The key goal of LNAP was to develop the literacy and numeracy skills of at-risk K-2 students, particularly in schools with a higher proportion of Year 3 students in the bottom two NAPLAN bands (that is, students achieving below the National Minimum Standard (NMS)). The previous section presented evidence that LNAP was not associated with relative improvement in mean NAPLAN scores in government schools. The practical (as opposed to statistical) significance of this can be assessed by looking at whether LNAP moved Year 3 students out of the bottom two NAPLAN bands.

To test this, a linear probability model was used to estimate the change in the proportion of Year 3 students in government schools above Band 2 NAPLAN between 2013 and 2019.

Table 11 presents the results of this modelling. The dependent variable indicates whether a student is above NAPLAN Band 2, or not. The full table of results, including all the other independent variables, is available in in the Technical report. As with the analysis in Section 5.3, results that are statistically significantly greater than 0 at the 0.05 level are bolded. Shaded cells indicate the years in which LNAP is expected to have had a partial (lighter shade) or full effect (darker shade).

For the LNAP school groups, values would be expected to decrease across the table indicating that students in AP schools were more likely to be above Band 2.

**Table 11: Estimates for the probability of students above Band 2 Year 3 NAPLAN, 2013-2019 (government schools)**

| School groups | Year | | | | | | |
|---|---|---|---|---|---|---|---|
| | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
| Reading | | | | | | | |
| Intercept | **0.902** | **0.903** | **0.937** | **0.909** | **0.919** | **0.912** | **0.917** |
| Supplementary schools | 0.010 | -0.004 | -0.018 | -0.014 | -0.022 | 0.007 | -0.007 |
| Phase 1: Group 1 (started 2012/13) | **-0.087** | -0.114 | -0.083 | **-0.072** | **-0.043** | **-0.049** | **-0.053** |
| Phase 1: Group 2 (started 2014) | **-0.052** | -0.057 | -0.041 | -0.027 | -0.011 | **-0.043** | **-0.041** |
| Phase 1: Group 3 (started 2015) | **-0.092** | -0.105 | -0.060 | -0.050 | -0.026 | -0.030 | **-0.072** |
| Phase 2: Group 4 & 5 (started 2017/18) | **-0.018** | -0.023 | -0.012 | -0.019 | -0.010 | -0.011 | **-0.016** |
| Numeracy | | | | | | | |
| Intercept | **0.905** | **0.875** | **0.841** | **0.850** | **0.888** | **0.879** | **0.893** |
| Supplementary schools | -0.012 | -0.024 | -0.023 | **-0.025** | -0.034 | 0.024 | -0.002 |
| Phase 1: Group 1 (started 2012/13) | **-0.081** | **-0.121** | **-0.087** | **-0.070** | **-0.092** | **-0.069** | **-0.086** |
| Phase 1: Group 2 (started 2014) | **-0.041** | **-0.039** | **-0.052** | 0.001 | **-0.034** | **-0.030** | **-0.042** |
| Phase 1: Group 3 (started 2015) | **-0.103** | **-0.088** | **-0.051** | **-0.043** | **-0.057** | -0.023 | **-0.051** |
| Phase 2: Group 4 & 5 (started 2017/18) | -0.012 | **-0.027** | **-0.025** | **-0.021** | **-0.021** | -0.012 | **-0.024** |

Note: bold font shows statistically significantly results greater than 0 at the 0.05 level

The values in Table 11 are probabilities that a student in each school group is above Band 2. For example, for Reading in 2013, the reference student who attends a non-AP school (reflected by the intercept) had a 90.2% chance of scoring above Band 2 in Reading. A student in a LNAP Group 1 school in that year had an 81.5% (subtracting 8.7% from 90.2%) chance of being above Band 2 in Reading, and an 86.4% (91.7 – 5.3) chance of being above Band 2 in Reading in 2019.

When 2019 LNAP student results are compared with their respective LNAP entry year results, a small decrease in the proportion of students in Bands 1-2 in reading is evident, while a similar decrease in numeracy cannot be identified.

For Reading across all years, the 'proportion of students in Bands 1-2 declines in all LNAP school groups, as we would expect, although these differences are not statistically significant. The biggest reduction was for LNAP Group 1, where 3.4% fewer students in 2019 fell into Bands 1-2 compared with 2013. However, even with this group the results are weaker over time. Looking at the difference between 2019 and the year before each school group entered LNAP, rather than comparing with 2013, we see that the results were *worse* for LNAP Group 3: we estimate that a student in LNAP Group 3 in 2019 for Reading was 1.2% more likely to be in Bands 1-2 than was the case in 2015.

For Numeracy, the results are even weaker. No group increased the probability of its students performing above Bands 1-2 when we compare the 2019 results with their respective LNAP entry year. For LNAP Group 3, as we saw with the earlier analysis, improvement only occurred in the years prior to joining LNAP.

### 5.4.2 The addition of data from non-government schools did not change the results

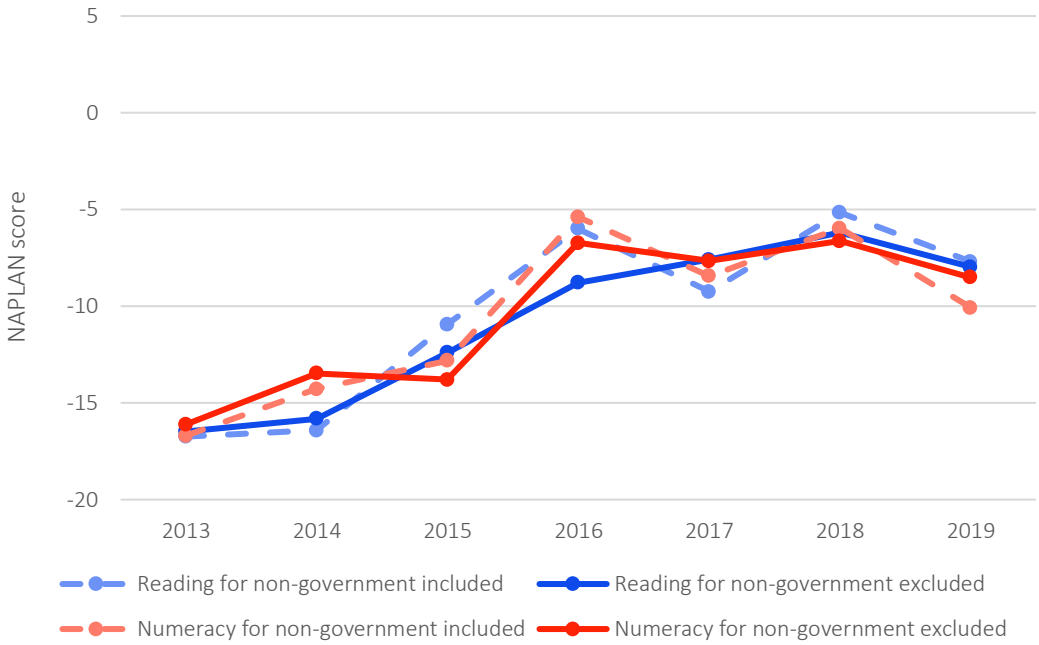
Limited data were available for the Catholic and independent school systems to assess student outcomes.

- BSKA data were not available to control for student levels at school commencement in 2016
- Data at the school level, such as school location and socio-economic status were not available
- For many variables in some years the data were not complete
- Data were not available for non-government schools who were not in LNAP.

Due to these data limitations (discussed in Technical report, a restricted analysis was conducted, combining where possible the government and non-government data only for AP schools in each sector. The aim of the analysis was not to provide robust estimates of NAPLAN scores, but rather was to assess whether the non-government AP schools were likely to have produced different results than government AP schools. This was first done by running a regression model with data for all sectors included. The same analysis was then conducted with only government schools. The hypothesis was that if non-government AP schools produced similar results to government AP schools the regression results would not substantially change.

Figure 6 illustrates the changes in coefficients when the model includes only government school data and when data from non-government schools are also added.

Figure 6: Coefficient comparison where one model includes non-government data and other excludes non-government data, NAPLAN Year 3 Reading and Numeracy, LNAP Group 1, 2013-19 (all AP and supplementary schools)




Note: The range used for this plot is between 5 and -20, which was chosen by rounding the smallest and largest group coefficients (LNAP Group 1, Group 2, Group 3, and Group 4 & 5) to the nearest 5.

**There were, when comparing government with non-government school Year 3 NAPLAN results, similar patterns, so that the lack of measurable impact of LNAP on NAPLAN Year 3 in government schools also applied to non-government schools.**

One possible explanation for this, especially for the Independent sector, was the high turnover of participating schools between LNAP Phase 1 and Phase 2: 66% of Catholic schools and only 23% of independent schools continued into the second phase. The shorter duration of these schools in LNAP could mean that they had insufficient time produce measurable results in NAPLAN Year 3.

## 5.5 Differences in LNAP implementation and the effect on student achievement in government schools

This section examines whether schools that have taken different approaches to implementing LNAP (Section 3) have seen different results in terms of student attainment.

### 5.5.1 Correlational analysis did not find a relationship between self-reported school implementation approaches and student achievement

An analysis was also undertaken to examine whether schools that took different approaches to implementing LNAP (Section 4) saw student attainment results. Correlation analyses explored the relationships between 2018 and 2019 Year 3 NAPLAN school mean scores in Reading and Numeracy with the following school-level variables taken from the principal and K-2 teacher surveys (limited to government schools):

- Degree of school-wide focus on instructional leadership priorities
- Degree of focus on instructional leadership strategies
- Stage of implementation of instructional leadership activities
- Level and change in teacher confidence in literacy and numeracy.

These were used as survey data, upon which the analysis relied, was issued to schools in late 2019 and asked respondents to reflect on the previous 12 months of teaching.

One example is the correlation between school-wide focus on instructional leadership priorities and school mean Year 3 NAPLAN Reading scores. In order to conclude that these school-wide priorities contributed to better student outcomes, we would need to see statistically significant positive correlations. However, the results in the Technical report indicate that there were no statistically significant relationships between NAPLAN Reading and Numeracy scores and the degree of focus on any of instructional leader priority areas.

These results were consistent across almost all of the correlation analyses undertaken – there was no statistically significant positive relationships between student outcomes and any of the contributing factors listed in the above bullet points.

## 5.6 Year 5 2015-19 NAPLAN scores for government schools

The preceding analysis found that LNAP students did not improve to a degree that would suggest LNAP had a major effect, as measured by Year 3 NAPLAN Reading and Numeracy. To account for the fact that the benefits of LNAP may need to time to 'mature' we also analysed Year 5 NAPLAN grades. However, there is no evidence of LNAP having an impact on Year 5 NAPLAN results in government AP schools.

Data from government schools were available for Year 5 NAPLAN for each year from 2015 to 2019. Students in Group 1 who began Kindergarten in 2013 and 2014, and therefore had been part of LNAP for the entire K-3 period, would have completed Year 5 NAPLAN in 2018 and 2019. For Group 2 this was students who began Kindergarten in 2014, and therefore completed Year 5 NAPLAN in 2019.[13] These years can therefore be used, for each AP school group, before and after LNAP was introduced. If LNAP was positively influencing reading and numeracy outcomes, we would expect to see an improvement in NAPLAN scores for the AP schools across the years in which LNAP would be expected to have an effect.

Table 12 presents the means and mean differences for Year 5 NAPLAN Reading and Numeracy. It shows the mean differences for both Reading and Numeracy remained remarkably stable across the whole period. The mean difference does not change in the years in which LNAP could have been expected to reduce the difference, if it had an impact Year 5 results. In Reading, Year 5 AP school scores in 2018 and 2019 showed an increase of approximately 9 points.

Table 12: Mean NAPLAN Year 5 scores (all government schools, 2015-19)

| NAPLAN score | 2015 | 2016 | 2017 | 2018 | 2019 |
|---|---|---|---|---|---|
| Reading: Mean | 496 | 495 | 502 | 504 | 502 |
| Numeracy: Mean | 494 | 494 | 494 | 494 | 496 |

More detailed summary statistics are presented in the Technical report for each LNAP school group. These results are consistent with the results in Table 12, that is, **there was no impact on Year 5 NAPLAN results based on LNAP status.**

### 5.6.1 LNAP is not associated with any long-term improvement in student learning outcomes, as measured by NAPLAN Year 5 grades

Using similar modelling to that in Section 5.3, the data were also analysed to account for other variables that may have affected Year 5 NAPLAN results. Two different models were used: one for students who remained in the same school for Year 3 and Year 5 NAPLAN, and one for all students, including those who moved. When controlled for these other variables, the results reinforce the general finding that **LNAP was not associated with any long-term improvement in student learning outcomes**, as measured by NAPLAN grades. In fact, there are signs that students who did experience LNAP in K-3 may have relatively declined by Year 5, particularly in Reading. The largest declines from 2015 Year 5 NAPLAN were for Group 1 and Group 2 Reading in 2018 and 2019; precisely the years we would expect to see an increase if LNAP had an impact.

[13] NAPLAN was not administered in 2020 due to COVID restrictions

## 5.7 Summary and conclusions

The analysis reported in this section found that LNAP Phases 1 and 2 did not improve the relative position of AP students Reading and Numeracy outcomes, as measured by NAPLAN scores. This is consistent with the earlier findings in the *Report of the Evaluation of the NSW Literacy and Numeracy Action Plan 2012-2016* by Erebus International.[13]

Overall, it was found that:

- Across all NSW schools across the three sectors there was modest improvement in reading and numeracy over the period 2013 and 2019
- Slight improvements in NAPLAN mean scores over 2013-19 occurred across all schools regardless of whether they were involved in LNAP or not
- There was no statistical improvement for any government LNAP Group when estimating NAPLAN Year 3 mean scores and controlling for school and student level variables
- Similar patterns were found when comparing government and non-government school Year 3 NAPLAN results
- The effect of LNAP seemed to weaken over time according to Year 3 NAPLAN data for government schools, although results were generally better for Reading than Numeracy
- When 2019 LNAP student results were compared with their respective LNAP entry year results, a small, non-statistical decrease in the proportion of students in Bands 1-2 in reading was evident, while a similar decrease in numeracy could not be identified
- Correlational analysis did not find a relationship between self-reported school implementation approaches and student achievement with one exception
- Year 5 NAPLAN (2015-19) reading and numeracy scores for AP did not show expected improvements

**What might explain the lack of improvement given the positive qualitative findings presented in previous Sections?**

1. The implementation of key components of the LNAP widely varied across individual schools as intended by the Program. This variability, however, may partially explain the lack of on NAPLAN scores. In particular, we noted that there was a great deal of variation in the way that individual schools implemented key components of LNAP, most notably the role of instructional leadership. This high variation may have diluted the possible impact that a more consistent approach (while still allowing schools to apply LNAP to their specific context). It was not possible to identify which of these variations across schools and across sectors were more successful.

2. The weak results for student Year 3 NAPLAN scores in government schools, and the even weaker results for Year 5 NAPLAN, can also be explained by the small differences between AP schools and all non-AP schools in the teacher level outcomes discussed in Section 4. Most importantly, changes in teacher confidence – a crucial perceived driver for LNAP – between AP, supplementary, and non-AP schools were very small, after controlling for years of experience, and overall change in confidence, in any event, was not correlated with NAPLAN scores.

3. It is also possible that the expansion of LNAP to a much larger range of schools than were included in Group 1 limited its ability to show relative improvement, because the schools that were progressively added to LNAP were much less different on key variables than the non-AP schools. However, this would still not explain the poor results for Group 1 and Group 2 in the Year 5 NAPLAN analysis, which were the schools with the relatively largest concentration of disadvantaged students.

4. It may also be the case that LNAP has influenced teaching practice in non-AP schools, helping to improve outcomes in the non-AP schools and thereby reducing the observable differences between them. This could have occurred, for example, by some teachers in AP schools moving to non-AP schools and talking with them any beneficial practices associated with LNAP with them. The focus of this evaluation, however, cannot assess this possibility. It would also raise the question as to whether this same outcome of 'improvement across all schools could be achieved through a different strategy.

# 6 Conclusion

This Final Evaluation report of LNAP Phase 2 assessed both the implementation and effectiveness of the Program. Overall, it found that LNAP Phase 2 was implemented as intended. Each of its four pillars (instructional leadership, diagnostic assessment, differentiated teaching, and tiered interventions) are in place in all participating Action Plan (AP) schools. This led to positive outcomes for teachers and schools, and for NSW education. However, the evaluation did not find any positive impact on student learning outcomes, using NAPLAN scores as the measure. Other measures of student progress may have found different results but could not be included in the evaluation.

## 6.1 Key evaluation findings

Overall, it was found that LNAP Phase 2 has been well implemented and in line with the sectoral implementation plans. Each sectoral authority supported the delivery of LNAP Phase 2 and as such implementation varied across the three sectors and at the school level, as illustrated in the Vignettes in Section 4.4. LNAP Phase 2 facilitated collaboration across the three sectors to a degree that had not existed before, and there was strong sentiment that this collaboration should continue. This may facilitate further learning from the experience of LNAP's varied implementation in different contexts in future.

The evaluation found that active instructional leadership model for K-2 literacy and numeracy was well established in participating AP schools. Schools reported placing a 'very strong' focus on instructional leadership priorities, and qualitative consultations in AP schools suggests that instructional leadership was greatly appreciated by school executive and teachers. Moreover, most schools created new instructional leadership positions after the cessation of funding in order to continue to embed the practices they have been using.

The evaluation found that LNAP Phase 2 provided schools with support to address the challenges COVID-19 presented for student learning. Most schools responded to the 'positive pressure' COVID-19 created for them to adopt new ways of differentiating teaching approaches and professional development during 2020-21. This response to COVID-19 may contribute to the education system's overall resilience towards unexpected events in the future.

In relation to the four pillars of LNAP, which were the main components of the program, the evaluation found positive outcomes from LNAP Phase 2 in respect of the impact of instructional leadership on schools' capabilities in: assessment; data analysis; lesson planning; modelling; team teaching; and lesson observation. The use of data to inform teaching practice has been particularly significant and has prompted teachers to consider the extent to which strategies are working and the reasons why, in order to improve their teacher practice.

The evaluation also found that LNAP Phase 2 has increased professional development and capacity building of teachers and supported a cultural change in schools across all sectors. This cultural shift is particularly evident in schools that have been involved in the program since Phase 1, with an increased focus on evidence-based teaching and learning practices for staff.

Notwithstanding concerns about the limitations of NAPLAN as an outcome measurement tool, the evaluation did not find evidence of any measurable improvement in literacy and numeracy outcomes for students as a result of LNAP Phase 2 when measured by their Year 3 NAPLAN Reading and Numeracy scores. This result is consistent with the results from the evaluation of LNAP Phase 1. While there was a small uplift among LNAP schools between 2013 and 2017 in all sectors, it was not sustained, and the likely cause of the uplift could have been factors other than LNAP. An analysis of NAPLAN Year 5 data was also conducted to assess any longer-term impact of LNAP, showing no measurable association between LNAP Phase 2 and Year 5 NAPLAN scores.

## 6.2 What might explain the discrepancy between positive teacher and school outcomes and the student outcomes?

There was a great deal of variation in the way that individual schools implemented key components of LNAP, most notably with respect to instructional leadership. This high variation, while important with regard to ensuring that the program met the needs of students in a range of contexts, could have diluted any possible impact that a more consistent approach may have brought about. This high variation could have resulted in variation in outcomes but it was not possible to identify which of these variations across schools and across sectors were most successful.

The weak results for student Year 3 NAPLAN scores in government schools, and the even weaker results for Year 5 NAPLAN, may also be explained by the small differences between AP schools, supplementary, and other non-AP schools in the teacher level outcomes. Numeracy confidence lifted more than literacy confidence and that more experienced teachers' confidence lifted more than early career, but these were small differences, after controlling for years of experience.

It is also possible that the expansion of LNAP to a much larger range of schools (or completely different schools as in AISNSW) than were included in Phase 1 limited its ability to show relative improvement, because the schools that were progressively added to LNAP were not as different on key variables compared with non-AP schools.

It may also be the case that LNAP has influenced teaching practice in non-AP and supplementary schools, helping to improve outcomes in the non-AP schools and thereby reducing the observable differences between them. This could have occurred, for example, by some teachers in AP schools moving to non-AP or supplementary schools and taking with them any beneficial practices associated with LNAP. It may also have arisen from the networking across schools facilitated by LNAP. The focus of this evaluation, however, could not assess this possibility.

## 6.3 Challenges and opportunities within the four pillars

A few key areas of opportunities were identified throughout the evaluation to improve the effectiveness of the four pillars for student learning and teacher capacity outcomes.

This included the logistical challenges of backfilling teaching roles vacated by people who had secured temporary instructional leader contracts; the need for careful negotiation of structural relationships between instructional leadership staff and other people who work alongside classroom teachers in K-2; and issues of continuity in the instructional leader role. Recruiting and retaining staff remains a key issue. Most instructional leadership staff interviewed had been in the role for less than a year. For many teachers, receiving support from a more experienced instructional leadership staff member led them to being more confident to sustain their LNAP practices.

There is also a need to keep focusing not just on the practice of diagnostic assessment, but on the use of the data it generates. Teachers expressed need for on-going support to understand evidence-based approaches to differentiated teaching and tiered interventions. Overall, findings suggest that more support is needed, particularly in the third pillar of LNAP Phase 2, to ensure that high quality differentiated teaching is being delivered across AP schools.

## 6.4 Implications for the future of instructional leadership practice, cross-sectoral education intervention programs and their evaluation

LNAP Phase 2 has highlighted the importance of cross-sector collaboration. There is scope for continued cross-sectoral collaboration at the operational level, for example in shared professional learning and other similar joint ventures. This collaboration may also improve data sharing between sectors to support learning and evaluation in the future.

Evaluation findings also highlight the importance for ongoing support for early career teachers particularly due to the ongoing impacts of COVID-19 on professional learning.

Program stakeholders are aware that the introduction of Progressions into some of the more complex schools across all sectors, has left little time to build instructional leadership capacity in leading the implementation and improvement process. There is opportunity to address this issue and provide ongoing support in the future. It is understood that Education Statistics and Measurement (ESM) team within CESE is currently exploring best possible ways to use Progressions data to measure outcomes so that it can be viewed as a summative tool in future.

In considering options for sectoral support and professional development, a stronger focus on numeracy may be worth considering, both in recruitment of future instructional leadership staff and professional learning for the current cohort. Moreover, to address the issue of the variation in professional learning opportunities across geographic contexts, stakeholders have suggested tailored support for different roles involved in LNAP and ensuring that they are equally accessible for teachers in regional/remote areas.

The challenge to reconcile the positive sentiment on LNAP Phase 2 gathered through implementation and progress documentation, and the quantitative analysis that has shown no additional improvement in student outcomes between 2013 and 2019 using NAPLAN Year 3 and 5 data, remains. Further review of AP schools that are producing positive outcomes for students could be undertaken to understand the particular combination of LNAP practices adopted by these schools that may have led to these outcomes.

Finally, the main concern of key stakeholders and school-based staff is one of sustainability – embedding and normalising the practices that have been initiated under LNAP Phase 2. Many stakeholders feel that more time will be required, and that there is a need to continue investing in instructional leadership.

# Appendix

## School demographic breakdown

A total of 227 interviews were conducted across 57 AP and 10 non-AP schools and included schools from:

**Table 13: AP Schools by sector**

| Sector | Catholic | Government | Independent |
|---|---|---|---|
| Number of schools | 19 | 26 | 12 |

**Note:** Government schools were under sampled relative to their involvement in the Action Plan to prevent the oversaturation of data collected from one sector.

**Table 14: Schools by remoteness**

| Region | Major cities | Inner regional | Outer regional and remote |
|---|---|---|---|
| Number of schools | 36 | 11 | 10 |

**Note:** Travel clusters were identified for remote schools.

**Table 15: Number of interviews conducted**

| Role | Principal | School executives | Instructional leaders | K-2 teachers |
|---|---|---|---|---|
| Number of interviews | 57 | 30 | 46 | 94 |

# School interview guide

As a method of exploration, the in-depth interviews conducted at schools were not completely standardised. Questions in the interview guide covered relevant activities associated with LNAP and left enough room for discussions in the sense of an open approach.

The questions mentioned below were not necessarily meant to be asked as written, but to guide the conversation with the participant. Whilst interviews conducted with schools were semi-structured in nature, questions followed an agreed sequence and were based on the key aspects of LNAP.

Table 16: School site visits, principal interview questions, 2018-2019

| Principal/Executive semi-structured interview questions | |
|---|---|
| About you | |
| 1. | What is your current position at this school in terms of K-2 literacy and numeracy? |
| 2. | Who is primarily responsible for K-2 literacy and numeracy leadership at your school? This may be a person or persons who fulfil the responsibilities of K-2 literacy and numeracy leadership personally, or they may ensure that teachers receive leadership and training from external providers. |
| 3. | Describe how you work with/direct the instructional leader(s)/person(s) with responsibilities in K-2 literacy/numeracy leadership at the school? |
| 4. | What sort of things does the instructional leader/person(s) with responsibilities in K-2 literacy/numeracy leadership(s) come to you about? |
| 5. | Do you work with K-2 teachers at the school in literacy and numeracy teaching?<br>If so what conversations do you typically have together? |
| 6. | How important is the relationship between instructional leadership, whole school planning for K-2 and the change in K-2 literacy and numeracy teaching in your school? |
| 7. | Apart from the instructional leader(s)/person(s) with responsibilities in K-2 literacy/numeracy leadership/s and the other K-2 teachers, do you work with other members of the executive team in literacy and numeracy teaching and development? |
| Diagnostic assessment | |
| 8. | How are your staff supported to identify the literacy, and numeracy, learning needs of the K-2 students in your school? |
| 9. | Which, if any commercially available assessment materials are used, in K-2 literacy, and in numeracy teaching and assessment at your school? |
| 10. | Are you using in-school developed tools and practices (in conjunction with, or in replacement of the aforementioned commercial tools)? |
| 11. | Is there a particular reason that these assessments were chosen (and continued with)? |
| 12. | Are these assessment tools working well? If not, why not? |
| 13. | Are the K-2 teachers in the school supported in the use of these materials? |
| 14. | Is your school using Learning Progressions with K-2 students? Can you tell us about your approach? |
| Differentiated teaching | |
| 15. | How does the school differentiate K-2 teaching to meet the needs and abilities of different students? |
| Tiered interventions | |
| 16. | Can you tell me a little about the way the school offers interventions for K-2 students experiencing difficulties? |
| Conclusion | |
| 17. | When did your school join the K-2 Literacy and Numeracy Action Plan (schools may know it as Early Action for Success)? Can you provide examples of some changes to practice since Phase 2 began? |
| 18. | Can you nominate the 'most successful aspect' of K-2 literacy and numeracy development since Phase 2 of the plan has begun? If so, what makes it so successful? |
| 19. | Are there any barriers to success in your development of your school's K-2 literacy and numeracy teaching? If so, what are they? |
| 20. | Is there anything else that you would like to add? |

Table 17: School site visits, instructional leader interview questions, 2018-2019, 2020-2021

| Instructional leader semi-structured interview questions | |
|---|---|
| About you | |
| 1. | How long have you been a K-2 instructional leader? |
| 2. | How often do you work with the K-2 teachers at the school? |
| 3. | What sort of things do you mostly do with the K-2 teachers at the school? |
| 4. | Do you work with other staff members or the executive in K-2 literacy and numeracy teaching and development? |
| 5. | How important is the relationship between the instructional leader(s), school planning for K-2 and the change in K-2 literacy and numeracy teaching in your school? |
| Diagnostic assessment | |
| 6. | (How) Do you support K-2 teachers to identify the literacy, and numeracy, learning needs of their students? |
| 7. | Which, if any commercially available assessment materials do you use with teachers, in K-2 literacy and numeracy teaching and assessment? |
| 8. | Are you using in-school developed tools and practices (in conjunction with, or in replacement of the aforementioned commercial tools)? |
| 9. | Is there a particular reason that these assessments were chosen (and continued with)? |
| 10. | Are these assessment tools working well? If not, why not? |
| 11. | How do you support K-2 teachers in the use of these materials? |
| 12. | Is your school using Learning Progressions with K-2 students? Can you tell us about your approach? |
| Differentiated teaching | |
| 13. | Can you tell us about ways you focus on differentiated teaching with the K-2 teachers so that they meet the needs and abilities of different students? |
| Tiered interventions | |
| 14. | How do whole class, small group or individual level interventions occur in your school for K-2 students experiencing difficulties? |
| Conclusion | |
| 15. | Since Phase 2 of the K-2 Literacy and Numeracy Action Plan (or Early Action for Success) began in 2017, have you noticed K-2 teaching practices changing? |
| 16. | Can you nominate the ‘most successful aspect’ of K-2 literacy and numeracy development in this school? If so, what makes it so successful? |
| 17. | Are there any barriers to success in your role as instructional leader? If so, what are they, and what might be done to address these? |
| 18. | What do you think are the outcomes of your support of K-2 teachers in your role as instructional leader(s)? |
| 19. | Are you professionally networking with persons with instructional leadership responsibilities at other schools? |
| 20. | Is there anything else that you would like to add? |

Table 18: School site visits, teacher interview questions, 2018, 2019, 2020, 2021

| Teacher semi-structured interview questions | |
|---|---|
| About you | |
| 1. | Which grade(s) do you teach? |
| 2. | Describe the work you do with the instructional leader(s)? |
| 3. | Of these tasks/activities, what are the most, or least helpful? |
| 4. | Do you work with other K-2 teachers at the school on K-2 literacy and numeracy teaching? If so, how often, and what do you typically do together? |
| 5. | Apart from the instructional leader(s) and the other K-2 teachers, do you work with other staff members in K-2 literacy and numeracy teaching and development? |
| 6. | How important is the relationship between the instructional leader(s), school planning for K-2 and the change in K-2 literacy and numeracy teaching in your school? |
| Diagnostic assessment | |
| 7. | Who are the staff that support you to identify the literacy and numeracy learning needs of your K-2 students? |
| 8. | Which, if any commercially available assessment materials do you use, in K-2 literacy and numeracy teaching and assessment? |
| 9. | How are you supported in your use of these materials? |
| 10. | Is your school using Learning Progressions with K-2 students? Can you tell us about your approach? |
| Differentiated teaching | |
| 11. | How do you differentiate your teaching to meet the needs and abilities of different K-2 students? |
| Tiered interventions | |
| 12. | Interventions for K-2 students experiencing difficulties can occur at whole class, small group or individual level. Can you give a recent example of one or two of these? |
| Conclusion | |
| 13. | Can you provide examples of some changes in K-2 teaching practice since Phase 2 began? |
| 14. | Can you nominate the 'most successful aspect' of K-2 literacy and numeracy development here? If so, what makes it so successful? |
| 15. | Are there any barriers to success in your development of your K-2 students' literacy and numeracy? If so, what are they, and what might be done to address these? |
| 16. | Can you discuss how the support from the instructional leader(s) has achieved success? |
| 17. | Is there anything else that you would like to add? |

# Qualitative data coding framework used in NVivo

Qualitative data obtained from implementation reports, surveys and stakeholder engagement was entered into NVivo and preliminary codes were assigned to the content.

Once all the qualitative content had been entered, themes and patters emerging from the qualitative data were searched for, shortlisted and reviewed. The findings were collectively discussed to observe the extent to which emerging findings/themes were in line with the quantitative data.

Table 19: NVivo coding framework used for qualitative data analysis

| Area of focus | Themes | Code | Node |
|---|---|---|---|
| **Instructional leadership (IL)** | Structure and model of implementation | Experience | Years |
| | | Hiring process | Internal |
| | | | External |
| | | Role | Dedicated IL role |
| | | | Combine IL role |
| | | | K-2 only |
| | | | K-6 |
| | | Extent of interaction with teaching staff | |
| | | Changes from Phase 1 to Phase 2 | |
| | Capacity building for teachers | Modelling teaching practices in the classroom | |
| | | Observing and providing teachers with feedback | Explore methods |
| | | Team teaching and in-class support | |
| | | Supporting teachers to collect student data (incl. assessment) | |
| | | Supporting teachers to analyse and use data to inform their teaching | Explore methods |
| | | Providing professional learning | Formal |
| | | | Informal |
| | | Other support | |
| | Other | | |
| **Diagnostic assessment/ Knowing your students** | Type of assessment | Summative | List for reference Best Start? |
| | | Formative | List for reference The Learning Progressions |
| | | Decision around what assessment to use | IL level |
| | | | School level |
| | | | Sector level |
| | | | Other |
| | Student data | | |
| | Support and capacity building | Instructional leader | |
| | | Other support staff | |
| | | Professional learning | Internal |
| | | | External |
| | Other | | |
| **Differentiated teaching** | Use of data | | |
| | Teaching practice and strategies | | |
| | Support and capacity building | Instructional leader | |
| | | Other support staff | |
| | | School resources | |
| | | Professional learning | |
| | Other | | |
| **Tiered interventions** | Use of data | | |
| | Teaching practice and strategies | Tier 1 | |
| | | Tier 2 | |
| | | Tier 3 | |
| | Support and capacity building | Instructional leader | |

| | | | |
|---|---|---|---|
| | | Other support staff (including external specialists). | |
| | | School resources | |
| | | Professional learning | |
| | Other | | |
| **Capacity building by others** | External professional learning | Consultants | AIS consultants |
| | | | Catholic LOPs |
| | | Intervention and program authors | |
| | Internal professional learning | Formal | |
| | | Informal | |
| | Networking and training sessions | | |
| **Other high impact teaching strategies (HITS)** | Setting goals (personalised learning goals | | |
| | Explicit teaching | | |
| | Collaborative learning | | |
| **Other school-wide structures** | Planning | | |
| | School-wide relationships | | |
| | Leadership | | |
| | School focus | | |
| **Opportunities for improvement (barriers)** | Instructional leader | Extent of interaction with teaching staff | |
| | | Role | |
| | | Skill and experience | |
| | Staff and relationships | Openness to change and feedback | |
| | | Staff relationships | |
| | | Understanding of the IL role and LNAP | |
| | | Workload and reporting requirements | |
| | School structures | Personnel resources | |
| | | Release time | |
| | Other | Student and Teacher mobility/transfers | |
| **Aspects working well (enablers)** | Instructional leader | Extent of interaction with teaching staff | |
| | | Role | |
| | | Skill and experience | |
| | Staff and relationships | Openness to change and feedback | |
| | | Staff relationships | |
| | | Understanding of the IL role and LNAP | |
| | School structures | Personnel resources | |
| | | Release time | |
| | Other | | |
| **Changes since the LNAP** | Students | Behaviour | |
| | | Learning outcomes | |
| | Teachers | Confidence | |
| | | Teaching practice and strategies | |
| | School | Infrastructure | |
| | | Resources | |
| | | Approach to professional learning | |
| | | Communications | |
| | Other | | |
| **Notable quotes** | | | |
| **Attributes** | | | |
| **School level** | Type of school (AP, non-AP, Supp)<br>Remoteness (Major city, Inner regional, Outer regional, Remote)<br>Phase (Phase 1, Phase 2, N/A)<br>Sector (Government, Catholic, Independent)<br>School focus (Lit, Num or both) | | |
| **Person level** | Years of teaching<br>Years at school<br>Role | | |

# Ethics

To undertake ethical research and minimise any risks, the evaluation team secured approval for this project through the UTS Human Research Ethics Committee. The evaluation also received NSW State Education Research Applications Process (SERAP) approval from the NSW Department of Education to conduct research within government schools. The SERAP documentation also covered Catholic and Independent schools.

The evaluation team has complied with all applicable research ethics laws and guidelines, including the Australian Code for the Responsible Conduct of Research (2018) and the National Statement on Ethical Conduct in Human Research 2007. This includes all researchers having Working With Children Checks (WWCC) and providing participant information sheets with relevant details of the project.

PARTICIPANT INFORMATION SHEET
Phase 2 of the K-2 Literacy and Numeracy Action Plan

## WHO IS DOING THE RESEARCH?

The Centre for Education Statistics and Evaluation (CESE) has commissioned the University of Technology Sydney (UTS) to evaluate the NSW K-2 Literacy and Numeracy Early Intervention Strategy, or Phase 2 of the Action Plan.

## WHAT IS THIS RESEARCH ABOUT?

This research aims to examine the outcomes and implementation of the Action Plan. This includes measuring improvement in student literacy and numeracy attainment, and conducting interviews with schools and key stakeholders about the implementation of the key features of the Action. In particular, the evaluation aim to determine extent to which teaching practices differ between schools that participate in the Action Plan and those that do not, and what is working well and what can be improved.

## WHY HAVE I BEEN ASKED?

You have been invited to participate in this study because you have been identified as being involved in the implementation of the Action Plan.

## IF I SAY YES, WHAT WILL IT INVOLVE?

If you decide to participate, please note that:

- You will participate in a 30 minute to 1 hour semi-structured interview that will be audio recorded and transcribed with your permission.
- The questions will revolve around the four key features of the Action Plan and your impressions of the strategy's implementation and outcomes. These key features are:
    - instructional leadership;
    - the use of diagnostic assessments;
    - differentiated teaching; and
    - the use of tiered interventions.

## ARE THERE ANY RISKS/INCONVENIENCE?

We don't expect the questions to cause any harm or discomfort, however if you experience feelings of distress as a result of participation in this study you can let the researchers know and they will provide you with assistance.

## DO I HAVE TO SAY YES?

Participation in this study is voluntary. It is completely up to you whether or not you decide to take part.

## WHAT WILL HAPPEN IF I SAY NO?

If you decide not to participate, it will not affect your relationship with the researchers or your employer. If you wish to withdraw from the study once it has started, you can do so at any time without having to give a reason, by contacting George Argyrous.

If you decide to leave the research project, we will not collect additional personal information from you, although personal information already collected will be retained to ensure that the results of the research project can be measured properly and to comply with law. You should be aware that data collected up to the time you withdraw will form part of the research project results.

## CONFIDENTIALITY

By signing the consent form you consent to the research team collecting and using personal information about you for the research project. All this information will be treated confidentially and stored securely. Data will only be made available to identified staff within the evaluation project who require access to perform their duties on a 'need to know' basis. Data from this interview will not be used for any other research purposes.

We plan to publish the aggregated results in a report to representatives from the NSW Department of Education, Catholic Education Commission and the Association of Independent Schools NSW. In any publication, information will be provided in such a way that you cannot be identified.

## WHAT IF I HAVE CONCERNS OR A COMPLAINT?

If you have questions or concerns about the research that you think the research team can help you with, please feel free to contact George Argyrous at UTS on (02) 9514 8223 or george.argyrous@uts.edu.au.

If you would like to talk to someone who is not connected with the research, you may contact the Research Ethics Officer on 02 9514 9772 or Research.ethics@uts.edu.au and quote this number (ETH18-3270).

You will be given a copy of this form to keep.

**NOTE:**

This study has been approved by the University of Technology Sydney Human Research Ethics Committee (UTS HREC). If you have any concerns or complaints about any aspect of the conduct of this research, please contact the Ethics Secretariat on +61 2 9514 2478 or at Research.Ethics@uts.edu.au, and quote the UTS HREC reference number. Any matter raised will be treated confidentially, investigated and you will be informed of the outcome.

# Consent forms for interviews

**Phase 2 of the K-2 Literacy and Numeracy Action Plan**

I _____ agree to participate in the evaluation of *Phase 2 of the K-2 Literacy and Numeracy Action Plan* (ETH18-3270) being conducted by UTS (City Campus, Broadway, NSW 2007).

I have read the Participant Information Sheet or someone has read it to me in a language that I understand.

I understand the purposes, procedures and risks of the research as described in the Participant Information Sheet.

I have had an opportunity to ask questions and I am satisfied with the answers I have received.

I freely agree to participate in this research project as described and understand that I am free to withdraw at any time without affecting my relationship with the researchers or my employer.

I understand that I will be given a signed copy of this document to keep.

I agree to that this research data will be audio recorded and may be published in a form that does not identify me in any way.

I am aware that I can contact George Argyrous if I have any concerns about the research.

_____ ____/____/____

Name and signature (participant) Date

_____ ____/____/____

Name and signature (researcher or delegate) Date

# Key stakeholder interviews – discussion guide

As with the school interview guides, the following questions cover relevant activities associated with the Action Plan and leave enough room for discussions in the sense of an open approach. The questions mentioned below were not always asked as written, with the flow of questioning dependent on the issues raised by participants.

1. **Tell me about your role and how it relates to the development and implementation of the Action Plan?**
    a. Over the last year, have there been any changes in the scope or focus of this role, or in the way that [organisation/team] is approaching the task of implementing the Action Plan?
    b. If yes, can you please describe the change? What initiated that change? What need was it designed to address? How effective do you feel that change has been? Why is that?

2. **What aspects of Action Plan implementation would you say have been 'going well' over the last 12 months?**
    a. What factors have made this possible?

3. **What challenges has the implementation of the Action Plan faced over the last 12 months?**
    a. What factors have made the Action Plan hard to implement?
    b. How have these challenges been handled? How effective has this response been?
    c. What direction do you the Action Plan needs to go in regard to these challenges? Why do you say that?

4. **What kinds of changes have you expected to see by now as a result of the Action Plan?**

5. **To what extent have you seen those changes? What makes you say this?**
    a. What factors have helped bring these outcomes about?
    b. What factors prevented or limited these outcomes?

6. **Have there been any unintended impacts? Positive or negative?**

7. **Looking forwards, what do you see as the main lessons we can learn from Phase 2 of the Action Plan?**
    a. For the final years of the Action Plan?
    b. For the continued investment in literacy and numeracy in 2021 and beyond?

**Is there anything else that you would like to add?**

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