## Supported Students, Successful Students

# Positive Behaviour for Learning evaluation – final report





#### Centre for Education Statistics and Evaluation

The Centre for Education Statistics and Evaluation (CESE) was created in 2012 to improve the effectiveness, efficiency and accountability of education in NSW. It is focused on supporting decision-making in education delivery and development with strong evidence.

CESE analyses and evaluates educational programs and strategies and gauges NSW's education performance over time through its ongoing core data collections and delivery of analysis and reports. It also monitors national and international strategic agendas to ensure that NSW is well positioned to provide leadership in education.

CESE's three main responsibilities are:

- 1. to provide data analysis, information and evaluation that improve effectiveness, efficiency and accountability
- 2. to create a one-stop shop for information needs a single access point to education data that has appropriate safeguards to protect data confidentiality and integrity
- 3. to build capacity across the whole education sector by developing intelligent tools to make complex data easy to use and understand, and providing accessible reports so that everyone can make better use of data.

CESE provides sound evidence for educators to make decisions about best practice in particular contexts and importantly, enables teachers to meet the needs of students at every stage of their learning.

#### **Authors**

Rebecca Wilkinson, Jessica Fulcher, Rochelle Cox Centre for Education Statistics and Evaluation, January 2021, Sydney, NSW

Please cite this publication as:

Centre for Education Statistics and Evaluation (2021), **Positive Behaviour for Learning evaluation – final report**, NSW Department of Education, cese.nsw.gov.au

For more information about this report, please contact:

Centre for Education Statistics and Evaluation Department of Education GPO Box 33 SYDNEY NSW 2001

info@cese.nsw.gov.au +61 2 7814 1527 cese.nsw.gov.au

#### Acknowledgements

CESE would like to thank those who have contributed to this evaluation. Thanks go especially to members of the SSSS Evaluation Reference Group. We would also like to thank the school counselling service and school staff who took the time to participate in our interviews or case studies informing this evaluation.

## Table of contents

Executive summary	7
Reform background	7
Evaluation	7
Methodology	7
Findings	8
Conclusion and future considerations	11
Limitations	11
Chapter 1: Introduction	12
Supported Students, Successful Students funding package	12
Positive Behaviour for Learning	13
Chapter 2: Positive Behaviour for Learning evaluation	17
Evaluation questions	17
Method	17
Chapter 3: How is Positive Behaviour for Learning being implemented and is it being implemented as intended?	21
Chapter 4: How have Positive Behaviour for Learning deputy principals and coach mentors assisted with start-up and implementation?	38
Chapter 5: What challenges are faced by schools when implementing Positive Behaviour for Learning?	47
Chapter 6: What aspects of Positive Behaviour for Learning are working well and what aspects are not working well?	56
Aspects that are working well	56
Aspects that are not working well	60
Chapter 7: What is the perceived impact of Positive Behaviour for Learning on student wellbeing?	63
Chapter 8: What is the impact of Positive Behaviour for Learning on student wellbeing, as measured through centrally collected datasets?	71

## List of figures

Collection of problem behaviour data before implementing Positive Behaviour for Learning and currently	23
Figure 2 Type of problem data collected by schools	24
Figure 3  Data management systems used by Positive Behaviour for Learning schools	25
Box 1 How a Positive Behaviour for Learning secondary school uses data for decision making	27
Box 2 How a Positive Behaviour for Learning primary school uses data for decision making	28
Box 3 How a Positive Behaviour for Learning central school used evaluation tools to identify areas for improvement	31
Figure 1a Self-assessment survey results at a Positive Behaviour for Learning central school in 2017 and 2018	31
Figure 4 Principal support for Positive Behaviour for Learning implementation at Positive Behaviour for Learning schools	33
Figure 5 Tier 2 implementation	34
Figure 6 Tier 3 implementation	34
Figure 7 Types of targeted or intensive interventions provided by Positive Behaviour for Learning schools	35
Figure 8 Coach mentor support requested and received by schools	40
Figure 9 Proportion of schools that received support in the areas where they requested support	42
Figure 10 Challenges encountered when implementing Positive Behaviour for Learning	48
Figure 11 Most time consuming aspects of Positive Behaviour for Learning	50
Figure 12 Factors that influenced schools to stop implementing Positive Behaviour for Learning	54
Figure 13 Change in leadership culture since implementation of Positive Behaviour for Learning (all respondents)	57
Figure 14 Changes in leadership culture since implementation of Positive Behaviour for Learning (schools with multiple survey respondents)	57
Figure 15 Likelihood of recommending behaviour management approach to a similar school	59
Figure 16 Perceived impact of Positive Behaviour for Learning on wellbeing by duration of implementation	64
Figure 17 Impact of Positive Behaviour for Learning on minor and major behaviour incidents	66

80

#### Figure 18 Impact of Positive Behaviour for Learning on minor behaviour incidents according to implementation duration 67 Impact of Positive Behaviour for Learning on major behaviour incidents by implementation duration 67 Figure 20 How respondents knew that Positive Behaviour for Learning had influenced behaviour incidents 68 Figure 21 Impact of Positive Behaviour for Learning on short suspensions in primary and secondary schools 69 Figure 22 Attendance rates at Positive Behaviour for Learning and matched non-Positive Behaviour for Learning schools 75 Short suspensions – total count 76 Figure 24 Short suspensions – unique students 76

### List of tables

Proportion of students with a positive sense of belonging in primary schools

Table 1           Proportion of Positive Behaviour for Learning schools implementing universal features	
Table 2           Proportion of Positive Behaviour for Learning schools that used Positive Behaviour for Learning evaluation tools	s <b>29</b>
Table 3           Distribution of coach mentors and Positive Behaviour for Learning schools across operational directorates in 2018	3 <b>39</b>
Table 4 Parameter estimates for regression models	75
Table 5           Estimates of the difference between the differences coefficients of Tell Them From Me student survey scales	81

### **Executive summary**

#### Reform background

In 2015, the NSW Department of Education (the department) introduced the Supported Students, Successful Students (SSSS) funding package. A key initiative within this package is \$15 million over four years to support schools to implement Positive Behaviour for Learning (PBL), a whole school approach that aims to create a positive, safe and supportive school climate in which students can learn and develop. The funding employed 32 PBL coach mentors and four PBL deputy principals. Coach mentors deliver professional learning to support schools with PBL start-up, ongoing implementation, and the use of evaluation tools. PBL deputy principals work collaboratively within a state-wide team to promote the consistent delivery of PBL, deliver professional learning activities for school staff, and build the capabilities of PBL coach mentors.

#### **Evaluation**

This evaluation addresses the following six questions:

- 1. How is PBL being implemented by a sample of NSW public schools and is it being implemented as intended?
- 2. How have the PBL deputy principals and coach mentors assisted with PBL start-up and implementation?
- 3. What challenges are faced by schools when implementing PBL for the first time?
- 4. What aspects of PBL are working well, and what aspects are not working well?
- 5. What is the perceived impact of PBL on student wellbeing?
- 6. What is the impact of PBL on student wellbeing, as measured through centrally collected datasets?

#### Methodology

This report draws upon both quantitative and qualitative sources to evaluate PBL, including a suite of surveys, interviews, examples of school-based data collection, and analyses of centrally collected data. Our surveys examined the experiences and views of current PBL schools, schools that are planning to use PBL, schools that previously used PBL, and schools that have not implemented PBL. We also conducted 51 interviews that included PBL and non-PBL schools, PBL coach mentors, PBL deputy principals, and other School Services staff. We examined how schools use their PBL data, by asking some schools to provide examples of the types of data they collect and how they use it for decision making. Finally, we developed statistical models to gauge the impact of PBL on student attendance and suspensions, as well as student wellbeing measures captured in the department's Tell Them From Me (TTFM) student survey.

#### **Findings**

## How is Positive Behaviour for Learning being implemented and is it being implemented as intended?

Almost all schools reported implementing each of the universal school-wide features that should be seen if PBL is being implemented as intended. Schools are also implementing the PBL framework flexibly, as intended, in a way that is tailored to their specific context. PBL coach mentors are working closely with schools to facilitate and monitor implementation.

Leadership support is one of the most important universal features and most principals do this actively by being on the team that implements PBL and by organising funding. One aspect of leadership support that could be improved, however, is principals' provision of release time, as fewer than half reported currently doing so. Data collection is another key universal feature and the great majority of schools report collecting data and analysing it at least once per term. Notably, almost all PBL schools report collecting data on problem behaviours after implementing PBL, and less than half report doing so prior to implementing PBL. Schools are using their data to inform decision making and develop appropriate interventions, and are using existing PBL evaluation tools to examine their implementation fidelity. It would be beneficial for monitoring purposes, and any future evaluations, to establish central collection of PBL fidelity data as measured by these tools. Differences in the way this information is stored made collation unfeasible in this evaluation.

There are three tiers of PBL support and at the time of data collection more than half of PBL schools were focused on implementing tier 1 (universal features, with a prevention focus). Approximately four in ten schools were implementing tier 2 (targeted support) and approximately two in ten were implementing tier 3 (intensive individualised support). We expect this to change soon though as a further three in ten schools said they were planning to implement higher tiers and requests for training in higher tiers recently increased. At schools implementing tiers 2 and 3, the most common targeted intervention is an individual support plan. Importantly, decisions about which students require tier 2 and 3 support are based on behavioural data, which is consistent with good implementation. To further support schools to implement higher tiers and provide students with appropriate individualised support, the department is aiming to increase the number of staff who are trained in functional behaviour assessments. We suggest monitoring the number of schools implementing higher tiers over time to check supports are working as intended.

We conservatively estimate that 1138 NSW public schools are implementing PBL and that 67 schools have stopped implementing. This translates roughly to a 94% retention rate.

## How have Positive Behaviour for Learning deputy principals and coach mentors assisted with start-up and implementation?

Coach mentors are providing schools with professional learning, general information about PBL, and support with data and evaluation. They regularly visit schools to attend PBL team meetings and provide face-to-face support. Support is most intensive when schools commence PBL or commence one of the higher tiers. They use their professional judgement and expertise to decide what support would be most useful to schools, and in some cases this differs to the support schools think they need. For example, some schools have wanted to progress quickly to higher tiers but coach mentors have identified fidelity issues that need to be addressed before doing so. Schools perceive coach mentors as a source of expert knowledge and advice. More than three in four rate the support received from a PBL coach mentor as very or extremely important.

PBL deputy principals are providing training to their teams of coach mentors, facilitating collaboration, and promoting awareness of the latest PBL research. During interviews all coach mentors said that they felt well supported by their deputy principal. Together, PBL deputy principals and coach mentors effectively support PBL coaches, although both groups noted that external coaches (a role that is distinct from PBL coach mentor) were an underutilised potential additional support for schools. While only three in ten PBL schools we surveyed report having an external coach, 72% of these schools report that the support they receive from the external coach is extremely or very important and a further 24% report that the support is fairly important. PBL deputy principals and the department may want to consider ways to further promote the opportunity to access an external coach.

## What challenges are faced by schools when implementing Positive Behaviour for Learning?

The main challenge that schools identify is ensuring consistent implementation by all staff. Lack of consistency was usually due to staff having different levels of understanding about PBL, staff being inconsistent in their use of reinforcement, and some staff being reluctant to adopt the PBL approach. Schools secondly point out the large time investment required, and many believe that PBL requires more time than alternative approaches. A challenge observed by some PBL deputy principals, coach mentors, and School Services staff is that schools can have difficulty applying the same principles of feedback and reinforcement to students who require tier 2 and 3 support.

Amongst the small proportion of schools that stopped implementing PBL, staff turnover, reduced engagement and competing time priorities were the main reasons for stopping. Yet many schools that describe themselves as previous PBL schools say they continue to use PBL practices.

## What aspects of Positive Behaviour for Learning are working well and what aspects are not working well?

Aspects that are working well include: (1) almost all schools self-report implementing the universal features; (2) the majority of PBL schools report that their leadership culture became more collaborative and more distributed following PBL implementation; (3) the PBL support structure consisting of four deputy principals managing teams of coach mentors, is working successfully to provide schools with the support that they need; (4) coach network meetings are offering added value to schools; (5) PBL schools are enthusiastic about the benefits of PBL and are very likely to recommend it; and (6) PBL schools report that PBL provides a clear and transparent guide for managing behaviour.

Aspects that are not working well include: (1) some schools need more support to integrate other wellbeing programs and initiatives with PBL, to better streamline the support they provide to students; (2) there is limited collaboration between PBL deputy principals and other School Services staff, despite their common goals; and (3) staff turnover results in the need to train new staff in PBL practices and principles, which can be time and resource consuming. To help schools use PBL in conjunction with other wellbeing programs, coach mentors, PBL deputy principals and other School Services staff could show schools examples of how this can be done. This could include examples of integrating with the Wellbeing Framework and School Excellence Framework.

## What is the perceived impact of Positive Behaviour for Learning on student wellbeing?

Nearly nine in ten PBL schools report that PBL has improved student wellbeing, and more than nine in ten would recommend the approach to a similar school. These schools use data, observations, and feedback from parents to support their claims that wellbeing has improved. The large majority of PBL schools say that major and minor problem behaviour incidents have reduced. (We note that this finding comes from self-report survey data and is not captured in centrally recorded behaviour data.) The longer that schools have been implementing PBL, the greater the perceived reduction in behaviour incidents. More than half of schools also perceive that PBL has reduced short suspensions but only a small proportion of schools report an improvement in attendance. Finally, schools believe PBL helps staff feel supported and empowered, which leads to further improvements in student wellbeing. We note that we have reported on the perceived impact of PBL on short suspensions because we believe this may be indicative of a real impact that we cannot detect at a system level using the currently available measures.

## What is the impact of Positive Behaviour for Learning on student wellbeing, as measured through centrally collected datasets?

We explored options to measure the impact of PBL on student wellbeing via independent behavioural, wellbeing and engagement indicators. The most relevant behavioural outcome is the (decreased) rate of problem behaviour incidents, examined in conjunction with PBL fidelity data. However this data is not centrally collected and it would not have been feasible to collect it in sufficient quantities for this evaluation. Previous research on the effectiveness of PBL indicates that it can also lead to reduced suspensions and possibly improved attendance, so we drew on these administrative datasets that are collected centrally. We also drew on the department's centrally collected TTFM student self-report survey that measures student engagement, wellbeing and effective teaching practices in NSW public schools.

Firstly we used a series of Poisson regression models to compare PBL and non-PBL schools on suspensions and fitted a generalised linear model to compare the same schools on attendance, holding other school factors constant. Our analyses found no differences between PBL and non-PBL schools, but we interpret findings with caution given limitations in the use of these data sources as outcome measures. For example, it is hard to detect an effect on attendance as rates are already high, they do not change much over time, and they are influenced by factors external to the school. It is hard to detect an effect on suspensions because they are relatively rare events that only apply to a small proportion of students. While we were not able to find evidence to support individual school perceptions of reduced suspensions at a system level, we cannot conclusively say that PBL is not having this impact.

Secondly we used a series of student-level regression models to estimate the effect of PBL on student wellbeing, as measured by TTFM. Our analyses were constrained to primary students in years 4, 5 and 6 as we had insufficient data for other year groups. Results indicate that PBL probably has little to no effect on these wellbeing measures, at least for this cohort. However, we identify limitations that may have impacted on our findings, in particular the necessary assumption that PBL schools would have had the same change over time as matched non-PBL schools had they not adopted PBL. We cannot test this assumption as there is insufficient historical data.

#### Conclusion and future considerations

SSSS funded 36 executive positions at a cost of approximately \$3.75 million per year. These executives supported just over half of all NSW schools to implement PBL, with a focus on those commencing PBL and those transitioning to higher tiers. There is a strong and widespread belief amongst schools that PBL is positively impacting on student wellbeing and reducing problem behaviour incidents. In interviews staff spoke about PBL with great passion and enthusiasm, and expressed conviction about its effectiveness. Schools report improvements in both classroom and playground behaviour, use of more respectful language amongst students, and improved behavioural choices. Also, the longer that schools use PBL, the more likely they perceive it to substantially improve wellbeing. Almost all schools would recommend PBL to other similar schools and most would strongly recommend. We conservatively estimate that just over half of all NSW public schools have adopted PBL, and only 67 have ceased.

In contrast to the strong positive views expressed by school staff, our impact analyses found no differences in suspension and attendance rates between PBL and non-PBL schools. Furthermore our analyses found no differences in wellbeing measures captured by the TTFM student self-report survey. We have outlined the limitations of our analyses that must be considered when weighing this evidence against the feedback from schools.

If funding for these positions continues, one area for focus is demonstrating to schools how to integrate other wellbeing programs and initiatives with PBL. Closer collaboration between PBL deputy principals and other School Services staff would also help with consistent communication of this information. Other areas to consider are further encouraging principals to provide release time, and promoting and supporting the external coach role, which is perceived as being an important resource by PBL deputy principals, coach mentors and schools. We suggest monitoring the number of schools implementing higher tiers as many schools are in the planning stage for doing so. Schools would also benefit from the central collection of both school-level problem behaviour incidents and PBL fidelity data. This would allow behaviour data to be examined for prevention purposes as well as for assessing effectiveness.

#### Limitations

This evaluation design was limited because it was retrospective. Stronger designs are feasible when evaluation planning commences before an initiative is implemented. Our outcomes analyses were also limited by the absence of centrally available behaviour incident data and PBL fidelity data. This meant we drew on some less suitable centrally available outcome measures, and we relied on schools' self-report data to gauge implementation fidelity. The final chapter in this report provides details on how to design an evaluation to make a more definitive assessment of PBI

### Chapter 1: Introduction

#### Supported Students, Successful Students funding package

In 2015, the NSW Department of Education (the department) introduced the Supported Students, Successful Students (SSSS) funding package, which commits \$167 million over four years to counselling and wellbeing services as part of the National Education Reform Agreement (NERA)<sup>1</sup>. SSSS aims to support schools to promote student character and wellbeing, help create safer school environments, counter inappropriate behaviours, and more effectively engage with vulnerable students. New resources under the initiative include:

- \$80.7 million to employ an extra 236 full-time equivalent (FTE) school counsellors and/or school psychologists
- \$51.5 million of flexible funding for wellbeing services equivalent to an additional 200 Student Support Officers
- \$15 million to support schools to implement a comprehensive and inclusive whole school approach to Positive Behaviour for Learning (PBL) funding that will employ an additional 36 PBL executive positions including four deputy principal PBL positions and 32 PBL coach mentors
- \$8 million to support Aboriginal students and their families
- \$4 million to support refugee students and their families
- \$8 million for graduate scholarships to boost the recruitment of staff for the school counselling service.

SSSS is complemented by the Wellbeing Framework for Schools<sup>2</sup>, which defines wellbeing as the quality of a person's life, focusing upon the subjective feeling of pleasure and the capacity to function effectively. The Wellbeing Framework for Schools articulates how the department will support and improve student wellbeing through the interconnected themes of Connect, Succeed and Thrive.

SSSS extends the range of services and initiatives that the department provides to support wellbeing in schools, such as Learning and Wellbeing Coordinators, Liaison Officers, Student Wellbeing Support Officers, Schools as Community Centres projects, the National School Chaplaincy Program and Healthy Canteens.

<sup>1</sup> For details on the NERA, see: <a href="http://www.federalfinancialrelations.gov.au/content/npa/national\_agreements/past/national-education-agreement.pdf">http://www.federalfinancialrelations.gov.au/content/npa/national\_agreements/past/national-education-agreement.pdf</a>.

<sup>2</sup> For details on the Wellbeing Framework, see: https://www.det.nsw.edu.au/wellbeing/about.

## Supported Students, Successful Students funding for Positive Behaviour for Learning

The SSSS initiative has provided funding for 36 PBL executive positions across the state who support schools to implement PBL. These executive positions include:

- 32 PBL coach mentors (8 assistant principals/head teachers per the four operational directorate model) who train and mentor PBL internal and external coaches and assist schools to support the wellbeing of all students through the development and delivery of professional learning. Their role includes:
  - mentoring internal and external coaches to build their coaching expertise and capabilities to apply the PBL framework in their role
  - supporting schools to use evaluation tools to assist in identifying strengths and opportunities for growth in the implementation of the PBL process.
- four PBL deputy principals (one for each of the four operational directorates)
  who work collaboratively within a state-wide team to promote the consistent
  delivery of PBL training and implementation of the PBL framework, and
  build the capabilities of the 32 PBL coach mentors. The PBL deputy principals
  coordinate and deliver local professional learning activities for school staff and
  PBL coaches.

#### **Positive Behaviour for Learning**

PBL is an evidence-based<sup>3,4</sup> whole school approach that aims to create a positive, safe and supportive school climate in which students can learn and develop. The PBL approach is intended to strengthen learning outcomes and wellbeing by focusing on social expectations and behaviour. PBL involves each school establishing a continuum of support, where students have access to more support as needed. The continuum emphasises the prevention of problem behaviour and early intervention rather than a reactive approach. Across the continuum, schools implement four critical and connected features of PBL, including:

- **Practices** that are student focused and include evidence-based processes, interventions and strategies that support students. Schools select and adjust practices to ensure that they are culturally and contextually relevant.
- Systems that are staff focused and include policies and procedures that support all staff with the ongoing and sustainable implementation of the practices that support students.
- Data that is collected to identify the current status, the need for universal, group, and individual support, and the effects of interventions. Schools consider data on student behaviour, academic performance, attendance and other key indicators.
   Data on how well the practices and systems are being implemented is essential to PBL. By reviewing data frequently, schools can make decisions to select, differentiate or discontinue practices based on need.
- Outcomes that are locally determined, contextually and culturally relevant, and measurable. They include academic, social-emotional, and behavioural achievements of all students.

<sup>3</sup> Mooney, M., Dobia, B., Yeung, A., Barker, K., Power, A., & Watson, K. (2008). Positive behaviour for learning: Investigating the transfer of a United States system into NSW Department of Education and Training Western Sydney Region schools. Report published by The University of Western Sydney: Penrith NSW Australia.

<sup>4</sup> Horner, R., Sugai, G., & Anderson, C. (2010). Examining the evidence base for school-wide positive behaviour support. Focus on Exceptional Children, 42(8), 1-14.

Schools engage in a PBL problem solving process where they use data to inform decision making, establish systems, policies and procedures that enable staff to meet the needs of all students, and implement evidence-based practices to support students. Internationally, there is evidence that a PBL approach can enhance the social, emotional and learning outcomes of students.<sup>5,6,7</sup>

The PBL framework guides each school to develop a continuum of support that promotes student learning and wellbeing for all students. The continuum of support acknowledges that learning and wellbeing is dynamic; at different times and for different reasons (social, academic, behavioural), students will need additional support to be successful. The continuum is developed across three tiers:

- Tier 1, Universal support (where prevention of problem behaviour is the focus)
- Tier 2, Targeted support, and
- Tier 3, Intensive individualised support (where early intervention is the focus).

For further information about these three tiers, see Appendix A.

Each school determines how they will lead PBL in their school. Some schools establish a specific team or identify an existing team to lead PBL implementation. The team, which has representatives from across the school, assists the entire staff with PBL implementation. Teams develop a yearly action plan, meet regularly, collect and use data for decision making, and collaborate with staff and families about the PBL approach. The way that PBL is led at each school varies according to the school's needs and local context.

PBL coaches provide professional support to teams to help them transfer their PBL learning into practice. Coaches are a source of expert knowledge about the PBL approach and provide feedback to teams about their problem solving processes and other key elements of PBL. They also encourage teams to engage in self-reflection about how they can improve their practices in order to develop a sustainable PBL approach. It is recommended that schools use an external coach who comes from the network of schools, as well as an internal coach who is selected from within the school's existing staff.

PBL has been adapted from a framework developed in the United States (US), called positive behaviour interventions and supports (PBIS)<sup>8</sup>. In Australia there is an emphasis on positive learning outcomes in addition to positive behaviour outcomes. In 2005, PBL was introduced into 13 NSW schools in the Western Sydney Region. Since then, approximately 1,100 NSW public schools (including primary, secondary and central schools) have been trained to implement the PBL framework. PBL is not a structured program, but rather it offers a framework that schools can use to guide the development of social and behavioural expectations for all students. PBL is considered a key mechanism in the implementation of the NSW Behaviour Code for Students<sup>9</sup>. It also aligns with the Australian Student Wellbeing Framework.

<sup>5</sup> Bradshaw, C., Mitchell, M., & Leaf, P. (2009). Examining the effects of school-wide positive behavioral interventions and supports on student outcomes. Results from a randomized controlled effectiveness trial in elementary schools. Journal of Positive Behavior Interventions, 12(3), 133-148.

<sup>6</sup> Horner, R., Sugai, G., Smolkowski, K., Eber, L., Nakasato, J., Todd, A., & Esperanza, J. (2009). A randomized wait-list controlled effectiveness trial assessing school-wide positive behavior support in elementary schools. Journal of Positive Behavior, 11(3), 133-144.

<sup>7</sup> Barrett, S., Bradshaw, C., & Lewis-Palmer, T. (2008). Maryland state-wide PBIS initiative: Systems, evaluation, and next steps. Journal of Positive Behavior Intervention, 10, 105-114.

<sup>8</sup> It is also known in the US as school-wide positive behaviour support (SWPBS) or positive behaviour in schools (PBS).

<sup>9</sup> https://education.nsw.gov.au/policy-library/associated-documents/behaviourcode.pdf

#### Evidence for Positive Behaviour for Learning effectiveness

The literature on PBL effectiveness is almost exclusively from the US. The most common measure of behaviour change is office discipline referrals, but others include suspension, expulsion and attendance. Academic changes are also sometimes examined. Researchers note that key limitations in measuring these outcomes are that schools differ in their behaviour management practices. A range of other evaluation challenges are documented, together making it difficult to isolate the effects of PBL.

In 2010, Horner et al. reviewed 46 papers that assessed PBL effectiveness (published between 2000 and 2009)<sup>10</sup>. They concluded that the overall PBL approach can be classified as evidence based and is sufficient to warrant large-scale implementation. However, Chitiyo, May, and Chitiyo (2012)<sup>11</sup> later applied more stringent criteria in reviewing these studies, many of which they noted were descriptive, non-experimental studies based on a single-case design. Following their review, Chitiyo et al. (2012) identified two studies that met their more stringent criteria and concluded that "although there is evidence pointing to its efficacy, the research behind SWPBS [School Wide Positive Behaviour Support] is still weak".

Of the two studies that Chitiyo et al. (2012)<sup>12</sup> identified, Bradshaw et al. (2010) found significant reductions in office discipline referrals and suspensions, and significant improvements in standardised test achievement scores. Attendance was not measured in this study. Horner et al. (2009)<sup>13</sup> found improvements in the perceived safety of the school setting and the proportion of students meeting or exceeding state reading assessment standards. Suspensions and attendance were not measured in this study.

There has been no system level examination of the impact of PBL in NSW public schools, but in 2008, Mooney et al. evaluated PBL at 20 of the original Western Sydney Region schools. This evaluation found that students at these schools demonstrated higher scores on self-report measures of school competency, mathematics, self-concept, and measures of motivation. Additionally, students at PBL schools had lower scores on a measure of disengagement than students at non-PBL schools. PBL did not appear to have an impact on overall attendance and suspension rates, although there was limited room for improvement. When short and long suspensions were examined separately, secondary PBL schools experienced a decrease in long suspensions, while a sample of secondary non-PBL schools experienced an increase.

In sum, the research indicates that there is promising evidence for the positive effects of PBL. Further information is provided in Appendix B.

<sup>10</sup> The five criteria identified by Horner et al. (2010) are: 1) The practice and participants are defined with operational precision to allow replication, 2) The research employs valid and reliable measures, 3) The research is grounded in rigorous methodological designs, 4) The research documents experimental effects without iatrogenic outcomes, and 5) The research documents effects.

<sup>11</sup> Chitiyo, M., May, M.E., & Chitiyo, G. (2012). An assessment of the evidence-base for school-wide positive behavior support. *Education and Treatment of Children*, 35, 1-24.

<sup>12</sup> Bradshaw, C. P., Mitchell, M. M., & Leaf, P. J. (2010). Examining the effects of schoolwide positive behavioral interventions and supports on student outcomes: Results from a randomized controlled effectiveness trial in elementary schools. *Journal of Positive Behavior Interventions*, 12, 133-148. doi:10.1177/1098300709334798

<sup>13</sup> Horner, R. H., Sugai, G., Smolkowski, K., Eber, L., Nakasato, J., Todd, A. W., & Esperanza, J. (2009). A randomized, wait-list controlled effectiveness trial assessing school-wide positive behaviour support in elementary schools. *Journal of Positive Behavior Interventions*, 11, 133-144. doi:10.1177/1098300709332067

## Indicators of Positive Behaviour for Learning effectiveness in the NSW public school system

In the existing literature, the most common indicator of PBL effectiveness is a reduction in major (executive managed) and minor (teacher managed) behaviour incidents (which are sometimes measured in the US via office discipline referrals). If PBL has successfully been applied in NSW public schools, we would expect schools to report a reduction in these behaviour incidents. Over time we might also expect to see improvements in student suspension and attendance rates. There are challenges, however, in using these measures in a retrospective evaluation in a NSW public school system context. Behaviour incidents are not captured centrally, and are collected differently across schools. Regarding suspensions, this information in captured centrally, but schools vary in their approach, depending on their specific context. Regarding attendance, there are a wide range of influencing factors, many of which are external to the school.

Other indicators of the effectiveness of PBL would be a large number of schools adopting the framework and implementing with fidelity, a small number of challenges faced by schools, and relatively few schools discontinuing their use of the framework. We would expect consistent positive feedback from schools about the impact of PBL on student behaviour and wellbeing, and on changing culture. We would also expect schools to recommend PBL to other similar schools.

## Chapter 2: Positive Behaviour for Learning evaluation

The Learning and Wellbeing Directorate within the department invited the Centre for Education Statistics and Evaluation (CESE) to evaluate the SSSS funding package. CESE developed the evaluation scope collaboratively and iteratively with Learning and Wellbeing.

#### **Evaluation questions**

The aims of the PBL evaluation were to:

- understand how PBL has been implemented in schools and how this may have varied across schools
- identify the aspects of PBL that are working well and the aspects that could be improved
- determine the impact of PBL on student wellbeing in NSW public schools.

Specifically, the PBL evaluation addressed the following six questions:

- 1. How is PBL being implemented by a sample of NSW public schools and is it being implemented as intended?
- 2. How have the PBL deputy principals and coach mentors assisted with PBL start-up and implementation?
- 3. What challenges are faced by schools when implementing PBL for the first time?
- 4. What aspects of PBL are working well, and what aspects are not working well?
- 5. What is the perceived impact of PBL on student wellbeing?
- 6. What is the impact of PBL on student wellbeing as measured through centrally collected datasets?

#### Method

We used a mix of quantitative and qualitative sources to evaluate PBL, including interviews, surveys, analyses of centrally collected attendance and suspension data, and an examination of how a sample of schools use their PBL data.

#### **Interviews**

We conducted 51 interviews, including:

- nine schools (five primary, three secondary, one school for specific purposes (SSP)) that were using PBL for the first time
- seven schools (five primary, two secondary) that had been using PBL for at least three years

- six schools (four primary, two SSP) that used PBL previously but no longer did so
- seven schools (two primary, three secondary, one SSP, one central) that did not use PBL
- nine PBL coach mentors
- seven PBL deputy principals (DPs)<sup>14</sup>
- six School Services staff.

We analysed interview transcripts with NVivo 11 software to identify common themes that emerged. Further information about the interview questions is provided in Appendix C.

#### Surveys

We developed a survey instrument with input from an Evaluation Reference Group that included separate sets of questions relevant for:

- schools that were currently implementing PBL
- schools that were planning to implement PBL
- schools that previously implemented PBL<sup>15</sup>
- schools that had never implemented PBL.

This was designed to provide insight into how schools are implementing PBL, the perceived impact of PBL on student behaviour and wellbeing, why some schools ceased using PBL, and alternative approaches to behaviour management that are being implemented in NSW public schools. Survey questions are provided in Appendix D and a complete survey analysis is provided in Appendix E.

#### Sampling approach

We employed a different sampling approach for each subgroup of interest. We invited all principals of schools thought to be implementing or to have previously implemented PBL to complete a survey, or to ask someone from the leadership team to complete it on their behalf. We additionally asked principals of PBL schools to invite a classroom teacher to complete the survey. In contrast, we only invited a subgroup of principals of schools thought to have never implemented PBL to answer the survey – those who had not been invited to complete the 2018 CESE Annual Survey – so as not to add unnecessary administrative burden to principals' workload. These principals also had the option of forwarding the survey to someone from the leadership team to complete. We designed the survey invitation to enable principals to select the most appropriate set of survey questions according to the school's PBL status. Further information about our survey population of interest and sampling approach is in Appendix F.

<sup>14</sup> There are a maximum of four PBL deputy principals at any one time but there are seven interviews due to staffing changes.

<sup>15</sup> Of the 43 respondents from previous PBL schools that we surveyed, 16 had recently completed the CESE Annual Principal Survey and of the 196 respondents from non-PBL schools that we surveyed, seven had recently completed the CESE Annual Principal Survey. This Annual Principal Survey contained a number of the same questions as the PBL survey. Those who had completed the Annual Principal Survey were not asked the same questions again in the PBL survey (that is, they skipped any duplicate questions). For these questions, we report the responses they entered in the Annual Principal Survey.

<sup>16</sup> Learning and Wellbeing maintains a database of schools implementing PBL but this is not always completely up to date because schools may elect to start or stop using PBL at any time. Consequently, we had only rough estimates of the sample sizes within PBL, non-PBL, planning-to-implement, and previous PBL schools.

In total we sent survey invitations to 1,707 schools and we received 852 survey responses (a response rate of 50%). This included:

- 566 PBL schools<sup>17</sup>
  - 254 principals
  - 141 other staff members
  - 171 schools where both the principal and another staff member responded
- 196 non-PBL schools
- 43 previous PBL schools
- 30 planning to Implement PBL schools.

#### Survey representativeness

Since the data on the schools who fell into each of the four categories came from multiple sources and contained some conflicting information, and since there are inaccuracies in the existing database of PBL schools, we were unable to determine how representative of the population our samples were. As such, we report survey data without any weighting.

#### Characteristics of survey respondents

Of the PBL schools that responded to the survey, the majority were primary schools (75%; n = 427), followed by secondary schools (17%; n = 96). There were also a small number of SSPs (SSP, 4%; n = 23), central schools (3%; n = 17), infants schools (<1%; n = 2), and an environmental education centre (<1%, n = 1). The distribution of school types across the other PBL survey categories is similar and is presented in Appendix F. In terms of respondent roles, the majority of respondents from PBL schools were principals (48%; n = 354), followed by classroom teachers (25%; n = 183). Further information about respondent roles in the four PBL surveys is in Appendix F.

PBL schools we surveyed indicated the length of time that their school had been implementing PBL. Of the 540 schools who were currently implementing PBL (and provided consistent information), a minority (8%; n = 41) had been implementing PBL for less than one year, about a third (33%; n = 177) had been implementing for 1-3 years, and the majority (60%; n = 322) had been implementing for more than three years.<sup>18</sup>

#### Examination of schools' use of Positive Behaviour for Learning data

The survey described above included a question asking schools if they would be happy to share any de-identified data (from PBL evaluation tools or other sources) with CESE to support systemic improvement for schools. Of the schools who were currently implementing PBL, 317 answered 'yes' to this question and offered to share their data. In this report, we describe how some of these schools used their PBL data to inform decision making about behaviour management.

<sup>17</sup> Seventeen schools with multiple respondents provided conflicting information about the school's use of PBL and were excluded from subsequent analysis. This may have been due to staff variation in their knowledge of the school's approach, their knowledge of PBL and/or the length of time they had worked at the school.

<sup>18</sup> Twenty six schools with multiple respondents provided conflicting information about how long they had been implementing PBL and were excluded from analysis.

#### Analyses of centrally recorded administrative data

Finally, we examined the impact of PBL on the department's centrally recorded attendance and suspension data. For each PBL school, we identified a matched non-PBL control school and estimated the average impact of PBL on:

- attendance rate
- short suspension counts (that is, total number of short suspensions)
- the number of unique (individual) students who receive short suspensions
- long suspension counts
- the number of unique students who receive long suspensions.

Appendix G presents this analysis in detail.

In addition to these attendance and suspension measures, we drew on the department's TTFM self-report student survey that measures student engagement, wellbeing and effective teaching practices in NSW public schools. It was first piloted in NSW in 2013 and 2014 became available for all schools to opt-in from 2015 onwards. Student participation in the survey is voluntary (managed via an opt-out process) and principals can also select which year groups and classes are invited to participate.

Appendix H presents this analysis in detail.

We also considered using data from the School Excellence Framework (SEF) which was introduced in 2016. However, this is too recent to allow for a three year PBL transition period and consequently, there are no schools with pre and post PBL data available. Further, a new version of the SEF was introduced to 50% of schools in 2018 and it is not feasible to compare the old and new versions.

# Chapter 3: How is Positive Behaviour for Learning being implemented and is it being implemented as intended?

In this chapter we examine how PBL schools are implementing PBL across the three tiers of support. We draw upon schools' self-reported implementation of PBL, rather than using data from existing fidelity measures, since not all PBL schools have completed these, and they are not available centrally. In particular, we focus on how schools collect and use data to inform decision making, and present examples of how some schools are doing this effectively.

#### Almost all Positive Behaviour for Learning schools selfreport implementing the universal features as intended

PBL is a flexible approach that schools can tailor to their specific context. However, there are a number of universal school-wide features that should be seen if PBL is being implemented as intended.<sup>19</sup> The PBL Survey examined whether schools self-reported implementing these universal features (see Table 1). Note that school data has been excluded where conflicting information was provided by two different respondents from the same school. Additional information on the implementation of universal features is presented in the complete survey analysis in Appendix E.

<sup>19</sup> Positive Behaviour for Learning Information for Schools. Presentation given for the NSW Department of Education's Quality Teaching Council Registered Course.

Table 1
Proportion of Positive Behaviour for Learning schools implementing universal features

Universal PBL feature	Proportion of PBL schools implementing universal feature
1. Principal support, participation, and leadership	99% (n = 561)
2. Rules and expectations specifically for behaviour	99% (n = 544)
3. School-wide reinforcement system	98% (n = 524)
4. Procedures for a consistent staff approach to behaviour management	97% (n = 525)
5. Collection of data	96% (n = 520)
6. Procedures for responding to problem behaviours	95% (n = 512)
7. Procedures for teaching expected behaviours	93% (n = 493)
8. Procedures for informing parents about expected behaviours	86% (n = 439)
9. Common purpose and approach to discipline	86% (n = 442)
Proportion implementing eight or nine universal features	85% (n = 420)

**Note.** The base size for these proportions ranges from n = 493 to n = 566 due to survey drop-out and the exclusion of schools with multiple respondents who provided conflicting information.

Table 1 indicates that 85% of schools are implementing all or almost all of the universal features. There may be room to improve the extent to which parents are informed about expected behaviour and the development of a common purpose and approach to discipline. It should be noted that this self-reported information is not an indicator of how well schools are implementing each universal feature or whether they are implementing with fidelity. However, it is encouraging to see that the great majority of PBL schools we surveyed reported implementing at least eight of these universal features.<sup>20</sup>

## After implementing Positive Behaviour for Learning, schools are more likely to collect data on problem behaviours

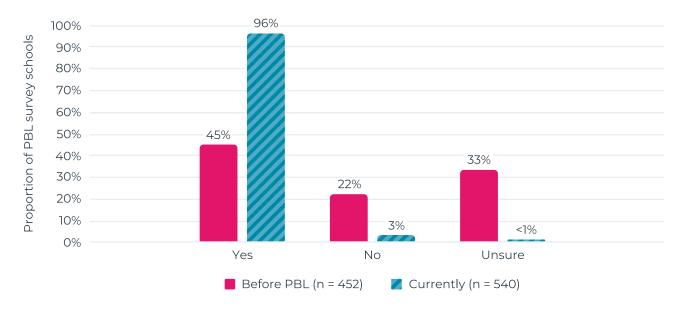
Collecting and using data to make decisions about behaviour is a key universal feature that is required for successful PBL implementation. If PBL is being implemented as intended, any type of data collection should include data on problem behaviour incidents. This may include the student(s) involved, the type of incident (for example, major or minor), and the location and time of the incident. This data should be examined regularly and used for decision making, ongoing behaviour monitoring (for example, of particular students, year groups, locations), and evaluation of PBL practices and procedures.

<sup>20</sup> During in-depth interviews with 16 PBL schools, feedback about the universal features was consistent with these survey findings.

PBL schools we surveyed indicated whether they collected data on problem behaviour<sup>21</sup> before implementing PBL and whether they currently did so. As shown in figure 1, before implementing PBL, less than half (n = 204; 45%) collected data on problem behaviour.<sup>22</sup> In contrast, almost all (96%; n=520) PBL schools indicated that they currently collected this type of data.<sup>23</sup> This suggests that at a substantial number of PBL schools we surveyed introduced data collection after commencing PBL.

Figure 1

Collection of problem behaviour data before implementing Positive Behaviour for Learning and currently



<sup>21</sup> Schools were not asked about positive behaviours they are not encouraged to collect this type of data. Positive behaviours are considered too time consuming for school staff to systematically record.

<sup>22 452</sup> PBL survey schools responded to this question and provided consistent information. Amongst schools with multiple respondents, there were 99 additional schools where respondents provided conflicting answers to this question.

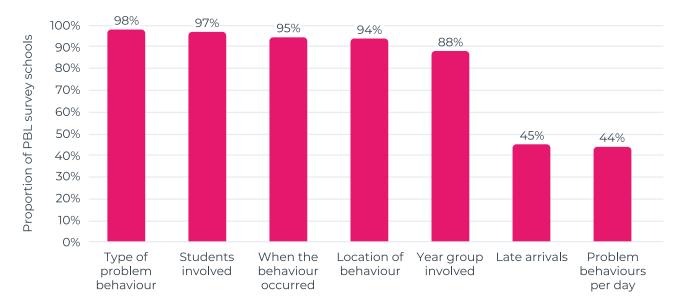
<sup>23 540</sup> PBL survey schools responded to this question and provided consistent information. Amongst schools with multiple respondents, there were 11 additional schools where respondents provided conflicting answers to this question.

## Schools are collecting similar types of behaviour data, they use a mix of database management systems but most commonly Sentral

Respondents who said they did collect data on problem behaviour were asked to specify which types of data were collected. As shown in figure 2, the great majority of schools collected data on the type of problem behaviour (98%; n = 509)<sup>24</sup>, the students involved (97%; n = 499)<sup>25</sup>, when the behaviour occurred (95%; n = 486)<sup>26</sup>, and the location of the behaviour (94%; n = 481)<sup>27</sup>.

Figure 2

Type of problem data collected by schools



**Note.** The base size for these proportions ranges from n = 465 to n = 521, due to exclusion of schools with multiple respondents who provided conflicting information.

All respondents who indicated that they collected problem behaviour data, were asked which data management system their school used to do this. As shown in figure 3, of the 518 schools who responded to this question (and provided consistent information), the majority used Sentral (65%; n = 335). Less common systems included EBS (16%; n = 82), paper forms (3%; n = 16) and excel (3%; n = 16). Other software packages that were mentioned (13%; n = 69) included Momentum ESR, STARS, Millenium, Google docs and Dojo.<sup>28</sup>

<sup>24</sup> Amongst schools with multiple respondents, there were 13 additional schools where respondents provided conflicting answers to this question.

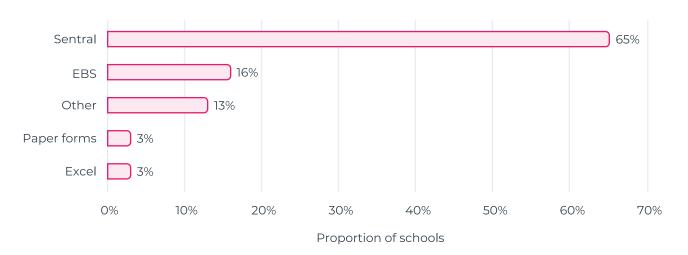
<sup>25</sup> Amongst schools with multiple respondents, there were 19 additional schools where respondents provided conflicting answers to this question.

<sup>26</sup> Amongst schools with multiple respondents, there were 21 additional schools where respondents provided conflicting answers to this question.

<sup>27</sup> Amongst schools with multiple respondents, there were 24 additional schools where respondents provided conflicting answers to this question.

<sup>28</sup> Amongst schools with multiple respondents, there were eight additional schools where respondents provided conflicting answers to this question.





#### Positive Behaviour for Learning schools report analysing their data at least once per term, which reflects good implementation

Frequent data analysis is a critical feature of good PBL implementation. This allows schools to identify areas of concern and track changes over time. PBL schools we surveyed that collected data on problem behaviour indicated that they analysed their data with the following frequency:

- once per month 131 schools (30%)
- weekly 115 schools (26%)
- once per term 109 schools (25%)
- a few times per year 53 schools (12%)
- unsure 27 schools (6%).

Thus, the majority of schools analysed their data at least once per term and just over half were analysing their data even more frequently.<sup>29</sup> This is consistent with good PBL implementation as it allows schools to make informed decisions at regular intervals and modify their practices as necessary.

<sup>29 435</sup> PBL survey schools responded to this question and provided consistent information. Amongst schools with multiple respondents there were 94 additional schools where respondents provided conflicting answers to this question.

#### Positive Behaviour for Learning schools report using behavioural data to inform decision making and to develop appropriate interventions

If PBL is being implemented as intended, schools will use their behavioural data to inform decision making. At PBL schools we surveyed, 87% (n = 456) of respondents said the team leading PBL implementation did use data to make planning decisions, 50 (10%) said the team did not use data to make planning decisions, and 17 (3%) were unsure. $^{30}$ 

Supporting these findings, the majority of PBL schools that were interviewed said that their data was a powerful tool that informed learning teams, allowed them to track behaviour, and helped with decision making and parent interviews. One PBL team member described how the school used data to identify areas of need.

"All the data is collected and the data gets analysed on a regular basis and we're able to identify the need within the school based on the data. So which school playground areas need some more work in them, whether we have classroom concerns or outside of school settings, transition times ... with bullying we've been able to monitor it and we've not just been able to monitor the bully but also the victim."

#### [PBL team member]

Although the majority of PBL schools we surveyed indicated that they were using data to make decisions, PBL coach mentors and deputy principals highlighted the importance of training PBL team members in how to use data most effectively.

We look more at how to analyse the data... this year we've actually taken it a step further ... we actually now train specifically coaches or their data people on their team. Because some of larger schools will have a team with a specific dedicated data person to make use of Pivot charts [in Excel], in order to actually drill down into that data effectively."

[PBL coach mentor]

<sup>30 523</sup> PBL survey schools responded to this question and provided consistent information. Amongst schools with multiple respondents, there were 28 additional schools where respondents provided conflicting answers to this question.

Boxes 1 and 2 provide examples of how two PBL schools have been using their data to inform decision making. These schools collect and analyse their data frequently, make decisions based upon data, and regularly discuss how to use their data to identify targeted behavior management strategies. These examples highlight the flexibility of the PBL framework in terms of the type of data that is collected, while also illustrating the benefits of regular data analysis.

#### Box 1

How a Positive Behaviour for Learning secondary school uses data for decision making

This example illustrates how a PBL secondary school, which introduced PBL in 2010, collects and uses their data. The school records negative behaviour incidents in the Millennium database and once a month, a staff member extracts this information and produces a summary report for each year group. The summary report contains graphs and tables and includes information such as:

- total number of Millennium entries or incidents for the month
- total number of students recorded on Millennium for a discipline related incident in the month
- number of students who received Millennium entries in the month for the three categories of 1, 2-5 and 6+ Millennium entries
- names of top five students for each year group in the category of 6+ entries.

The report also includes a summary table, showing behaviour for each month dating back to February 2014. Each month, the summary report is used at the school's PBL Leadership Team meeting. If specific issues are identified (for example, a large number of students not wearing school uniform) the PBL action team is asked to create lessons to address each issue. If teachers and students are losing interest in the school's rewards program, the school mentions the rewards program in assembly, on Facebook and on their website, and puts posters around the school.

#### Box 2

#### How a Positive Behaviour for Learning primary school uses data for decision making

This example illustrates how a PBL primary school has been using behaviour data to identify trends and inform decision making. Staff record minor and major behaviours in a tracking folder which is reviewed weekly by the school executive. This allows staff to identify any students who are displaying persistent problem behaviours. They can also identify any playground issues that may be causing concern (for example, handball rules). At the end of each term, the following data is summarised:

- number of behaviour incidents recorded per class
- number of behaviour incidents recorded per location
- number of behaviour incidents recorded per session
- number of behaviour incidents recorded each day of the week
- · number of staff who recorded a behaviour incident
- the number of planning room referrals (students who display persistent minor behaviours or are involved in a major incident, are referred to the planning room to reflect upon their behaviour).

Staff compare this data from term to term, to track progress over time. The data is used to inform decisions such as:

- interventions for particular students
- explicit instructions regarding playground behaviour (for example, during ballgames)
- how student parliament can contribute towards particular school rules
- which PBL evaluations tools would benefit the school.

## Positive Behaviour for Learning schools report using evaluation tools to examine their implementation fidelity

There are a number of PBL evaluation tools that schools can use to examine various aspects of their implementation fidelity. Table 2 presents each evaluation tool, a description of their purpose, and the proportion of PBL schools we surveyed that reported using them. The most commonly used evaluation tools were the School-Wide Evaluation Tool (SET) and the Self-Assessment Survey (SAS). Of the 458 schools that had been using PBL for at least one year, 85% (n = 390) had used at least one evaluation tool.

#### Table 2

### Proportion of Positive Behaviour for Learning schools that used Positive Behaviour for Learning evaluation tools

Evaluation tool	Description	Proportion who used tool
School-Wide Evaluation Tool (SET)	Assesses the major features of the school-wide PBL approach via interviews, observations, and a review of school records	365/482 schools (76%) <sup>31</sup>
PBL Self-Assessment Survey (SAS)	Measures staff perceptions of behavioural support systems in the school	345/478 schools (72%) <sup>32</sup>
Team Implementation Checklist (TIC)	Assesses the development, implementation and monitoring of the actions of the PBL team	201/456 schools (44%) <sup>33</sup>
Benchmarks of Quality (BOQ)	Assesses the universal school-wide PBL process	183/449 schools (41%) <sup>34</sup>
Benchmarks for Advanced tiers (BAT)	Assesses the implementation of tiers 2 and 3 behavioural support systems and a school's readiness to implement these systems	44/447 schools (10%) <sup>35</sup>

All of the schools interviewed that had been using PBL for three or more years had also used some or all of the tools and reported finding them very helpful for identifying areas of PBL implementation that could be improved.

<sup>31</sup> Amongst schools with multiple respondents, there were 65 additional schools where respondents provided conflicting answers to this question.

<sup>32</sup> Amongst schools with multiple respondents, there were 69 additional schools where respondents provided conflicting answers to this question.

<sup>33</sup> Amongst schools with multiple respondents, there were 91 additional schools where respondents provided conflicting answers to this question.

<sup>34</sup> Amongst schools with multiple respondents, there were 98 additional schools where respondents provided conflicting answers to this question.

<sup>35</sup> Amongst schools with multiple respondents, there were 100 additional schools where respondents provided conflicting answers to this question.

Consistent with our survey findings, a number of coach mentors said that they regularly supported schools with the SET and SAS evaluation tools. Some coach mentors encouraged schools to complete both of these tools every year. Coach mentors also highlighted the value of these evaluation tools by explaining how they could be aligned with the external validation process.

"I did the School-Wide Evaluation Tool, which is one of our evaluation tools. And I align it very similarly to the external validation process that's happening every five years under The School Excellence Framework now. We've actually been doing it every 12 months. The external coach goes in and interviews staff, students and the principal, does a visual audit, does classroom walkthroughs, and gets a snapshot of what the culture of the school is for wellbeing and learning. And we provide feedback to show what's working really well and where are some areas of improvement. And they can align [it] with their school planning and their strategic direction."

#### [PBL coach mentor]

Schools that use these PBL evaluation tools are not required to centrally report the outcomes and this makes it challenging to identify the proportion of schools that are implementing PBL with fidelity. However, our findings suggest that the majority of PBL schools we surveyed are using evaluation tools to examine various elements of their implementation and inform their decision making about PBL. Box 3 provides an example of how one PBL school used a number of PBL evaluation tools to inform their decision making and identify priority areas for improvement.

#### Box 3

## How a Positive Behaviour for Learning central school used evaluation tools to identify areas for improvement

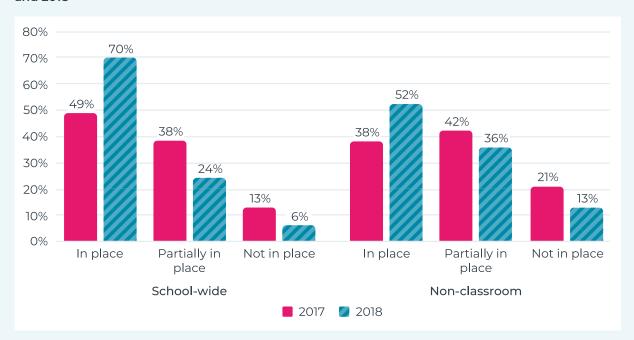
This example illustrates how one PBL central school used PBL evaluation tools to inform their decision making about areas for improvement. One of the tools used by this school was the PBL Self-Assessment Survey (SAS) which measures staff perceptions of behavioural support systems in the school. These include school-wide discipline systems, non-classroom management systems, classroom management systems, and individual management systems. Respondents are presented with 18 statements about behaviour support systems (for example, "Expected student behaviours are taught directly") and are asked if each one is "In place", "Partially in place", or "Not in place". The SAS guides PBL decision making and action plans, allows schools to track change over time, and also increases staff awareness of the school's PBL approaches.

The school performed the SAS for school-wide discipline systems, and non-classroom management systems in 2017 (school-wide n=401, non-classroom n=207) and 2018 (school-wide n=507, non-classroom n=232). Results are shown in figure 1a and indicate that in 2018, more respondents thought that the school had behavioural support systems in place across these two settings, compared to 2017. Based on their SAS results, staff at the school identified priority areas for improvement that included:

- 1. students experience high rates of academic success
- 2. instruction and curriculum materials are matched to student ability (maths, reading, language)
- 3. expected student behaviour and classroom routines are directly taught.

#### Figure 1a

## Self-assessment survey results at a Positive Behaviour for Learning central school in 2017 and 2018



The school also conducts the School-wide Evaluation Tool (SET) each year which is designed to assess the major features of the school-wide PBL approach. It includes interviews, observations, and a review of school records. An independent person conducts the SET by first interviewing the principal and then interviewing a sample of staff and students. Based on these interviews, scores are calculated across seven sub-scales. Scores over 80% indicate that the system is well in place. At this particular central school, the SET was conducted in 2017 and 2018 and identified improvements in a number of areas. All the areas that were below 80% in 2017, had improved to above 80% in 2018. The SET allowed the school to identify their strengths and achievements, as well as issues to consider in their future planning. To maintain momentum and develop sustainability the school considered:

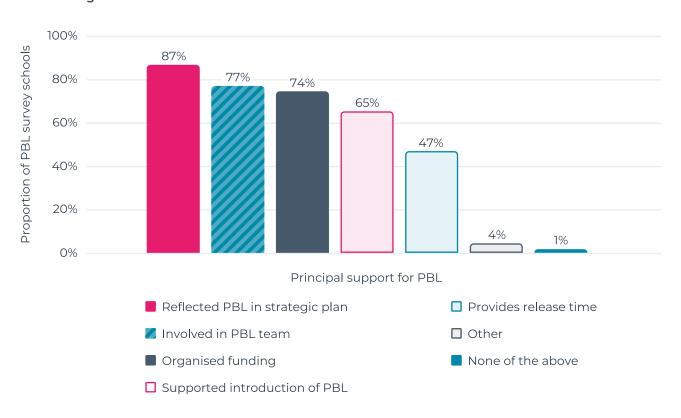
- continuing staff professional learning to develop consistency of practice across the whole school
- extending PBL visibility into the community via the school newsletter
- consistent signage in all classrooms
- · including student voice in PBL implementation to determine rewards and reinforcers
- ensuring that PBL is an agenda item for staff meetings.

## Most principals support Positive Behaviour for Learning implementation, although this could extend to more areas, particularly the provision of release time

Although the majority of PBL schools we surveyed indicated that the principal supported PBL implementation, as shown in figure 4, principal support does not extend to all potential areas. In particular, only 47% of respondents indicated that the principal provided release time. This could potentially make it difficult for some schools to design PBL lessons and attend PBL training. There is also room for improvement in the extent to which the principal supported the introduction of PBL, with only 65% of schools indicating that this had occurred. The importance of principal and leadership support was emphasised during interviews with School Services staff and coach mentors. These interviewees said that leadership support for PBL encourages staff buy-in and usually means that resources will be allocated to enable successful implementation.

Figure 4

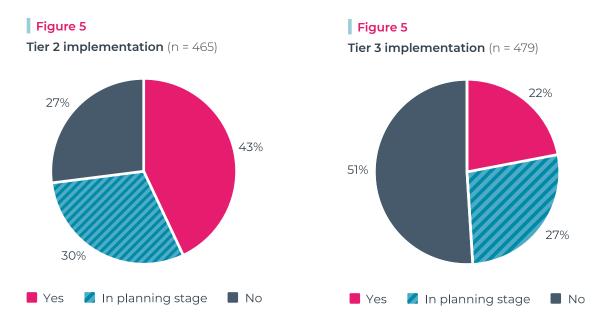
Principal support for Positive Behaviour for Learning implementation at Positive Behaviour for Learning schools



**Note.** The base size for these proportions ranges from n = 503 to n = 565, due to the exclusion of schools with multiple respondents who provided conflicting information.

## Fewer schools are implementing tiers 2 and 3 supports compared to tier 1 support

When schools begin to implement PBL, they typically focus on their universal features (in tier 1) for a number of years before they progress to tiers 2 and 3. Ideally, the universal features should be implemented with good fidelity before tiers 2 and 3 are implemented. As illustrated in figures 5 and 6, just under half of PBL schools we surveyed were implementing tier 2 (43%; n = 200)<sup>36</sup> and just under a quarter were implementing tier 3 (22%; n = 104).<sup>37</sup> Almost a third of PBL schools we surveyed that were not currently implementing tiers 2 and 3, were planning to implement these tiers.



The fact that fewer schools are implementing tiers 2 and 3 compared to tier 1 is consistent with our finding that 40% (n = 218) of PBL schools we surveyed had been implementing PBL for three years or less. PBL deputy principals indicated that some schools have not recognised that they have a need for tier 2 training and have therefore not progressed to higher tiers. However, a large number of schools have started to request training in these higher tiers. One PBL deputy principal reported that they had delivered more tier 2 and tier 3 training in the last year than in the last three years combined. To keep up with the increased demand for higher tiers, the department is currently building the skills of support staff who are working in this area. In particular, there is a need for more staff to be trained in functional behaviour assessments, which involve identifying problem behaviour triggers for students who require tier 3 support.

<sup>36</sup> Amongst schools with multiple respondents, there were 82 additional schools where respondents provided conflicting answers to this question.

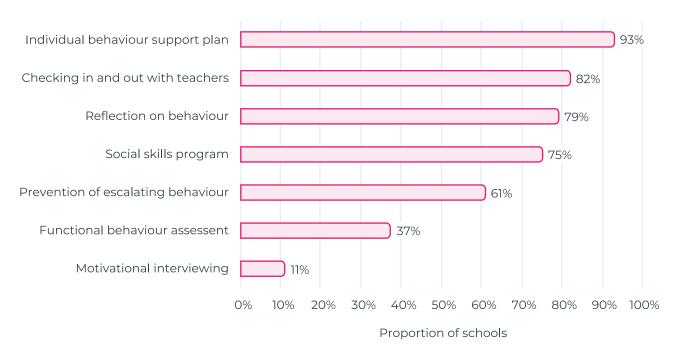
<sup>37</sup> Amongst schools with multiple respondents, there were 68 additional schools where respondents provided conflicting answers to this question.

## The most common type of targeted intervention is an individual support plan

Survey respondents who said the school was implementing tier 2 or 3 indicated that the most common type of targeted intervention was an individual behaviour support plan (93%; n = 196; see figure 7). Other common interventions included regular checking in and out with teachers during the day (82%; n = 172) , regular student reflection on behaviour with the teacher (79%; n = 163) , and social skills programs (75%; n = 158) .

Figure 7

#### Types of targeted or intensive interventions provided by Positive Behaviour for Learning schools



**Note.** The base size for these proportions ranges from n = 207 to n = 250 due to exclusion of schools with multiple respondents who provided conflicting information.

<sup>38</sup> Amongst schools with multiple respondents, there were 59 additional schools where respondents provided conflicting answers to this question.

<sup>39</sup> Amongst schools with multiple respondents, there were 59 additional schools where respondents provided conflicting answers to this question.

<sup>40</sup> Amongst schools with multiple respondents, there were 62 additional schools where respondents provided conflicting answers to this question.

<sup>41</sup> Amongst schools with multiple respondents, there were 59 additional schools where respondents provided conflicting answers to this question.

At one primary school, the Learning and Support coordinator described their targeted supports, which included checking in and out with staff, regular behaviour monitoring, students setting their own behaviour goals, and self-reflection on behaviour.

We have a check-in and check-out, where I have my SLSOs. They check-in for the first ten minutes after the bell has gone every day, and they check-out with them for the last ten minutes of the day. And they have a little tracking sheet, where they get a thumbs up, a middle thumb, or a thumbs down. And that's tracked. And then we collect the data. And they're on that program for two weeks ... if they can achieve 80% for two weeks, then I give them a little acknowledgement and they graduate ... they make their own goals for what their day is. ... Now they spend 15 minutes in the morning and say 10-15 minutes in the afternoon, where they sort of talk about their day. And that's a really positive teaching time, where you're really explicitly giving that extra layer of support for those students."

[Learning and Support coordinator]

## Decisions about tiers 2 and 3 are based on behavioural data, which is consistent with good implementation

Decisions about which individuals require tiers 2 and 3 support should primarily be based on regular analysis of behavioural data. If the data indicates that universal supports are insufficient for particular individuals, they should progress to tiers 2 or 3. Survey respondents indicated that decisions about student access to tiers 2 and 3 were based on the following factors:<sup>42</sup>

- by monitoring data on behavioural incidents 189/207 schools (91%)<sup>43</sup>
- teacher referral 131/198 schools (66%)<sup>44</sup>
- once a certain number of problem behaviours have been reached 100/220 schools (45%)<sup>45</sup>
- parental request 56/238 (24%).<sup>46</sup>

It is positive that the large majority of PBL schools we surveyed monitored data on behaviour incidents to decide which students should access higher tiers. This data-driven approach is consistent with good PBL implementation practice and indicates that schools are using data in meaningful ways to provide additional support to students when required.

<sup>42</sup> The base size for these proportions ranges from n = 198 to n = 238, due to the exclusion of schools who provided conflicting information.

<sup>43</sup> Amongst schools with multiple respondents, there were 62 additional schools where respondents provided conflicting answers to this question.

<sup>44</sup> Amongst schools with multiple respondents, there were 71 additional schools where respondents provided conflicting answers to this question.

<sup>45</sup> Amongst schools with multiple respondents, there were 49 additional schools where respondents provided conflicting answers to this question.

<sup>46</sup> Amongst schools with multiple respondents, there were 31 additional schools where respondents provided conflicting answers to this question.

## We conservatively estimate that 1,138 NSW public schools are implementing Positive Behaviour for Learning and that 67 schools have stopped implementing Positive Behaviour for Learning

Our estimates of the number of schools implementing PBL and those that have stopped implementing PBL are based on multiple data sources: a database held by Learning and Wellbeing (which is continually changing and challenging to keep up-to-date), information provided by principals who completed the 2018 Principal Survey, and information provided by school representatives that completed one of the suite of PBL surveys that we conducted in 2018.

We conservatively estimate that 1,138 NSW public schools are implementing PBL, including 835 primary schools, 213 secondary schools, 54 SSPs and 36 central schools.

We also estimate that 67 NSW public schools have stopped implementing PBL. This translates roughly to a 94% retention rate.

## Summary

The great majority of PBL schools self-reported implementing the universal features of PBL, which is consistent with the PBL framework and suggests good implementation fidelity. Importantly, PBL schools are collecting data and using data for decision making and future planning. Data collection is often supplemented with PBL evaluation tools, which provide helpful additional information about PBL implementation. With support from PBL coach mentors, some schools are gaining added value from using the PBL evaluation tools for self-assessments and external validation linked to the School Excellence Framework. Overall, PBL schools appear to be taking a data-driven approach to behaviour management, which is consistent with good PBL implementation.

# Chapter 4: How have Positive Behaviour for Learning deputy principals and coach mentors assisted with start-up and implementation?

SSSS funding for PBL includes funding for four PBL deputy principals and 32 coach mentors who provide support to schools with the start-up and ongoing implementation of PBL. In this chapter, we explore the ways in which they have done this and the value this has brought.

## Coach mentors are providing schools with professional learning, general information about Positive Behaviour for Learning, and support with data and evaluation

More than eight in ten (85%) PBL schools we surveyed and almost one in two (48%) schools that were planning to implement PBL reported having received professional learning or assistance from a state supported PBL coach mentor.<sup>47</sup> This suggests that coach mentors have good reach considering they are a team of only 32 and work with schools across the entire state. Table 3 further highlights the reach of coach mentors by illustrating the number of positions within each of the six operational directorates (the model that commenced in 2018) and the approximate number of PBL schools they support. Note that the information in this table is from the database maintained by Learning and Wellbeing. The total number of schools differs slightly from our estimate which takes into account survey data that we collected in mid-2018.

<sup>47 516</sup> PBL survey schools and 29 planning-to-implement PBL survey schools responded to this question and provided consistent information.

Table 3

## Distribution of coach mentors and Positive Behaviour for Learning schools across operational directorates in 2018

Operational directorate	PBL schools	Non-PBL schools	Coach mentor (& DP) positions (FTE)
Metropolitan North*	249	87	6
Metropolitan South*	201	158	7
Regional North	221	118	4.2
Regional South	206	106	5
Rural North*	255	180	5.8
Rural South and West*	224	203	8
TOTAL	1,356	852	36

Note 1. \* indicates PBL deputy principal included in the FTE calculation.

**Note 2.** The total number of PBL schools is based on the database maintained by Learning and Wellbeing and therefore differs slightly from our estimate, which we calculated using data from the PBL survey developed for this evaluation; the 2018 CESE Principal Survey and; the database of PBL schools maintained by Learning and Wellbeing.

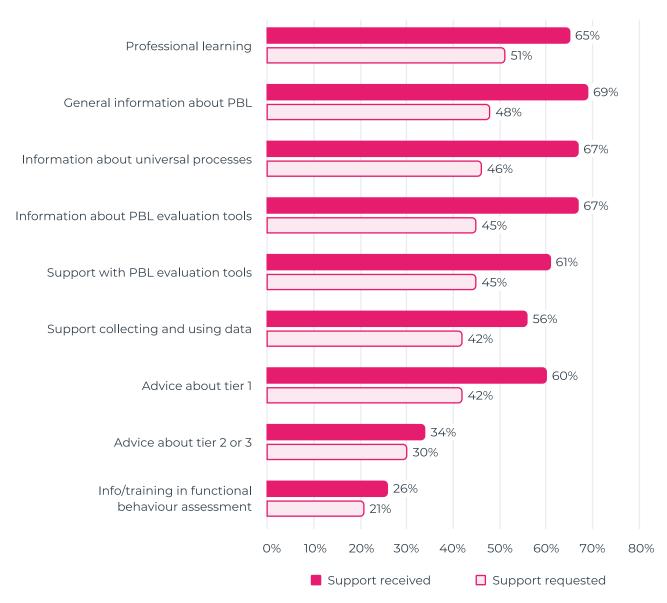
Survey respondents who indicated that their school had received assistance from a coach mentor were presented with a list of types of support and were asked:

- which of the supports they had requested (not necessarily received), and
- which of the supports they had received (not necessarily requested).

Figure 8 shows the areas of support that schools had requested and received from coach mentors. A fairly similar proportion of schools requested support in most of these areas although there were fewer requests for advice about tier 2 or 3, and information/training in functional behaviour assessment.<sup>48</sup> It is not surprising that a smaller proportion of schools requested support in these areas, since the majority of our survey respondents were not yet implementing the higher tiers. Figure 8 also indicates that coach mentors are providing support to schools who had not necessarily requested support. This suggests that coach mentors are being proactive in providing support where they feel it would be most beneficial.

<sup>48</sup> A similar pattern of results was obtained for support requested and received by planning-toimplement PBL survey schools (further details are provided in Appendix E).

Figure 8
Coach mentor support requested and received by schools



**Note.** The base size for these proportions ranges from n = 412 to n = 437 due to exclusion of schools with multiple respondents who provided conflicting information.

The main types of support that coach mentors are providing can be categorised as: 1) professional learning, 2) information about PBL and universal processes, and 3) support with data and PBL evaluation tools. This is consistent with the role of coach mentors who support schools with PBL start-up (where the focus is on universal processes), ongoing implementation, and evaluation.

During interviews, coach mentors discussed the types of support that schools request at different stages of PBL implementation. According to coach mentors, schools that are new to PBL initially request general information about what PBL involves as well as advice about how to get all staff "on board" with PBL.

"The first presentation is called a 'taster presentation', which is delivered on site at schools. The purpose of that is if schools are considering implementing PBL and the executive have already decided that yes, PBL would work at our school and be sustainable at our school, that's offered as a way to support staff commitment and staff buy-in."

#### [PBL coach mentor]

For schools that decide to implement PBL, coach mentors then provide an initial three-day course followed by ongoing support implementing the universal features of PBL.

Schools that have been using PBL for at least three years do not typically require as much continuous support from coach mentors. Rather, these schools request support intermittently or request refresher sessions.

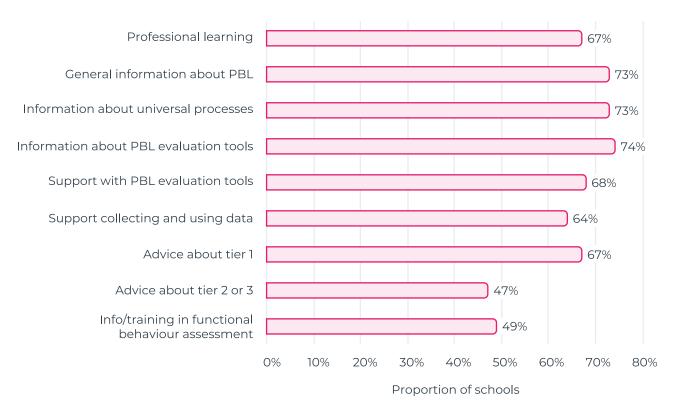
With schools that have been implementing more than three years, quite often what happens is that staff have moved on ... it may mean that there's no-one left on the team that has any PBL training. So we would recommend a training package called the Reload, which is essentially the three day training in one day. It's a very comprehensive overview. If they've been implementing more than three years, they need that."

#### [PBL coach mentor]

Consistent with survey findings, coach mentors said that a large part of their role involved supporting schools with data collection, using data to make decisions, and using PBL evaluation tools. Schools implementing PBL often requested support to set up systems to enable good data collection. Coach mentors said that they trained school staff in the types of data they should be collecting, how to collect it, how to interpret it, and how to use it in meaningful ways. According to coach mentors, once schools become proficient in their use of data and examine their data regularly, they start wondering how to manage students who require additional support. This is when schools become interested in tiers 2 and 3, but this usually only occurs after they have been implementing PBL for a number of years. They should also only progress to higher tiers if they are implementing their universal features with fidelity.

In addition to looking at support across all schools, we examined the proportion of schools that received support in the areas where they requested support. As shown in figure 9, not all schools are receiving the types of support they requested. However, the types of support that schools think they need may not necessarily align with the types of support that coach mentors think they need. Indeed, interviews with coach mentors indicate that they are using their professional judgement to discern which types of support would be most beneficial for schools. For example, coach mentors often commented that some schools wanted a quick fix or were in a rush to implement tiers 2 and 3. However, coach mentors said that these schools needed to implement their universal features with better fidelity before they could progress to higher tiers. Therefore, in some situations there are good reasons why schools may not always be receiving support in the areas where they requested support.

Figure 9
Proportion of schools that received support in the areas where they requested support



**Note.** The base size for these proportions ranges from n = 87 to n = 196 due to the exclusion of schools who did not request support in particular areas, and exclusion of schools with multiple respondents who provided conflicting information.

## Coach mentors are providing extensive face-to-face support to Positive Behaviour for Learning schools

In addition to the supports listed above, schools that were interviewed said that they had received substantial hands-on, face-to-face support from coach mentors. Schools indicated that coach mentors had invested considerable time and support that included:

- visiting the school to provide assistance and direction
- attending PBL team meetings
- developing links with parents and/or the community
- developing PBL teaching matrices (behavioural expectations in different settings)
- providing opportunities for schools to share their practices and experiences.

Schools were particularly appreciative of coach mentors visiting the school in person and their willingness to provide ad-hoc support as requested.

One school who was new to PBL mentioned that their coach mentor had attended and given presentations at a number of community events hosted by the school. This face-to-face support had helped build links with families and the community.

"[She] helped with the initial implementation to staff, to parents. She has then since attended a couple of our community functions that we've had to present at ... She also spoke at education week this year ... So she's helped with our community links, she's helped us with building it up ... she's helping us setting our directions and everything like that. So it's been good."

[Primary school PBL coordinator]

Coach mentors themselves highlighted the extensive face-to-face support that they provide during school visits where they often attend PBL team meetings.

"The other way that I provide support is on a less formal basis where I will attend some PBL meetings ... and offer suggestions based on whatever the agenda is on that PBL meeting at the time. And then on an informal ad hoc basis where I will get phone calls from internal coaches or emails where people are saying look, we're having some problems here or we're thinking about doing this, what do you think? And where should we go next? ... I'll come out and help you."

[PBL coach mentor]

## Coach mentors are providing expert knowledge and advice, and are therefore perceived as very valuable

The knowledge and advice provided by coach mentors was considered by many schools to be critical to their ability to implement PBL. Approximately three quarters (76%) of survey respondents rated the support they had received from a PBL coach mentor as "very" or "extremely important".<sup>49</sup> Specifically, importance of coach mentor support was rated as follows:

- extremely important 260 (44%) respondents
- very important 188 (32%) respondents
- fairly important 104 (18%) respondents
- not important 13 (2%) respondents
- unsure 21 (4%) respondents.

Thus, although schools were not necessarily receiving support in the exact areas where they requested support, they found the support they received from coach mentors to be important.<sup>50</sup>

<sup>49 586</sup> respondents from PBL survey schools answered this question and provided consistent information

<sup>50</sup> Similarly, 12 of the 13 planning-to-implement PBL survey schools rated the support they had received from a PBL coach mentor as "very" or "extremely important".

In interviews, representatives of PBL schools expressed similar views and reported that coach mentors were extremely helpful, easy to contact, and readily available to provide support. Schools highly valued their coach mentors' advice and found them to be very knowledgeable about PBL.

- "They're fantastic, can't speak highly enough of them."

  [PBL coordinator at a school new to PBL]
- "The coaches that you've got are amazing and they're with you all the time ... The coaches were we really needed them in order to do this, so they were mentoring us to like to lead it through the school and they were phenomenal."

[Deputy principal at a school implementing PBL for at least three years]

"He did a fabulous job in terms of providing ongoing training and seeing what other schools are doing and providing opportunities for sharing."

[Principal at a school implementing PBL for at least three years]

## Positive Behaviour for Learning deputy principals are providing training, facilitating collaboration, and promoting awareness of the latest Positive Behaviour for Learning research

Four PBL deputy principals work collaboratively in a state-wide team to facilitate consistent delivery of PBL. They support coach mentors by building their professional capabilities, and by coordinating and delivering professional learning activities.

All coach mentors interviewed said that they felt very well or fairly well supported in their role. Coach mentors said their PBL deputy principals were very approachable, knowledgeable, and readily available to discuss a variety of issues and challenges.

"One hundred percent, she's available, accessible, because again she's local and so whether it needs to be face-to-face support and collaboration or a phone call or an email, highly professional and knowledgeable and a great resource."

[PBL coach mentor]

According to PBL deputy principals, the type of support they provide includes:

- organising, developing and providing training such as:
  - professional learning for coach mentors
  - coach network meetings (designed to establish a network of internal and external coaches)
- working with coach mentors to set team goals
- examining how to integrate PBL with other school programs or initiatives
- facilitating team discussions about the latest PBL research
- · direct support to schools, especially schools new to PBL
- planning the team's training calendar.

The nature of support provided by PBL deputy principals is frequently tailored to the experience of individual coach mentors. One PBL deputy principal said the support she provided had changed over time as her team became more established and their professional learning needs changed.

44 the beginning of the year I was very much hands-on but as the team's grown I've had to move back and now I'm going right okay now I need to work out what the professional learning – differentiated professional learning for the team might look like. So in my head I'm kind of going well if I need to provide professional learning on data analysis for a group of three then I have to think about where that's going to happen, what that looks like. 

[PBL DP]

PBL deputy principals often seek feedback from coach mentors in order to determine the type of professional learning most needed by the team.

We asked all of the coach mentors to fill out – basically a coach self-assessment ... From that we determined some topics that the team would like to know about. One of them was around – they would have liked more information around functional behaviour assessment, so we offered some training on that. The other one was around coaching. We had a teacher quality advisor come and run two sessions."

[PBL DP]

## Positive Behaviour for Learning deputy principals and coach mentors support other coaches and report that the benefits of external coaches should be promoted to schools

In addition to PBL deputy principals and coach mentors, internal and external PBL coaches are another layer of support for schools. Internal coaches are staff members who serve as PBL coaches within their own schools. External coaches are not staff at the school but visit the school to assist with PBL activities. External coaches are often staff members at other schools. PBL deputy principals and coach mentors support internal and external coaches by providing ongoing training and professional development. They also host coach network meetings to build the capabilities of internal and external coaches. These coach network meetings provide the opportunity for schools to share their practices and learn from each other's experiences.

Survey findings revealed that 69% (n = 347) of PBL schools we surveyed had an internal PBL coach. In contrast, only 29% (n = 134) of PBL schools and 29% (n = 8) of schools that were planning to implement PBL had received assistance from an external coach (other than a coach mentor).

<sup>51 504</sup> respondents answered this question and provided consistent information. Amongst schools with multiple respondents, there were 55 additional schools where respondents provided conflicting answers to this question.

<sup>52 467</sup> respondents answered this question and provided consistent information. Amongst schools with multiple respondents, there were 86 additional schools where respondents provided conflicting answers to this question.

All individuals from PBL schools we surveyed who had received assistance from an external coach were asked how important that support had been. Respondents rated importance as follows:<sup>53</sup>

- extremely important 87 (42%) respondents
- very important 63 (30%) respondents
- fairly important 50 (24%) respondents
- not important six (3%) respondents
- unsure three (1%) respondents.

Thus, PBL schools we surveyed were less likely to have received support from an external coach compared to a coach mentor, but nevertheless they found the support provided by the external coach to be very important.

During interviews, PBL deputy principals and coach mentors agreed that the external coach role was very important because external coaches are not influenced by internal school politics. They are therefore able to provide independent, unbiased suggestions for improvement. However, PBL deputy principals and coach mentors said that that many schools did not recognise the benefits that an external coach could provide, which has resulted in the external coach role becoming less common over time. This is compounded by external coaches finding it difficult to obtain release time to visit other schools.

We need more, we need schools to take it on, we need principals to really value the role of external coach. We try and make principals understand that but ... they'll often say I don't need an external coach, we've got you and we don't want to waste that time and that money in doing that. And they don't understand the benefits they'll get from it, at least not initially."

[PBL DP]

School Services staff also agreed that the external coach role was challenging because school staff found it difficult to devote time and resources to other schools.

"Back in the day ... it was always fresh eyes ... We were external, and offering support and advice ... Then we've sort of moved into a newer model, where we sort of said 'Well schools can support each other,' but the reality is that schools are under so much pressure to do what they need to do in their own school, I don't believe we've been able to get that school-to-school support."

[School Services staff member]

## Summary

Overall, these findings suggest that the PBL coach mentors are providing valuable support to the great majority of PBL schools. Coach mentors are providing professional learning, information about PBL, and support with data and PBL evaluation tools. The PBL deputy principal role also appears to be working well to support coach mentors and boost their capabilities. Deputy principals and coach mentors support other PBL coaches but they emphasized the need for more external coaches and for the importance of this role to be promoted.

<sup>53 209</sup> respondents answered this question and provided consistent information.

## Chapter 5: What challenges are faced by schools when implementing Positive Behaviour for Learning?

This chapter discusses the main challenges that schools face in their PBL implementation. We present challenges from the perspective of school staff, PBL deputy principals, coach mentors, and other School Services staff.

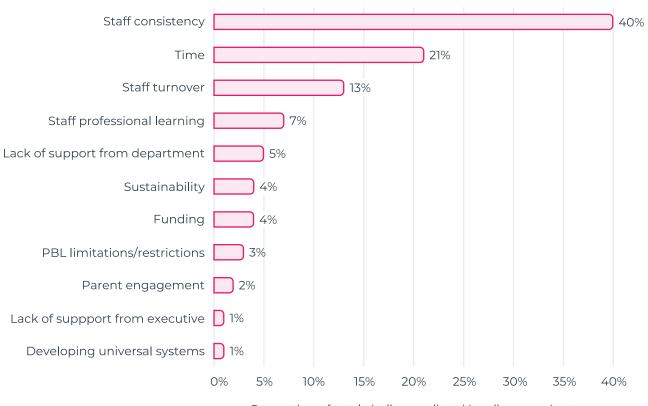
## The main challenge that Positive Behaviour for Learning schools report is ensuring consistent implementation by all staff

PBL schools we surveyed were asked to describe in an open-ended question any challenges they had encountered when implementing PBL. A total of 517 schools identified challenges which we categorised into 11 themes, as shown in figure 10. Some schools identified multiple challenges, resulting in 675 counted responses.

The standout challenge which accounted for 40% of the total challenges identified was difficulty achieving staff consistency when implementing PBL. Lack of consistency included:

- staff having different levels of understanding and experiences of PBL
- the same staff members being inconsistent in their use of reinforcement
- some staff being reluctant to buy into or engage with the PBL framework.

Figure 10
Challenges encountered when implementing Positive Behaviour for Learning (n=675)



Proportion of total challenges listed by all respondents

Survey respondents described the challenge of staff consistency, for example:

"Ensuring consistency in reporting incidents among all staff [is challenging]. Ensuring that consequences are followed through and dealt with consistently by executive staff. Behaviour is subjective and everyone has their own viewpoints about what to log and what not to log."

[Primary school classroom teacher]

"Teacher buy in has been the biggest challenge, as changing habits in adults is far more challenging than with students. It has taken a couple of years to get momentum going with the new procedures and a common language."

[Primary school head teacher]

During interviews with PBL schools, some principals and PBL coordinators noted that there were occasionally a handful of staff who were resistant to change and less willing to buy in to the PBL approach. These staff members either did not acknowledge that students were displaying problematic behaviours, preferred to manage behaviour as they had done previously, or believed that PBL would be too burdensome to implement. A PBL coordinator said that staff who were reluctant to buy into PBL made comments such as:

"Oh, we have done this sort of thing before... there will be lots more work and we don't need it. We're not one of those schools that need it."

#### [PBL coordinator]

A related challenge noted by PBL schools we surveyed was staff turnover (13%, n = 86). This was challenging because new staff required training to become familiar with the school's PBL framework. Such training is essential to ensure consistency in implementation across the entire school.

"Staffing changes mean that PBL training needs to be constantly redone to ensure that all staff are aware and able to implement the PBL values and practices across the school and within classrooms."

#### [Primary school principal at PBL school]

During interviews, the challenge of staff turnover was raised by PBL schools, previous PBL schools, coach mentors, and PBL deputy principals. A principal at a previous PBL school described how the details of their PBL approach had been lost with continual staffing changes.

"I know when we first brought it in and we had all trained staff – we trained all staff in PBL. It was a school that went through a lot of change over six or seven years – a lot of staff coming in and going and I think probably that is where some of that authenticity around PBL was lost because they were sort of just getting the overarching message without the actual depth behind it."

### [Primary school principal at previous PBL school]

Some schools that had been implementing PBL for more than three years mentioned that they had addressed the challenge of staff turnover by implementing an induction system and/or providing new staff with clear details of how PBL works within their school. Coach mentors and PBL deputy principals echoed the importance of schools having these systems in place.

"One of the main reasons for, I guess, the drop in PBL implementation was high staff turnover. They had four different principals in two years, or under two years, and a high staff turnover just with teachers and execs. So, putting in sustainable systems around that so it doesn't matter who comes into the school - they have greatly benefited from that."

### [Deputy principal at PBL school]

## Time investment is the second challenge, and many schools believe it requires more time than alternative approaches

Amongst PBL schools we surveyed, the second most commonly listed challenge was the time that it took to implement PBL with fidelity (21%, n = 145; see figure 11). Coach mentors also indicated that some schools found the time investment challenging. They said that schools often wanted a quick fix and could become impatient with the time required for broader cultural change that is reflective of good PBL implementation.

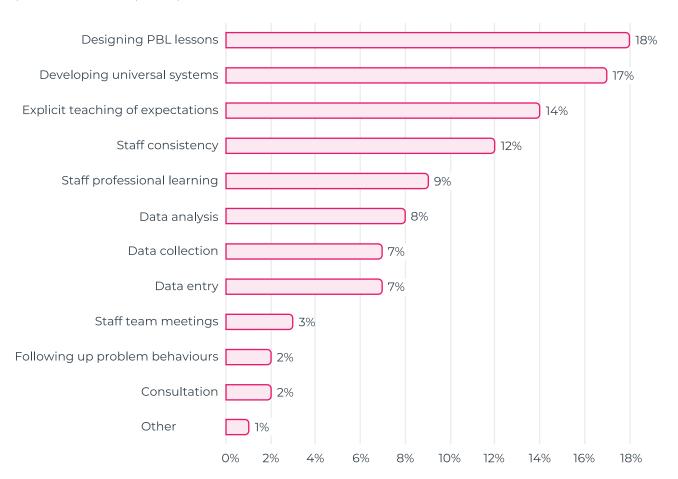
Survey respondents completed an open-ended question about which aspects of PBL were the most time consuming to implement. Some respondents listed multiple time consuming aspects, resulting in a total of 642 counted responses that were categorised into 11 themes. As shown in figure 11, some of the most time consuming aspects included:

- designing PBL lessons or implementing elements of PBL into established lessons
- developing and implementing the universal systems (for example, school-wide matrices, reward systems, signage and communication materials).

Figure 11

#### Most time consuming aspects of Positive Behaviour for Learning

(n = 642 counted responses)



Proportion of total aspects listed by all respondents

It is reasonable to assume that these two aspects of PBL are quite time consuming in the early stages of PBL implementation but will decrease over time as schools embed practices across the school.

Another time-related challenge associated with PBL involves release time for staff to attend professional learning. Interviews with PBL schools revealed that release time was particularly challenging in remote areas where causal replacements are limited.

What I find very challenging is the time that schools have to allocate to establish the team. So, the beginning is really difficult, where you've got to get four staff out for two days of training to start up that whole team, and that's – to find four replacement staff in a school is really difficult, and I think that's one of the challenges we've had. And again, some of the refreshes and the updates – again, unless it's front and centre of the school's management plan, it's very difficult to get that release of time for staff."

#### [Primary school assistant principal]

We asked survey respondents to compare how much time was required to implement PBL relative to other behaviour management approaches. As illustrated below, approximately half indicated that PBL required more time.<sup>54</sup>

- much more time 109 (26%) schools
- a little more time 115 (27%) schools
- about the same time 156 (37%) schools
- a little less time five (1%) schools
- much less time eight (2%) schools
- unsure 28 (7%) schools.

The survey did not ask respondents to specify the alternative approach(es) they were thinking about when answering this question, so we do not know if they are comparing like with like. We do, however, have information on the types of alternative approaches that other schools are implementing, based on information we gathered from surveying schools that have never implemented PBL and that have previously implemented PBL. This gives us an indication of the types of approaches that PBL schools might have been thinking about when comparing to PBL. They include:

- · restorative justice
- · Positive Choices for Learning
- · You Can Do It
- Five Keys to Success programs.
- explicit, high expectations
- whole of school values system
- positive reinforcement
- negative consequences

<sup>54 421</sup> schools to this question and provided consistent information. Amongst schools with multiple respondents, there were 126 additional schools where respondents provided conflicting answers to this question.

- Bounce Back
- FISH Philosophy
- Choice Theory
- programs inspired by positive psychology such as Power of Positives.

Although PBL schools we surveyed indicated that time was their second major challenge and that PBL was more time consuming than alternative approaches, time was also a challenge for behaviour management at non-PBL schools. Principals at non-PBL schools said that even though behaviour management was time consuming, it was something their schools had chosen to prioritise.

"It's [behaviour management is] extremely time-consuming. But we, as a school, decide. Things are calm here. Teachers like it. Kids like it. So, it's manageable."

[SSP principal at non-PBL school]

"Us having time is always a never-ending battle ... Us making sure that each week that we get it [behaviour management] done is sometimes hard but it's just something that we've had to go, "Right. We have to prioritise this and we have to do this". That's probably been the only thing."

[Primary school principal at non-PBL school]

Despite the time required to implement PBL with fidelity, many PBL schools said in both the survey and interviews that it was a worthwhile investment.

- 46 PBL definitely makes a positive difference but because of the time required to change a culture of a school (which can take five to 10 years) sometimes it's hard for staff to see the forest from the trees.
  [Survey response from principal at a primary school using PBL for 3+ years]
- "It's worthwhile. It's expensive. It's long-term and it has to be embedded. So, it changes staff perceptions. It has to change teacher practices. So, it takes a long time to happen, to do well. You can't tick and flick it. It's not a three-year plan and move on to something else."

[Interview with assistant principal at a primary school using PBL for 3+ years]

## Some schools have difficulty applying Positive Behaviour for Learning principles to students who require tier 2 and 3 support

We interviewed a number of School Services staff who had in-depth knowledge of PBL and had previously worked in roles supporting schools to implement PBL (for example, as a PBL coach). Several of these School Services staff, as well as coach mentors and PBL deputy principals indicated that some schools were not applying PBL practices and principles to students who require tier 2 or 3 support.

"The students that had referrals through for behaviour problems were not really connected to the language of PBL or the teaching part of PBL. It was a separateness ...that 10% to 15% of students that need the extra support. You don't do something separate for them, it's actually really just doing PBL better to support them so everyone does the same thing."

### [PBL coach mentor]

"It's that difference I think between understanding the key principles of PBL and then, once you've got a student who's got quite high level behaviours, applying those same principles to that student - that's what I don't see."

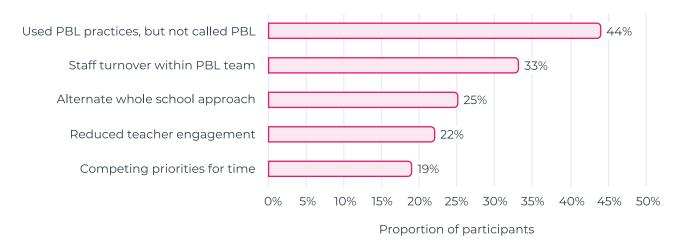
### [School Services staff member]

School Services staff who had extensive knowledge of PBL, said that adjustments could be made to training materials and/or training context to allow school staff to make connections between the PBL framework and students requiring tier 2 and 3 support.

## Schools that stopped implementing cite reasons of staff turnover, reduced engagement and competing time priorities. Yet many previous Positive Behaviour for Learning schools continue to use the practices.

Previous PBL schools that completed our survey were asked what factors influenced them to stop implementing PBL at their school. Major factors that played a role in stopping PBL were staff turnover and a reduction in staff engagement (see figure 12), which are known to be important for successful implementation. However, many previous PBL schools continue to use elements of PBL (for example, consistent consequences for negative behaviour, widely known rules and expectations, systems in place to support staff to have a consistent approach to behaviour, and the collection and use of behavioural data) but do not consider themselves PBL schools. We also examined whether the same factors influenced primary and secondary schools to stop using PBL, and found that the main contributing factors were similar (see Appendix E).

Figure 12
Factors that influenced schools to stop implementing Positive Behaviour for Learning (n = 36)



Some previous Positive Behaviour for Learning schools found it challenging to adapt to their specific school context

During interviews with representatives of six schools who had previously implemented PBL, the most consistently described challenge was that PBL was not adaptable or relevant to their school contexts. This point was made by some very small schools, large high schools, and SSPs. The principal at one SSP said that students with mental health issues did not connect or relate to the language of PBL.

"The school's changed a lot. I think the issue with PBL is that it probably worked better originally with the kind of students that they had back in 2014. When I arrived it was a very, very different school ... I think what we're finding is that we have to tailor-make systems now. Systems that are like PBL don't work for all of our students ... kids with mental health issues or kids that have defined disorders, PBL doesn't really mean anything to them."

#### [SSP principal]

This principal elaborated further by stating that students with oppositional defiance disorder quickly work out how the PBL framework operates and automatically react against it. For these students, positive behaviour is neither important nor valuable. To manage this, the school instead takes a more individual focus and tries to determine what is important to these students and how to best engage them. Although this school had decided to stop using PBL, proponents of the PBL framework argue that it can be implemented at SSPs but may require additional support.

## **Summary**

According to PBL schools, staff consistency, time and staff turnover are the biggest challenges that PBL schools report facing in their efforts to implement PBL successfully. Coach mentors and deputy principals echoed these views, and also reported that some schools found it challenging to apply the PBL framework to students who required tier 2 and 3 support. Although PBL schools said PBL required more time than other behaviour management approaches, time was also listed as a challenge for non-PBL schools. This suggests that some of the challenges that schools face when implementing PBL are also experienced when implementing other behaviour management approaches. Importantly, despite the time outlay required, PBL schools felt that it was worthwhile investment.

# Chapter 6: What aspects of Positive Behaviour for Learning are working well and what aspects are not working well?

In this chapter, we discuss the aspects of PBL that are working well and are not working well from the perspective of schools, coach mentors, PBL deputy principals, and other School Services staff. We also include discussion of whether the PBL support structures are providing schools with the support that they need.

## Aspects that are working well

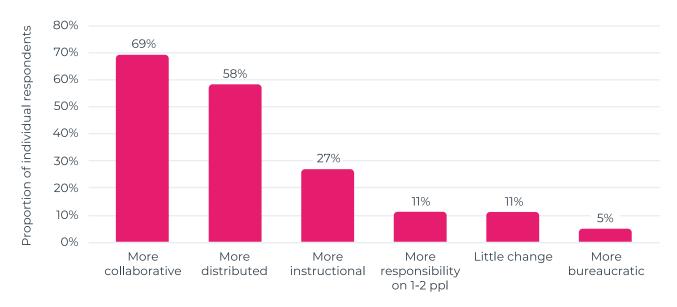
## Almost all Positive Behaviour for Learning schools report implementing the universal features

Implementation of the universal features is a key element of successful PBL implementation. The universal features provide schools with a clear framework for behaviour management and decision making and their implementation alone can result in positive changes to student behaviour. Almost all PBL schools self-reported implementing these universal features, which suggests that this is an element of PBL that is working well. The widespread implementation of the universal features also implies that their importance and value has been communicated to schools. Many schools are only implementing the universal features, yet have indicated that student behaviour, wellbeing, and the whole school environment have greatly improved as a result. Although we did not specifically measure implementation fidelity, these findings suggest that PBL schools are likely to be implementing many, if not all, of the universal features.

## The majority of Positive Behaviour for Learning schools report that their leadership culture changed following implementation

PBL survey respondents were specifically asked how the leadership culture at their school had changed since PBL was introduced. Figure 13 indicates that the most common ways in which leadership culture changed was by becoming more collaborative and more distributed. This is an intended consequence of PBL and signifies that this aspect of PBL is working well.

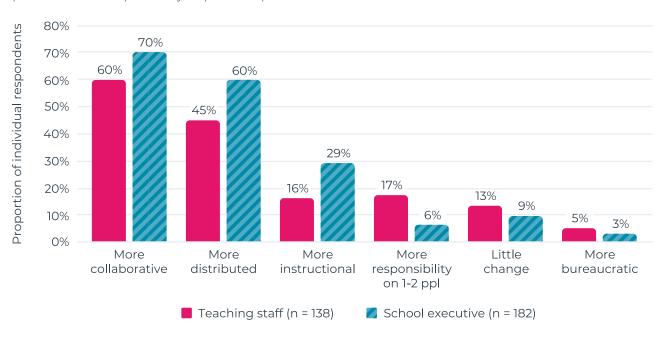
Figure 13
Change in leadership culture since implementation of Positive Behaviour for Learning (all respondents; n = 684)



We also examined whether there were different perspectives on leadership culture amongst those in executive positions compared with non-executive classroom teachers. As illustrated in figure 14, both groups indicated that leadership culture had changed in similar ways. The proportion of school executive staff who reported that leadership culture had become more collaborative, distributed, and instructional is greater than the proportion of non-executive teaching staff who responded in this way. However, this level of variance is to be expected given the self-report nature of this survey question. Overall, the introduction of PBL appears to have produced promising changes to leadership culture in PBL schools we surveyed.

Figure 14

Changes in leadership culture since implementation of Positive Behaviour for Learning (schools with multiple survey respondents)



## The Positive Behaviour for Learning support structure is working successfully to provide schools with the support they need

As discussed in Chapter 4, the departmental support structure for PBL implementation is working well. PBL deputy principals are providing valuable support to their teams of coach mentors by building their capabilities, designing and delivering PBL training, and keeping up-to-date with the latest PBL research. This deputy principal support has allowed coach mentors to support schools effectively in a variety of ways. The face-to-face support provided by coach mentors is highly valued, with some schools saying they would not have been able to implement PBL without this support. Schools commented favourably about their coach mentor's expertise, their willingness to provide support when requested, and their ability to encourage staff buy-in. Overall, the PBL deputy principal and coach mentor roles appear to be a highly successful, integral part of PBL implementation that is working very well.

### Coach network meetings are offering added value to schools

Coach mentors and PBL deputy principals reported hosting coach network meetings that involve professional development for internal and external coaches within an operational directorate. These coach network meetings are working well because they help schools to apply what they have learnt during their PBL training. Schools often share their practices at these meetings which builds capabilities via peer learning.

"I have five network meetings each term... So, I might do a 20-minute presentation to upskill, and then what we do is get the network meetings to share focus. So we might either do their reward systems, or we might look at their flow charts for discipline, or we might get them to show some data, and everybody has a little sharing session. It kind of builds the capacity of the school, and it keeps that momentum going, I think. And they have a connection too, so they get to talk to each other, they connect with each other, they talk about their communities, and I think that's probably one of the harder points in PBL, is getting communities in, but I think there's some schools up here that have done it really, really well."

### [PBL coach mentor]

Therefore, coach network meetings not only provide schools with expertise but offer the additional benefit of bringing schools together to build a PBL community.

## Current Positive Behaviour for Learning schools are enthusiastic and very likely to recommend it as a behaviour management approach

Representatives from PBL schools, coach mentors and PBL deputy principals were very willing to participate in interviews about PBL and expressed great enthusiasm for the PBL approach. Interviewees believed with strong conviction that PBL was working well and having a positive impact in schools.

"It is the best thing that I have ever been part of ... It is phenomenal, yep. It really is."

[Deputy principal at a school using PBL for 3+ years]

"PBL is something that I'm very passionate about ... I think that PBL is a fantastic approach that really supports wellbeing, and I strongly believe that student wellbeing is the most important thing. If students are happy and feeling safe and nurtured, then they're going to be successful lifelong learners."

[Assistant principal at a school using PBL for 3+ years]

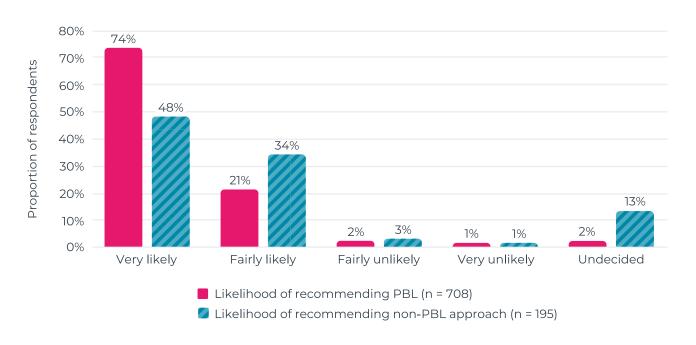
- "I'm just very happy that it's going so well, and it's a lovely positive system. And it's so much nicer to give the children positives rather than negatives. It makes them feel better, makes us feel better."

  [Principal at a school using PBL for 3+ years]
- "It is a wonderfully positive system that, put in place well, gives everyone the best opportunity for a sense of purpose in school and wellbeing and creates that empathy for others. It does so many broad things with social emotional learning ... it's a very proactive preventative system approach that works just fantastically in a small primary school or a large high school or an SSP. So I couldn't speak more highly of it."

[PBL coach mentor]

To further examine this enthusiasm for PBL, the survey asked PBL schools how likely they would be to recommend PBL as an approach to behaviour management to a school in similar circumstances. As illustrated in figure 15, 95% (n = 674) of PBL schools we surveyed reported they would be either "very likely' (74%) or "fairly likely" (21%) to recommend PBL. In comparison, only 48% (n = 94) of non-PBL schools we surveyed were very likely to recommend their approach to behaviour management.

Figure 15
Likelihood of recommending behaviour management approach to a similar school



## Positive Behaviour for Learning schools claim that it provides a clear and transparent guide for managing behaviour

PBL schools reported that the PBL approach provides a clear guide on how to deal with problem behaviours. Interviewees said that PBL offers transparency and consistency in the way behaviour is managed. This was identified as being particularly helpful when discussing behaviour with parents.

"I feel like it's a very supportive structure for a school to have, especially when dealing with any negative issues with parents. You have a clear guide of what your school does, how they do it, when they do it and what the procedure is. There's no grey areas there with the way the school manages issues."

[Primary school deputy principal]

## Aspects that are not working well

### Some schools need more support to integrate Positive Behaviour for Learning with other programs and initiatives

According to PBL deputy principals and School Services staff, some schools see PBL as being one approach to behaviour management that might operate independently from other wellbeing initiatives, rather than as an overarching integrative framework. If schools do not incorporate all of their wellbeing initiatives within their PBL framework, it can limit the positive impact that PBL may potentially have.

- "A number of schools are implementing visible learning ... And initially the conversation starts with 'we're doing visible learning next year so we can't do PBL anymore because how can we possibly do two things at once, and they're not related anyway'. So part of our work is then saying well actually you're talking about making improvements in classrooms, they are related and that's what we can work with you on. I think I personally have built a great deal of flexibility into the team to help them make those links."

  [PBL DP]
- "I think the schools that implement with integrity absolutely understand that PBL becomes the umbrella for all of our wellbeing and learning programs that occur. But I would have to say that I still see schools that have the PBL team, they have the wellbeing team, they have a learning support team, so they have the silo."

Similarly, some schools need support to see the links between PBL and other departmental frameworks such as the Wellbeing Framework and School Excellence Framework. One School Services staff member (an assistant principal Learning and Support) who was very familiar with PBL and had a previous role

supporting its implementation in schools, indicated that they had delivered quite a bit of professional learning around the relationships between PBL and other frameworks.

[School Services staff member]

We're saying this is not an add-on, this is not an extra thing. This is already there it just needs to be embedded with whatever else you're doing. So within the Wellbeing Framework and the School Excellence Framework and all of our other policies and frameworks. They're getting that message that it's all part of the one, you know, it comes under the same umbrella ...So we've done quite a bit of professional learning in that regard."

[School Services staff member]

## There is limited collaboration between some Positive Behaviour for Learning deputy principals and School Services staff, despite their common goals

We asked both PBL deputy principals (who work within School Services) and a range of other School Services representatives (for example, Learning and Wellbeing coordinators) about the extent to which they collaborate with each other. We were particularly interested in whether there was a joint approach to the support they provided to schools, given their common goals.

Feedback indicated that the extent of collaboration was variable, with some describing a lack of connection. One PBL deputy principal indicated that she would like to work more closely with School Services, particularly with assistant principals Learning and Support in order to better coordinate the support provided to schools.

- "I think it could be done better. For example if we could meet with those AP Learning and Supports. Because we're trying to achieve the same thing I guess so if we were on the same page we're able to meet and discuss the schools that we support and what we're doing in each school and where they're at and provide information about the evaluations that we do and what they're saying about that school. I think being on the same page would be beneficial."

  [PBL DP]
- "Our team in School Services doesn't have that connection with PBL anymore ... We have a structure called the Executive Learning and Support Team ... we do some professional learning and we actually talk about how we're going to do business with schools and support schools. I probably should be inviting our local AP PBL for that so we have more of a connection. And bringing that person in to actually talk to the broader team about PBL because some of them will know about it and some of them won't."

[School Services Learning and Wellbeing coordinator]

However, there was also discussion of recent improvements in collaboration. One deputy principal explained that up until recently there had been limited collaboration and a compartmentalised approach. More recently, however, a multidisciplinary approach has been implemented to provide more coordinated, 'wraparound' support to schools.

## Some previous Positive Behaviour for Learning schools have retained Positive Behaviour for Learning practices but no longer identify as a Positive Behaviour for Learning school

As mentioned in Chapter 5, a number of previous PBL schools indicated that they continued to use elements of PBL but did not formally identify as a 'PBL school'. This 'unofficial' PBL implementation was explored further during interviews with six previous PBL schools, where four principals noted that they had retained some elements of PBL but did not consider themselves to be a 'PBL school.' Two of these felt that their school already had the universal features in place and were asking their staff to attend training that was not benefiting them or duplicating work that had already been done.

When I say stopped, it more has morphed, so we still use elements of it. The key reason was it really focused solely on behaviour ... it was very contextualised. We found that our students weren't transferring the skills from one spot to another, so we looked at a way of having an umbrella that brought behaviour, and also linked in to academics as well."

[Primary school principal]

We felt that we were covering all of the suggestions and ideas that PBL had suggested.... we felt that we were able to do it ourselves without really, you know going for more training."

[Primary school principal]

## **Summary**

The aspects of PBL that are unanimously agreed as working well include the change in leadership culture within schools, the valuable support that coach mentors provide, and the professional learning acquired via coach network meetings. One aspect that is not working well is the lack of understanding by some schools that PBL is an overarching integrative framework, rather than an independent wellbeing initiative. Additionally, the coordination and communication between School Services staff and PBL deputy principals and coach mentors could be improved, for example through regular meetings and/or sharing of information between these two groups. Many schools who stop using PBL are actually continuing to implement elements of PBL. However, some of these schools feel that PBL training is duplicating their existing approach to behaviour management.

## Chapter 7: What is the perceived impact of Positive Behaviour for Learning on student wellbeing?

This chapter presents feedback from surveys and interviews on the perceived impact of PBL on wellbeing. This includes the perceived impact of PBL on student attendance, minor and major behaviour incidents, and short suspensions. This reflects recommendations in the international literature to include these domains in evaluations of PBL.55

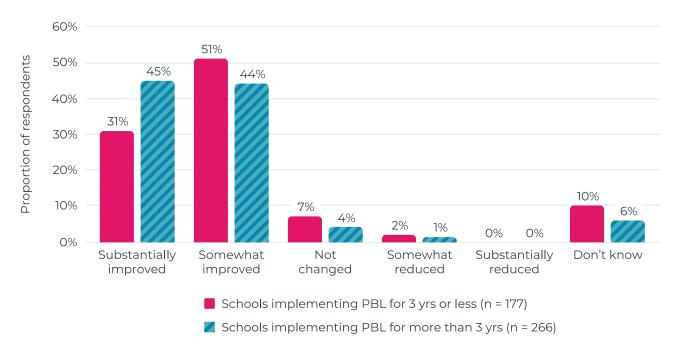
## The large majority of schools report that Positive Behaviour for Learning improves student wellbeing as indicated by their data, observations and feedback

The large majority (86%; n = 392) of PBL schools we surveyed indicated that PBL had substantially or somewhat improved student wellbeing.  $^{56}$  We wondered whether this perceived improvement to wellbeing might vary according to the length of time that schools had implemented PBL. As shown in figure 16, schools that had implemented PBL for more than three years were more likely to report that PBL had substantially improved wellbeing compared to schools that had implemented PBL for three years or less.

<sup>55</sup> Algozzine, B. et al. (2010). Evaluation Blueprint for school-wide positive behaviour support. Eugene, OR: National Technical Assistance Center on Positive Behavior Interventions and Support.

<sup>56 454</sup> PBL survey schools responded to this question and provided consistent information. Amongst schools with multiple respondents, there were 92 additional schools where respondents provided conflicting answers to this question.





**Note.** Amongst schools with multiple respondents, there were 103 additional schools where respondents provided conflicting answers to this question

Feedback gathered through interviews with PBL schools, coach mentors, and deputy principals was consistent with these findings. Many schools spoke passionately about their students appearing happier, more caring and more engaged since the introduction of PBL. They also noted that there were more respectful relationships among students and between students and teachers.

"I think it [PBL] has impacted them immensely in a positive way ... If kids are happy and they feel safe and nurtured, then I – we all believe they're going to be successful learners. And that's really valued here. Wellbeing is really important ... I think that all kids feel valued. And they are being acknowledged."

#### [Assistant principal]

PBL schools we surveyed completed an open-ended question about how they knew that PBL had improved/reduced student wellbeing. Some respondents listed multiple reasons and the most prevalent included:57

- examination of data 449 schools (87%)
- observations 270 schools (53%)
- feedback from parents 207 schools (40%).

This is encouraging given that effective implementation of PBL requires a datadriven approach to decision making.

<sup>57 512</sup> PBL survey schools responded to this question.

## Positive Behaviour for Learning is perceived to improve attendance in a small proportion of schools

PBL survey respondents provided their perceptions of the impact that PBL had on student attendance. About half indicated that there had been no change to attendance, whilst about one quarter thought that attendance had improved. Specifically, the impact of PBL on attendance was rated as follows:<sup>58</sup>

- substantially improved 22 schools (5%)
- somewhat improved 102 schools (23%)
- no change 216 schools (49%)
- somewhat reduced three schools (1%)
- substantially reduced 0 schools (0%)
- don't know 96 schools (22%).

The majority of interviewees from PBL schools similarly indicated that PBL had not influenced attendance. However, interviewees said this was because attendance was either not problematic at their schools or because PBL had not been implemented long enough to have an impact on attendance.

Some PBL coach mentors recalled specific examples of schools where attendance improved following PBL implementation.

that it's only [due to] PBL ... but it's certainly a contributing factor ... One of the tools we have is Cost Benefit Analysis, and schools can track how much time kids are out of class and out of learning time because of their problem behaviours and learning areas. And how much executive time is spent reacting to all of those problem behaviours. And then once you get that positive environment where you've got less of those issues, we increase learning time and we increase executive proactive time. And we do have schools showing that data and being able to have evidence that it's having a huge impact."

#### [PBL coach mentor]

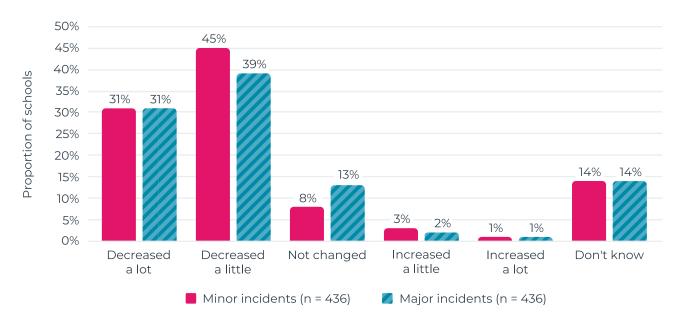
Although some schools and coach mentors are reporting an improvement in attendance, the majority indicated that attendance had not changed. This finding is consistent with our expectations because student attendance is generally very stable and improved attendance is not the main intended outcome of PBL. Further, attendance is influenced by a multitude of factors, many of which are external to the school (for example, physical illness, family mental health, community expectations).

<sup>58 439</sup> PBL survey schools responded to this question and provided consistent information. Amongst schools with multiple respondents, there were 106 additional schools where respondents provided conflicting answers to this question.

## Positive Behaviour for Learning is perceived to reduce both minor and major problem behaviour incidents

PBL schools we surveyed provided their perceptions of the impact of PBL on minor and major behaviour incidents. Their responses are presented in figure 17 and indicate that the majority of schools thought that PBL had decreased the number of minor and major behaviour incidents.<sup>59</sup>

Figure 17
Impact of Positive Behaviour for Learning on minor and major behaviour incidents



We also examined whether the reported decrease in problem behaviour incidents varied according to the length of time that schools had been implementing PBL. As shown in figures 18 and 19, the longer that schools had been implementing PBL, the more likely they were to report that minor and major behaviour incidents had decreased.

<sup>59 436</sup> PBL survey schools responded to this question and provided consistent information.

Figure 18

Impact of Positive Behaviour for Learning on minor behaviour incidents according to implementation duration

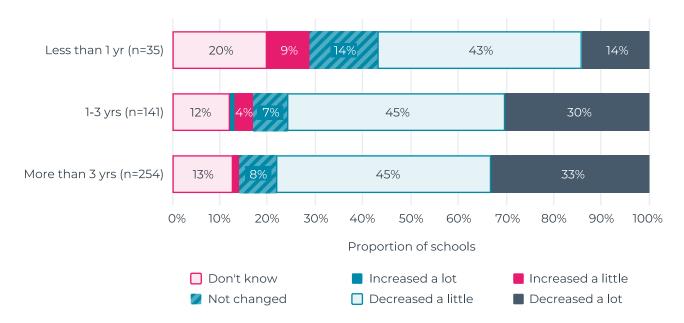
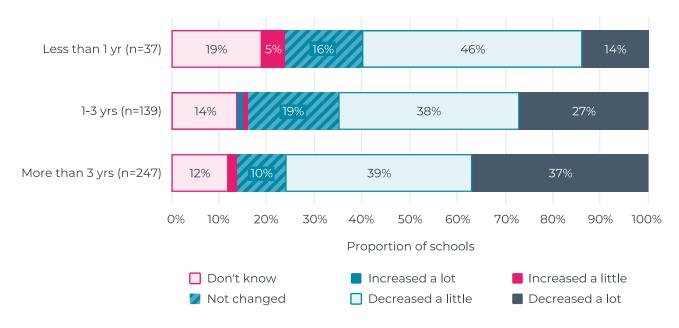


Figure 19
Impact of Positive Behaviour for Learning on major behaviour incidents by implementation duration



During interviews, PBL schools also reported a drop in problem behaviour incidents that they attributed to PBL.

"I think the negative incidents in the playground have definitely decreased. I think the students are more caring for each other ... and they're more willing to feel that the teachers are there to help them, rather than just the teachers are the enemy."

[Principal]

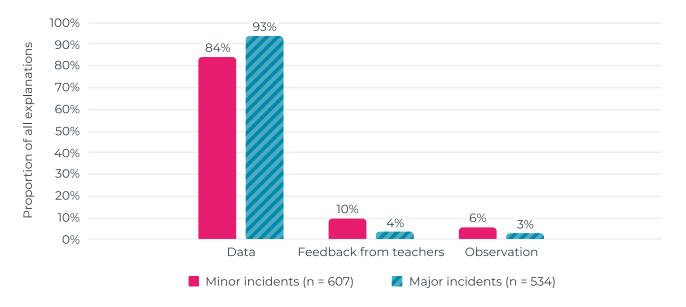
Similarly, coach mentors had a strong view that PBL led to a noticeable reduction in problem behaviour and a reduction in the intensity of problem behaviour. Further, they also said that positive behaviour increased. For example, the relationships amongst students and between students and teachers had become more respectful. One coach mentor even reported on positive feedback from a local shop where staff had commented on the behaviour of students.

We've had community reports from the local shop saying, 'what have you done to the kids? We wish the school down the road was doing whatever you're doing'. They're behaving, they're being respectful out in the community as well."

#### [PBL coach mentor]

PBL school survey respondents completed an open-ended question asking how they knew that minor and major behaviour incidents had increased/decreased. Some respondents listed multiple reasons, resulting in a total of 607 reasons related to minor behaviour incidents and 534 reasons related to major behaviour incidents. When asked how they knew that behaviour incidents had increased/decreased, the great majority indicated that they had examined their data (see figure 20). Very few schools relied on feedback from teachers or observation alone.

Figure 20
How respondents knew that Positive Behaviour for Learning had influenced behaviour incidents

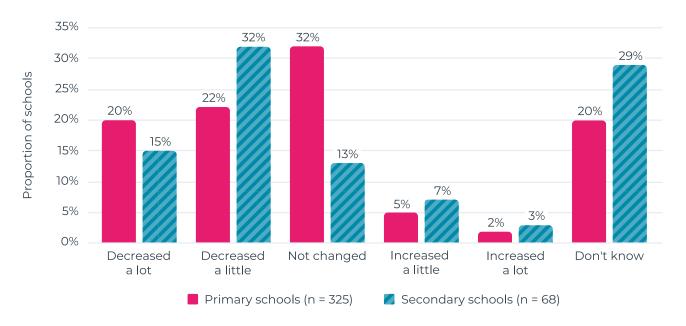


These findings indicate that PBL is perceived to be reducing problem behaviour incidents, which is one of the main areas that it is designed to target. Whilst this is based upon perceptions rather than recorded behaviour incidents, it appears that these perceptions are primarily based on data collected within schools.

## Positive Behaviour for Learning is perceived to decrease suspensions

PBL survey respondents were asked to describe the impact of PBL on short suspensions. As shown in figure 21, 42% of primary schools and 47% of secondary schools thought PBL had led to a decrease in short suspensions. During interviews, some schools that had been using PBL for at least three years also indicated that there had been a drop in suspensions that they attributed to PBL.<sup>60</sup> In some cases, schools had not noticed a change in suspensions although these schools reported that they did not have a high number of suspensions to begin with.

Figure 21
Impact of Positive Behaviour for Learning on short suspensions in primary and secondary schools



Coach mentors and PBL deputy principals similarly indicated that PBL had reduced suspensions in a number of schools.

"I can talk about \_\_\_\_\_ School. They were in a mess basically. They were having masses of suspensions, and all sorts of things ...

They put all their universals into place, they've now moved into classrooms and their drop in [suspension] rates has been amazing."

[PBL coach mentor]

<sup>60</sup> Interviewees did not distinguish between short and long suspensions.

## Positive Behaviour for Learning helps staff feel supported and empowered which leads to improvements in student wellbeing

During interviews, the majority of schools, coach mentors, and PBL deputy principals indicated that PBL had helped improve staff wellbeing. This was mainly because it provided a consistent approach that enabled staff to feel supported and empowered in their decisions about discipline.

What only do they feel better, they feel empowered. It increases their professional ability, provides them with professional skills. And not only do classroom teachers feel more empowered, they feel supported because the exec staff who support them know what to do to support them – it's clear, it's structured, everybody understands how the system works and so that creates a sense of fairness. It reduces stress levels dramatically."

#### [PBL coach mentor]

School executive also indicated that staff were greatly benefitting from the reduction in classroom behaviour incidents. They noted that negative behaviour often contributed to teachers' leaving the profession and that PBL was helping reduce such behaviour.

We know that teachers are leaving the profession and lots of them are [leaving] because of negative behaviour. If teachers are feeling supported, they're getting training based on – classroom behaviours – you know that low-level stuff ... this is the way that we can support it ... if the negative behaviour is decreasing, then that has a positive impact on teachers."

#### [Assistant principal]

Overall, interviewees noted that there was a reciprocal relationship between student and staff wellbeing. The benefits of staff feeling supported and empowered, reportedly led to improvements in student wellbeing and vice versa.

## Summary

The main ways in which schools perceive PBL to be having an impact is by improving student wellbeing and reducing major and minor behaviour incidents. Schools are basing these perceptions primarily on data, which is consistent with good PBL implementation. Only a small proportion of schools thought that PBL was improving attendance, although this is to be expected because attendance is very stable and is not the main expected outcome of PBL.

# Chapter 8: What is the impact of Positive Behaviour for Learning on student wellbeing, as measured through centrally collected datasets?

We explored options to measure the impact of PBL on student behaviour and wellbeing via independent centrally collected datasets.

The most relevant behavioural outcome is the (decreased) rate of problem behaviour incidents. However this data is not centrally collected and it would not have been feasible to collect it in sufficient quantities for this evaluation. Previous research indicates that PBL can also lead to reduced suspensions and possibly improved attendance<sup>61</sup>, so we drew on these administrative datasets that are collected centrally.

We also drew on the department's TTFM self-report student survey that measures student engagement, wellbeing and effective teaching practices in NSW public schools. It was first piloted in NSW in 2013 and 2014 and became available for all schools to opt-in from 2015 onwards. Student participation in the survey is voluntary (managed via an opt-out process) and principals can also select which year groups and classes are invited to participate.

Below, we present a summary of the methodology and findings, firstly for the attendance and suspensions analyses, and secondly for the TTFM analyses. We provide full details in Appendices G and H.

## 8a. Attendance and suspensions outcome analyses

There are key limitations associated with using attendance and suspension data to examine the impact of PBL

There are several limitations associated with using centrally recorded attendance and suspension data to examine the impact of PBL. Limitations associated with attendance data include:

• Attendance data is typically stable over time because most schools have high attendance rates. This makes it difficult to detect an effect.

<sup>61</sup> Chitiyo, M., May, M.E., & Chitiyo, G. (2012). An assessment of the evidence-base for School-Wide Positive Behaviour Support. Education and Treatment of Children, 35(1), 1-24.

- Attendance is influenced by a broad range of factors, including many that
  are outside of the school's control, such as physical illness, family factors (for
  example, parental separation and divorce, parental mental health issues,
  parenting styles) and community factors (for example, adequacy of community
  support services).<sup>62, 63</sup>
- In January 2015, a change to the recording of family holidays came into effect, which required schools to record extended family holidays as absences rather than as an exemption from attendance. This means that the attendance rates from 2015 onwards are lower than they would have been had this change not occurred. However, we factored this into the statistical model.
- Student-level attendance data is not available for analysis so we are unable to determine if patterns of attendance are potentially driven by a handful of students.

#### Limitations associated with suspensions data include:

- Suspensions are relatively rare events and apply only to a small proportion of students. Suspended students are often those who require tier 2 and/or 3 supports. However, many PBL schools are implementing tier 1 only (amongst survey respondents from PBL schools, 43% were implementing tier 2 and 22% were implementing tier 3). We would not expect tier 1 to have as strong an effect on suspensions as tier 2 and tier 3 supports.
- Schools vary in their approaches to suspension according to their contextual needs, especially for short suspensions. For example, schools consider the specific circumstances surrounding each child when making a decision about whether to suspend. They may not suspend if they believe a child might participate in activities that will exacerbate problem behaviour (for example, gang activity, criminal behaviour) whilst suspended.
- Long suspensions are approached more consistently across schools, but long suspensions may be associated with external criminal activity, which is not a focus of PBL.
- According to departmental staff with expertise in PBL implementation, some schools may adjust their approach to suspensions when implementing PBL. For example, when schools start implementing PBL they can experience a spike in suspensions as staff and students adjust to the new framework. Suspensions can increase because the suspension policy is applied with greater consistency across the entire school.
- The year in which schools indicate that they started PBL may sometimes be merely an indicator of when the school attended PBL training. The start year does not necessarily imply that the school took practical steps to begin implementation at that point in time.
- Suspensions data is not available prior to 2012, which reduces the pool of PBL schools that can be included in the model. This reduces the power of the model.

<sup>62</sup> Maynard, B., Heyne, D., Brendel, K., Bulanda, J., Thompson, A., & Pigott, T. (2018). Treatment for school refusal among children and adolescents: A systematic review and meta-analysis. Research on Social Work Practice, 28(1), 56-67.

<sup>63</sup> Thambirajah, M., Grandison, K., & DeHayes, L. (2007). Understanding School Refusal. Jessica Kingsley Publishers: London

# We examined attendance rates, counts of long and short suspensions and counts of students suspended

We analysed the impact of PBL on the following student attendance and suspension measures:

- student attendance rate
- short suspension counts (total number of short suspensions)
- the number of unique (individual) students who receive short suspensions
- long suspension counts
- the number of unique students who receive long suspensions.

### We compared Positive Behaviour for Learning schools with similar non-Positive Behaviour for Learning schools and we examined attendance and suspensions outcomes three years after commencing

We used a conservative approach for categorising schools as PBL schools and non-PBL schools for analysis purposes. We identified 774 schools that consistently indicated that they were implementing PBL and for which we had a start date, 709 schools that were excluded from analysis (including PBL schools where we did not have a start date, schools where we had conflicting information, and schools that implemented PBL previously but were no longer doing so), and 727 schools who indicated they had never implemented PBL.

We used propensity score matching to identify non-PBL schools that could be used in the analysis as a comparison group. To do this, we first examined the characteristics of our PBL schools in the year before they adopted PBL (that is, our "pre" data collection point). We then identified non-PBL schools that had similar characteristics at this 'pre' data collection point. We attempted to find similar comparison schools based on the following factors:

- attendance rate
- Index of Community Socio-Educational Advantage (ICSEA)65
- school location with three levels: metropolitan, provincial, and rural and remote
- school type with four levels: infants school, primary school, secondary school, and central school
- · school gender type with three levels: girls only, boys only and mixed school

<sup>64</sup> We drew upon three sources to categorise schools: i) The PBL survey developed for this evaluation; ii) The 2018 CESE Principal Survey and; iii) The database of PBL schools maintained by Learning and Wellbeing. The PBL survey developed for this evaluation was the most recent source of information about a school's PBL status, so information in this survey overrode information from other sources. If there was a conflict between a school's PBL status on the 2018 CESE Principal Survey and the database maintained by Learning and Wellbeing, we excluded them from our analysis. If a school did not respond to the PBL survey or the CESE Principal Survey, we obtained their PBL status from the database maintained by Learning and Wellbeing.

<sup>65</sup> The ICSEA value is the level of a school's educational advantage. ICSEA provides an indication of the socio-educational background of students. It is calculated based on four factors – two student factors and two school factors. The two student factors are (1) parents' occupation and (2) parents' education. The two school factors are (1) geographical location and (2) proportion of Indigenous students. ICSEA is a scaled score. The median score is set at 1000 with a standard deviation of 100. Schools with lower ICSEA values have lower levels of educational advantage, and schools with higher ICSEA values have higher levels of educational advantage.

- proportion of language background other than English (LBOTE) students<sup>66</sup>
- proportion of Aboriginal and Torres Strait Islander (ATSI) students
- total number of enrolled students
- total recurrent funding per student including funding from the commonwealth government, state government, community contributions and parent contributions
- short suspension count (suspension data is only available from 2012).

Consistent with previous literature we factored into the model a 3-year transition period following adoption of PBL. This is considered a typical timeframe for a school to adjust to the PBL framework and refine implementation. Therefore, we allowed three years between the "pre" and "post" data collection points. This meant that the PBL schools we included in our analysis, adopted PBL between 2009 and 2014.<sup>67</sup>

For further details about the propensity score matching procedure see Appendix G.

# Analyses found that Positive Behaviour for Learning is unlikely to be having a meaningful impact on attendance and suspensions

The propensity score matching procedure meant that PBL schools and matched comparison schools had similar attendance and suspension data at baseline (that is at the "pre" data collection point). Therefore, our analyses examined differences between PBL and non-PBL schools three years post PBL adoption.

To examine the impact of PBL on attendance rates, we fitted a generalised linear model to compare attendance rates at PBL and comparison schools, three years post PBL adoption. To examine the impact of PBL on suspensions, we used a series of Poisson regression models to compare suspensions at PBL and comparison schools, three years post adoption (see Appendix G for further details).

Table 4 shows the estimated difference between PBL schools and comparison schools across each model. The propensity score matching procedure accounts for differences in suspensions and attendance at baseline so this table shows differences between these schools at the "post" data collection point. As illustrated in Table 4, the difference in attendance rate between PBL and comparison schools is less than 1%. Similarly, the difference in short and long suspension counts is one to two suspensions, and the difference in the number of unique students who received short and long suspensions is approximately one student.

<sup>66</sup> The proportion of LBOTE students is available from 2014 to 2017 in the department's LBOTE data cube. The proportions before 2014 can be calculated by number of LBOTE students divided by number of enrolments. However, the data comes from a different data source so the calculated rate is not always accurate, that is some schools were found with a rate greater than 1.

<sup>67</sup> In the department's data cube, suspension data dates back to 2012 and attendance data dates back to 2008.

Table 4

#### Parameter estimates for regression models

Model	Estimated difference between PBL and comparison schools	95% Confidence interval lower limit	95% Confidence interval upper limit
Attendance rate	-0.335%	-0.933%	0.264%
Short suspension count	1.680 short suspensions	-7.960	11.320
Short suspension unique students	1.065 unique students	-5.025	7.154
Long suspension count	2.301 long suspensions	-1.763	6.364
Long suspension unique students	1.211 unique students	-1.713	4.134

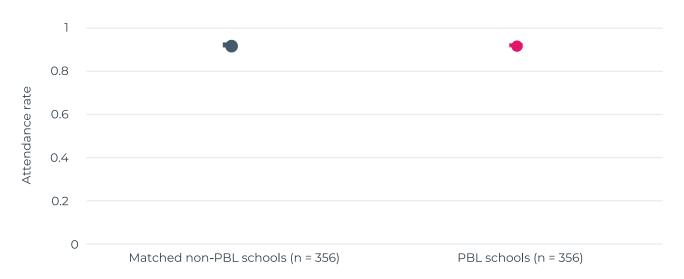
**Note.** These estimated differences between PBL and comparison schools reflect differences three years after PBL adoption.

### Positive Behaviour for Learning is unlikely to be having a meaningful impact on attendance

Figure 22 presents the average attendance rate at schools that implemented PBL and at comparison schools three years after adoption. We estimate that the average attendance rate at schools that implemented PBL was about 91.6% three years after implementation (95% CI [91.3%, 92.0%]). This is about 0.34 percentage points lower than what we would expect to see had these schools not implemented PBL. The narrow confidence intervals mean that our estimate of the effect of PBL on school attendance was fairly precise, and indicates that PBL is unlikely to have a meaningful impact on attendance rates.

Figure 22

### Attendance rates at Positive Behaviour for Learning and matched non-Positive Behaviour for Learning schools



# Positive Behaviour for Learning is probably not having a meaningful impact on short or long suspensions

Figures 23 and 24 show short suspension counts and the number of unique students who received short suspensions at PBL and matched non-PBL schools three years after adoption. We estimate the average number of short suspensions at schools that implemented PBL was 29.1 three years after implementation (95% CI [24.14, 34.10]). This is about 1.7 cases more than what we would expect to see has these schools not implemented PBL. Our confidence intervals indicate that our estimate of the effect of PBL on short suspension was somewhat imprecise. However, PBL is probably not having a meaningful impact on the total number of short suspensions.

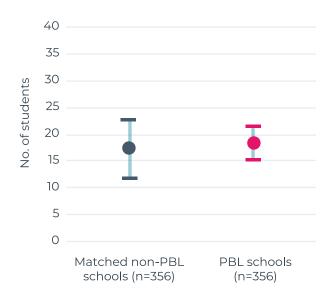
Similarly, as shown in figure 24, we estimate that three years after adoption the average number of students who received short suspension in PBL schools was 18.6 (95% CI [15.53, 21.74]). This is about 1.1 students more than what we would expect to see has these schools not implemented PBL. Our confidence intervals indicate that our estimate of the effect of PBL on number of students who received short suspension was somewhat imprecise. However, PBL is probably not having a meaningful impact on the number of unique students who receive short suspensions.

Figure 23
Short suspensions – total count

40
35
30
25
20
15
0

Matched non-PBL schools schools (n=356)

Figure 24
Short suspensions – unique students



We also examined students who received short suspensions for continued disobedience. This is a reason for a short suspension that is most closely linked to the behavioural outcomes of PBL. We used the same analysis procedure to compare the number of suspensions for continued disobedience and the number of unique students who were suspended for this reason. Results indicate that three years after adoption PBL schools had 0.68 fewer suspensions for continued disobedience than comparison schools (95% CI [-5.82, 4.45]). PBL schools also suspended 0.33 fewer students for continued disobedience than comparison schools (95% CI [-3.94, 3.27]). These small differences indicate that PBL is probably not having a meaningful impact on suspensions for continued disobedience.

Similar to short suspension counts, we found that PBL is probably not having a meaningful impact on the total number of long suspensions or long suspensions for persistent misbehaviour. More details on these analyses can be found in Appendix G.

### 8b. Tell Them From Me outcome analysis

We analysed a subset of schools and students that had complete data that implemented Positive Behaviour for Learning during the Supported Students, Successful Students funding period

We limited the sample of PBL schools to those schools that started implementing PBL from 2015 onwards as this was the year that the Supported Students, Successful Students initiative was introduced which included funding for 36 PBL executive positions. This was also the year that the TTFM student survey became available for all schools to opt-in. Consistent with previous literature, we allowed a three year transition period following the adoption of PBL. This meant that we had to exclude schools that began implementing PBL after 2016 as they had not yet had sufficient time to refine their implementation.

Using the available data<sup>68</sup>, we categorised the 2,184 NSW public schools that were open in 2015 or 2016 into four groups:

- included fully exposed PBL schools (N = 169) those schools where the data consistently indicated that they started implementing PBL in 2015 or 2016
- excluded fully exposed PBL schools (N = 605) those schools where the data consistently indicated that they started implementing PBL before 2015 or after 2016:
- partially exposed PBL schools (N = 704) those where the data was inconsistent or incomplete with regard to PBL implementation
- never exposed schools (N = 706) those where the data consistently indicated that they never implemented PBL.

We excluded those schools that were partially exposed to PBL as their data was considered to be unreliable. Of the included PBL schools, only nine secondary schools, five schools for specific purposes, two central schools and one infant school met our inclusion criteria. Given these limited numbers, and hence the limited amount of information for these types of schools, we decided to further restrict our analysis to include only primary schools.

In addition to limiting our analysis to certain types of schools, we also needed to limit our analysis to certain types of students. Namely, as the TTFM student survey is only available to primary students in years 4, 5 and 6, the results from our analysis may not generalise to students in lower years. To ensure that students had adequate exposure to their school environment, we limited our analysis to those students who had attended their primary school for at least one year prior to responding to the TTFM survey.

<sup>68</sup> We used three sources of information as the PBL database maintained by Learning and Wellbeing consisted of missing and inconsistent data due to the fact that PBL schools may stop using PBL at any time and are not required to report this to Learning and Wellbeing. The PBL survey developed for this evaluation was the most recent source of information about a school's PBL status, so information in this survey overrode information from any other sources. If there was a conflict between a school's PBL status on the 2018 CESE Principal Survey and the database maintained by Learning and Wellbeing, we excluded them from our analysis. If a school did not respond to the PBL survey or the CESE Principal Survey, we obtained their PBL status from the database maintained by Learning and Wellbeing.

Once we applied the exclusion criteria described above, we used a logistic regression model to investigate whether the characteristics of the fully exposed students who participated in the TTFM survey in the relevant base year (9,103 students from 79 primary schools) were similar to those of the broader population of interest (17,432 students from 149 primary schools). We included the following information in our model:

- student reading and numeracy scaled scores from the National Assessment Program – Literacy and Numeracy (NAPLAN)
- student socio-educational advantage (SEA)
- student scholastic year (year 4 vs. year 5 vs. year 6)
- school Index of Community Socio-Educational Advantage (ICSEA) values<sup>69</sup>
- school location (metropolitan vs. non-metropolitan)
- school attendance
- school proportion of Language Background Other Than English (LBOTE) students
- school size (total number of enrolled students).

While there were some minor differences between the sample and the broader population of interest, the results indicated that the sample was generally representative<sup>70</sup> (refer to appendix H for further details).

#### We compared Positive Behaviour for Learning schools with similar non-Positive Behaviour for Learning schools on the Tell Them From Me measures

For the 28 primary schools that started implementing PBL in 2015, the pool of potential control schools included the 143 schools that never implemented the approach and had valid TTFM data for 2015 and 2018. For the 51 primary schools that started implementing PBL in 2016, the pool of potential control schools included the 217 schools that never implemented the approach and had valid TTFM data for 2016 and 2019.

To estimate propensity scores for each school in our sample, we first fit separate logistic regression models to the school data for each year (2015 or 2016) using the same school information described in the logistic regression model above. We then used the estimated parameters from these models to calculate propensity scores for each school. We used 1:1 nearest neighbour matching without replacement to match the schools that had never implemented the PBL approach to the fully exposed PBL schools (refer to appendix H for further details).

<sup>69</sup> The ICSEA value is the level of a school's educational advantage. ICSEA provides an indication of the socio-educational background of students. It is calculated based on four factors – two student factors and two school factors. The two student factors are (1) parents' occupation and (2) parents' education. The two school factors are (1) geographical location and (2) proportion of Indigenous students. ICSEA is a scaled score. The median score is set at 1000 with a standard deviation of 100. Schools with lower ICSEA values have lower levels of educational advantage, and schools with higher ICSEA values have higher levels of educational advantage.

<sup>70</sup> The area under the receiver operating characteristic curve for the logistic model was .54, indicating that the model did not meaningfully discriminate between those students in the population and those in the sample based on the modelled covariates.

#### We examined five different Tell Them From Me measures of wellbeing

Most of the TTFM measures are derived from Likert scale type questions where students are presented with a series of statements and asked to rate their agreement with each statement on a 5-point scale. For each relevant aspect of wellbeing, student responses are first numerically coded and then averaged. These average scores are then used to classify students as either having positive wellbeing or not for each area. We used the following TTFM measures of student wellbeing in our analysis:

- Positive sense of belonging is a 4-item measure that represents whether students feel included and accepted at school and by their peers.
- Positive behaviour at school is a 5-item measure that represents how often students are not disruptive or do not break school rules.
- **Bullying** is a 4-item measure that represents whether students have experienced moderate to severe physical, verbal, social, or cyber bullying.
- Positive teacher-student relationships is a 5-item measure that represents whether students feel that teachers respond to student needs and encourage independence within a democratic environment.
- Positive learning climate is a 5-item measure that represents the extent to which students feel that there are rules and expectations for classroom behaviour in place.

### We compared Tell Them From Me outcomes the year schools began implementing Positive Behaviour for Learning and again three years later

We used a series of student-level regression models to estimate the effect of the PBL approach on student wellbeing. These models can be written as:

$$TTFM \ outcome_{ijt} = \beta_0 + \beta_1 \cdot (PBL_{ijt}) + \theta_t + \gamma_j + \varepsilon_{ijt}$$

where  $TTFM\ outcome_{ijt}$  represents the binary outcome for student i who attended school j in calendar year t;  $PBL_{ijt}$  is a dummy coded variable taking the value 1 when student i attended a PBL school in 2018/19 and 0 otherwise;  $\theta_t$  are calendar year effects;  $\gamma_j$  are school effects; and  $\varepsilon_{ijt}$  are student-level residuals. This specification is commonly known as a two-way linear fixed effects model.

In the above equation, is the coefficient of interest and represents the expected change in a student's wellbeing score with exposure to the PBL approach, which is assumed to be constant across all schools

<sup>71</sup> The 5 response options are (1) strongly disagree, (2) disagree, (3) neither disagree nor agree, (4) agree, and (5) strongly agree. Students use a 2-point scale (yes or no) to respond to statements about bullying.

<sup>72</sup> For the measures of positive sense of belonging, positive teacher-student relationships and positive learning climate, students with average scores greater than or equal to 3 (the numeric value that represents a response halfway between neutral and agree) are considered to have positive wellbeing in the respective area. For the measure of positive learning climate, students with average scores greater than or equal to 3.3 are considered to have positive wellbeing in this area.

<sup>73</sup> The errors  $\varepsilon_{ijt}$  are not assumed to follow a normal distribution. To account for this non-normality (caused by the binary outcomes), we used cluster bootstrapping to obtain percentile-based 95% confidence intervals for our estimates.

<sup>74</sup> We used a series of dummy indicators to estimate the school and year fixed effects.

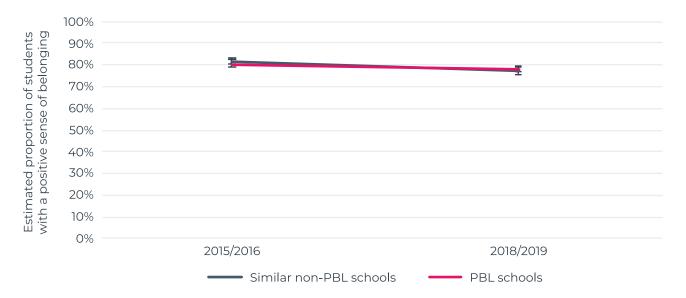
Our analyses of students in years 4, 5 or 6 found that the Positive Behaviour for Learning approach probably has little to no effect on student wellbeing measures from the Tell Them From Me self-report student survey, at least for this cohort

#### Positive sense of belonging

We present the estimated proportions of students (grades 4 to 6) who had a positive sense of belonging in figure 25. These results show that about 80% (95% CI [79, 82]) of students in PBL schools and about 82% (95% CI [81, 83]) of students in similar non-PBL schools were expected to have a positive sense of belonging in 2015/16. By 2018/19, the rate for PBL schools had decreased by about 3 percentage points (95% CI [-4, -2]) while the rate for similar non-PBL schools had decreased by about 4 percentage points (95% CI [-6, -3]). These results are consistent with those from our statistical model, which indicated that the probability of having a positive sense of belonging increased by about 1 percentage point (95% CI [0, 2]) with exposure to the PBL approach. This means that the PBL approach probably had little effect on a student's positive sense of belonging, as measured by the TTFM self-report student survey.

Figure 25

Proportion of students with a positive sense of belonging in primary schools



#### Other measures

We also looked at the scales of self-reported positive behaviour at school, bullying, positive learning climate and positive teacher-student relations. In each instance we found no meaningful difference in the mean (average) change over time between PBL and non-PBL schools

As shown in Table 5, the difference between the differences were never more than +/- 1%. Please refer to Appendix H for the full write up of results and graphs.

#### Table 5

### Estimates of the difference between the differences coefficients of Tell Them From Me student survey scales

TTFM measure	Observed coefficient	95% CI lower limit	95% CI upper limit
Positive behaviour at school	0.01	0.01	0.02
Bullying	0.00	-0.01	0.02
Positive learning climate	0.00	-0.02	0.02
Positive teacher-student relations	-0.01	-0.02	0.00

**Note.** The observed coefficient represents the expected change in the outcome for a student in a PBL school following the introduction of PBL. The estimates and confidence intervals are on a standardised scale.

#### There are four key limitations that may impact on these findings

It is possible that some of the students in the matched non-PBL schools transitioned to their TTFM school from a school that begun implementing PBL prior to 2015. That is, some of the students in the matched non-PBL schools may have been exposed to the PBL approach at a different school in the years prior to the TTFM survey. However, as the TTFM responses we examined are intended to reflect current school environments, combined with the exclusion of those students who had been at their TTFM school for less than one year, we do not think that controlling for complete student histories would change the results.

We excluded some schools from our analysis because we had missing or conflicting PBL information about these schools. It is possible that these schools were different than those we included in our analysis. While we do not think this is the case, we cannot rule out this possibility without further information.

The key identifying assumption of our analysis is that PBL schools would have had the same change over time as the matched non-PBL schools had they not adopted the PBL approach. This assumption is commonly known as the common trends assumption. While this assumption is inherently untestable, we investigated the possibility of providing some evidence for this assumption by using data from schools that adopted the PBL approach in later years but found that there was insufficient data for this analysis.

Finally, the representativeness checks presented in this report only included population and sample data from 2015/16. While it would be ideal to also include data from 2018/19, the data was not readily available. When this data becomes available, it would be possible to directly examine the representativeness of the 2018/19 sample data.

### **Summary**

We were unable to analyse the impact of PBL on the number of problem behaviour incidents because this information is not captured centrally. We were, however, able to examine the impact that PBL has on student attendance and suspensions. We also examined the impact that PBL has on measures of student wellbeing and engagement captured in the department's TTFM self-report student survey.

Our analyses indicate that PBL is probably not having a meaningful impact on student attendance and suspensions. However, there are limitations in the use of these data sources as outcome measures. For example, it is hard to detect an effect on attendance as rates are already high, they do not change much over time, and they are influenced by factors external to the school. It is hard to detect an effect on suspensions because they are relatively rare events that only apply to a small proportion of students.

Our analyses found that PBL probably has little to no effect on student wellbeing as measured by the TTFM self-report student survey, at least for students in years 4, 5 and 6. However, we identify several limitations that may impact our findings, in particular the necessary but untestable assumption that PBL schools would have had the same change over time as matched non-PBL schools had they not adopted PBL.

# Chapter 9: Conclusion and future considerations

### Summary of key findings

### How is Positive Behaviour for Learning being implemented and is it being implemented as intended?

Almost all schools reported implementing each of the universal school-wide features that should be seen if PBL is being implemented as intended. Schools are also implementing the PBL framework flexibly, as intended, in a way that is tailored to their specific context. PBL coach mentors are working closely with schools to facilitate and monitor implementation.

Leadership support is one of the most important universal features and most principals do this actively by being on the team that implements PBL and by organising funding. One aspect of leadership support that could be improved, however, is principals' provision of release time, as fewer than half reported currently doing so. Data collection is another key universal feature and the great majority of schools report collecting data and analysing it at least once per term. Notably, almost all PBL schools report collecting data on problem behaviours after implementing PBL, and less than half report doing so prior to implementing PBL. Schools are using their data to inform decision making and develop appropriate interventions, and are using existing PBL evaluation tools to examine their implementation fidelity. It would be beneficial for monitoring purposes, and any future evaluations, to establish central collection of PBL fidelity data as measured by these tools. Differences in the way this information is stored made collation unfeasible in this evaluation.

There are three tiers of PBL support and at the time of data collection more than half of PBL schools were focused on implementing tier 1 (universal features, with a prevention focus). Approximately four in ten schools were implementing tier 2 (targeted support) and approximately two in ten were implementing tier 3 (intensive individualised support). We expect this to change soon though as a further three in ten schools said they were planning to implement higher tiers and requests for training in higher tiers recently increased. At schools implementing tiers 2 and 3, the most common targeted intervention is an individual support plan. Importantly, decisions about which students require tier 2 and 3 support are based on behavioural data, which is consistent with good implementation. To further support schools to implement higher tiers and provide students with appropriate individualised support, the department is aiming to increase the number of staff who are trained in functional behaviour assessments. We suggest monitoring the number of schools implementing higher tiers over time to check supports are working as intended.

We conservatively estimate that 1,138 NSW public schools are implementing PBL and that 67 schools have stopped implementing. This translates roughly to a 94% retention rate.

### How have Positive Behaviour for Learning deputy principals and coach mentors assisted with Positive Behaviour for Learning start-up and implementation?

Coach mentors are providing schools with professional learning, general information about PBL, and support with data and evaluation. They regularly visit schools to attend PBL team meetings and provide face-to-face support. Support is most intensive when schools commence PBL or commence one of the higher tiers. They use their professional judgement and expertise to decide what support would be most useful to schools, and in some cases this differs to the support schools think they need. For example, some schools have wanted to progress quickly to higher tiers but coach mentors have identified fidelity issues that need to be addressed before doing so. Schools perceive coach mentors as a source of expert knowledge and advice. More than three in four rate the support received from a PBL coach mentor as very or extremely important.

PBL deputy principals are providing training to their teams of coach mentors, facilitating collaboration, and promoting awareness of the latest PBL research. During interviews all coach mentors said that they felt well supported by their deputy principal. Together, PBL deputy principals and coach mentors effectively support PBL coaches, although both groups noted that external coaches (a role that is distinct from PBL coach mentor) were an underutilised potential additional support for schools. Only three in ten PBL schools we surveyed report having an external coach, so PBL deputy principals and the department could consider ways to further promote this role.

### What challenges are faced by schools when implementing Positive Behaviour for Learning?

The main challenge that schools identify is ensuring consistent implementation by all staff. Lack of consistency was usually due to staff having different levels of understanding about PBL, staff being inconsistent in their use of reinforcement, and some staff being reluctant to adopt the PBL approach. Schools secondly point out the large time investment required, and many believe that PBL requires more time than alternative approaches. A challenge observed by some PBL deputy principals, coach mentors, and School Services staff is that schools can have difficulty applying the same principles of feedback and reinforcement to students who require tier 2 and 3 support.

Amongst the small proportion of schools that stopped implementing PBL, staff turnover, reduced engagement and competing time priorities were the main reasons for stopping. Yet many schools that describe themselves as previous PBL schools say they continue to use PBL practices.

# What aspects of Positive Behaviour for Learning are working well and what aspects are not working well?

Aspects that are working well include: (1) almost all schools self-report implementing the universal features; (2) the majority of PBL schools report that their leadership culture became more collaborative and more distributed following PBL implementation; (3) the PBL support structure consisting of four deputy principals managing teams of coach mentors, is working successfully to provide schools with the support that they need; (4) coach network meetings are offering added value to schools; (5) PBL schools are enthusiastic about the benefits of PBL and are very likely to recommend it; and (6) PBL schools report that PBL provides a clear and transparent guide for managing behaviour.

Aspects that are not working well include: (1) some schools need more support to integrate other wellbeing programs and initiatives with PBL, to better streamline the support they provide to students; (2) there is limited collaboration between PBL deputy principals and other School Services staff, despite their common goals; and (3) staff turnover results in the need to train new staff in PBL practices and principles, which can be time and resource consuming. To help schools use PBL in conjunction with other wellbeing programs, coach mentors, PBL deputy principals and other School Services staff could show schools examples of how this can be done. This could include examples of integrating with the Wellbeing Framework and School Excellence Framework.

# What is the perceived impact of Positive Behaviour for Learning on student wellbeing?

Nearly nine in ten PBL schools report that PBL has improved student wellbeing, and more than nine in ten would recommend the approach to a similar school. These schools use data, observations, and feedback from parents to support their claims that wellbeing has improved. The large majority of PBL schools say that major and minor problem behaviour incidents have reduced. (We note that this finding comes from self-report survey data and is not captured in centrally recorded behaviour data.) The longer that schools have been implementing PBL, the greater the perceived reduction in behaviour incidents. More than half of schools also perceive that PBL has reduced short suspensions but only a small proportion of schools report an improvement in attendance. Finally, schools believe PBL helps staff feel supported and empowered, which leads to further improvements in student wellbeing.

# What is the impact of Positive Behaviour for Learning on student wellbeing, as measured through centrally collected datasets?

We explored options to measure the impact of PBL on student wellbeing via independent behavioural, wellbeing and engagement indicators. The most relevant behavioural outcome is the (decreased) rate of problem behaviour incidents, examined in conjunction with PBL fidelity data. However this data is not centrally collected and it would not have been feasible to collect it in sufficient quantities for this evaluation. Previous research on the effectiveness of PBL indicates that it can also lead to reduced suspensions and possibly improved attendance, so we drew on these administrative datasets that are collected centrally. We also drew on the department's centrally collected TTFM student self-report survey that measures student engagement, wellbeing and effective teaching practices in NSW public schools.

Firstly we used a series of Poisson regression models to compare PBL and non-PBL schools on suspensions and fitted a generalised linear model to compare the same schools on attendance, holding other school factors constant. Our analyses found no differences between PBL and non-PBL schools, but we interpret findings with caution given limitations in the use of these data sources as outcome measures. For example, it is hard to detect an effect on attendance as rates are already high, they do not change much over time, and they are influenced by factors external to the school. It is hard to detect an effect on suspensions because they are relatively rare events that only apply to a small proportion of students.

Secondly we used a series of student-level regression models to estimate the effect of PBL on student wellbeing, as measured by TTFM. Our analyses were constrained to primary students in years 4, 5 and 6 as we had insufficient data for other year groups. Results indicate that PBL probably has little to no effect on these wellbeing measures, at least for this cohort. However, we identify limitations that may have impacted on our findings, in particular the necessary assumption that PBL schools would have had the same change over time as matched non-PBL schools had they not adopted PBL. We cannot test this assumption as there is insufficient historical data.

#### **Future considerations**

SSSS funded 36 executive positions at a cost of approximately \$3.75 million per year. Executives supported more than 1,100 schools to implement PBL, with a focus on those commencing PBL and those transitioning to higher tiers. There is a strong and widespread belief amongst schools that PBL is positively impacting on student wellbeing and reducing problem behaviour incidents. In interviews staff spoke about PBL with great passion and enthusiasm, and expressed conviction about its effectiveness. Schools report improvements in both classroom and playground behaviour, use of more respectful language amongst students, and improved behavioural choices. Also, the longer that schools use PBL, the more likely they perceive it to substantially improve wellbeing. Almost all schools would recommend PBL to other similar schools and most would strongly recommend. A large number of schools have adopted PBL, and relatively few have ceased.

In contrast to the strong positive views expressed by school staff, our impact analyses found no differences in suspension and attendance rates between PBL and non-PBL schools. Furthermore our analyses found no differences in wellbeing measures captured by the TTFM student self-report survey. We have outlined the limitations of our analyses that must be considered when weighing this evidence against the feedback from schools.

If funding for these positions continues, one area for focus is demonstrating to schools how to integrate other wellbeing programs and initiatives with PBL. Closer collaboration between PBL deputy principals and other School Services staff would also help with consistent communication of this information. Other areas to consider are further encouraging principals to provide release time, and promoting and supporting the external coach role. We suggest monitoring the number of schools implementing higher tiers as many schools are in the planning stage for doing so. Schools would also benefit from the central collection of both school-level problem behaviour incidents and PBL fidelity data. This would allow behaviour data to be examined for prevention purposes as well as for assessing effectiveness.

To make a more definitive assessment of PBL, clear design and data systems need to be in place before schools commence PBL. If we were to do this piece of work, we would need a large sample of schools (N=200 or more) that have not yet implemented PBL to consistently follow a standardised procedure for centrally recording student behaviour incident data. Most schools are already capturing behaviour incident data using a number of different systems. However, without a centralised system in place schools are recording data in considerably different ways. Schools would need guidance and training on appropriate categories and thresholds for the recording of behaviour incidents and they would need to invest time in applying these consistently over time. After two years of having these data systems in place, half of the schools could begin to implement PBL

(ideally, a random allocation) while the other half would need to delay their onset by three years, if they do choose to implement PBL. Ideally, those schools that are implementing PBL would complete PBL fidelity data each year and undergo regular external validation that the recording of student behaviour incidents reflects actual behaviour incidents. Most existing PBL schools are already using the PBL school-wide evaluation tool and/or PBL self-assessment survey and so collecting this information centrally would not be too difficult. These conditions would allow us to collect baseline data on problem behaviour incidents, student wellbeing, and suspensions for persistent misbehaviour. Three years later we would compare PBL and non-PBL schools on these measures before and after implementation, using the PBL fidelity data as an indication of how well PBL schools had been implementing the framework.

#### Limitations

This evaluation design was limited because it was retrospective. Stronger designs are feasible when evaluation planning commences before an initiative is implemented. Our outcomes analyses were also limited by the absence of centrally available behaviour incident data and PBL fidelity data. This meant we drew on some less suitable centrally available outcome measures, and we relied on schools' self-report data to gauge implementation fidelity.

#### Authors: CESE

Centre for Education Statistics and Evaluation GPO Box 33, Sydney NSW 2001, Australia

Visit our website to subscribe to the CESE newsletter

- 02 7814 1527
- ⊠ info@cese.nsw.gov.au
- cese.nsw.gov.au

y∈ yammer.com/det.nsw.edu.au

#### Please cite this publication as:

Centre for Education Statistics and Evaluation (2021)

Positive Behaviour for Learning evaluation – final report

NSW Department of Education, cese.nsw.gov.au

