



University of
South Australia

International Centre for
Allied Health Evidence

ICAE

Final Evaluation Report: Boxall Educational Practice Project Implementation (2016-2017)



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Government of South Australia

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Executive Summary

This report contains the accumulated evaluation results for the implementation of the Boxall Educational Practice, at four primary school sites in Adelaide (South Australia), over the period of four school terms in 2017. The best available, comprehensive and consolidated results of the impact at the sites are provided, drawing together results from a variety of evaluation tools. Site staff themselves collected data, whilst the data were collated and analysed centrally at DECD. Dr Kobie Boshoff from the UniSA International Centre of Allied Health Evidence (UniSA), worked as contracted consultant with Alina Page (DECD) to refine the evaluation tools, and together with Dr Jocelyn Kernot (UniSA), wrote up the results of the evaluation.

The Boxall Educational Practice has a long history of implementation in the UK and has also been successfully adopted in other countries. It has a strong foundation of evidence to support its implementation and it is from this strong foundation that the project was implemented in DECD primary schools in South Australia, to serve as trial for future implementation. The approach centres around the use of the Boxall Profile (an assessment and outcome measure) and on supporting students both in their mainstream class and in nurture groups at school. The aim is to enable children to reach an age-appropriate developmental level at both a wellbeing and academic level by first understanding and identifying the strengths and areas of development of each child and targeting the teaching to accelerate the learning and remove 'gaps'. For children with complex barriers to learning, the Boxall model entails more intensive work for approximately 50% of a child's timetable in a smaller group than their regular classroom (collectively called a nurture group).

Schools implemented the Boxall Educational Practice according to the prescribed framework and principles, and customised implementation to reflect their local context. In accordance with the Evaluation Plan, the Boxall Educational Practice aimed to achieve results for students, parents and within the broader school context.

Results indicate that across the four terms, a total of 59 children participated, with 55 indicating more than five risk factors, potentially predisposing them to disengagement at school. Gains were seen for participating children in their improved literacy levels, improved school attendance and social and emotional development. Parents saw outcomes both in school and home settings. Staff participating in the program reported outcomes noticed in relation to children's academic learning, engagement in learning and attitude towards learning, as well as outcomes related to improved behaviour, social relationships and children's communication skills. At a whole-school level, one school showed improved wellbeing and engagement indicators and another school received positive comments from an external review panel regarding the effectiveness of the Boxall Educational Practice at their school.

Recommendations arising from this report include formal recognition by DECD of this model with the potential to provide quality outcomes for children, given the combination of evidence provided in this report and the evidence from well designed, credible published international research. Recommendations further include the continuation of the implementation and evaluation of the Boxall Educational Practice, with consideration given to the refinement of specific evaluation measures for the future implementation of larger scale, robust evaluations.



1. Background to the implementation of the Boxall Educational Practice in South Australian Primary Schools

The DECD strategic plan (2017) focuses on providing a strong start for children, high achievement, fairness for all, learning in partnership and better futures for the children of South Australia. The outcomes that DECD aims to achieve include giving children a strong start in life, students having strong numeracy and literacy skills, educational achievement for all students regardless of student background, and students attending school and staying focussed, amongst other outcomes.

In achieving these outcomes, South Australian schools are lagging behind particularly in literacy and numeracy outcomes. In national terms, South Australia's performance in literacy (NAPLAN) is below National average in year 3, 5, 7 and 9 literacy and numeracy performance indicators (Australian Curriculum, Assessment and Reporting Authority, 2017). The 2015 PISA survey demonstrates a steady decline in Australian average reading, mathematical and scientific literacy performance, between 2006 and 2016 (pg. 16, 11, 21 respectively). This applies to all sectors of schooling (government, catholic and independent). South Australia also has some of the highest rates of exemptions, absence and withdrawals in the country for these tests.

In addition, South Australian student suspension rates (DECD Term 3 School Enrolment Census 2012-2016) were reported to be 2.3% (3550 students), in 2014, with 2.28% (3855 students) in 2015 and 2.20% (3773 students) in 2016. The number of students suspended by age shows that 4.9% were 4-6

years old (189 students); 17.6% (683 students) were 7-9 years old, 25.4% (984 students) were 10-12 years old and 47.1% (1827 students) were 13-16 years old. Noteworthy is that these figures illustrate reported statistics only at census time (Term 2 2012-2016).

Success at school and into adulthood depends not only on academic skills, but also on student wellbeing. Aspects of wellbeing include emotional resilience, ability to engage with others, motivation, attitudes towards schooling, self-regulation and ability to persevere. Systematic reviews incorporating large participation numbers, illustrate the link between social and emotional skills and academic attainment (Durlak et al 2011, Farahmand et al 2011). In considering students' performance academically, consideration needs to be given to children's wellbeing as these two aspects go hand-in-hand.

Research has shown that a young person (aged 13 or 14 years), who experience five or more problems in the family environment (this can include mental health problems, physical disability, substance misuse, domestic violence, financial stress, neither parent being in work, teenage parenthood, poor basic skills and living in poor housing conditions), is 36 times as likely to be excluded from school and six times as likely to enter the care system, or have contact with the police, as a young person living in a family with none of these problems (Layard & Dunn, 2009).

In the 2013-2104 Young Minds Matter survey (Lawrence, Johnson, Hafekost, et al. 2015), 14% (1 in 7) of children and adolescents, aged 4-17, were assessed as having mental health disorders in the previous 12 months, which equates to 560 000 young Australians. Of these, ADHD was the most common (7%) and conduct disorders made up 2%. Almost one third (30%) with a disorder had two or more mental health disorders. It has also been shown by Kim-Cohen, Caspi, Moffit et al (2003) that approximately half of mental health disorders emerge in the teenage years (before the age of 15). Poor mental health at ages 14 and 15 has been shown by Goodman et al (2011) to lower a young person's outcomes in the workforce, education or training, above and beyond other factors, including academic achievement.

Neuroscience evidence has shown that the presence of stress early in life could permanently impair learning and memory and increase susceptibility to depression (Karten, Olariu & Cameron, 2005). In addition, adolescents maltreated early in life had lower grades in language arts, were absent from school twice as much than non-maltreated students and were less likely to anticipate attending college / university as compared to non-maltreated adolescents (Lansford et al 2002).

In the 2016 Wellbeing and Engagement survey conducted by the South Australian Department of Education and Child Development (2017), 46% of primary school students, and 30% of secondary school students reported being worried about things at home and at school. Fifteen percent of primary school students and 18% of secondary school students did not feel that they belonged with peers. Thirty-four percent of students (primary and secondary schools) showed low levels of optimism, 27% of secondary school students showed low levels of satisfaction with life. Seventy percent reported that they were bullied at least once during the school year. School belonging was reported as low by 26% of students. Perseverance with challenges were reported as low by 30% of students. Perseverance was also shown to have a strong relation with young people's educational

achievement in year 7 reading and academic progression from year 5 to year 7. This impact was found to be over and above the impact of students' demographic factors. The South Australian Government has responded by investing 1.8 million towards student wellbeing programs, services and initiatives to support the needs of preschool and primary school students at risk of disengagement.

In addressing the need, a project to implement the Boxall Educational Practice in South Australian schools, was commenced in Term 3, 2016 and was completed in December 2017. The project aimed to: increase the engagement in learning of highly vulnerable children and young people; develop a whole school approach to work effectively with vulnerable learners who experience emotional, social and behavioural difficulties and to build the capacity of sites to implement strategies specific to meet the learning needs of students with poor attendance, trauma and adverse childhood experiences.

The project's overall goals were to address the following key strategic DECD priorities:

- **Higher standards of learning achievement:** within this priority, it is aimed for South Australia to have a strong public education system, characterised by high achievement, growth, challenge, engagement and equity. It aims to maximize each and every child and young person's learning to help them become more successful learners, confident individuals and informed citizens. High expectations is created for preschools and schools to raise standards of achievement and reduce the gap between our highest and lowest achievers. Leadership capacity is built and teacher quality continues to be improved.
- **Improving the health and wellbeing of children and young people:** within this priority, the developmental outcomes for children and young people will be improved through the provision of universal and targeted education, health and family services that consider the "whole child". It aims to establish an effective platform of universal family health and preschool and school services with targeted interventions to meet every child's health, learning and developmental needs. Working with families will ensure that every child has the foundation for success in school, the workplace, the community and life.
- **Accessing the right service at the right time:** within this priority, families, carers, children and young people will access the range and scale of services they need for their health, wellbeing, development, care and education. It is aimed to plan and better integrate services to ensure children, young people and families have access to the services they need, when they need them. In this priority, those who need support most are supported by directing resources to meet the specific and identified needs of priority populations.

In addition, the project also aimed to address the following elements of the National Safe Schools Framework (Ministerial Council of Education, Early Childhood Development and Youth Affairs, revised 2011, 2013):

- Element 2: Supportive and connected school culture
- Element 5: Positive behaviour management

- Element 6: Engagement, skill development and safe school curriculum
- Element 7: A focus on student wellbeing and targeted student ownership
- Element 8: Early intervention and targeted student support
- Element 9: Partnerships with families and community

Students at risk of disengagement was the target population group for this project. “These students are those who have identified needs which prevent them from engaging effectively in learning” (Project Overview p. 4). Students in this group may present with social and emotional issues, behaviours or attitudes informed by experiences of trauma and adverse childhood experiences and may have multiple vulnerabilities. These students may or may not be eligible for accessing disability or specific behaviour funding.

The project falls in line with a key deliverable of the Student Engagement Unit in 2016, for sites and partnerships to be able to access resources (human and financial) to effectively address the wellbeing and engagement needs of vulnerable students, with a focus on primary school students. The Student Engagement Unit provided \$25 000 to each of the four identified participating sites. A further \$60,000 per site was allocated to partially support the staffing of the nurture group.

The project was overseen by a Reference Group. Local working groups were responsible for the implementation in the four sites. Behaviour Coaches, Channel Managers and Allied Health Professionals from the SSS and site staff (teachers and support staff) were actively involved in the implementation of the project.

The project aims were implemented by introducing the use of the Boxall Profile and nurture groups into the four primary schools. The four schools were Melaleuca Primary School, Prospect North Primary School, Christies Beach Primary School and Goolwa Primary School. Christies Beach subsequently withdrew - a change in school leadership led to this project being cancelled at the site. The funding was redirected to Hackham West Primary School in Term 3 of 2017.

The process followed at each primary school site included:

- Staff training conducted over a number of weeks, in different sessions, which included attachment theory, behaviour management, supporting language development, administration of the Boxall Profile, classroom-based structures that support and promote nurture, using the Boxall Profile in the classroom (including integration into the curriculum). Training was conducted by a Channel Manager from the SSS, Behaviour Coach and/or Allied Health Professional (Psychologist or Speech Therapist), depending on topic of training session.
- Setting up the nurture room by site staff and Behaviour Coach.
- Student selection by site staff and Behaviour Coach.

- Parent involvement and training.
- Integration into the school timetable.
- Ongoing support provided by Behaviour Coaches and relevant Channel Managers. Day-to-day support provided by the Principal of each school.
- Monitoring of progress by Behaviour Coaches and relevant Channel Managers.
- An evaluation was conducted on the various components of the project, in consultation with Kobie Boshoff and Jocelyn Kernot, from the University of South Australia.
- A prerequisite of engagement in the trial was that the schools concerned would share their practice and their findings with their local partnerships and portfolios and open their doors to practitioners from other schools to learn from their experiences.

In addressing the wellbeing of students, the program conforms with known protective factors for positive mental health: secure attachment experiences, good communication skills, problem solving skills, experiences of success, affection, support for education, “open door” policy for children to raise problems, a whole-school approach, positive classroom management, a sense of belonging and positive peer influences (Department of Education - UK, 2016). In addition, the following culture and structures have been incorporated to promote students’ mental health and have been recommended in literature: a committed senior management team, an ethos of setting high expectations of attainment for all students with consistently applied support, an effective strategic role for the qualified teacher who acts as the special educational needs co-ordinator for the group, working with parents and carers as well as with students themselves, continuous professional development of staff, clear systems and processes to help staff who identify children with possible mental health problems, working with others to provide interventions that use a graduated approach with a clear cycle of support (an assessment with clear analysis of the student’s needs, a plan to set out how the student will be supported, action to provide that support and regular reviews) and lastly, a healthy school approach to promoting health and wellbeing of all students at school (Department of Education - UK, 2016).

The Boxall Educational Practice

The Boxall Educational Practice has a long history of implementation in the UK and has also been successfully adopted in other countries. The program was started in inner London in 1969 by Marjorie Boxall, an educational psychologist to address the high level of needs in primary schools in Brixton, an area with significant levels of deprivation in London. Boxall brought a new way of thinking about children’s behaviour by understanding children’s need for nurturing and building trusting relationships. Her approach made teachers aware that children who have grown up without

nurturing, were not ready for the social and intellectual demands of school. The intervention is therefore focused on providing children with the nurturing and trusting relationships that they need. The approach centres around the use of the Boxall Profile and supporting students in nurture groups at school. When this approach was established in schools in the UK, teachers saw great progress in children and also saw improvement in staff morale with staff feeling that they were being more effective in working with these children. It was reported that in 2014 there were 1500 nurture groups in the UK (Hughes and Schlosser, 2014).

The approach is underpinned by the following six principles in a whole school approach:

- 1) Children’s learning is understood developmentally.
- 2) The classroom offers a safe base.
- 3) Nurture is important for the development of self-esteem.
- 4) Language is understood as a vital means of communication.
- 5) All behavior is communication.
- 6) Transitions are significant in the lives of children.

The practice model (the nurture pyramid) can be represented as illustrated in Figure 1.

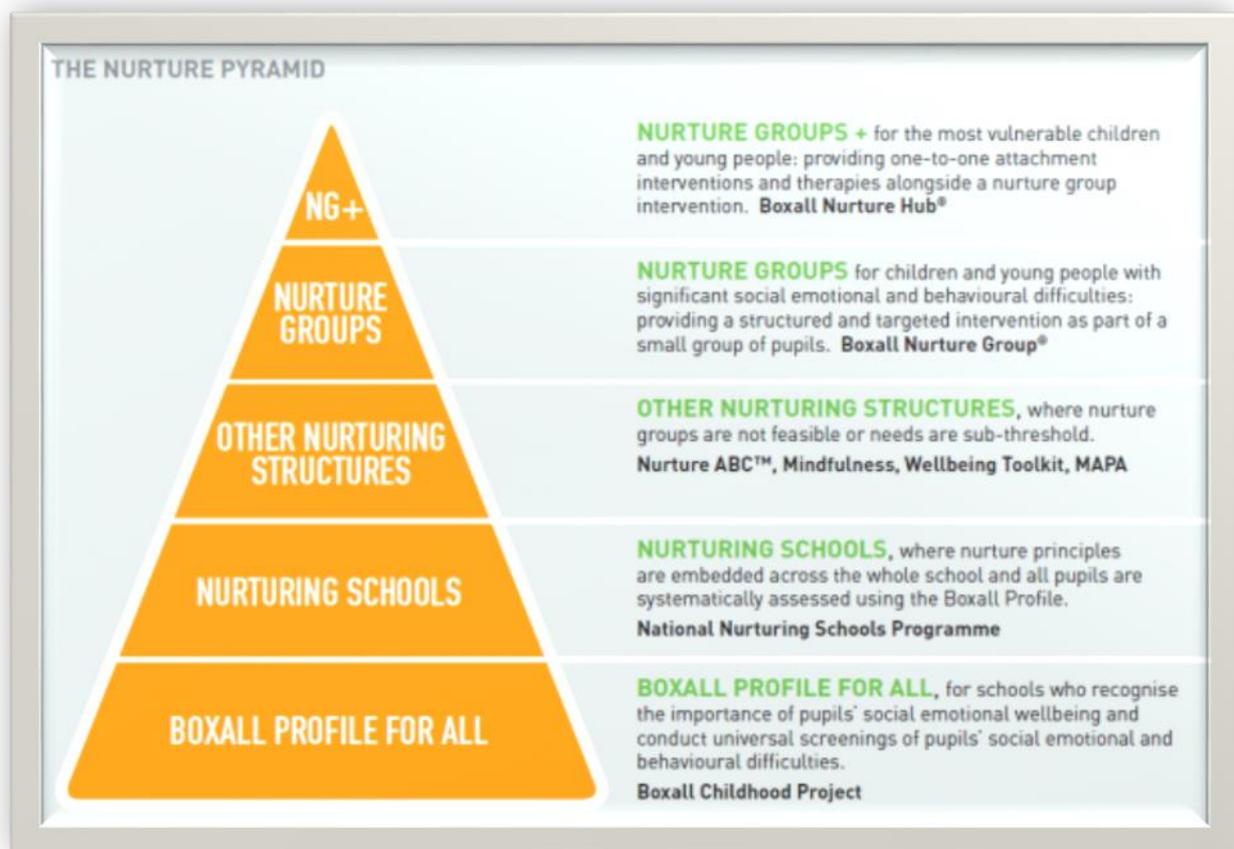


FIGURE 1. THE NURTURE PYRAMID IS THE MODEL USED TO MAP OUT THE DIFFERENT LEVELS ENCOMPASSED IN THE GRADUATED APPROACH TO NURTURE.

The project focused on trialling the Nurture groups structure, in response to identified needs within sites: targeting the intervention to a number of children identified as having significant emotional and behavioural difficulties. The schools in the trial used this structure as a vehicle for building whole school practice, thus moving closer to a nurturing school model.

Unlike other approaches, which focus on children's wellbeing alone, the model of practice is firmly focused on learning across both the academic and wellbeing domains. The aim is to enable children to reach an age-appropriate developmental level at both a wellbeing and academic level by first understanding exactly what the strengths and areas of development of the children are and targeting the teaching to accelerate the learning and remove 'gaps'.

For children with severe gaps, the Boxall model entails more intensive work for approximately 50% of a child's timetable in a smaller group than their regular classroom (collectively called a nurture group, although in practice schools give it alternative names such as 'The Rainbow Room'). Children are placed in the group if their needs have been identified as severe, following a standardised assessment using a Boxall profile. They attend a carefully planned mixture of mainstream lessons and small group lessons for 2-4 terms.

The model takes approximately two years to embed in a site and, whilst this work is ongoing, for the purpose of this evaluation, we have focused on the outcomes realised for children attending the nurture groups, as this is where we can ascertain that the practice follows the six principles more reliably.

Baseline and outcome-based assessment tool: the Boxall Profile

The intervention is embedded within a process starting with the administration of the Boxall Profile, followed by intervention and monitoring of the child's progress. The child is assessed again by means of the Boxall Profile and other standardised and non-standardised tools.

The Boxall Profile is an assessment tool to profile a child or young person's social, emotional and behavioural development and their barriers to learning. The assessment is a two-part checklist, completed by staff who know the child or young person best. The assessment identifies the levels of skills the child or young person possesses to access learning. It assists with the understanding of what lies behind a child's behaviour and then helps to determine the appropriate way to set individualized and achievable targets of intervention for the child. It also assists with tracking the progress of the intervention. Once the scoring is completed the individual student's scores are compared to the standardized emotional literacy scores of "competently functioning" children of a similar age group.

The profile is cost-effective (AUD 0.88 per child being the most expensive option) quick and easy to administer and scoring is made more expedient if the online scoring software is used. It has undergone development over the years since its original start in 1970. The Boxall Profile has been found to have high level of concordance with the Strengths and Difficulties Questionnaire, showing

that both measures identify the same children as having difficulties (Couture, Cooper & Royer, 2011), and also indicated good internal consistency.

The intervention

The nurture groups are classes of between six and 12 children or young people, supported by the whole staff group and parents. Each group itself is run by two staff members, a teacher and an SSO. Children remain active as part of their main class group, however spend allocated time in the nurture group, according to their need (typically 50% of the time). The aim is to eventually return to their main class full time.

In the nurture groups, each child's learning, social and emotional needs are assessed with the Boxall Profile. The intervention is then planned according to the child's individual needs. During the intervention there is a focus on language and communication and literacy. Information is explained, role-modelling occurs, as well as demonstration and the use of gestures, as appropriate. Staff members' own relationship with each other and the children serve as role model, illustrating being supportive and nurturing.

The outcomes of this approach have been documented in a number of published studies. A systematic review was conducted in 2014 on the effectiveness of nurture groups by Hughes and Schlosser. The review included 13 studies, all of which used pre-post measures. The review concluded that there is evidence that nurture groups are effective in improving the emotional wellbeing of children. Positive outcomes were seen in children's "peer problems", "pro-social behaviour", "hyperactivity", on both strands of the Boxall Profile (explained in next section) and academic achievement. Teachers also perceived improvements in the children's academic progress and most parents reported a positive impact on their child. There is however a need for higher quality and longitudinal research. In a separate qualitative study (Taylor and Gulliford, 2011), not included in the review, parents reported the following positive impacts on their children (in the form of themes that emerged from the qualitative data): "improved communication – with parents less stressed, connecting more with parents and family" and "happy child – happy parent" and additionally, in relation to impact on parents the following was mentioned by parents: "changes in parenting approaches".

The Boxall Educational Practice therefore has a strong foundation of evidence to support its implementation and it is from this strong foundation that the project was implemented in DECD primary schools in South Australia, to serve as trial for future implementation.



2. Evaluation Methodology

The basis for the evaluation was developed by Alina Page and the steering committee. In July 2017, Kobie Boshoff from the iCAHE at UniSA was contracted to provide a consultation service in the evaluation of the project. Kobie Boshoff worked collaboratively with Alina Page to refine the methodology and together with Dr Jocelyn Kernot (UniSA) and Alina Page, documented the results of the evaluation.

The evaluation methodology is based on an Evaluation Plan (see Table 1) documenting the four key areas with performance indicators. The four population groups in which outcomes were expected to be seen were in students themselves, the educational staff, parents and carers and within other DECD areas such as whole school outcomes.

The Evaluation Plan identifies the tools used to collect data against each outcome area. As can be seen, a large variety of tools were planned to be used to gather data, illustrating a comprehensive approach to capture potential outcomes. Site staff themselves collected the data with central DECD collation and analysis of the results. Evaluation of complex programs of this nature is always a challenging task due to the integrated nature of service delivery, long term nature of outcomes and the various factors at play in delivering these services and collecting the data (such as staff time to collect data and site-specific aspects, e.g. readiness to adopt a new program within the whole school community). This was also the case in this evaluation, requiring a pragmatic, multi-dimensional and flexible approach. This evaluation therefore aimed at gathering the best possible evidence of the outcomes achieved in order to inform decision making.

Table 1. Evaluation Plan: Implementation of the Boxall Educational Approach

| Who is our population? | What outcomes do we want? Do we need to collapse/Sub-divide/prioritise? | What are our potential measurable performance indicators? | How will we capture this data? What evaluation tools do we need? <i>How is data collected?</i> |
|---|--|---|--|
| <p>Children and Young people</p> | <ul style="list-style-type: none"> • Positive Engagement with education • Reduction in negative behaviour incidents • Increase levels of self-regulation • Increase and accelerated growth in educational achievement levels. • Integration within mainstream classes • Transfer positive behaviours outside of the nurture group, classroom or school. • Increase in ‘within range’ developmental strands for individuals. | <ul style="list-style-type: none"> • Increased attendance levels • Reduction in number of behaviour incidents • Reduction in severity of behaviour incidents. • Improvement of achievement levels in literacy and numeracy. • Increased attendance to mainstream classes • Reduction in behaviour incidents outside of school. • Improvement in levels of regulation in the home and in the community • Reduction in areas of need on the developmental profile. • Improved self-perception levels in SDQ domains. | <ul style="list-style-type: none"> • % attendance per child termly, week 10 (EDSAS) <i>from system</i> • Number of behaviour incidents termly week 10 (EDSAS) <i>from system</i> • Breakdown of behaviour incident type termly week 10 (EDSAS) <i>from system</i> • Suspensions, exclusions and take homes termly (termly week 10 EDSAS) <i>from system</i> • Strength and Difficulties Questionnaire scores – student reported; pre- intervention and week 10 termly (parent perception of student outcomes). <i>Measurement tool.</i> • Literacy levels pre and post intervention. <i>Reading age collected by sites</i> • Feedback from parents - questionnaire – pre and post intervention. <i>Self-developed questionnaire</i> • Boxall profile scores pre and post intervention. <i>Measurement tool of student behaviour profile</i> • Teacher SDQ for the child pre and post intervention. <i>Measurement tool completed by staff re child outcomes</i> |
| <p>Education</p> | <ul style="list-style-type: none"> • Develop staff ability to implement | <ul style="list-style-type: none"> • Perception data from staff | <ul style="list-style-type: none"> • Staff questionnaires pre and post-training. |

| Who is our population? | What outcomes do we want? Do we need to collapse/Sub-divide/prioritise? | What are our potential measurable performance indicators? | How will we capture this data? What evaluation tools do we need? <i>How is data collected?</i> |
|---------------------------|---|--|---|
| staff | <p>strategies to meet the learning needs of students with poor attendance, trauma and adverse childhood experiences.</p> <ul style="list-style-type: none"> • Greater ability to provide developmentally-appropriate programs for identified children. • Employ a restorative approach to behaviour management. • Understand the communication and functional need of behaviours. • Ability to interpret developmental data and translate it into classroom practice. • Agreed and consistent behaviour management strategies and approaches. • Increase and accelerate the educational outcomes of the children in their care. • Improve engagement with parents. | <ul style="list-style-type: none"> • Perception data from children. • Level of transference of skill and approach from the nurture group to the whole school staff. • Change in behaviour management approaches at the school • Reduction in behavioural incidents at the school. • Improved attendance. • Increase in engagement with families. | <p><i>Self-developed</i></p> <ul style="list-style-type: none"> • Student questionnaires. <i>Self-developed</i> • Staff questionnaires (whole school) post intervention and in week 9 T4. <i>Self-developed</i> • School behaviour incident <i>data collected termly by staff</i> • Family engagement data/ information (number of visits/ interactions with schools). <i>Collected by staff. Staff diary (planned but not done)</i> • Behaviour management processes and practices (narrative; appendix with any changes). <i>Staff diary (planned but not done)</i> • Staff feedback on differentiation and engagement (<i>pre training and in T4 week 9</i>). <i>Self-developed – done anecdotally</i> |
| Parents and Carers | <ul style="list-style-type: none"> • Increased positive engagement with the site. • Improved understanding of their children’s needs. • More consistent approach to | <ul style="list-style-type: none"> • Increased positive engagement with school • Engagement in provision of support for their children. • Improvement in relationship with | <ul style="list-style-type: none"> • SQD family/ parent assessment • Parent feedback (narrative or <i>questionnaire</i>) • Staff feedback on parent engagement. <i>Staff questionnaire (planned, not done)</i> |

| Who is our population? | What outcomes do we want? Do we need to collapse/Sub-divide/prioritise? | What are our potential measurable performance indicators? | How will we capture this data? What evaluation tools do we need? <i>How is data collected?</i> |
|------------------------|---|--|---|
| | behaviour management. | site and / or own children. <ul style="list-style-type: none"> • Transfer of strategies employed by the school into the home. | |
| DECD | <ul style="list-style-type: none"> • Children can manage mainstream education and self-regulate to the point of functioning with minimal adjustments alongside their peers | <ul style="list-style-type: none"> • Stabilisation or decrease in funding requirements for individual students over time. | <ul style="list-style-type: none"> • Reintegration into ‘mainstream’ class and maintenance of low levels of disruption and self-regulation strategies. <i>Records of length and outcomes of intervention</i> • Achievement levels improve over time. <i>Reading age – collected by site</i> |



3. Results of the Evaluation

3.1 Description of Participating Student Group, including Risk Factors

To date 59 students with an average age of 8 years 10 months have been enrolled in the high-end provision of the Boxall Educational Practice model, across the state. Of these, 23 have 'graduated' and have been judged by their schools as being ready to return to a mainstream class full time. The average length of the intervention before graduation has been 3.17 terms.

Students attend between four and 0.5FTE sessions per week in the Nurture Group. For six of the children, the Nurture Group was the only provision they attended until the end of Term 2. This was the decision of the local setting. The four sites have structured their approach slightly differently, which was to be expected, taking into account their local cohort and settings.

Table 2. Description of intervention at different sites

| Prospect North Primary School | Melaleuca Primary School | Goolwa Primary School | Hackham West Primary School |
|---|--|--|--|
| <p>Initially one group of 6 students in years 5-7 attended the Nurture Group together, with one teacher, for half of their week. The Nurture Group ran for 3 terms.</p> <p>Pressures on space meant that the school had to be creative around sharing the space with Out-of-School Care, which presented challenges in terms of ensuring a secure base. A small room attached to Out-of-School Care provided a much appreciated sensory room; the teacher skilfully worked around the limitations of the space and engaged in whole of school delivery and support.</p> | <p>Melaleuca started with two parallel groups, all of whom started at the same time and attended twice a week. The groups ran for 4 terms.</p> <p>Each group took ownership of their rooms and the personalities of the staff and children shaped the look and feel of the room.</p> <p>The two groups approached the work slightly differently, with one delivering a more prescriptive, structured approach to the children’s social learning, whilst the other integrated this in day to day teaching and learning activities. Of interest is that both delivered similar progress and achievement results.</p> | <p>The school’s Nurture Group was set up and the intervention delivered by the School Counsellor who had a strong focus on the children’s developmental needs, ‘stage not age’. The intervention lasted 5 terms, it was delivered in small groups, scheduled to attend at prescribed times, three times a week for 2 hours at a time.</p> <p>The nurture room was already known to the children as a learning and withdrawal/ refocus space, which facilitated the transition to a nurture room.</p> | <p>Hackham West R-7 decided on a whole school lens moving to a nurture group later in the year: over 2 terms all staff were trained, with regular sessions and support delivered by the local support services staff; the school reviewed its approach to assessment and baseline data to include Boxall Profiles and staff comment about their understanding as a staff group of the children’s needs.</p> <p>Social skills and their support were embedded in the curriculum, which led to a change in the whole school culture.</p> <p>Staffing issues interrupted the commencement of the nurture class.</p> |

*NG=Nurture Group

One of the schools, Prospect North has extended the provision to creating a second Nurture Group provision in the junior primary class in Term 4 2017. These students and their progress have not been monitored as part of the trial. However, the school are reporting outcomes and continue to run the group in 2018.

In Table 3 below, it is evident that more male students than female students attended. In Table 3, it is illustrated that the largest year groups participating were year 6, 5 and 2. Only one child in reception participated.

Table 3. Gender distribution by year group

| Year group | Female | Male | Total |
|--------------|-----------|-----------|-----------|
| 1 | 1 | 6 | 7 |
| 2 | 3 | 7 | 10 |
| 3 | 3 | 2 | 5 |
| 4 | 2 | 7 | 9 |
| 5 | 1 | 10 | 11 |
| 6 | 7 | 5 | 12 |
| 7 | 1 | 3 | 4 |
| R | | 1 | 1 |
| Total | 18 | 41 | 59 |

Table 4. Distribution of cohort by site and year group

| Site | Year group | | | | | | | | Total |
|--------------|------------|-----------|----------|----------|-----------|-----------|----------|----------|-----------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | R | |
| Goolwa | 2 | 6 | 2 | | 1 | | 2 | 1 | 14 |
| Hackham | 2 | | 2 | 4 | 4 | 4 | | | 16 |
| Prospect | | | | | 4 | 1 | 1 | | 6 |
| Melaleuca | 3 | 4 | 1 | 5 | 2 | 7 | 1 | | 23 |
| Total | 7 | 10 | 5 | 9 | 11 | 12 | 4 | 1 | 59 |

Risk factors of the participating group

The distribution of risk factors across the 59 children who have already attended Nurture Groups is seen in Table 5. The table indicates that the majority of children (55 out of 59) have five or more risk factors present.

Table 5. Risk factors per number of children

| Number of risk factors | Number of children |
|------------------------|--------------------|
| More than 5 | 55 |
| 1-4 | 4 |
| 0 | 0 |

Table 6. Number of risk factors in student population by year group

| Year group | Number of risk factors | | | | | | | | | | | | | | | |
|------------|------------------------|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|
| | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 18 | 22 |
| R | | | | | | | | | | 1 | | | | | | |
| 1 | 1 | | 1 | 3 | | 1 | | 1 | | | | | | | | |
| 2 | 1 | | | 4 | 2 | | | | | | 3 | | | | | |
| 3 | | | | 1 | 1 | | | | | 3 | | | | | | |
| 4 | | | | | 1 | 1 | | 2 | 2 | | 2 | | 1 | | | |
| 5 | | | 1 | 2 | | | 3 | | 1 | | | 2 | | 1 | 1 | |
| 6 | | 2 | | | | 5 | | 1 | 1 | 2 | | | | | | 1 |
| 7 | | | | | 1 | | | | | 2 | | | 1 | | | |



Results reflecting the outcomes of the Boxall Educational Practice, during and after 4 School Terms, are provided for both children's outcomes, as well as outcomes at a whole-school level.

3.2 Outcomes for participating students

3.2.1 Academic achievement

The progress was assessed using Reading Records, Naplan and PAT-R levels. . Reading ages were the measure used to assess progress.

Information on literacy levels was received for 43 of the 59 children. Of these, 31 recorded significant gains in their literacy levels during the time they attended the nurture group, far exceeding expectations of progress for the length of time of the intervention (12 months of progress for a year of schooling, pro rata). Students making more than this level of progress were assessed as having exceeded expectations.

Sixteen children received only one term of intervention in a designated Nurture Group and no achievement data was submitted for them in T4. Their data is included in the progress reporting below.

No data was recorded for 22 students (37.2%) across all schools, indicating a limitation of data collection.

Table 7. Literacy progression of participating children

| Literacy progress | Number/ percentage of children At the end of T4 |
|---|---|
| <p>Progress exceeding expectation (more than the equivalent of 12 months' of progress for 12 months of schooling).</p> <p>The average rate of progress for all students for whom data was available at the end of term 4 was 12.5 months of progress in literacy in 30 weeks of intervention.</p> | <p>31 students/ 52.6%</p> |
| <p>Limited data or reading remained stationary (e.g. reading age listed as >12 for both pre and post)</p> | <p>6 students/ 10.1%; running records indicate progress, but this is limited.</p> |

The data collection outcome would indicate the need to become more sophisticated in the assessment and collection of literacy skills data, as limited information is available on a significant number of students. A single standardised assessment tool that assesses both decoding and comprehension ability and skills would be desirable in the future.

3.2.2 Developmental skills assessment: Boxall Assessment Profiles

There are two Boxall Profiles: one for children (nursery/primary school pupils), and the other for young people (secondary school students). The profile is completed by an adult or group of adults who know the child well. On completion, the scores of each individual student are compared to the standardised emotional literacy scores of "competently functioning" children of a similar age group. Individualised, achievable targets for social and emotional aptitudes are then set for the student which are reviewed and re-assessed periodically.

Both profiles have two sections, each consisting of a list of 34 descriptive items.

Section I: Developmental strands

This measures progress through the different aspects of development in the student's early years- the first assessing the child and young person's organisation of their learning experiences, the second, their internalisation of controls.

Section II: The diagnostic profile

This consists of items describing behaviours that inhibit or interfere with the child's satisfactory involvement in school- self-limiting features, undeveloped behaviour and unsupported development. They are directly or indirectly the outcome of impaired learning in the earliest years.

The profile can be repeated termly and the online profile tracks and helps teachers target set and program based on the assessment findings and the progress recorded. Table 8 illustrates that the majority of children showed good progress.

Table 8. Number of children in each category of Boxall Profile progress

| | Developmental after 1 term of intervention | Diagnostic after 1 term of intervention | Developmental after 2 terms of intervention | Diagnostic after 2 terms of intervention | Developmental after 3 terms of intervention | Diagnostic after 3 terms of intervention | Developmental after 4 terms of intervention | Diagnostic after 4 terms of intervention |
|---|--|---|---|--|---|--|---|--|
| No progress | 9 | 11 | 10 | 6 | 6 | 9 | 3 | 3 |
| Limited progress (1-2 points difference) | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 |
| Good progress | 24 | 22 | 17 | 23 | 23 | 20 | 20 | 20 |

3.2.3 Behavioural Outcomes

Incidents by term

One caveat expressed by sites is that data collection and recording for behaviour has improved significantly since the nurture group has started in sites, which has led, in some cases, to an artificial increase in the number of incidents as they were more rigorously recorded following the implementation of Boxall. The table shows a trend towards decrease in incidents in terms 1 and 2, with an increase in term 3. It is worth noting that Term 3 saw a significant increase in the number of children accessing the Nurture Groups across the 4 sites, as Hackham West came on board – this was the first term of intervention for these children.

Table 9. Number of incidents by term

| | T1 | T2 | T3 | T4 |
|-------------|-----------|-----------|-----------|-----------------------------|
| 2016 | 192 | 84 | 96 | Insufficient data submitted |
| 2017 | 87 | 75 | 115 | Insufficient data submitted |

There is a typical ‘spike’ we should expect in the number of incidents recorded in the first term of intervention, due to the increased structure, rigour and heightened expectations of the children, both academic and behavioural. Typically there is an expected gradual decrease in the number, frequency and severity of negative behavioural incidents over time. The data appears to follow this trend.

Further data collection and analysis is required on the severity of these incidents and the consequences arising from these in the data sets above. Informal reports from staff and school leadership indicate a decrease in the severity of behaviours and a reduction in the time required to deescalate situations. Where incidents tend to still occur with higher frequency is in classes that do not yet have embedded support practices and where staff have low expectations of the children and little targeted teaching occurs.

Staff report that the severity of the incidents has decreased significantly, as has the time taken to deescalate, refocus and reengage in learning; senior leadership in one site are particularly emphatic about the reduced pressure on their time and resources as a result.

Table 10 below shows the data when broken down by length of intervention and pre- and post-information. An overall picture of decrease in incidents, suspensions and exclusions is seen. There has, however, been an increase in the number of take homes, which staff attribute to reflecting a much better engagement of families and a softer sanction for incidents.

Table 10. Incident, suspensions and exclusions count pre- and post-intervention based on intervention duration

| | 1 term of intervention | 2 terms of intervention | 3 terms of intervention | 4 terms of intervention |
|---------------------|------------------------|-------------------------|-------------------------|-------------------------|
| Incidents: | | | | |
| 2016 | 36 | 82 | 254 | 379 |
| 2017 | 38 | 27 | 212 | 225 |
| Suspensions: | | | | |
| 2016 | 9 | 10 | 24 | 19 |
| 2017 | 16 | 9 | 18 | 10 |
| Exclusions: | | | | |
| 2016 | 0 | 1 | 2 | 2 |
| 2017 | 0 | 0 | 0 | 2 |

Key: Orange cells denote a decrease between 2016 and 2017.

3.2.4 School Attendance

Data was available for 45 of the children. Of these, 31 students have recorded attendance levels that have improved from the attendance levels prior to attending the Nurture Groups. The average improvement across this group was 2.3 percentage points (from an average 83.9% attendance before joining the Nurture Groups to an average 86.2% currently).

Table 11 Change in School Attendance before and after attending Nurture Groups

| | Attendance pre-Nurture Groups | Attendance after 1 term in Nurture Groups | Attendance after 2 terms in Nurture Groups | Attendance after 3 terms in Nurture Groups | Attendance after 4 terms in Nurture Groups |
|---------------------------|-------------------------------|---|--|--|--|
| Average attendance | 83.9% | 88.5% | 82.3% | 84.7% | 86.2% |

3.2.5 Graduation from Intervention

As mentioned before, 23 of the 59 children have graduated successfully from the program and joined their mainstream classrooms on a full-time basis. The average length of the intervention before graduation has been 3.17 terms.

3.3 Parental feedback on outcomes achieved

Parents provided feedback in relation to the benefits, outcomes and general impressions of the intervention. As can be seen in Table 11 below, parents overall indicate being positive and appreciative, and see benefits from their children’s participation in the Nurture Groups. Benefits seen by parents are described in both school and home settings.

Table 12. Parent feedback on outcomes achieved

| Theme: | Supporting parent quotes: |
|--|--|
| <p>Overall comments:</p> <ul style="list-style-type: none"> Positive Appreciative Beneficial | <p>Programme is really good. Can see the difference it is making</p> <p>I love Nurture program...</p> <p>We loved it when our daughter went to Nurture...</p> <p>We have loved Nurture group for our daughter...</p> <p>I absolutely love Nurture days...</p> <p>...benefiting from the smaller group...</p> <p>Parent commented on the effectiveness of some of the strategies learnt</p> |
| <p>Benefits at school:</p> <ul style="list-style-type: none"> Increase in attendance Increased student learning Increase in attitude towards school Improved self-regulation Improves social relationships Improved self-confidence in asking for support from teachers | <p>I love Nurture program, it has meant my child can come to school each day</p> <p>We loved it when our daughter went to Nurture, she was able to go to school without attachment issues every single morning. She was even able to support a reception child who had the same anxiety as her be brave and go to school every day.</p> <p>I absolutely love Nurture days, I know that he will be calm when he comes home. He loves these days</p> <p>Since our son has been going to Nurture he feels like he fits in to the school</p> |

| Theme: | Supporting parent quotes: |
|---|--|
| <p>Improved decision making ability</p> <p>Less staff supervision required</p> <div data-bbox="159 609 603 882" style="border: 1px solid black; border-radius: 15px; padding: 10px; margin-top: 20px;"> <p>“I love Nurture program, it has meant my child can come to school each day”</p> <p>– Participating parent</p> </div> | <p>Carer has indicated that he is benefiting from the smaller group and now really enjoys learning. She has commented on how his self regulation is getting so much better.</p> <p>Parent has seen an improvement in attitude towards learning and is wanting to come to school more often.</p> <p>He is starting to make wise choices and change friendship groups</p> <p>She has been making wise choices and will be able to play out in the yard now and not be supervised by teaching/SSO staff</p> <p>We have loved Nurture group for our daughter, she is more confident in asking for help from her teachers</p> <p>Likes being part of the program and benefits from the smaller group</p> |
| <p>Benefits at home:</p> <p>Improved behaviours of child at home</p> <p>Increased parent support</p> <p>Increased parent knowledge</p> <p>Increased parent relationship with child</p> <div data-bbox="146 1697 590 2011" style="border: 1px solid black; border-radius: 15px; padding: 10px; margin-top: 20px;"> <p>“I have noticed that since my son has been involved with Nurture group he seems more settled and get into trouble less” – Participating parent</p> </div> | <p>Since our son has been going to Nurture... his behaviours are much calmer at home now</p> <p>I absolutely love Nurture days, I know that he will be calm when he comes home. He loves these days</p> <p>He has enjoyed Nurture group and improved his behaviours at home.</p> <p>I have noticed that since my son has been involved with Nurture group he seems more settled and get into trouble less</p> <p>Seen significant improvement in behaviour and overall attitude, even family and friends are commenting on the positive changes they are noticing.</p> <p>His behaviours at home is much easier to work with. He seems much calmer</p> <p>Since understanding my sons sensory needs I will be working on having him assessed for ASD</p> <p>Staff member commenting on discussion with parent: Wanting to use strategies, techniques and activities used in the nurture room at home</p> <p>Staff member comments: Parent commented on the effectiveness of some of the strategies learnt when used at home.</p> |

| Theme: | Supporting parent quotes: |
|--------|--|
| | <p>As a parent that has struggled to manage my child's managing behaviours it's a relief to finally feel like I have a support network to help lead the way.</p> <p>We are very proud of him</p> |

3.4 Staff feedback on outcomes achieved by participating children

Staff who participated in the intervention documented their feedback on their perceptions and impressions of the intervention and the perceived outcomes by the participating children. Their feedback (provided in Table 12) indicates outcomes noticed in relation to children’s academic learning, engagement in learning and attitude towards learning, as well as outcomes related to improved behaviour, social relationships and children’s communication skills. Other outcomes are reported as well and staff also commented on children’s progress and challenges.

Table 13. Staff feedback on participating children’s outcomes

| Theme: | Supporting staff comments: |
|--|---|
| <p>Outcomes noticed related to academic learning, engagement in learning and attitude towards learning</p> <div data-bbox="145 1263 624 1480" style="border: 1px solid #ccc; border-radius: 15px; padding: 10px; margin-top: 10px;"> <p>“Even in a short time, positive change occurred for the students which inspired confidence and hope- in the students and staff” – Participating staff member</p> </div> | <p>Reached age-level developmental goals. Completed writing task by choice.</p> <p>Staying in class and doing the work as requested.</p> <p>More willing to undertake learning tasks. Student has driven personal learning in Nurture Group in several different subject areas.</p> <p>Improvements in raising expectations in self and academically both in the Nurture Group and the mainstream classroom.</p> <p>The student is engaged every morning without tears or tantrums after her experience of Nurture group</p> <p>Disposition to being at school has improved.</p> <p>Increased responsibility and accountability across mainstream and NIT classes</p> |

Theme:**Supporting staff comments:****Outcomes noticed related to improved behaviour**

“We have noted that he is easily taking on board the 1-5 program and will soon be able to play soccer in the yard hopefully without violence” – Participating staff member

We have noted many improvements in behaviour

I have noticed that he is easier to talk to now.

We have noted that he is easily taking on board the 1-5 program and will soon be able to play soccer in the yard hopefully without violence

Accepting failure and things not going his way better.
Accepting learnings and consequences for choices and behaviours. Reduced meltdowns in class.

Appropriate physical contact is accepted and requested.

Initial escalations of behaviour in nurture groups before settling

Initial escalations of behaviour in nurture group, but increase in appropriate behaviours during class times

Better at self-regulation.

Whilst in the nurture room huge improvements have been seen in the following of instructions and practising respectful behaviours.

Had initial challenges around him engaging in the nurture program which has now improved. He is now using the catastrophe scale and identifying and discussing feelings and the causes for these with class teacher.

Student has strong attachment to Nurture Group staff, improved regulation within the program.

We have noted that the student is better on Nurture days emotionally

He is able to go to his cool down spot instead of being violent

I have noticed since he has been a part of the group, he has been much calmer and easier to work with

| Theme: | Supporting staff comments: |
|---|--|
| <p>Outcomes noticed related to improvement in social relationships</p> <div data-bbox="172 757 561 1061" style="border: 1px solid black; border-radius: 15px; padding: 10px; margin: 10px 0;"> <p>“We have noticed that she is more relaxed and able to make friends a little more easier” – Participating staff member</p> </div> | <p>Socially playing by choice.</p> <p>Willing to help others. Polite when requesting things. Reducing the involvement in other people's drama/chaos.</p> <p>Better at helping others.</p> <p>Has become less withdrawn.</p> <p>Elimination of peer conflict.</p> <p>Understanding appropriate responses for helping others.</p> <p>We have noticed that she is more relaxed and able to make friends a little more easier</p> <p>Eliminated peer conflict.</p> <p>Better at resolving peer conflict.</p> <p>Is able to confidently verbalise strategies and techniques effective in building social confidence and emotional wellbeing.</p> <p>Improvements in social interactions with a wider variety of peers</p> <p>Improvements in manners/respect to others.</p> <p>He will be receiving a Principals reward for making positive friendship choices.</p> |
| <p>Outcomes noticed related to improved communication</p> <div data-bbox="172 1532 561 1836" style="border: 1px solid black; border-radius: 15px; padding: 10px; margin: 10px 0;"> <p>“He has become a much more confident boy, asking questions and letting us know if he has been bullied” – Participating staff member</p> </div> | <p>Communicating better.</p> <p>Now asks to play.</p> <p>Comfortable with communication. More appropriate volume when communicating.</p> <p>More communicative and less withdrawn.</p> <p>She is more able to ask for help and able to be readily understood</p> <p>He has become a much more confident boy, asking questions and letting us know if he is being bullied</p> <p>We have noted that he is more likely to tell us what is bothering him</p> |

| Theme: | Supporting staff comments: |
|---|---|
| <p>Other outcomes not reported elsewhere</p> <div data-bbox="172 452 558 757" style="border: 1px solid #f0e68c; border-radius: 15px; padding: 10px; margin: 10px 0;"> <p>“Has more understanding of his surroundings and improved ability to process challenges” – Participating staff member</p> </div> | <p>Has more understanding of his surroundings and improved ability to process challenges.</p> <p>Has developed a greater sense of identity.</p> <p>Learning to recognise and understand his own needs and accepting his needs and assistance.</p> <p>Increase in maturity</p> <p>He is keen to engage in activities experienced in the Nurture Group at home with his parents.</p> <p>Boxall Profile is being implemented at other primary school sites</p> |
| <p>Progress and challenges towards achieving outcomes</p> | <p>Difficulties in transitioning to mainstream class</p> <p>Transition back into mainstream class. Still sees challenge and some resistance. Increased challenges at home</p> <p>Home has been really tough this term</p> <p>Seen improvements but they have been spasmodic as he started new medication which saw his anxiety and fixations on particular issues/topics increase.</p> |

Additional supporting staff quotes:

“Boxall (Educational) Practice provides a way of tracking the emotional needs of children. It provides an objective framework for targeting specific interventions for students and a highly efficient planning tool. The progress of children is made clear by the completion of profiles and heartens the staff that are working with the children day in day out who may not see the progress when working so closely with the children. In my mind it is an excellent way to target the needs of the child to develop their disposition and readiness for learning .”

“The staff reported that the tool itself identified where the student was and helped them to plan the appropriate activities ” – Participating staff member

“The staff reported that the tool itself identified where the student was and helped them to plan the appropriate activities.”

“Even in a short time, positive change occurred for the students which inspired confidence and hope- in the students and staff.”

“When (the Nurture Group staff member) was suddenly ill, the students were unhappy and needed to cope with being in their full class from the start of the day. Breaks were organised at different points. There was less consistency, more pressure with learning and relationships, and they generally coped. They continued to be challenging and staff needed to work around them. However, what was reported to us, was that there were no major incidents as had been happening before. The students showed an improved capacity within mainstream, to follow routines; attempt learning with support; show patience; remain in the room; regulate their emotional states to avoid meltdowns.”

“...a year 6 girl said- ‘I like being in there’. When the teacher said that the student had been working really hard and her reading was improving, and the girl was asked if that was true- she looked sheepish/ embarrassed and nodded.”

“Before the upper primary group started, there were classes that were unsettled every day due to the variable emotional outbursts that could happen at any time, including verbal shouting and abuse, physical violence and other unsafe behaviour to self and others. Once the group started and had been running for a term, running off stopped, violence was reduced in intensity and frequency, and learning had been reinstated as an expectation which was met.”

“The difference that was made to the JP classes was major. A small number of students who were not able to cope in the mainstream class, and were disruptive, noisy, anxious and sometimes violent, were able to have tailored support that helped them settle into routines and engage in learning activities. The mainstream teachers noticed the positive change in their class’s attention, learning capacity and emotional resilience, and also commented on being able to teach, without frequent interruptions to manage behaviours.”

3.5 Outcomes at a Whole-School Level after participation

3.5.1 Wellbeing and Engagement School Results

Principals report improvement across the school with one school sharing their Wellbeing and Engagement report as evidence, which shows an improvement in several of the wellbeing and engagement indicators for the whole school. They attribute some of these changes to the implementation of the Boxall Practice. The report is based on the results of the Wellbeing and Engagement survey which is completed by children themselves and it is implemented as part of the Wellbeing and Engagement Census.

The graphs below show the comparison between student perceptions in 2016 and 2017. All the students surveyed were in years 4-7, which is representative of the cohort in the Nurture Group too. A total of 131 children participated in the survey, from the particular primary school. Survey results illustrate positive changes in all domains between 2016 and 2017 data.

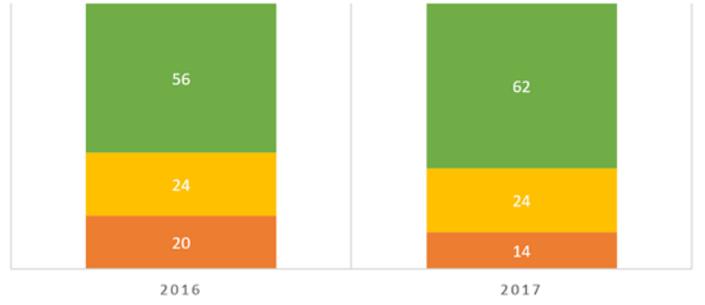
EMOTIONAL ENGAGEMENT WITH TEACHER

Low Medium High



SADNESS

Low Medium High



WORRIES

Low Medium High



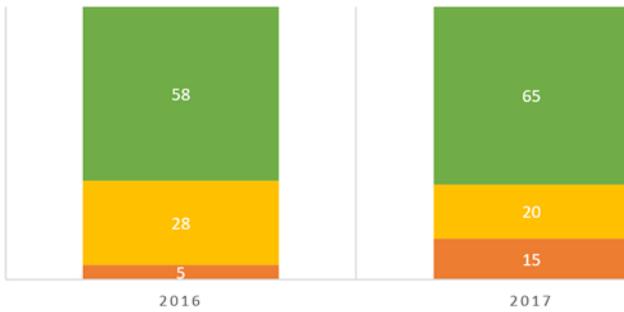
CONNECTEDNESS WITH ADULTS AT SCHOOL

Low Medium High



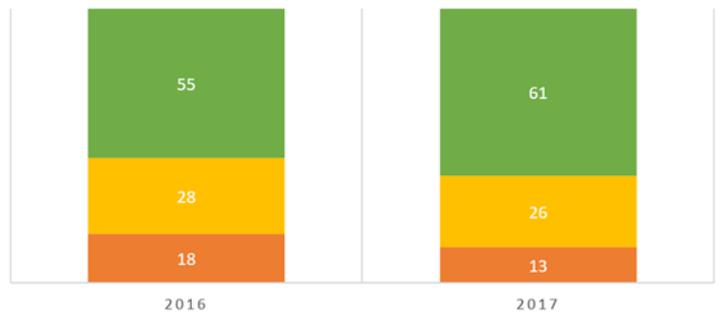
FRIENDSHIP INTIMACY

Low Medium High



PEER BELONGING

Low Medium High



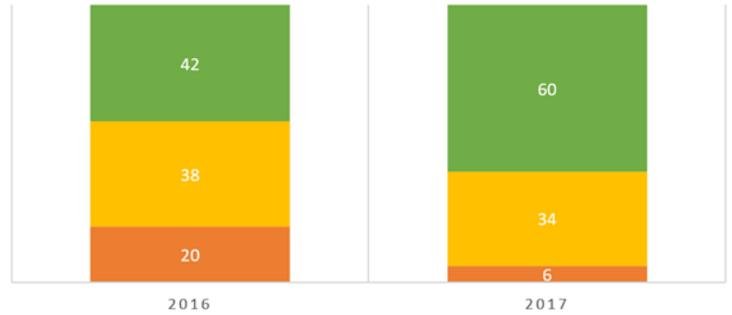
ACADEMIC SELF CONCEPT

Low Medium High



COGNITIVE ENGAGEMENT

Low Medium High



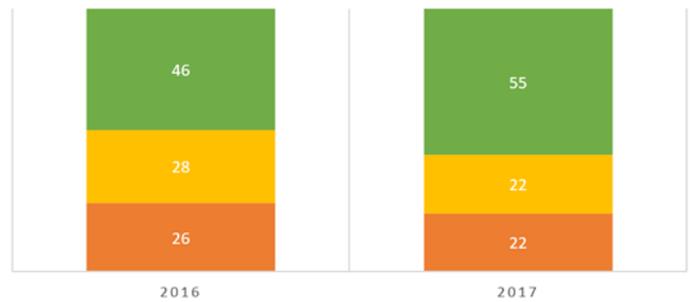
EMOTIONAL REGULATION

Low Medium High



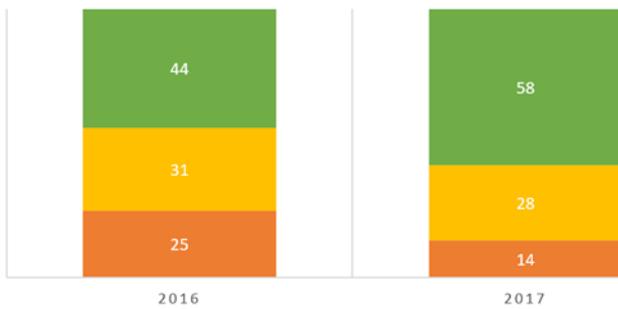
LIFE SATISFACTION

Low Medium High



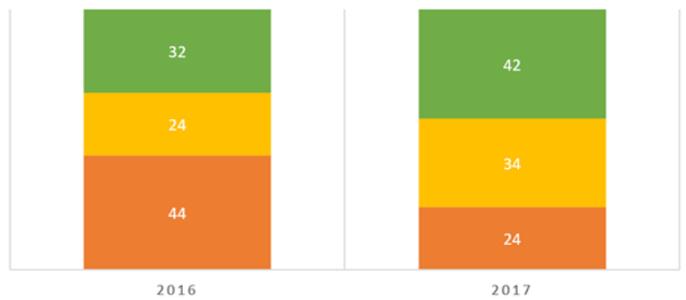
HAPPINESS

Low Medium High



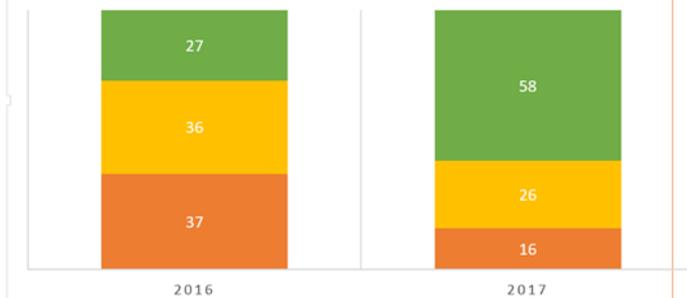
PERSISTENCE

Low Medium High



OPTIMISM

Low Medium High



3.5.2 External school review results

Another positive impact of nurture practices across the whole school community has been reported in the external review of one of the schools in the trial (external review conducted in October 2017, after one term of Boxall Educational Practice at the school). Schools in DECD are reviewed externally every 1-4 years by a review officer and a review principal not associated with the site. External school reviews evaluate school performance in relation to student achievement and growth over time and the extent to which the school's performance has been supported by effective teaching, effective leadership, school – community partnerships and a rigorous improvement agenda. International and national research provide the basis for the external school reviews.

A selection of relevant comments from the external review of one school, has been included below.

“The school has individually profiled each student’s language level, and social and emotional self-management in the school environment. This profiling has reframed the ways in which staff understand the individual communication and social and emotional needs of each student at school. These deeper understandings enable staff to understand student behaviour as communication, and to respond proactively, in order to de-escalate behaviour and to maintain a learning focus in the classroom. “ (pg 5).

“The panel concluded that the careful and considered approaches that the school has taken to improve student social and emotional self-management for learning have been highly effective”
– External School Review

“Language is now understood as central to the learning development of each student, and this has led to whole-school practices, such as the provision of visual supports for all students, and a vocabulary focus in all learning.

Sensory adjustments and environmental adaptations have been made across the school in all learning spaces. Physical classroom spaces are relaxed with options for students to spread, without interrupting teaching and learning.

Interventions to support the development of social and emotional self-management are varied and strongly resourced. These interventions are highly valued by staff and students, and are seen to be effective.

Student behaviour data and critical incident data has significantly reduced. “ (pg 5).

“The panel concluded that the careful and considered approaches that the school has taken to improve student social and emotional self-management for learning have been highly effective. These approaches have been embedded in, not isolated from, classroom practice and academic learning tasks. The school has reframed the ways in which staff interpret and respond to the negative behaviours of students. This changed staff behaviour has enabled a significant increase in student engagement and active participation in purposeful learning.” (pg 6).

“Student language growth is monitored using a language screening tool.” (pg 6).

“Targets for growth in social and emotional self-management for learning are based on a screening tool that is used for all students.” (pg 6).

“The focus for teachers has shifted from age-appropriate expectations of students to providing for their actual developmental needs.” (pg 6).

“Students told the panel that they have class and individual targets for learning and social and emotional development. Students said that goals help to improve grades. Setting goals becomes a habit that then drives one’s own learning. This is an indicator of the development of a positive learning mindset.” (pg 6).



3.6 Key results from Evaluation

In this evaluation of the Boxall Educational Practice, a total of 59 children participated, with 55 indicating more than 5 risk factors, potentially predisposing them to disengagement from school. The participating schools implemented the Boxall Educational Profile according to the prescribed framework and principles, however customised implementation to reflect their local context. Limitations with data collection occurred, such as in the collection of literacy data, severity of school incidents and consistency of data collection across all sites. However, even with these limitations, descriptive data suggests improvements in both outcomes related to children, and outcomes at a whole-school level.

Preliminary evidence of the benefits of the program were seen in the areas of learning, school attendance and social, communication and emotional development. Outcomes were seen in both home and school settings.

Outcomes for children during and after participating in the Boxall Educational Practice:

- Majority of the children (31 of 43) experienced gains in their literacy levels.
- School attendance improved for a majority of the children (31 of 45).
- A positive trend is emerging towards a decrease in number of incidents, suspensions and exclusions in participating schools.
- Majority of the participating children indicated good progress on the Boxall Assessment Profiles.

- Of the 59 participating children, 23 have graduated from the program, with average length of time before graduation being 3.17 school terms.
- Positive feedback from parents: overall parents indicated that they were positive and appreciative, and could see the benefits from their child's participation in the Nurture Groups. Benefits seen by parents are described in both school and home settings.
- Positive feedback from staff: outcomes were noted in relation to children's academic learning, engagement in learning and attitude towards learning, as well as outcomes related to improved behaviour, social relationships and communication skills.

"Since our son has been going to Nurture he feels like he fits into the school" – Participating parent

In addition, 12 additional settings are reported to have started implementing the Boxall Profiles as a basic assessment tool, including some Better Behaviour Centres and Learning Centres.

Outcomes seen at whole-school level:

- Descriptive data suggest improvements in the wellbeing and engagement indicators for one participating Primary School.
- An external review panel commented favourably on the implementation of the Boxall Profile Practice model and its effectiveness in one Primary School.

In addition, this implementation of the Boxall Educational Practice has provided useful information on how the program can be adapted to meet the needs/culture of the school and individual needs of children attending.

"The school has reframed the ways in which staff interpret and respond to the negative behaviors of students. This changed staff behaviour has enabled a significant increase in student engagement and active participation in purposeful learning" – External School Review



4. Recommendations

- It is strongly recommended that DECD formally recognises this model with the potential to provide quality outcomes for children, given the combination of evidence provided in this report and the evidence from well designed, credible published international research. Formal DECD endorsement of the Boxall Profile as a developmental assessment tool, is recommended.
- Continuation of the implementation and refinement of the Boxall Educational Practice model, as described in this report.
- Expansion of the implementation to secondary schools as an endorsed, evidence-based model of practice with both proactive, preventative and reactive, intensive elements of provision.
- Appropriate and ongoing training of the workforce (Psychologists and Behaviour Support Coaches) to be able to support the implementation of the model more broadly.
- Provision of seed funding to support sites in the implementation and evaluation of the Boxall Educational Practice model through existing and future funding models e.g. current RAAP, Challenging Behaviours Funding (currently applications for funding for children accessing the existing nurture groups are rejected by existing DECD funding allocation panels).

- Continuation of tracking children’s outcomes and whole-school outcomes by establishing a data collection and evaluation model that can act as an ongoing evaluation tool for all sites implementing the model. This trial of outcome measures and data collection methods will assist with further refinement and development of methodology to allow for future evaluation on a larger scale and with robust evaluation measures, for example:
 - The data collection outcome would indicate the need to become more sophisticated in the assessment and collection of literacy skills data, as limited information is available on a significant number of students. A single standardised assessment tool that assesses both decoding and comprehension ability and skills would be desirable in the future.
 - Further data collection and analysis is required on the severity of school incidents and the consequences arising from these in the data sets above.
 - Consistency of data collection across all participating sites and, indeed, across all sites implementing the Boxall model of practice.

“Boxall (Educational) Practice provides a way of tracking the emotional needs of children. It provides an objective framework for targeting specific interventions for students and a highly efficient planning tool” – Participating staff member



Summary

A total of 59 children participated, with 55 indicating more than 5 risk factors, potentially predisposing them for disengagement from school. Schools implemented the Boxall Educational Profile according to the prescribed framework and principles, and customised implementation to reflect their local context. Gains were seen for participating children in their improved literacy levels, improved school attendance and social and emotional development. Parents saw outcomes both in school and home settings. Staff participating in the program reported outcomes noticed in relation to children's academic learning, engagement in learning and attitude towards learning, as well as outcomes related to improved behaviour, social relationships and children's communication skills. At a whole-school level, one school showed improved wellbeing and engagement indicators and another school received positive comments from an external review panel regarding the effectiveness of the Boxall Educational Practice at their school. Recommendations arising from this report include the continuation of the implementation and evaluation of the Boxall Educational Practice in primary schools, with consideration given to the refinement of specific evaluation measures.

References

Australian Curriculum, Assessment and Reporting Authority (2017), *NAPLAN achievement in reading, writing, language conventions and numeracy: National report for 2017*, ACARA, Sydney.

<http://www.nap.edu.au/docs/default-source/default-document-library/naplan-national-report-2017_final_04dec2017.pdf?sfvrsn=0>.

Coulter, C., Cooper, P., & Royer (2011). A study of the concurrent validity between the Boxall Profile and the Strengths and Difficulties Questionnaire. *International Journal of Emotional Education*. Vol 3(1), pp. 20 – 29.

DECD Term 3 School Enrolment Census 2012-2016,

<<https://www.decd.sa.gov.au/sites/g/files/net691/f/behaviour-management-incident-summary-2016.pdf>> .

Department of Education (2016). *The mental Health and behaviour in schools*. Departmental Advice for School Staff. London.

Department of Education and Child Development (2017). *Education for a stronger future: Department of Education and Child Development strategic plan*, Government of South Australia.

Department of Education and Child Development (2017). *Results from the 2016 wellbeing and engagement survey*. Government of South Australia. <<https://www.decd.sa.gov.au/department/media-centre/news/1-8m-student-wellbeing>>.

Durlak et al (2011). The impact of enhancing students' social and emotional learning. A meta-analysis of school-based universal interventions. *Child Development*. Vol. 82, pp.405-32.

Farahmand et al (2011). School-based mental health. *Clinical Psychology*. Vol 18, pp. 372-90.

Hughes, K.N., & Schlosser, A (2014). The effectiveness of nurture groups: A systematic review. *Emotional and Behavioural Difficulties*. Vol 19 (4), pp. 386-409.

Karten, Y.J.G., Olariu, A., & Cameron, H.A (2005). Stress in early life inhibits neurogenesis in adulthood. *Trends in Neuroscienc*. Vol. 28 (4), pp. 171-172.

Kim-Cohen, J., Avshalom, C., Moffitt, T.E., Harrington, H., Milne, B.J., & Poulton, R (2003). Prior juvenile diagnoses in adults with mental disorder. *Archives of General Psychiatry*, vol. 60, pp. 709-717.

Lansford, J.E., Dodge, K.A., Pettit, G.S., Bates, J.E., Crozier, J., & Kaplow, J (2002). A 12 year prospective study of the long-term effects of early child physical maltreatment on psychological, behavioural and academic problems in adolescence. *Archives of Pediatrics Adolescent Medicine*. Vol. 156, pp. 824-830.

Lawrence, D., Johnson, S., Hafekost, J., Boterhoven De Haan, K., Sawyer, M., Ainley, J., & Zubrick, S.R (2015). *The Mental Health of Children and Adolescents - Report on the Second Australian Child and Adolescent Survey of Mental Health and Wellbeing*. Department of Health, Canberra.

Layard, R., & Dunn, J (2009). *A good childhood. Searching for values in a competitive age*. London: Penguin.

Taylor, V.M., & Gulliford, A (2011). Parental perspectives on nurture groups: the potential for engagement. *British Journal of Special Education*. Vol. 38 (2), pp. 73 -82.

Thomson, S., De Bortoli, L., Underwood, C (2016). *PISA 2015: A First look at Australia's results*. Australian Council for Educational Research.

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