



Briefing Note: Alert Program® in schools – Phase 2 evaluation and final advice.

To:	Hon Jan Tinetti, Minister of Education		
Date:	7 March 2023	Priority:	Low
Security Level:	In Confidence	METIS No:	1301521
Drafter:	Sarah Spence	DDI:	9(2)(a)
Key Contact:	Dr David Wales	DDI:	
Messaging seen by Communications team:	No	Round Robin:	No

Purpose of Report

The purpose of this report is to:

- provide you with an overview of the Alert Program® pilot carried out in two Wellington schools and a summary of the evaluation findings with a focus on Phase 2. Now that the evaluation of the pilot is complete, it also outlines our advice for next steps for this programme.
- seek your agreement to the proposed release of this briefing note and the evaluation report (Appendix 1).

Summary

- In 2020 and 2021, two Wellington primary schools piloted the Alert Program® (self-regulation) with support from the Ministry of Education and the Ministry of Health. Phase 1 of the evaluation assessed the application at a universal level [METIS 1247848 refers] which showed positive results.
- The Phase 2 evaluation (attached) considered the effectiveness of the Alert Program® in the New Zealand setting and the effectiveness of more targeted services for identified students. In summary, it showed that Phase 2 had mixed results but continued the use of the school-based Alert Program® practices in school and at home.
- Due to the very small sample size of the evaluation, we cannot draw any conclusions for future use.

Recommendations

The Ministry of Education recommends you:

- a. **Note** that given the limitations of the Alert Program® in primary schools pilot and its evaluation, the Ministry cannot make recommendations for future use of this programme, even if budget to deliver it more widely became available. Any future use would require a larger scale pilot with positive outcomes.
- b. **Note** that we would recommend a preference for New Zealand designed options such as Te Ara Whakamana which is culturally centred in te ao Māori and takes a strengths-based approach to support self-awareness, self-regulation, and reflection and has stronger evaluation findings.
- c. **Agree** that this Briefing Note be proactively released and the Phase 2 evaluation report be published on Education Counts.

☒ Agree / ☐ Disagree



Dr David Wales
National Director Learning Support Delivery
Te Pae Aronui

7 March 2023



Hon Jan Tinetti
Minister of Education

13 / ³08 / 2023

Background

1. Building social-emotional skills in the early years is integral to achieving the outcomes set in the Child and Youth Wellbeing Strategy (2019) and social-emotional learning is part of the Ministry of Education's strategies for Inclusive Education¹.
2. The Alert Program® was developed by two Occupational Therapists in the United States and is supported by an international peer-reviewed evaluation evidence base. It provides tools and strategies intended to strengthen self-regulation, using an engine analogy.
3. The Alert Program® pilot was carried out in two primary schools in the Wellington region. Adjustments were made to the programme to increase its relevance to the local context with the approval of the developers and through co-design with the participating schools.
4. The pilot was funded through Budget 2017 - expansion of the Ministry's Behaviour Services and the Ministry of Health's Proceeds of Crime funding. The cost of the pilot was approximately \$210,000 plus 0.5 FTE staffing, not including evaluation. The Ministry's Wellington regional office also contributed to the pilot in schools through specialist time and expertise.
5. The evaluation of Phase 1 of the school-based pilot influenced the decision to trial Alert Program® in the early years setting. It was identified that Alert Program® complemented the school values and other programmes/strategies that are running e.g., PB4L and trauma informed practice.
6. There were 203 Early Learning Services (ELS) across seven regions involved in social emotional learning pilots in 2021/2022 (Alert Program®, Incredible Beginnings and ENGAGE). These were funded through the Social Cohesion budget that provided \$5.243 million from Cabinet and are ongoing with next year including up to 370 ELS.
7. An alternative, similar programme - Te Ara Whakamana - mana enhancement programme has also been evaluated. Designed in New Zealand, it develops social-emotional wellbeing for ākonga through strategies to increase knowledge and awareness in themselves and support from the environment. Te Ara Whakamana's evaluation showed positive impacts on wellbeing, cultural capability, education pedagogy, and change and transformation².

¹ See, Te Kete Ipurangi guidance on [social-emotional learning](#).

² [Te Ara Whakamana: Mana Enhancement Evaluation \(educationcounts.govt.nz\)](#)

Piloting and evaluating the Alert Program® in two primary schools

8. The adaptations for the pilot (working within the He Pikorua learning support practice framework³) applied a tiered approach to support, beginning in Phase 1 with school-wide inclusive practices for all learners (tier 1). Phase 2 offered more deliberate targeted supports for some learners (tier 2) and more intensive and tailored supports for students who needed some additional help implementing the strategies (tier 3).
9. A key feature of the pilot was the local District Health Board (DHB) and Ministry of Education office providing supports in an integrated cross-agency way, rather than siloed services.
10. There was a delay in getting started with Phase 2, due to the timing of ethics approval. Rather than Term 1 2021, it began in Term 2 and ran into Term 3 2021. There was further interruption from a COVID-19 lockdown in Term 3 2021.
11. While phase 2 was initially intended to provide targeted support for children needing additional support with self-regulation skills, it was identified that more individualised support should be provided for some students to support uptake of the services offered.
12. There were 28 learners identified to be included in Phase 2 of the pilot (across both schools) and 26 towards the end. Only a proportion of these participated in the evaluation. These low numbers challenge the validity of any findings.
13. Both schools have given their consent that the report be released as it is easy to identify the schools. Student level data is not identifiable in the report.

Bringing together the findings for Alert Program® evaluations

Staff and students using Alert Program® strategies within their classrooms

14. Following Phase 1 of the Alert Program® pilot (METIS 1247848) the evaluation indicated:
 - Staff and students showed a medium to large increase in the reported use of Alert Program® language and/or strategies.
 - Caregivers perceived small positive improvements in children's self-regulation.
 - Teachers also reported small improvements in children's self-regulation, a reduced number of classroom disruptions, and a notable shift in teacher perceptions of 'problem behaviour'.

³ <https://hepikorua.education.govt.nz/how-we-work/flexible-tailored-model-of-support/>

15. The main factors influencing the achievement were: shared values, simplicity, awareness and understanding of sensory principles and exposure (contact with the Occupational Therapist and involvement in the co-design).
16. The evaluation of Phase 2 found that overall, participating teachers, family and whānau increased the frequency of Alert Program® practices in school and at home respectively. There were however, only four parents (representing 5 learners) remaining in the post-assessment phase so these findings have limited validity.
17. Feedback in relation to evaluation questions in Phase 2 was that participation:
 - helped teachers become more aware of their learners' needs and teachers who had been involved from Phase 1 benefitted from the ongoing participation.
 - improved learner's ability to identify 'engine speeds' (first stage towards self-regulation) and contributed to overall wellbeing.
 - more individualised support was effective in catering to the differing needs and knowledge levels of schools, families and whānau.

The overall impact of the two phases of Alert Program®

18. The evaluation of the first phase showed that Alert Program® strategies were easily embedded into the classroom and set a strong foundation for additional supports. Having shared values and language, alongside an increased understanding of sensory principles and exposure were features of success.
19. Collaboration between the Ministries of Health and Education and schools was highlighted as a key strength of the pilot. Joint meetings with the teachers and family and whānau were also highlighted as beneficial to develop relationships and a shared understanding of the practices and the learner's needs.

Limitations of Alert Program® pilot and evaluations.

20. In addition to the small sample of schools, the number of participants in the Phase 2 pilot was already small, and the participants in the evaluation of the pilot were fewer, meaning the sample size was not big enough to provide robust data.
21. Due to the project limitations (piloting during COVID-19, timing of the process for gaining ethics approval, and small sample size), the evidence is not strong enough to draw solid conclusions. The evaluation provided indications that the programme provided benefits to the children, to the extent that future trialling of Alert Program® would be reasonable. If funding were prioritised for a future use of this programme, evaluation should measure its effectiveness before scaling.

Next Steps

22. Subject to your approval, we will proactively release this briefing note and publish the accompanying evaluation report on Education counts. The pilot evaluation will be also shared with the teams and reference group working on the PB4L school wide programme refresh.
23. Given the limitations of the pilot and its evaluation, the Ministry cannot make recommendations for future use of this programme, even if budget to deliver it more widely became available. Future intentions for the Alert Program® will be considered further once the ECE pilot evaluation has been completed.
24. At this stage, we would recommend a preference for Te Ara Whakamana which and takes a culturally valid, strengths-based approach to support self-awareness and self-regulation stronger evaluation findings.

Appendices

Appendix 1: Phase 2 evaluation report

**Helping
people
access and
use quality
evidence**



EVALUATION OF THE ALERT PROGRAM[®] PILOT PHASE TWO

Report



22 March 2022

About us

Standard of Proof was created out of passion. Passion for making a difference, for making the lives of individuals, communities and organisations better through evidence. We pride ourselves on providing the highest standard of evidence that is appropriate and useful for the context.

Standard of Proof provides specialist services in:

- Evaluation: We encourage high standards of evidence, we promote relevant and inclusive processes, and we focus on informing decisions.
- Monitoring: We inspire progress through evidence, and we make quality data accessible.
- Measurement: We design, test and validate measures, and we enable efficient and accurate measurement practice.
- Research: We review, analyse and synthesise existing evidence, and we investigate new ideas and concepts.

We work with our partners and clients to ensure the right data and the right insight are brought to every project. For this evaluation, we worked with the Ministry of Education, Ministry of Health, Hutt Valley DHB and pilot schools, supported by Dr Thy C. M. Phan.

This report was written by Dr Sira Engelbertz with contributions from Beau Jarvis-Child.

www.standardofproof.nz

Acknowledgements

This evaluation wouldn't be possible without the support of many individuals and organisations. We would like to extend our sincere gratitude to all of them. Firstly, we would like to thank the programme facilitators for the time and work invested and the valuable knowledge they shared. Their support has been essential for the quality of the outcome. We are also grateful to the Alert Program® implementation working group who generously shared their information, knowledge and expertise. We would like to express our sincere thanks to the pilot schools and family and whānau who participated in the evaluation and devoted their time and knowledge. Finally, we thank Sue Yates for proofreading and editing this report so thoroughly.

CONTENTS

List of abbreviations	iii
Executive summary	1
Introduction	4
Context	10
Putting things in perspective	11
Consider the evidence quality	13
Findings	15
What we found	16
Conclusions	30
What we can conclude	31
Appendices	34
Appendix A: Information sheet and consent form	35
Appendix B: Methodology	39

LIST OF ABBREVIATIONS

Abbreviation	Explanation
EEC	Education Ethics Committee
IEP	Individualised education plan
HVDHB	Hutt Valley District Health Board
KEQ	Key evaluation question
MoE	Ministry of Education
MoH	Ministry of Health
OT	Occupational therapist
PD	Professional development
Phase 1	First phase of the Alert Program® pilot focusing on universal services.
Phase 2	Second phase of the Alert Program® pilot focusing on services to support learners with additional needs.
SDQ	Strengths and Difficulties Questionnaire
SEL	Social-emotional learning

EXECUTIVE SUMMARY

The Alert Program® was developed in the 1990s in the United States to foster self-regulation through teaching children how to change how alert they feel and teaching adults how to support learning and positive behaviours.¹ The Alert Program® pilot seeks to test a model for integrating social-emotional learning into the curriculum while adapting the programme to the New Zealand school context using the Ministry of Education's tiered learning support model.

The present report synthesises emerging findings from the evaluation of the pilot's second phase (Phase 2), which focused on selected learners with additional needs, their teachers, family and whānau. Data was captured using a mixed-method approach, and included measures of:

1. A questionnaire examining child-behaviour (Strengths and Difficulties Questionnaire - SDQ) and checklists measuring implementation fidelity (Alert Program® implementation) and learners' skills (Alert Skill Development) completed at two time-points – before and after implementation of Phase 2 – by teacher (n=16) and family and whānau (n=12) to detect change.
2. Perceptions of the programme and its implementation by a sample of teachers (n=8) and family and whānau (n=4) before and after implementation of Phase 2.
3. Perceptions of the programme implementation by stakeholders (n=4), including school leaders and programme facilitators.
4. Feedback by teachers (n=16) after implementation of Phase 2.

The Phase 2 evaluation is to be read in conjunction to the first phase evaluation of the Alert Program® pilot (Phase 1).

Phase 2 and the evaluation experienced a series of delays due largely to longer-than-anticipated approval process and COVID-19 lockdowns. The latter impacted the data collection and potentially the evaluation results, notably the SDQ scores and Alert Skill Development checklist. Although the evaluation had initially anticipated a bigger sample, pilot schools were able to identify a total of 28 learners between them to be included in Phase 2 while also considering feasibility criteria. However, the small size of the Phase 2 cohort presents limitations for the conclusiveness of the evaluation evidence (i.e. there are limitations in finding statistically significant differences or effects). Further, the focus of the programme was expanded to individualised (Tier 3) support in response to family and whānau needs and preferences. This put pressure on the time required to engage family and whānau and limited the capacity allocated for delivering Phase 2.

¹ An overview of the programme can be found on the Alert Program® website: https://www.alertprogram.com/brief-overview-of-the-alert-program-for-parents/?doing_wp_cron=1632863728.5725929737091064453125 (retrieved 29/09/2021).

Despite the limitations due to the sample size mentioned above, the evidence were informative and adequate to answer the key evaluation questions. Overall, the quality of evidence used was deemed appropriate for the learning purpose of this evaluation.

Rubrics were used to guide judgements about the programme's effectiveness regarding participant-level and child-level outcomes. Rubrics had been developed during the planning phase for the evaluation and agreed by the Ministries and pilot schools.

Findings

The findings focus on answering the Key Evaluation Questions (KEQs), as agreed with the Advisory Group.

KEQ1a: *To what extent is the Alert Program® integrated in learners' school and home environments?*

The evaluation found Phase 2 of the Alert Program® pilot's effectiveness in integrating the programme in learners' school and home environments to be generally good. There were some inconsistencies related to some family and whānau not engaging in the programme. Overall, participating teachers and family and whānau increased the frequency of Alert Program® practices in school and at home respectively. Phase 2 helped teachers become more aware of their learner's needs and teachers who participated in Phase 1 of the pilot benefitted from having practiced the Alert Program® since 2019. Parents seemed to experience more challenges with practicing the Alert Program® at home due to busy lives, circumstances and unexpected events.

KEQ1b: *To what extent is the programme contributing to improving learners' self-regulation skills and wellbeing?*

The evaluation found Phase 2 of the Alert Program® pilot's effectiveness on learner outcomes to be very good. Phase 2 demonstrated to be effective in improving learners' ability to identify engine speeds (first stage towards self-regulation) and contributed to improvements of learners' overall wellbeing. However, most improvements were not statistically significant. Most teachers observed positive changes in learners. Parents' experiences varied but seemed to be linked to their level of engagement with the programme (i.e. parents who reported positive change in their child also reported regularly practicing the Alert Program® at home, parents who reported no or negative change in their child also reported not practicing the Alert Program® at home).

KEQ2: *How well have the collaborations between the Ministries, schools and family and whānau worked for implementing the programme?*

The evaluation found individualised support ensured relevance of the programme to teachers and family and whānau. Because of the different levels of experience with the programme between teachers and family and whānau their support needs differed considerably. Individualised support worked well to respond to differing needs and was also well received by family and whānau, in particular. Effective relationships enabled collaboration between the Ministries and schools. Collaboration between and joining up

health and education services was highlighted as a key strength of the programme and beneficial for all partners, including and especially schools.

KEQ3: *How well does the Alert Program® align with other school programmes?*

The evaluation found the Alert Program® adaptation fitted well with the pilot schools and aligned with PB4L, restorative practices and other professional development (PD) for teachers, such as trauma-informed PD.

Based on these findings, we conclude that Phase 2 of the Alert Program® pilot was relevant and coherent with pilot school systems. While the evidence on the pilot's effectiveness is limited due to the small sample size, there are clear trends of positive change. Intended outcomes are expected to increase with time as teacher and family and whānau continue to practice the Alert Program®. The question of adjustments to the selection criteria to optimise benefits for identified learners from Phase 2 support requires further investigation. Joint teacher and family and whānau (of one learner) sessions could be beneficial to further foster alignment of Alert Program® practices specific to the learner – and to ease some of the pressure on service delivery capacity. The co-design approach for the implementation of Phase 2 proved beneficial for involved parties in terms of effective communication and tailoring the programme to school-specific needs but was also rather resource intense in terms of time and human resources.

Learnings from the pilot for a future roll out of the programme include

- For the programme delivery, joint teacher/family and whānau of one learner sessions are more suitable for family and whānau than small group sessions.
- Teachers are often in a good position to engage family and whānau of learners with additional needs in the programme because of their existing relationships.
- There is existing high demand for support among both teachers and family and whānau, which has implications on the OT's capacity.
- There are mutual benefits for DHB Child Development Services and schools from being directly connected, which can be considered in future implementations.
- Self-selection for participation in the programme needs to be balanced with teacher identification and a transparent process of learner selection for the programme may increase teachers' acceptance and willingness to actively support and participate in the programme.

INTRODUCTION

Social-emotional skills have gained increased attention internationally as crucial prerequisites for both individual wellbeing and well-functioning societies.² While being a critical component of early childhood development, research has shown that social-emotional skills have both long term and immediate benefits for children in their ability to build relationships and generally interact with others, as well as actively engaging in learning.^{3 4 5} Self-regulation is a key social-emotional skill and predictor for success as an adult.^{6 7} Social-emotional skills are incorporated in the New Zealand Government [Child and Youth Wellbeing Strategy \(2019\)](#)⁸ and social-emotional learning is incorporated in the Ministry of Education's strategies for action towards *Inclusive Education*.⁹

The Alert Program® pilot seeks to test a model for integrating social-emotional learning into the curriculum while adapting the programme to the Aotearoa New Zealand school context using a tiered approach.

The Alert Program® was developed by occupational therapists, Mary Sue Williams and Sherry Shellenberger, in the 1990s in the United States and has a recognised evidence base.^{10 11 12} The Alert Program® focuses on self-regulation through teaching children how to change how alert they feel and teaching adults how to support learning, attending, and positive behaviours.¹³ The programme uses the analogy of a car engine to explain the concept of alertness levels in children. Children recognised and articulated their

² OECD (2017). [Social and Emotional Skills: Well-being, connectedness and success](#). Paris.

³ Denham et al. (2003). Preschool emotional competence: pathway to social competence? *Child Development*, 74(1), 238–256.

⁴ Taylor, R. D., Oberle, E., Durlak, J. A., & Weissberg, R. P. (2017). [Promoting Positive Youth Development Through School-Based Social and Emotional Learning Interventions: A Meta-Analysis of Follow-Up Effects](#). *Child Development*, 88(4), 1156–1171. <https://doi.org/10.1111/cdev.12864>

⁵ Sorrenti, G., Zöhlitz, U., Ribeaud, D., & Eisner, M. (2020). [The Causal Impact of Socio-Emotional Skills Training on Educational Success](#) (CESinfo Working Paper No. 8197). Munich.

⁶ Moffitt et al. (2011). A gradient of childhood self-control predicts health, wealth, and public safety. *Proceedings of the National Academy of Sciences*, 108(7), 2693–2698.

⁷ Robson, D. A., Allen, M. S., & Howard, S. J. (2020). Self-Regulation in Childhood as a Predictor of Future Outcomes: A Meta-Analytic Review. *Psychological Bulletin*, 146(4), 324–354. <https://doi.org/10.1037/bul0000227>

⁸ Relating to the 'learning and developing' outcome of the strategy, identified indicators include, social and self-management skills as well as regular school attendance and literacy, numeracy and science skills for achieving this outcome.

⁹ See, for example, Te Kete Ipurangi guidance on [social-emotional learning](#).

¹⁰ Barnes, K.J., Vogel, K.A., Beck, A.J., Schoenfeld, H.B., & Owen S.V. (2008). [Self-regulation strategies of children with emotional disturbance](#). *Physical & Occupational Therapy in Pediatrics*, 28(4), 369–87. <https://doi.org/10.1080/01942630802307127>. PMID: 19042478.

¹¹ Blackwell, A. L., Yeager, D. C., Mische-Lawson, L., Bird, R. J., & Cook, D. M. (2014). Teaching Children Self-Regulation Skills within the Early Childhood Education Environment: A Feasibility Study. *Journal of Occupational Therapy, Schools, and Early Intervention*, 7, 204–224. <https://doi.org/10.1080/19411243.2014.966013>

¹² Nash, K., Stevens, S., Greenbaum, R., Weiner, J., Koren, G., & Rovet, J. (2015). Improving executive functioning in children with fetal alcohol spectrum disorders. *Child Neuropsychology*, 21(2), 191–209. <https://doi.org/10.1080/09297049.2014.889110>

¹³ An overview of the programme can be found on the Alert Program® website: https://www.alertprogram.com/brief-overview-of-the-alert-program-for-parents/?doing_wp_cron=1632863728.5725929737091064453125 (retrieved 29/09/2021).

emotions by using engine speeds, for example 'your engine is running high' or 'your engine is running low to imitate high and low arousal states. The analogy teaches regulatory tools and strategies based on sensory modulation principles to strengthen self-regulation skills.

The Ministry of Health (MoH) and the Ministry of Education (MoE) have been working together with two primary schools in the Wellington region to pilot the Alert Program® since 2019. The pilot seeks to test a model for integrating social-emotional learning into the curriculum while adapting the Alert Program® to the Aotearoa New Zealand school context using a tiered approach (Figure 1). There was continued dialogue between the NZ Alert Program® pilot project working group and the developers in the US; the advice and guidance sought from developers ensured adaptations for Aotearoa New Zealand context could occur, whilst retaining the integrity and intent of the original programme.

The first phase of the pilot (hereafter Phase 1) considered the adaptation of the Alert Program® as a school-wide programme (Tier 1). Universal training was provided to staff at the two pilot schools. As staff learn and embed the Alert Program® language and strategies, it is expected that learners will improve their ability to self-regulate and both teachers and learners will improve their overall wellbeing. Phase 1 was formally evaluated in 2019. The evaluation found the programme effective for both teachers and learners, with statistically significant changes in learners' wellbeing (as perceived by their caregiver).

Figure 1: The Alert Program® pilot implementation approach (based on the Ministry of Education and Resource Teachers: Learning and Behaviour (RTLb) joint practice framework [He Pikorua](#)).



The second phase of the pilot (hereafter Phase 2) was implemented in 2021 at the same two primary schools that had already been part of Phase 1 and had continued

implementing the Alert Program® school-wide. Phase 2 was intended to focus on targeted services for those learners identified as having participation or learning difficulties or compromised wellbeing. These learners are likely to have increased self-regulation challenges and require additional support beyond the general application of the Alert Program® in the classroom. Tier 2 support was planned to be provided to teachers and family and whānau of identified learners through small group sessions.

Service delivery mode was changed to individualised support for a cohort of 28 learners in Phase 2.

A total of 28 learners were identified between the two pilot schools to be included in Phase 2. The selection of learners was led by the schools, and school leaders decided on the final selection. As well as displaying signs of participation or learning difficulties or compromised wellbeing, learners were selected because:

- they didn't yet have any other support in place (e.g., through MoE, MoH, or Child Development Services)
- they displayed self-regulation challenges
- the likelihood of the learner's family and whānau to engage in the programme.

Care was also taken around equity when considering demographic information of the Phase 2 cohort.

As with Phase 1, MoH contracted one occupational therapist (OT) from the Hutt Valley District Health Board (HVDHB) to facilitate delivery of the targeted services at the pilot schools, while MoE assigned up to two of their regional practitioners to support the OT in service delivery. Following advice by the schools, and based on family and whānau feedback, targeted support (Tier 2) was expanded to individualised support (Tier 3). For family and whānau in particular, small group sessions presented an uncomfortable space and they preferred one-on-one sessions instead. Services provided by the OT and MoE practitioners included:

- an induction meeting with each participating teacher and parent where the learner's individual needs were identified
- sharing support material and tools with all participating teachers and parents
- follow-up meetings and classroom observations, as requested
- advice and guidance regarding a child's individual sensory needs
- linking the use of sensory tools between the school and home environment
- liaising with other agencies involved with the learner (with parent permission)
- supporting family and whānau navigating access or referral to other services (e.g., child mental health services, Child Development Services).

Services were provided either in person, via email or telephone, or through individualised education plans (IEPs).

The programme delivery team also connected with local iwi, including an initial meeting. However, further engagements had to be put on hold due to COVID-19 outbreaks.

The evaluation took a participatory approach in assessing the effectiveness, relevance and coherence of Phase 2.

The evaluation was commissioned to help MoH and MoE understand the effectiveness of the Alert Program® pilot at its different stages (i.e., a tiered approach) so they can make informed decisions about any future expansion of the programme (i.e. should it be expanded and/or how it could be expanded?). The pilot also presented an opportunity for cross-government best-practise, working in collaboration in the school setting together. Therefore, the evaluation is about learnings from the programme's implementation and its relevance to schools and family and whānau. Further, taking a wider school system perspective, the evaluation investigated the compatibility of the Alert Program® with other interventions employed in the school.

The key evaluation questions (KEQs) are:

1. To what extent is the programme achieving its intended outcomes? (effectiveness)
 - a) To what extent is the Alert Program® integrated in learners' school and home environments?
 - b) To what extent is the programme contributing to improving learners' self-regulation skills and wellbeing?
2. How well have the collaborations between the Ministries, schools and family and whānau worked for implementing the programme? (relevance)
3. How well does the Alert Program® align with other school programmes? (coherence)

The KEQs are addressed in scope of the Phase 2 implementation of the Alert Program® pilot. The evaluation focused first on the reported experiences and beliefs of those involved with delivery, including pilot school staff and teachers, family and whānau, and programme facilitators (interviews); and second, on the changes in school and home practices (checklists and interviews), and self-regulation abilities and wellbeing of learners selected for Phase 2 (teacher and family and whānau questionnaires). Programme outcomes in the classroom were out of scope.

The Ministries adopted an approach whereby the evaluation was embedded in the implementation of Phase 2. To this end, an Alert Program® implementation working group was established consisting of representatives of MoH, MoE, pilot schools and the

evaluation team, and including programme facilitators (i.e., OT and MoE practitioners). The group met fortnightly throughout the Phase 2 implementation process (including planning, implementation and reporting). To ensure alignment of implementation and evaluation activities, the group co-designed the evaluation plan. With the implementation of the evaluation alongside the programme implementation, data collection was able to be integrated into the programme delivery.

Data was collected before and after the implementation of Phase 2 using a mixed method approach.

The evaluation adopted a mixed method approach integrating both quantitative and qualitative data while using a repeated measures design to track change between two time points – before (pre) and after (post) Phase 2 implementation. Measurement instruments to evaluate the programme included:

- an Alert Program® implementation checklist – developed specifically for the present evaluation to assess the degree to which teachers and family and whānau implement the Alert Program® in the classroom or at home respectively
- an Alert Program® skill development checklist – to assess learner's ability to employ the Alert Program® strategies at the different stages towards self-regulation (1. identify engine speed, 2. change engine, 3. self-regulate)
- the Strengths and Difficulty Questionnaire (SDQ), 25 items for parents or teachers of 4 to 10-year-olds – to assess learner's difficulties and wellbeing.

Measurement instruments were administered by the OT and MoE practitioners at both time points. Aimed at the entire cohort of teachers and family and whānau of the 28 learners identified for Phase 2, 16 teachers (of 24 learners) and 26 parents (of 26 learners) completed the checklists and questionnaire at the pre assessment, and 16 teachers (of 26 learners) and 12 parents (of 12 learners) at the post assessment.

The wording in the Alert Program® implementation checklist was slightly adjusted for the post assessment in accordance with the way the instrument was administered by the OT and MoE practitioners in the pre assessment. For the post assessment, the SDQ follow up version was used for teachers and parents, including additional questions about the intervention. Also, a feedback survey for teachers (n=16) was added to the post assessment, including questions around their experiences with the programme and its implementation.

The evaluation team conducted semi-structured interviews with stakeholders and a sample of Phase 2 learners' teachers and family and whānau to gain further insights into their experiences with the programme and context. The sample was pre-selected by schools at the beginning of the programme implementation. Selected teacher and family and whānau were interviewed at two time points in alignment with the application of measurement instruments. Views and experiences of participating family and whānau outside the sample have not been included in the evaluation.

The evaluation also included a sense-making session with the Alert Program® Phase 2 implementation working group and schools' Board of Trustees members as family and whānau representatives. The sense-making session included a presentation of and discussion around the evaluation's emerging findings, which has further informed the present report.

To answer the three KEQs, data was triangulated to test and validate our judgements. An overview of the data sources for each KEQ is presented in Table 1. Further information on methods used for this evaluation are included in [Appendix B](#).

Table 1: Triangulation of different data sources for answering the KEQs.

KEQ	Implementation checklist	Alert skills development checklist	SDQ	Interviews	Feedback survey
1. a)	✓			✓	✓
1. b)		✓	✓	✓	
2.				✓	✓
3.				✓	✓



CONTEXT

Putting things in perspective

Emerging findings from the evaluation need to be considered within the given context, particularly given significant events would likely have impacted the implementation of both the programme and the evaluation. The following sections outline the specific context for the present evaluation and set the scene for the subsequent [findings section](#).

The implementation and evaluation of Phase 2 was affected by a series of delays due to unplanned events.

The implementation of Phase 2 was initially planned for school Term 1 and part of Term 2, with the evaluation to be completed by the end of June 2021. However, as Phase 2 focused on targeted learners, it became clear during the planning phase that collecting information about vulnerable children through their teacher and family and whānau required an ethics review and approval.

Towards the end of Term 1, MoE established an Education Ethics Committee (EEC) and developed the associated ethics approval application process.¹⁴ Once formed, an ethics application was submitted, and the evaluation was approved by EEC on 30 April 2021 (at the end of Term 1).

The process to gain ethics approval delayed the implementation and evaluation of Phase 2, which then started in Term 2 with an extension into Term 3 of the 2021 school year. In addition to the delayed start of Phase 2, implementation and evaluation was interrupted by an outbreak of COVID-19, which caused a nation-wide lockdown over three weeks from 18 August to 7 September 2021, and all schools closed during this period. For the implementation, the interruption meant scheduled service provision could not be delivered. For the evaluation, the lockdown interrupted and stalled the post-data collection for several weeks after programme delivery.

The increase in the intensity of service delivery toward more individualised supports put additional pressure on the service delivery and its logistics.

As noted earlier, Phase 2 of the Alert Program® pilot was intended for the delivery of Tier 2 targeted services, and resourced as such in terms of capacity (i.e., time and human resources). The change in service delivery for some children, from targeted towards individualised support, while sensible to ensure uptake of service provision, meant an increased demand on service delivery (i.e., higher number of sessions) and logistics (i.e. considering the time schedules of individuals). Consequently, programme facilitators (i.e., OT and MoE practitioners) found service delivery was impacted by time constraints. In addition, engaging family and whānau to participate in the programme proved challenging. While family and whānau engagement presents a challenge for schools in

¹⁴ While there had been other existing ethics committees, such as the Health and Disability Ethics Committee or the New Zealand Ethics Committee, there was no committee that fully fitted the context of the Alert Program® pilot. In addition, MoE recognised the lack of an Ethics Committee dedicated to MoE affairs as a gap that needed to be filled.

general and is not unique to the Alert Program® pilot, it required further time spent on communication and chasing parents for both the schools and the programme facilitators. Identifying the best communication method was a key element. Keeping family and whānau engaged over the course of the programme was another challenge, especially with the impact of Covid lock down. Data collection, impacting further on programme facilitators' capacity, experienced considerable attrition among family and whānau (54%) between pre and post assessments. Reasons for the decline in family and whānau participation varied, including some learners leaving the school and some parents opting out of programme due to conflicting priorities such as busy lives and/or unexpected events. It was noted that parents who chose this, also chose for their child to remain engaged in the program at school level. The considerable, unplanned time delay for post data collection (due to factors such as lock down, school holidays, level 2 Alert levels) likely impacted participation in the post data collection.

The small size of the Phase 2 cohort present limitations that need to be considered when interpreting the evaluation evidence.

Phase 2 of the Alert Program® pilot included a small number of learners and their teachers and family and whānau. Small population sizes have inherent limitations in terms of their ability to detect change. These small numbers further declined at the post assessments due to natural attrition (as noted above), further limiting the ability to detect change statistically. What this means is that the effect size (i.e., size of the improvement) would need to be quite large to detect using a small sample, while a larger sample could detect this difference.

The pilot nature of the programme, and as such the unique population, also limits the ability to generalise the findings to the Aotearoa New Zealand. The results should be considered in light of the context, and not generalised to the potential pool of Alert Program® participants. In other words, we cannot assume that the findings observed here will be consistent if the programme was implemented in other areas of New Zealand.

Also, to protect individual privacy, learner-related data was collected by the OT and MoE practitioners. All personal information was removed and replaced with a unique identifier (to allow matching of pre and post assessments) before data was shared with the evaluation team. Hence, learner demographics could not be included and further limited the data analysis for the evaluation. Because of these limitations, findings from the present evaluation should be viewed with some caution.

The information in this report can be used to determine the effect of the programme on a specific group of learners where only larger effects detected can be considered. While these results may not be replicated in other regions, a larger sample will have greater chance of detecting a small and medium effect, resulting in more significant findings. Findings with moderate effect sizes that are not statistically significant should first be interpreted as non-significant results. A larger sample size is recommended to explore these results further.

Impacts of the COVID-19 lockdown on post assessment SDQ scores are unknown but cannot be ruled out.

The SDQ is a brief behavioural screening questionnaire for children aged 3 to 16-years. The instrument encompasses five different scales, including emotional symptoms, conduct problems, hyperactivity or inattention, peer relationship problems and prosocial behaviour. It is widely used internationally for measuring children's emotional and behavioural problems.¹⁵ Given the type of data the SDQ measures and the incidence of a national lockdown over multiple weeks prior to the post data collection, effects of the lockdown on SDQ scores in the post assessment cannot be ruled out.¹⁶

Consider the evidence quality

The evaluation seeks to inform learning among key implementation teams for a small pilot programme. Further, relationships are key in the programme as is alignment with the Ministry of Education's strengths-focused approach when working within the context of learners with learning support needs. For this context, the evaluation collated evidence to the following standards:

- **Sufficiency:** Data was sufficient to address the specified purpose, although likely limitations in the numbers of data given the ethical context (i.e., assessing data about minors collected through their parents/caregiver/teacher) as well as the power to detect small effects.
- **Limited generalisability :** In most areas the findings are generalisable to the pilot population in which this was carried out. However, given the small, unique population the findings are not generalisable outside of the population of 26 learners.
- **Limited balance :** There is always a risk of bias, in particular when capturing evidence through individuals highly invested in the programme. The interviews also embedded strengths-focussed questions, in line with the delivery approach, to support participants. Although there is a risk to bias, the data was informative and prioritised to learn from these specific experiences.
- **Adequate collective evidence :** Evidence were generally adequate to answer the questions, using triangulation across multiple data sources to address aspects of potential bias and lack of generalisability.

¹⁵ Keilow M, Sievertsen HH, Niclasen J, Obel C (2019). The Strengths and Difficulties Questionnaire and standardized academic tests: Reliability across respondent type and age. PLoS ONE 14(7): e0220193. <https://doi.org/10.1371/journal.pone.0220193>

¹⁶ With reference to international studies examining the impact of lockdowns on children's wellbeing and using the SDQ, among other instrument, there have been found significant increase in child mental health problems with a significant change in total SDQ difficulties from pre-COVID levels. (For example, [Adegboye et al. \(2021\)](#), [Cellini et al. \(2021\)](#), [Ezpeleta et al. \(2020\)](#), [Mallik and Radwan \(2021\)](#).) However, these findings are not consistent. Other similar studies found no significant effects of the COVID-19 lockdown on children's behaviour or even a decrease in SDQ scores. (For example, [Achterberg et al. \(2021\)](#), [Bignardi et al. \(2021\)](#), [Koenig et al. \(2021\)](#), [Sicouri et al. \(2021\)](#).)

The evidence used here was deemed appropriate for the purpose of this evaluation, and the findings should be read in light of the context of the evidence quality.

The report uses these data to answer the key evaluation questions.

Proactively Released

FINDINGS



What we found

The following sections summarise the evidence the evaluation of the pilot's Phase 2 generated to answer the KEQs. Each KEQ and sub-question is discussed separately. Interview data includes reference to number of teachers (T), parents (P) or other stakeholder (STH), making a specific statement to indicate the weight of that statement. Judgements are based on the rubrics agreed on in the evaluation plan, which was developed before the evaluation implementation.

Phase 2 was generally good at increasing the frequency of Alert Program®-relevant practices in school and at home, albeit with some inconsistencies.

Effectiveness is considered in two different ways. First, in terms of the expected outcome where both teacher and family and whānau integrate the Alert Program® into daily routines and create supportive environments at school and at home. Second, in terms of expected learner outcomes, including improved self-regulation and wellbeing.

The evaluation assessed the self-reported frequency of using Alert Program® practices by participating teachers and parents before and after the implementation of Phase 2.

Table 2: Rubrics to assess effectiveness of the programme in embedding Alert Program® in the school and home environment.

Excellent	Very good	Adequate	Poor
Triangulated data show convergence, demonstrating large and consistent change/difference	Triangulated data show convergence, demonstrating consistent positive change/difference	Inconsistent evidence of change	No evidence of change

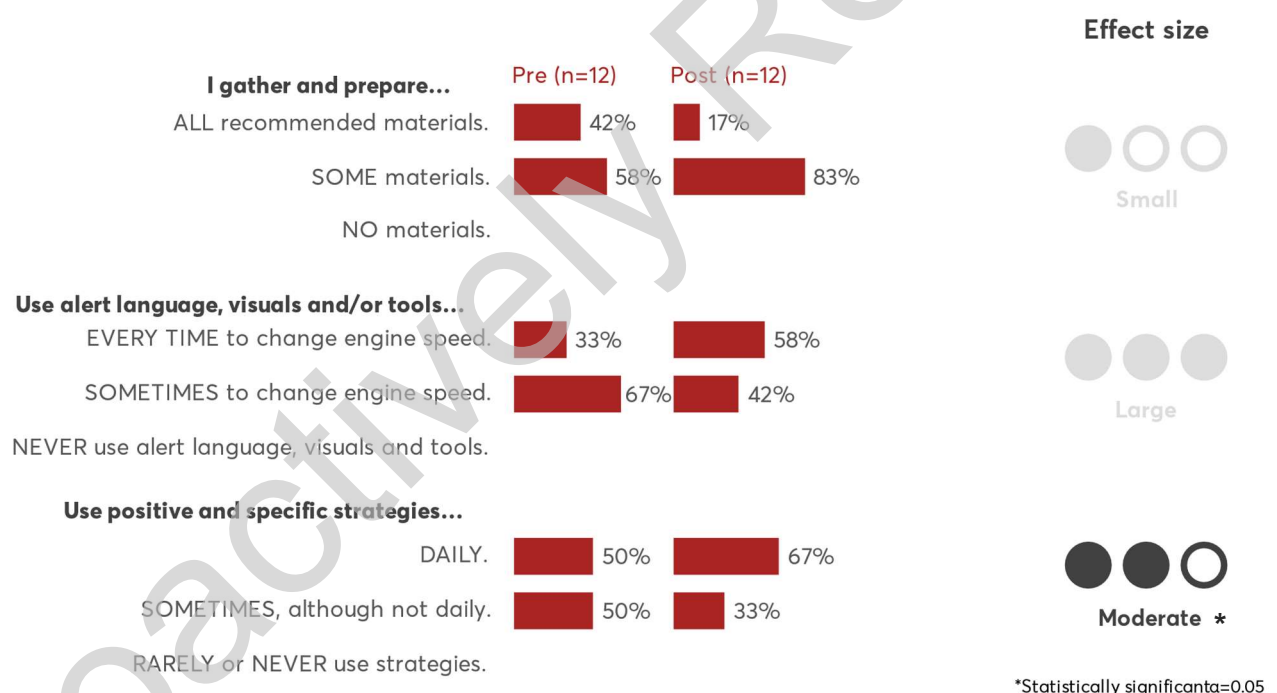
The evaluation found Phase 2 of the Alert Program® pilot's effectiveness in integrating the Alert Program® in learners' school and home environments to be good in general. While positive changes could be detected changes were not consistent and varied depending on family and whānau engagement in the programme, which impacted on the effectiveness of Phase 2. The findings that support this assertion are outlined below.

Overall, participating teachers and family and whānau increased the frequency of Alert Program® practices in school and at home respectively.

Alert Program® practice in the school or home environment differed considerably between teacher and family and whānau. From the outset, all teachers already

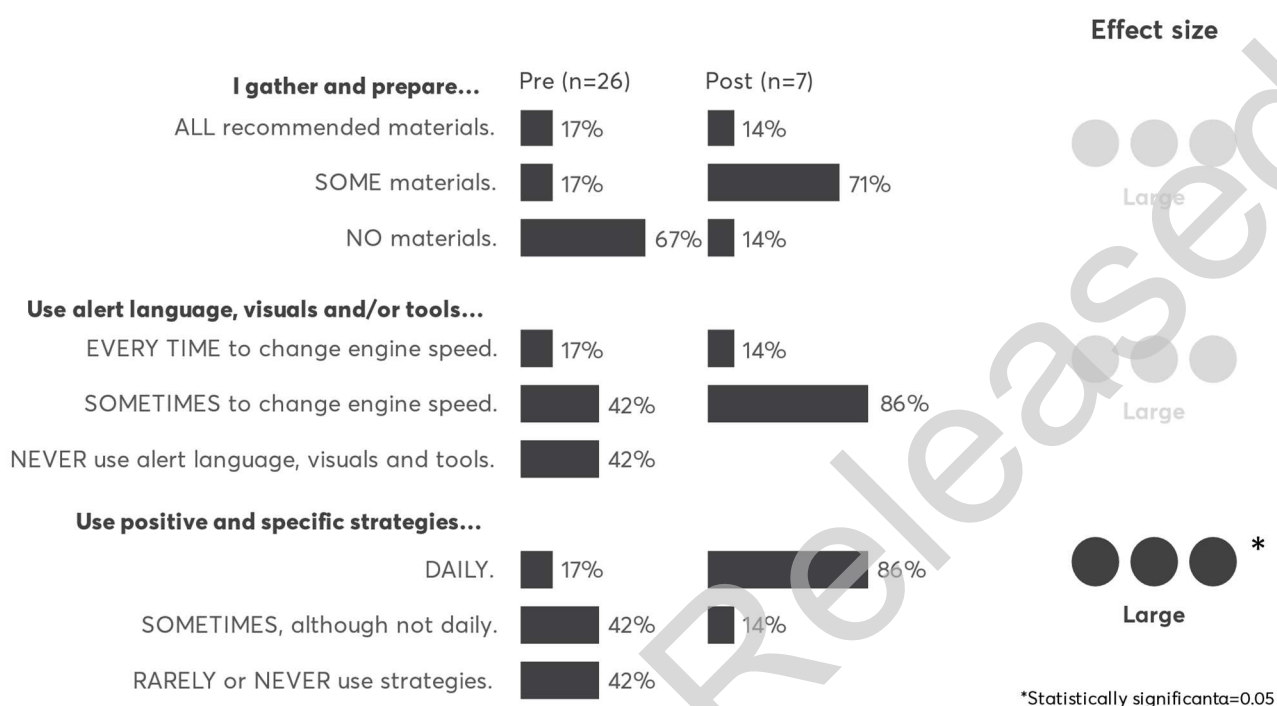
practiced Alert Program® strategies to varying degree in the classroom while many parents had never practiced the Alert Program® – whether they had gathered or prepared materials, used the Alert Program® language (i.e., engine analogy), visuals or tools, or used positive and specific strategies to change engine speeds. By the time of the post assessment, both teachers and parents reportedly used Alert Program® practices more frequently. More importantly, all parents who completed the implementation checklist at the post assessment reported they were using the Alert Program® language, visuals and tools to some degree, and most were using positive and specific strategies on a daily basis. A Wilcoxon paired signed rank test found large effects for parents, with a significant finding regarding the use of positive and specific strategies ($Z= 2.16$, $p= 0.031$, $r = 0.88$). Non-significant results were found for teachers¹⁷. A larger sample size would allow for more statistical power to determine if these effects are significant.

Figure 2: Changes in the frequency of practices relevant to the Alert Program®, comparing pre and post assessment for teachers (n=12). *Source: The Alert Program® implementation checklist.*



¹⁷ Tables of results are included in [Appendix B](#).

Figure 3: Changes in the frequency of practices relevant to the Alert Program®, comparing pre and post assessment for parents (n=26 pre / n=7 post). Effect sizes calculated using Wilcoxon signed ranked paired test (n=7). Source: The Alert Program® implementation checklist.



Interviews with a small sample of participating parents revealed some variation in these practices.

Parents experienced more challenges with practicing the Alert Program® at home, due to busy lives, circumstances and unexpected events.

The sample of interviewed parents highlighted the variance in levels of engagement with the programme. As noted earlier, the sample was very small and reduced to four parents (representing five learners) at the post assessment, but each experience was very different. What they had in common was that they all started off with little or no prior knowledge about the programme. At the pre assessment interview, some parents had heard of some aspects of the programme, such as the engine levels (P1, P2), some had attended a hui at school where the programme was introduced (P5, P8) or had read the information provided (P4). One parent had been a teacher aide at the school and experienced the Alert Program® in the classroom that way. However, none practiced the Alert Program® before Phase 2 of the pilot.

By the time of post assessment, two parents had opted out of the programme. One hadn't engaged in the programme beyond the initial meeting with the OT and MoE practitioner due to an unexpected event that interrupted the implementation of the Alert Program® for this family and whānau. They believed they might be able to start practicing the Alert Program® at a later stage using the resources emailed to them by the OT.

The remaining parents received multiple one-on-one sessions, some mentioned more frequent communication with the OT and receiving various tools during the lockdown period (P5, P8). They all demonstrated a level of understanding of the programme at the post assessment. None used the engine analogy on a regular basis but explained they were using alternative language instead (e.g., talking about feelings) (P2, P5, P8). They all had at least tried to apply suggested Alert Program® strategies at home and some had found strategies that worked well with their child (P1, P2).

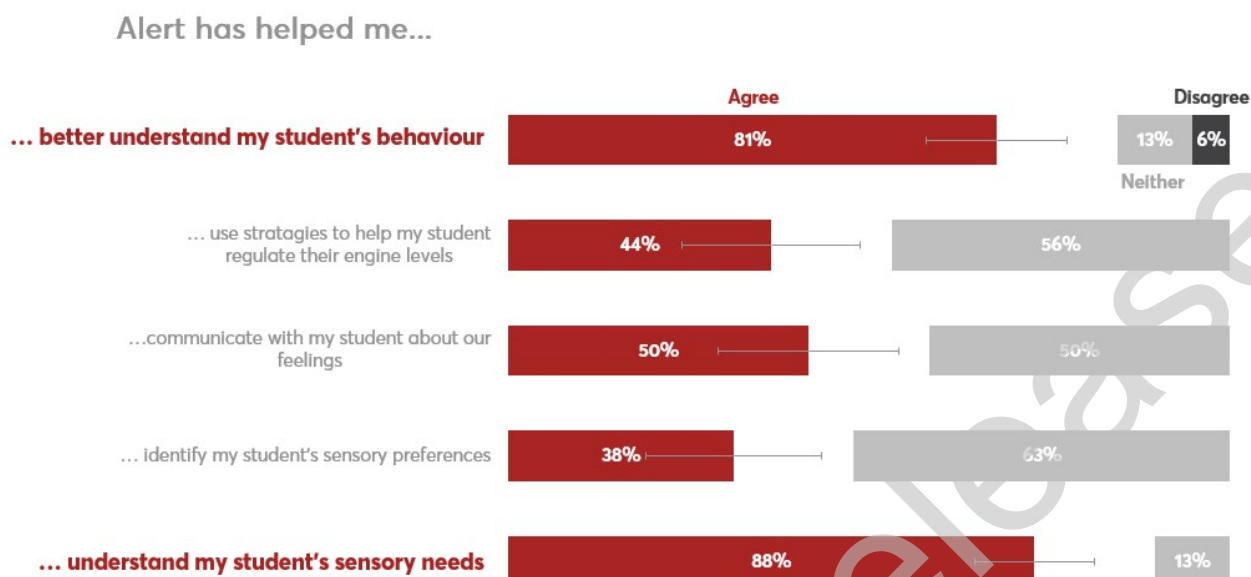
Parents noted challenges with practicing the Alert Program® at home (P1, P2, P5, P8). For example, single parents of multiple school-aged children and/or working parents felt too exhausted at times to practice the Alert Program®, or the learner's behaviour made it harder for them to apply strategies.

Phase 2 helped teachers become more aware of their learner's needs and teachers who participated in Phase 1 of the pilot benefitted from having practiced the Alert Program® since 2019.

On the other hand, interviewed teachers were confident in practicing the Alert Program® at both pre and post assessments. Those teachers who had been part of Phase 1 of the pilot used the language, strategies and modelled Alert Program® practice in the classroom on a daily basis. Many noted how they have become more confident with implementing the programme over time ('easier now') and had individually adopted the programme (i.e., strategies and tools to create their own) to the specific needs in the classroom (T2, T3, T4, T6, T7, T8). Among teachers who had not been part of Phase 1 there seemed to be less consistency in practicing the Alert Program® at the pre assessment (T1, T5).

Some of the teachers interviewed felt their awareness of learner's needs had increased because of engagements with the OT and MoE practitioners (T1, T2, T3, T5). Increased awareness of learner needs also came through very strongly in the feedback survey that all participating teachers completed after the implementation of Phase 2, along with a better understanding of the learner's behaviour (Figure 4).

**Figure 4: The proportions of teachers' agreeing (red), neither agreeing or disagreeing (grey) or disagreeing (black) to how helpful Phase 2 was for them (n=16, 95% CI's on % agreement).
Source: The Alert Program® feedback survey .¹⁸**



One teacher noted the engagement had been a good refresher, reminding them of talking and explaining to learners what is happening to their bodies when they are at different alert states. Another teacher noted the positive impact the programme facilitators had on their learners by talking to them directly about the Alert Program® and engine levels in the classroom. That teacher had introduced the Alert Program® language to the classroom but suggested that having the same thing explained by an 'expert' made it more meaningful to the learners. The usage of the Alert Program® language was working better since then according to the teachers. Some changes to practices were also reported. For example, spending extra time on reflecting on feelings and the alert state (T2, T3, T8), or trying out new strategies (T4).

Phase 2 was very good at improving learners' ability to identify engine speeds (first stage towards self-regulation) and contributing to improvements of learners' overall wellbeing.

The evaluation assessed teachers and family and whānau perceptions of learners' ability to identify, change and regulate their own state of alertness, as well as learners' strengths and difficulties and whether they had observed any changes between, before and after the implementation of Phase 2.

¹⁸ Sensory-motor self-regulation is a focus on the Alert program® and emotional self-regulation is a more sophisticated level of self-regulation.

Table 3: Rubrics to assess effectiveness of the programme in improving learners' self-regulation skills and wellbeing.

Excellent	Very good	Adequate	Poor
Significant differences Effects detected across both language and behaviours (strategies)	Early indications of progress Any significant effect occurring in either language or behaviours (strategies)	No evidence of change	Negative effects

The evaluation found Phase 2 of the Alert Program® pilot's effectiveness on learner outcomes to be very good. The findings that support this assertion are outlined below.

Learners significantly improved their ability to identify their own engine speed in the classroom.

*A Leader's Guide to The Alert Program® for Self-Regulation*¹⁹ suggests implementing the Alert Program® in three stages: first, identifying engine speeds, second, experimenting with methods to change engine speed and, finally, regulating engine speed. The Learners Alert Skills Development checklist²⁰ assesses learner's skills – as perceived by their teacher or family and whānau who completes the checklist – according to these three stages.

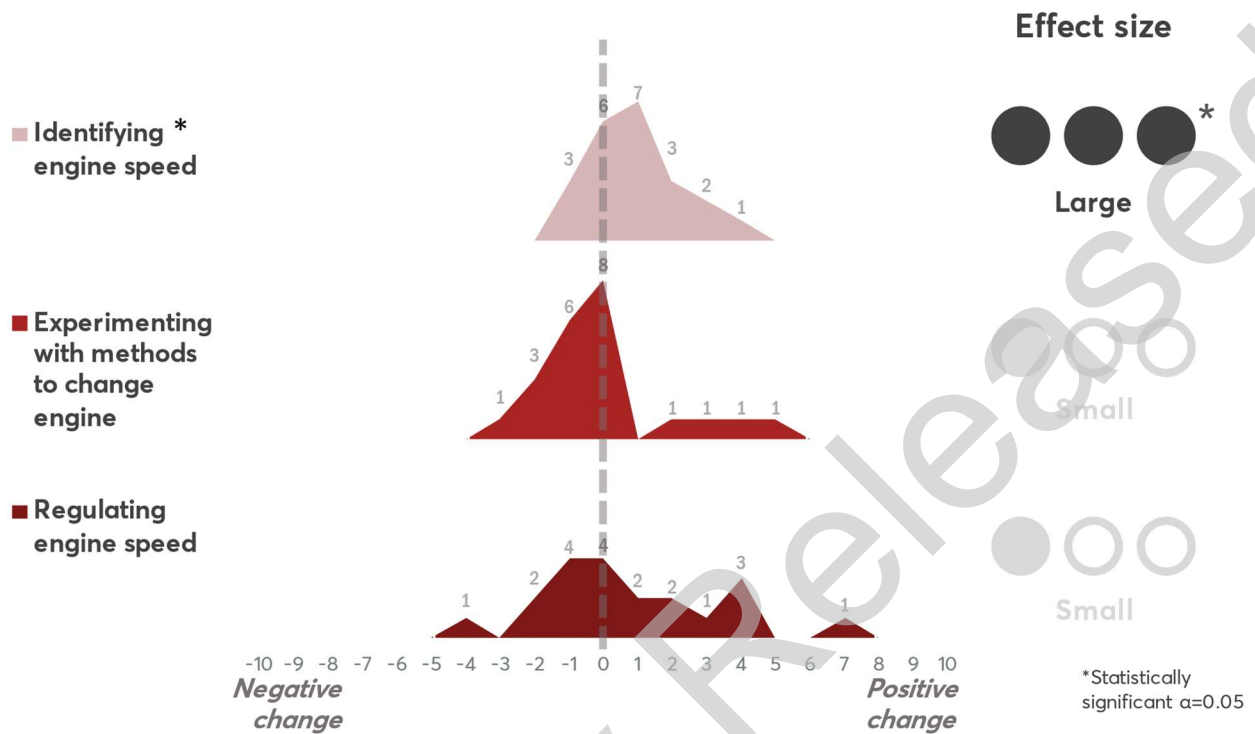
Data collected from teachers showed learners' progress between the pre and post assessments. The figures below show the distribution of the score changes among learners, as estimated by teachers (Figure 5) and parents (Figure 6). The changes show that, according to teachers, the majority of learners improved their ability to identify engine speed ($Z = 2.72$, $p = 0.007$, $r = 0.58$). This change was also statistically significant overall, with 13 out of 22 learners showing a growth in skill.

Smaller changes could be detected at the second stage, whereby learners were experimenting with methods to modify their engine speed ($Z = 0.317$, $p = 0.75$, $r = 0.21$), and third stage, where learners were regulating engine speed ($Z = 1.20$, $p = 0.23$, $r = 0.23$). These changes were not statistically significant, however, for some individual learners, change was significant in terms of improvement as shown in Figure 5. Due to the lack of learners' demographical information available to the evaluation team characteristics of particularly successful learners could not be determined.

¹⁹ Williams, M.S., & Shellenberger, S. (1996). "How Does Your Engine Run?"® A leader's guide to the Alert Program® for self-regulation. Albuquerque, NM: Therapy Works, Inc.

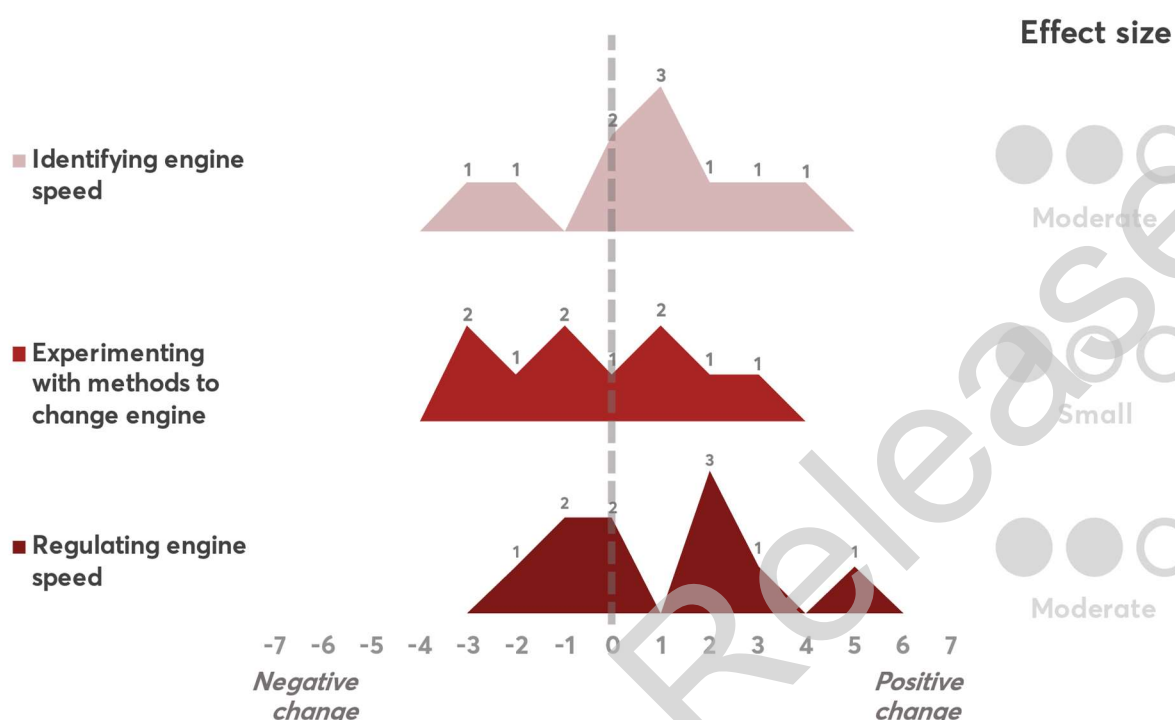
²⁰ Alert Pilot Project Oct 2020, Developed by Nicky Bank, Occupational Therapist, Child development Service, HVDHB

Figure 5: The numbers of learners demonstrating negative (left side) and positive (right side) changes in three skills relevant to the program, as the difference between the post and pre assessments estimated by teachers (n=21 learners). Source: Alert Skill Development.



Data collected from parents showed a similar trend with the majority of learners, according to these parents, making moderate, albeit non-significant improvements at the first stage ($Z= 0.92$, $p= 0.36$, $r = 0.36$) and the third stage ($Z= 1.42$, $p= 0.156$, $r = 0.41$) but no change at the second stage. However, there was more variability in results for individual learners among the parent data

Figure 6: The numbers of learners demonstrating negative (left side) and positive (right side) changes in three skills relevant to the pilot programme, as the difference between the post and pre assessments estimated by parents (n=10 learners). Source: Alert Skill Development.



Teachers observed positive changes in learners while parents' experiences varied, and some teachers raised questions about the selection of learners for Phase 2.

Most interviewed teachers reported positive changes in their learners at the post assessment (T1, T2, T3, T4, T6, T8). Observed changes included learners being more receptive and calmer (T1, T5), improved confidence (T2), fewer incidences occurring in the classroom (T1, T8), learners' awareness of their own state of alertness and feelings as well as what triggers outbursts (T8). In some cases, changes were not assigned to the Alert Program® but other factors, however. For example, one teacher noted their learner had been diagnosed with ADHD during the programme and believed it was the learner's medication that made the difference.

Experiences of interviewed parents varied and each family and whānau had a different story to tell at the post assessment. One reported their child was positively responding to prompting, one saw positive changes in their child's behaviour (i.e., fewer meltdowns) but wasn't convinced this was a result of the programme, one didn't observe any changes and one thought their child's behaviour got worse²¹. A link between changes in learners' behaviour and family and whānau engagement can be assumed. Parents who reported positive change in their child also reported to regularly practice the Alert

²¹ Note, post assessments occurred after a lockdown over several weeks, which presents another potential factor negative changes.

Program® at home, parents who reported no or negative change in their child also reported not practicing the Alert Program® at home.

The selection of learners chosen for Phase 2 was brought up in the interviews by a number of teachers (T1, T5, T6, T7). Some teachers didn't agree with the selection of learners for the Phase 2 support (T5) or, in hindsight, thought it would have worked better with other learners (T1, T6, T7). Given the challenges their learner was facing, some teachers wondered whether the Alert Program® was the right programme for them, suspecting there was something else going on with the learner and likely needed different kind of support (T1, T6, T7).

On average, learners' wellbeing improved based on their strengths and difficulties²² as perceived by their teacher and family and whānau after the implementation of Phase 2.

The evaluation used the SDQ to assess learners' wellbeing before and after the implementation of Phase 2. The questionnaire was completed by both the teacher and family and whānau of the learner hence results represent their respective perception of the learner's wellbeing. SDQ scores between teacher and family and whānau differed where family and whānau tended to report more learner difficulties than teachers. At the pre assessment, most parents (77%) scored their child 'high' or 'very high' overall²³, against half of the teachers (50%). The high percentage of 'high' and 'very high' total SDQ scores reinforced the need for additional support of learners included in Phase 2.

On average, learners' wellbeing (based on SDQ total scores) saw improvements at the post assessment, which was consistent between teacher ($Z = 1.69$, $p = 0.091$, $r = 0.37$) and parent ($Z = 1.08$, $p = 0.28$, $r = 0.34$) data (c.f. Figure 7).²⁴ Even though not statistically significant for the most part, data from teacher completed SDQs demonstrated improvement on all scales between pre and post assessments with the exception of the hyperactivity scale (c.f. Figure 8). Improvements on the peer problems scale proved statistically significant with a large effect size ($Z = 2.75$, $p = 0.006$, $r = 0.58$). Data from parent completed SDQs showed similar results where the evaluation found a trend towards improvement, however, no significant differences were observed (c.f. Figure 9).

²² Refers to improvements in SDQ scores in the post assessment compared to the pre assessment.

²³ High SDQ total scores represent the high degree of difficulties the learner is facing.

²⁴ As this is growth over time, the possibility that other factors will have contributed to this change cannot be eliminated.

Figure 7: The numbers of learners demonstrating negative (left side) and positive (right side) changes in overall SDQ scores, as the difference between post and pre SDQ scores estimated by teachers (top panel) and parents (bottom panel). *Source: SDQ.*

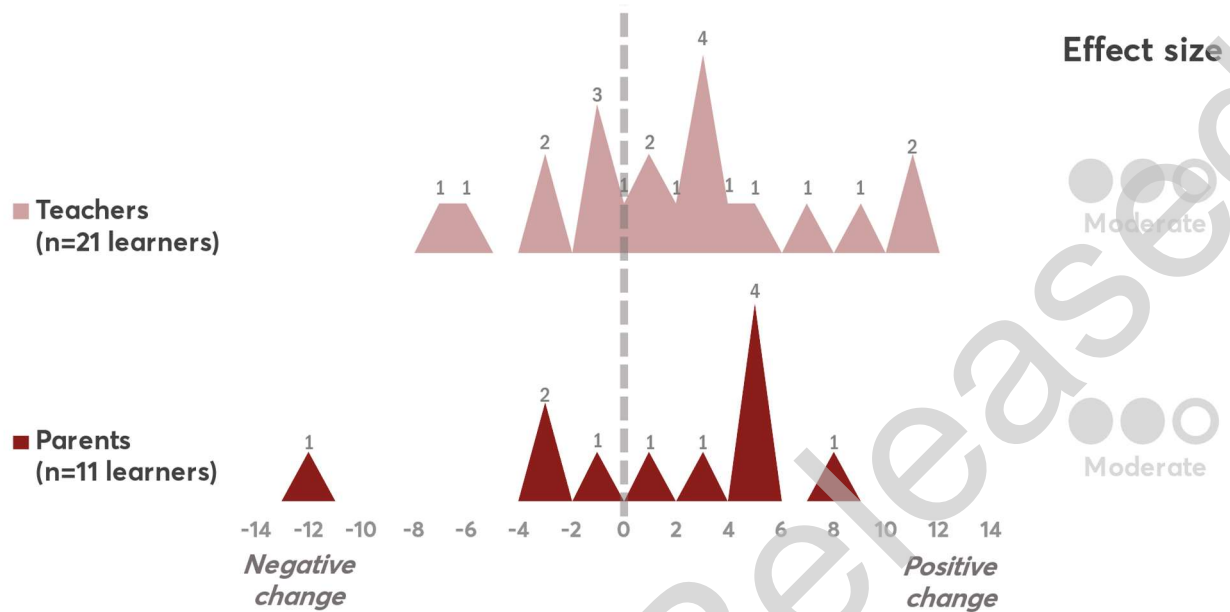


Figure 8: The numbers of learners demonstrating negative (left side) and positive (right side) changes in SDQ scores, as the difference between post and pre SDQ scores (by scale) estimated by teachers (n=21 learners). *Source: SDQ.*

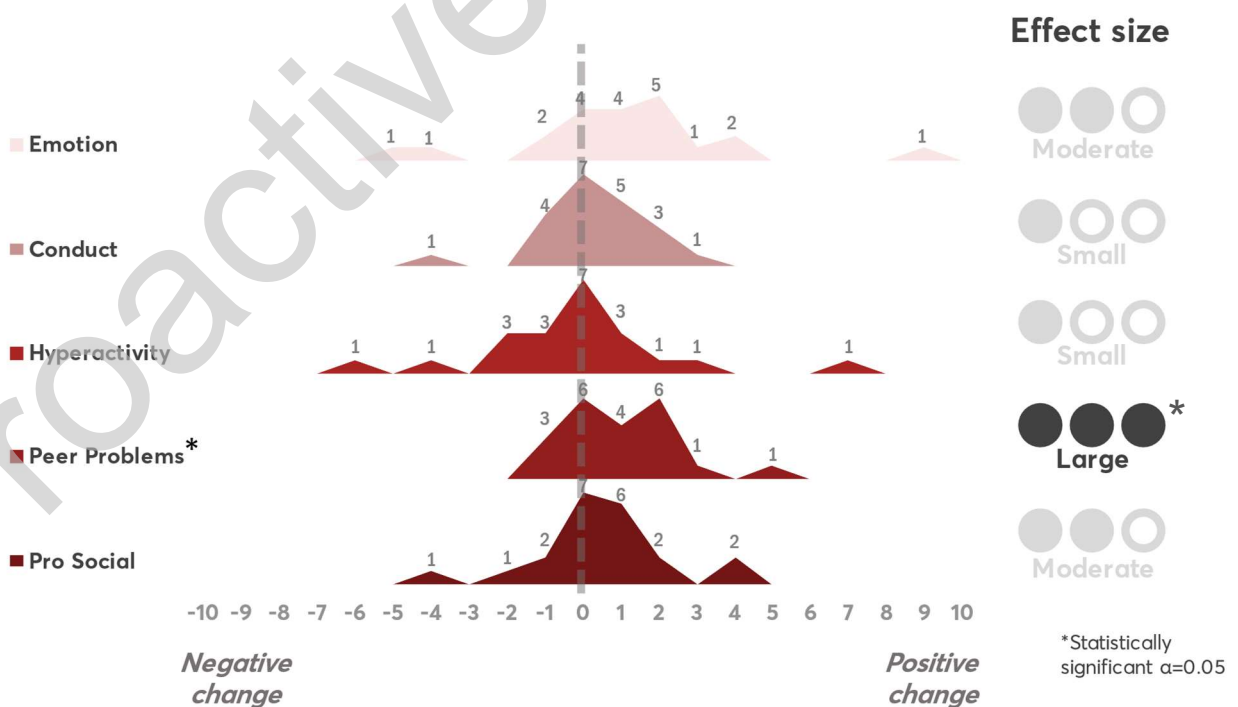
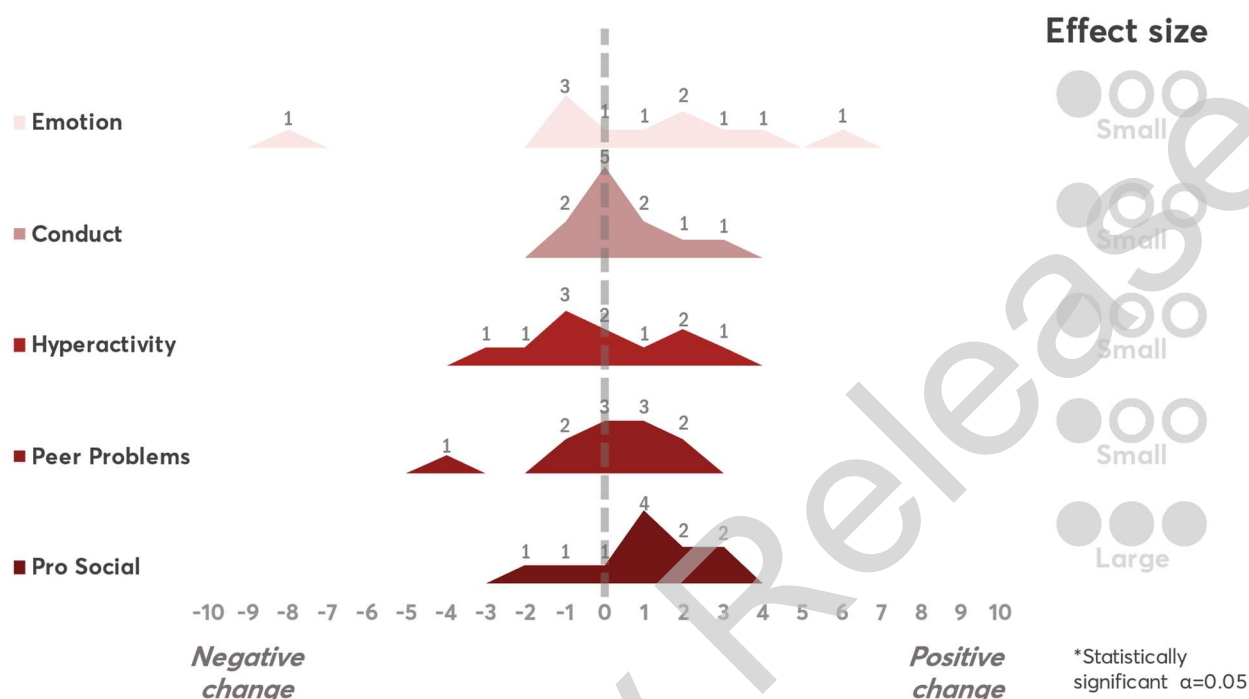


Figure 9: The numbers of learners demonstrating negative (left side) and positive (right side) changes in SDQ scores, as the difference between post and pre SDQ scores (by scale) estimated by parents (n=11 learners). *Source: SDQ.*



Individualised support and effective collaboration ensured relevant service provision and programme implementation for schools and family and whānau.

This section addresses the relevance of Phase 2 of the Alert Program® pilot to beneficiaries and the collaboration between the Ministries, schools and family and whānau. The evaluation assessed different stakeholder experiences with the implementation of the Phase 2.

Individualised support enabled programme facilitators to respond to differing needs among teachers and family and whānau.

At the pre assessment, expectations of the Phase 2 support differed between interviewed teachers and family and whānau. Many teachers wanted more in-class support, having the 'experts' in the classroom to observe and/or reiterate the engine analogy and strategies (T1, T4, T7). Parents, on the other hand, sought help for both their child or children and themselves (P1, P4, P5, P6, P8). Accordingly, teachers and parents needed different kinds of support.

For teachers it was more around adjusting tools and getting advice around how to use the Alert Program® in more difficult situations. Many noted that they were struggling with the tools that learners perceived more as toys (T1, T2, T3, T5, T6, T8). That problem seemed to be solved by the time of the post assessment. Teachers reported having received more solid and less toy-like tools through Phase 2, including weighted blankets and cushions, noise cancelling earmuffs, and a variety of different chairs and stools (T1, T4, T6, T7). Learners' confusion between tools and toys was not a topic any longer. Beyond the tools, what worked well for teachers was having access to support and expertise (T1, T2, T3), the people delivering the support (OT and MoE practitioners were "very hands-on, kind and approachable") (T6, T7, T8), and the involvement of learning support coordinators and support of teacher aids (T2, T3, T7).

While most teachers reported to be satisfied with the information and resources received through the programme (T1, T2, T3, T5, T6, T7, T8) some wished for more support on-site (T1, T2, T3, T8), e.g., classroom observations, modelling of the programme in the classroom, fortnightly consultation sessions over a longer time period (T2, T3). Some suggested increasing the support capacity (i.e., time and human resources) (T1, T4) and repeating the training for new staff (T5). This feedback was echoed in the teacher survey.

Because they were new to practicing the Alert Program®, for parents the support was more around trial and error, finding out what works and what doesn't. Parents appreciated the individualised support (P1, P2). A number of parents opted out of the programme, as already mentioned. One teacher noted that – at least in one case – this was due to parents' expectation that the programme would provide a "quick fix" and they hadn't been prepared to practice at home.

Where teacher and family and whānau worked together in implementing the Alert Program® it worked well but often teacher and family and whānau practiced the Alert Program® in isolation despite having an established relationship.

Interviewed teachers and parents both reported to have good relationships and communication between them. Many had worked out a mechanism to exchange updates on the learner's behaviour at home and in school, whether in writing through journals and a reward system (T2, T6, T7) or text messaging (T5) or verbally at drop-offs and pickups (T1, T8). And this was already the case before the implementation of Phase 2 – hence potentially good conditions for working together.

However, at the post assessment, only a few interviewed teachers and parents reported exchanging Alert Program® strategies for learners with each other (P1, T1, T3, T7). More often, there was no specific exchange about the Alert Program® between teacher and whānau occurring (P2, P5, P6, P8, T5, T6, T8). Teachers were aware that family and whānau were engaging with the OT and/or MoE practitioners – and vice versa – but they didn't know what Alert Program® strategies the other was using or whether or not they were practicing the Alert Program® at all (P6, T2, T8).

Where collaboration with family and whānau worked well it was highlighted as the key to success ("being on the same page", T1). Some teachers and parents suggested combined sessions with both teacher and parent would be beneficial (T2, T3, T6, T7). One parent also noted that it would be beneficial to have both parents being part of the process so that they were aligned at home. In at least one case, such joint sessions occurred in scope of IEP meetings, which included apart from the learner's teacher and parent also the OT and learning support coordinator. These meetings were used to integrate conversations on Alert Program® strategies in school and at home, which worked well (T7, STH3, STH4).

Effective relationships enabled collaboration between the Ministries and schools.

Stakeholders saw the collaboration and collective partnership with the different disciplines and schools as a real strength of the pilot and Phase 2 (STH1, STH2, STH3, STH4). For schools, the collaboration presented an opportunity for professional development for their staff while having access to specialist knowledge, tools and networks (STH1, STH2, STH4). For the Ministries – and Health, in particular – the programme presented an opportunity to work in schools and improve the reach with children (STH2, STH4).

Building effective relationships was noted as enabling collaboration, for which the individuals involved were critical (STH3). Thoughts about how the programme could be maintained beyond Phase 2 included a stronger role of learning support coordinators (STH3, STH4), regular review of practices and ensuring appropriate systems are in place (STH2).

The co-design approach was rated as appropriate for the implementation of Phase 2 by all stakeholders. It allowed schools to tailor the programme to their specific needs and context (STH1, STH2, STH3). The co-design approach also enabled direct and effective communication between the different parties (STH1, STH2). However, the approach also meant doubling processes, personnel and time (STH2). With the involvement of two Ministries, programme implementation had to be aligned with administrative procedures of two organisations, which slowed down processes at times (STH1, STH2, STH3).

Teachers provided some suggestions about how to further improve the Alert Program® in terms of cultural responsiveness and embedding in the local curriculum context.

Teachers responding to the feedback survey (n=16) commented on opportunities for embedding the Alert Program® as part of local curriculum implementation, including Māori cultural concepts, language and tikanga. Examples noted included:

- Translating engine speed language and visuals (e.g., engine speed monitor) into te reo Māori.²⁵

²⁵ The translating of engine speeds has already been considered and/or practiced in some classrooms.

- Linking ngā atua Māori (Māori gods) to descriptions of engine levels ((e.g. Rūaumoko = volcano = engine high).
- Connecting Alert Program® strategies to Māori health models such as Te Whare Tapa Whā.

Alert Program® aligns well with PB4L and other programmes implemented at the schools.

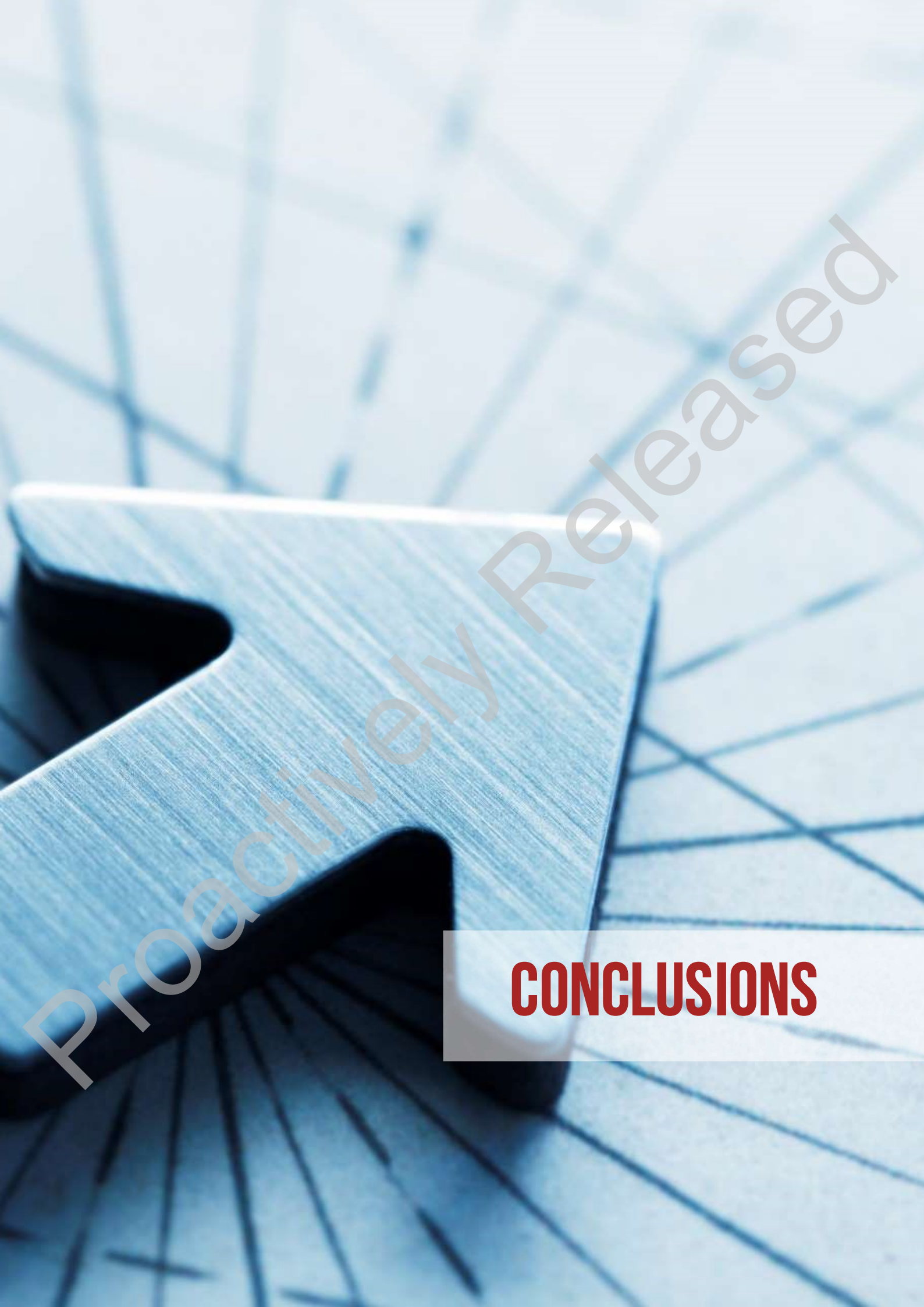
This section addresses the coherence of the Alert Program® programme with other existing programmes at the schools.

Schools evaluated the Alert Program® in alignment with their other programmes.

Stakeholders confirmed the Alert Program® was a good fit for the pilot schools and aligned with their respective school values (STH1, STH2, STH4). Through the co-design schools could ensure the programme and its implementation was tailored to their own setting. Both pilot schools were PB4L schools and had a number of other programmes going on in parallel with the Alert Program®, including:

- Restorative practices
- Tikanga Māori
- Trauma PD

Stakeholders thought the Alert Program® was complementing these programmes well (STH1, STH2, STH3, STH4), in particular Trauma PD. One teacher expressed concern that the programme might not fit with non-PB4L schools because they would likely be not as prepared for the programme. One stakeholder noted that coherence and effectiveness was often dependent on the understanding and skills of the teacher. Timing was another factor mentioned by a stakeholder ("it was the right time for the Alert Program®").



Proactively Released

CONCLUSIONS

What we can conclude

The evaluation was commissioned to help the Ministries of Health and Education understand the effectiveness of the ALERT pilot so they can make informed decisions about any future delivery of the programme. For this purpose, it is important to understand how adequately the collective evidence can address each key evaluation question to guide appropriate use based on the extent of the evidence. Using enough data, and a mixture of methods and data sources, provides ample opportunity to test theories, views, experiences and achievements, with each data source providing different information relevant to the evaluand. Further triangulating different data sources and evidence promotes a balanced reflection of the evaluation and highlights the relative weight of evidence supporting (or contradicting) any evaluative statement.

The evidence, given the context of delivery, is limited but useful for the intended purpose. There will likely be gaps in what can be concluded, but nonetheless the evaluation provides useful learning for implementing the programme moving forward.

The implementation and evaluation of Phase 2 faced a number of challenges. A delayed start and lockdown interruption required adjustments to initial plans and timelines. A key challenge for the Phase 2 delivery was the change of service delivery mode towards individualised support, which put pressure on and limited the capacity provided for Phase 2. There is high demand for specialist support among both teacher and family and whānau in applying and reviewing Alert Program® practices. Challenges in engaging family and whānau in the programme made the implementation of Phase 2 even more difficult. Whānau were not allowed in the centres because of COVID-19 restrictions, limiting the interaction between whānau and teachers. Increased struggles experienced by family and whānau of selected learners for Phase 2 came out in the evaluation. Hence family and whānau commitment to adopt the programme cannot be assumed and requires work and flexible support, which needs to be considered in the capacity planning.

Despite the challenges, the evaluation did find progress was made in integrating Alert Program® practices in the home and school environments of the Phase 2 cohort of learners. There were clear differences between teachers who participated in Phase 1 of the pilot, on the one hand, and teachers new to the school and family and whānau, on the other. The former had already established confidence in practicing the Alert Program® and further tailored tools and strategies to their classes' specific needs. The latter were in the more insecure trial and error phase, still figuring out what worked and what didn't. This observation underlines time to practice as a key factor for positive outcomes.

Progress in learners' ability to recognise alert levels and perceived strengths and difficulties could also be found despite the relatively short timeframe of Phase 2. Learners benefit through their teacher and family and whānau who are still practicing and trialling tools and strategies. There is the question about the selection of learners for targeted and/or individualised support and which learners this service works best for. Data analysis was limited in this regard due to the small sample and the lack of learners'

demographic information available to the evaluation team. Hence the learner selection question still requires further investigation. Such investigation could also assess a possible link between the selection of learners for the service delivery and the programme's effectiveness in embedding Alert Program® practices in the school and home environments.

While the move to individualised support put more pressure on programme facilitation capacity, the provision of individualised support made the programme more relevant to its direct beneficiaries, especially family and whānau. Support needs differed considerably because of the different levels of experience with the programme between teachers and family and whānau. Individualised support worked well to respond to differing needs and was also well received by family and whānau in particular. Joint teacher and family and whānau (of one learner) sessions could be beneficial to further foster alignment of Alert Program® practices specific to the learner – and to ease some of the pressure on service delivery capacity. Integrating the Alert Program® in IEP meetings proved to be a way that worked well in this context.

The co-design approach for the implementation of Phase 2 proved beneficial for involved parties in terms of effective communication and tailoring the programme to school-specific needs. However, the co-design approach also proved rather resource intense (time and human resources), which needs to be factored into the planning and budgeting at the outset. Collaboration between and joining up health and education services was highlighted as a key strength of the programme and beneficial for all partners, including and especially schools. However, working across the administrative procedures of two Ministries can slow down processes at times.

The Alert Program® adaptation proved to fit well with the pilot schools and aligned with PB4L, restorative practices and other professional development (PD) for teachers, such as trauma-informed PD.

Overall, based on the evidence available, Phase 2 of the Alert Program® pilot was relevant to schools and family and whānau, and coherent with other programmes implemented at the pilot schools. The small cohort and sample, in addition to the lockdown disruption limited the evidence around Phase 2 of the pilot's effectiveness in embedding the Alert Program® practice in the school and learner outcomes. There are trends towards positive change, which could become significant with a larger sample.

Learnings from the pilot for a future roll out of the programme

The pilot tested a model for integrating social-emotional learning into the curriculum while adapting the programme to the New Zealand school context. There were a range of lessons and good practice that implementation teams can take from the experience

of this pilot. In addition to what has been described above, some of these other areas that would be useful to learn from are summarised below.

Learnings for the implementation of the programme include:

- Delivery of the Alert Program® through group sessions may be suitable for teachers, however, it presents an uncomfortable situation for family and whānau – particularly family and whānau of learners with additional needs. Alternatively, joint sessions of teacher and family and whānau of the learner work well combined with IEP meetings.
- Teachers often have existing relationships and communication channels with family and whānau of learners with additional needs. Teachers, therefore, are in a good position to lead engagements with family and whānau for the Alert Program® implementation.
- Especially with learners with additional needs, even experienced teachers require comprehensive individualised support from the OT. This requirement will have implications for OT capacity.
- There are mutual benefits for DHB Child Development Services and schools from being directly connected. This can be considered in future implementations.

In terms of learner selection for Phase 2 support, self-selection for participation in the programme needs to be balanced with teacher identification. Learnings from the implementation of the evaluation:

- As the COVID-19 pandemic continues, future interruptions in everyday school and home life are to be expected. These events are likely to influence results of wellbeing measurement tools used to assess programme outcomes. Therefore, when tools, such as the SDQ, are used to assess wellbeing outcomes during the pandemic there is a risk of any wellbeing benefits being overcome by such overwhelming events. It would be important to minimally consider including comparable counterfactual groups in future evaluations and an opportunity to mitigate such effects, if at all possible.
- Presupposing ethics approval, the inclusion of learners' demographic information in the evaluation's data collection and analysis could further explore the relationships between successful outcomes and cohorts of learners.



APPENDICES

Appendix A: Information sheet and consent form



Evaluating extra support under the Alert program®: Information for parents, caregivers and kaiako

Information about the program

The Alert program® is specifically designed for schools to support children with their self-regulation skills. Research shows that self-regulation skills not only have long term but also immediate benefits for children in their ability to build relationships and generally interact with others, as well as actively engaging in learning. Furthermore, self-regulation is a key social-emotional skill and predictor for success as an adult. Alert has been used in your child's classrooms since 2019.

We would like to collect information about children's wellbeing and ability to self-regulate, and how Alert can be used in the home and at school, to help us evaluate the programme.

Parents, caregivers and kaiako can choose to be involved using the consent form attached to this information sheet.

Parents and caregivers – what's involved

If you consent to participate and are selected, you will be provided with targeted support from Alert facilitators and teachers on how to use the Alert program® at home. Your child's teacher will also receive support so that the ways Alert is used in the home and at school are as similar as possible.

You will be asked to complete short checklists and questionnaire about your child's ability to regulate their emotions, and how Alert is being used. You might also be asked to participate in an interview and/or a workshop. This information will help us to evaluate the programme, to make programme improvements, and help the Ministries of Education and Health to make decisions about how the programme is used in the future. If any additional learning support needs are identified through this process, the Occupational Therapists (OT) or the Ministry of Education specialist will make contact you.

Kaiako – what's involved

If a child that you teach is to receive extra support, Alert facilitators will work with you and the parents or caregivers so that the ways Alert is used in the home and at school are as similar as possible.

You will be asked to complete short checklists and questionnaires about the child's ability to regulate their emotions, and how Alert is being used. You might also be asked to participate in an interview and/or a workshop. This information will help us to evaluate the programme, to make programme improvements, and help the Ministries of Education and Health to make decisions about how the programme is used in the future.

Why are we doing this?

We want to make sure we are giving kaiako, parents and their children the support they need. It's important for us to understand if the Alert programme is useful - how children use it, and how has it affected their wellbeing and ability to self-regulate. We also want to understand how the programme benefits Māori and Pacific children.

We are encouraging kaiako, parents and caregivers to take part so we can learn from your experiences and help us improve the support we provide.

Do you have to take part?

No. You can agree to take part, or you can choose not to take part at all. You can also stop taking part at any time. If you withdraw, your information will no longer be included in the evaluation.

What do the evaluation activities involve?

Everyone involved will be asked to complete questionnaires and surveys.

- In the **questionnaires**, you will be asked about your child's behaviour and relationships with others and any behavioural challenges.
- In the **checklists**, you will be asked how Alert is being used in daily routines. Teachers will also be asked about how well the child already understands and uses Alert.

A small number of people will also be asked to participate in interviews and a workshop.

- In the one-on-one **interviews**, we will talk through some questions about the Alert programme. We will look at what difference Alert made for your children, how the programme was provided, and whether the processes worked well.
- In the group discussion **workshop**, we will talk through the results of our analysis to a group of whānau, teachers, occupational therapists, and Ministry of Education specialist services providers. We will not include any information that could identify any participants or children. Together we will explore what it means.

All parents and caregivers will be asked to **allow your child's school to share information** with us about your child's achievement at school, attendance, and demographic information such as ethnicity and gender.

Who will have access to my information?

Checklists and questionnaires

- The Occupational Therapist, who works at the school, will collect the checklists and questionnaires and attach them to your child's medical records. They will use the checklist information and will share it with the Ministry of Education specialist/s and educators to provide additional support for your child.
- We (Standard of Proof) will use checklists and questionnaires that have had identifying information removed (for example, names will be replaced with a unique ID code) to understand how useful the extra support has been for everyone involved. We will use an online tool, accessed by the Ministry of Education, to score the questionnaire. No identifying information is recorded by the online tool. If any additional concerns are identified through the analysis of this questionnaire, we will notify the Alert team working with your child (the OT and Ministry specialist/s).

Interview and workshop

- We will collect information during the interviews and workshop. We will write a report about the Alert programme for the Ministry of Education and the Ministry of Health. The Minister of Education will receive a summary of the report. The report and the summary will not contain any identifying information about participants or students.

Information shared by your child's school

- All information shared by the school will be anonymous – i.e. names will be replaced by a unique code. We will be able to match this to the checklist and questionnaires but will not be able to match it to specific children.

All information collected will be stored securely.

Important: If, at any stage during the process, we think that your child could benefit from extra support that is not part of the Alert programme, then we will contact you to discuss this immediately.

Who is conducting the evaluation?

The evaluation is being conducted by the independent research and evaluation company Standard of Proof on behalf of the Ministry of Education. Dr Sira Engelbertz and Dr Thy Phan are conducting the evaluation. For more information about Standard of Proof, go to www.standardofproof.nz.

What if you have questions?

If you have any questions about the evaluation, please contact Dr Sira Engelbertz at sira@standardofproof.nz.

Privacy statement

- We are collecting information so that we can formally evaluate the Alert Programme. We will use this information to enable us to identify improvements and make decisions about future support.
- The collection, storage and use of personal information will be in accordance with the Privacy Act 2020. Under that Act, kaiako, parents and caregivers have the right to access any personal information that we hold about them or their child, and can ask for it to be corrected.

Parent/Caregiver Consent Form – Alert Programme extra support

We would like to use information collected by the Alert program about your child's self-regulation skills. This information will include learner's skills, behaviour and wellbeing, as well as how Alert is used and practiced. We would also like to use information provided by the school about your child (such as attendance, achievement, and demographic information). This information will help us know if the programme was helpful for children.

- ☐ I am interested in receiving support from Alert facilitators on using Alert in the home
- ☐ I agree to information about my child's self-regulation skills, behaviours and wellbeing being used for the evaluation of the Alert programme
- ☐ I agree to the school sharing information about my child for the evaluation of the Alert programme.

Some people will be asked to participate in interviews and a workshop. If you agree to take part and are selected, your responses will help the Ministry of Education make improvements and decisions about how such support should be provided in the future.

- ☐ I am interested in taking part in the interviews.
- ☐ I am interested in taking part in the workshop.

Name: _____

Date: / /

Signed: _____

If you would like to participate in either the interviews or the workshop, please include your contact information:

Email address: _____

Phone number: _____

School Staff Consent Form – Alert Programme extra support

We would like to use information collected by the Alert program about children's self-regulation skills. This information will include learner's skills, behaviour and wellbeing, as well as how Alert is used and practiced. We would also like to use information provided by the school about your teaching. This information will help us know if the programme was helpful for children.

- ☐ I agree to information about my teaching being used for the evaluation of the Alert programme

Some people will be asked to participate in interviews and a workshop. If you agree to take part and are selected, your responses will help the Ministry of Education make improvements and decisions about how such support should be provided in the future.

- ☐ I am interested in taking part in the interviews.
☐ I am interested in taking part in the workshop.

Name: _____ Date: / /

Signed: _____

If you would like to participate in either the interviews or the workshop, please include your contact information:

Email address: _____

Phone number: _____

Appendix B: Methodology

Assessment tools

Figure 10: The Alert Program® implementation checklist for teacher and family and whānau.

Alert Program® Implementation

(for teacher and/or parent/caregiver)

This checklist is to understand the degree to which the Alert Program® has been implemented at home and at school.

Please read the three statements under 'In my home / class' and circle the one statement that applies to you for each preparing, facilitating and evaluating the Alert Program®.

	3	2	1
	In my home / class:		
Prepares	I gather / prepare all recommended materials	I gather / prepare some materials	I gather / prepare no materials
Facilitates	I use the alert language, visuals and/or tools with my child every time they need to change their engine speed.	I sometimes use the alert language, visuals and/or tools with my child when they need to change their engine speed.	I never use the alert language, visuals and tools with my child.
Evaluates	I use positive and specific strategies (e.g. positive language, offer choices, model strategies) daily, reinforcing modifying engine levels.	I sometimes use, although not daily, positive and specific strategies to reinforce modifying engine levels as part of daily routines.	I rarely or never use the strategies to reinforce modifying engine levels with my child as part of daily routines.

Name: _____

Date: _____

I am a teacher ☐ parent ☐ caregiver ☐ (Please tick the box that applies to you.)

of

_____ (Name of student)

Figure 11: Learners' Alert Skill Development checklist (Bank, 2020) completed by teachers and family and whānau.

Alert Skill Development

Stage 1: Identifying Engine Speed	yes	somti mes	no	Strategy to support
1. Demonstrates theoretical understanding of high, low, just right alert levels.				
2. Is able to identify high, low, just right in others				
3. Is able to identify high, low, just right in self				
4. Can use engine language independently				
Stage 2: Experimenting with methods to change engine				
5. Can identify sensory tools available in class				
6. Initiates selecting a sensory strategy/tool to try				
7. Can independently select an <i>appropriate/helpful</i> sensory tool				
Stage 3: Regulation				
8. Can identify own triggers in theory – e.g. activities, sensitivities				
9. Is aware of own physical and emotional state indicating change in engine level.				
10. Can identify own triggers in context of natural environment/situation <i>and</i> need to change engine level.				
11. Can explain what sensory tools work for them individually.				
12. Actively use alert language and strategies in a variety of activities and environments at school.				
13. Actively use alert language and strategies in a variety of activities and environments at home.				
14. Can role model Alert in action to peers/whanau				

Alert Pilot Project Oct 2020
Developed by Nicky Bank, Occupational Therapist, Child Development Service, HVDHB

Figure 12: SDQ for learners aged 4-10 years including follow up questions (post assessment) completed by teachers and family and whānau.

Strengths and Difficulties Questionnaire

P4-10
FOLLOW-UP

For each item, please mark the box for Not True, Somewhat True or Certainly True. It would help us if you answered all items as best you can even if you are not absolutely certain. Please give your answers on the basis of your child's behaviour **over the last month**.

Your child's Name Male/Female

Date of Birth.....

	Not True	Somewhat True	Certainly True
Considerate of other people's feelings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Restless, overactive, cannot stay still for long	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often complains of headaches, stomach-aches or sickness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shares readily with other children, for example toys, treats, pencils	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often loses temper	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rather solitary, prefers to play alone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Generally well behaved, usually does what adults request	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Many worries or often seems worried	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Helpful if someone is hurt, upset or feeling ill	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Constantly fidgeting or squirming	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has at least one good friend	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often fights with other children or bullies them	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often unhappy, depressed or tearful	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Generally liked by other children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Easily distracted, concentration wanders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nervous or clingy in new situations, easily loses confidence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kind to younger children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often lies or cheats	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Picked on or bullied by other children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Often volunteers to help others (parents, teachers, other children)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Thinks things out before acting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Steals from home, school or elsewhere	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gets along better with adults than with other children	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Many fears, easily scared	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Good attention span, sees chores or homework through to the end	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Do you have any other comments or concerns?

Please turn over - there are a few more questions on the other side

Since coming to the service, are your child's problems:

Much worse	A bit worse	About the same	A bit better	Much better
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Has coming to the service been helpful in other ways, e.g. providing information or making the problems more bearable?

Not at all	Only a little	Quite a lot	A great deal
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Over the last month, has your child had difficulties in one or more of the following areas: emotions, concentration, behaviour or being able to get on with other people?

No	Yes-minor difficulties	Yes-definite difficulties	Yes-severe difficulties
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If you have answered "Yes", please answer the following questions about these difficulties:

- Do the difficulties upset or distress your child?

Not at all	Only a little	Quite a lot	A great deal
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- Do the difficulties interfere with your child's everyday life in the following areas?

	Not at all	Only a little	Quite a lot	A great deal
HOME LIFE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
FRIENDSHIPS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CLASSROOM LEARNING	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LEISURE ACTIVITIES	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- Do the difficulties put a burden on you or the family as a whole?

Not at all	Only a little	Quite a lot	A great deal
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Signature

Date

Mother/Father/Other (please specify:)

Thank you very much for your help

© Robert Goodman, 2005

Figure 13: Teacher feedback survey.

Alert Program® pilot Phase 2 – teacher feedback survey

We would like to find out how you experienced the programme and its implementation. The Alert® Program has been adapted to assist tamariki with-self-regulation in school and at home. You have been part of this implementation and local adaptation. Your feedback can help us understand better how well the adaptation of the programme works and what can be improved. We would appreciate if you took a few minutes and answered the questions below. Many thanks!

How much do you agree or disagree with the following statements?

The Alert® Program has helped me ...	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1. ... understand student's sensory needs.					
2. ... identify student's sensory preferences.					
3. ... communicate with students about our feelings.					
4. ... use strategies to help my student regulate their "engine levels".					
5. ... better understand my student's behaviour.					

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
6. Overall, participating in Phase 2 of the Alert® Program pilot at my school was a good experience.					
7. The information and resources shared with me were useful to apply Alert in my classroom.					
8. The support provided during Phase 2 of the programme was the right support for me.					
9. Being able to work directly with someone from the DHB Child Development service was valuable.					
10. Being able to work directly with someone from the Ministry of Education was valuable.					

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Don't know
11. The Alert® Program was implemented in a way that was culturally enhancing and responsive to me.						<input type="checkbox"/>
12. The Alert® Program elements could be flexibly applied within our local curriculum, including our use of Māori language and tikanga.						<input type="checkbox"/>

13. Can you share examples of resources and/or activities used as part of the implementation, which included Māori cultural concepts, language and tikanga?

14. What learnings from the Phase 2 support do you apply in your teaching?

15. What elements of the Phase 2 support were not useful?

16. Do you have any suggestions how the process for identifying learners for Phase 2 of the programme can be improved?

17. Do you have any other comments you would like to share?

Interviews

Table 4: Interview schedule for programme participants (teacher and family and whānau).

	Teacher question	Family and whānau question	Notes
<i>Introduction</i>	1. To start, can you tell me your role in the Alert Program® programme?	1. To start, can you tell me if you knew about the Alert Program®? If yes, what do you know about the Alert Program® programme?	KEQ1 for family and whānau
<i>Embedding Alert Program® in home and school environment</i>	2. Do you practise the Alert Program® in school? In what ways do you currently practise and integrate the Alert Program® strategies and language in your teaching?	2. Do you practise the Alert Program® at home? In what ways do you currently practise and integrate the Alert Program® strategies and language at home?	KEQ1
	3. What makes it easier or harder for you to integrate the Alert Program® into your daily routines? Why?	3. What makes it easier or harder for you to integrate the Alert Program® into your daily routines? Why?	KEQ1
	4. How do you think this programme can benefit you and your learners?	4. How do you think this programme can benefit your whānau?	KEQ1
	5. Have you noticed any changes in the children you work with since Phase 2 support started? What have you noticed? (post question only)	5. Have you noticed any changes at home since you started using the Alert Program®? What have you noticed? (post question only)	KEQ1
<i>Collaboration</i>	6. How would you describe your relationship with your learners' whānau?	6. How would you describe your relationship with your child's teacher and school?	KEQ1 & KEQ2

	7. How well has the programme and its implementation been communicated to you by your school and by the Ministries of Health and Education?	7. How well has the programme and its implementation been communicated to you by the school and by the Ministries of Health and Education?	KEQ2
	8. How satisfied are you with the information, resources and support you have been provided with? Why?	8. How sufficient and appropriate do you find the information, resources and support you have been provided with? Why?	KEQ2
	9. How well did you work with whānau in implementing the programme? How comfortable did you feel about working with whānau in implementing the Alert Program® (prompting their level of willingness and commitment). What do you think worked well? (post question only)	9. How well did you work with your child's teacher in implementing the programme? What do you think worked well? (post question only)	KEQ1 & KEQ2
	10. Can you think of any way the programme and/or its implementation could be improved? How? (post question only)	10. Can you think of any way the programme and/or its implementation could be improved? How? (post question only)	KEQ1 & KEQ2
<i>Closing</i>	11. Is there anything else you want to share to help us understand your experience with the programme (implementation, effectiveness, design, delivery, relevance, and coherence)?	11. Is there anything else you want to share to help us understand your experience with the programme (implementation, effectiveness, design, delivery, relevance, and coherence)?	KEQ 1, 2, 3

Table 5: Interview schedule for programme participants (school leader and programme facilitators).

	School leader	OT/MoE practitioner	Notes
<i>Introduction</i>	1. To start, can you tell me your role in the Alert Program® programme?	1. To start, can you tell me your role in the Alert Program® programme?	
	2. Can you explain how Phase 2 of the Alert Program® programme has been implemented in your school?	2. Can you explain how Phase 2 of the Alert Program® programme has been implemented in your school?	
<i>Programme design, delivery/ implementation and effectiveness</i>	3. How have you experienced the co-design process of Phase 2?	3. How have you experienced the co-design process of Phase 2?	KEQ2
	4. What do you think about the approach? Do you think this is the right approach or should we approach this design differently?	4. What do you think about the approach? Do you think this is the right approach or should we approach this design differently?	
	5. How effective do you think this approach is?	5. How effective do you think this approach is?	
	6. What are the enablers and barriers to the way the programme is being implemented?	6. What are the enablers and barriers to the way the programme is being implemented?	KEQ1 & KEQ2
	7. Can you tell me how you have experienced leading the implementation of Phase 2 of the Alert Program® at your school?	7. Can you tell me how you have experienced being involved in the different stages of the co-design process of Phase 2?	KEQ2
	8. How do you rate the overall implementation success of Phase 2 of the programme, out of 10? What is the evidence or rationale for your rating?	8. How do you rate the implementation success of Phase 2 of the programme, out of 10? What is the evidence or rationale for your rating?	KEQ1 & KEQ2
<i>Programme relevance</i>	9. What could have been done differently to make the programme more effective?	9. What could have been done differently to make the programme more effective?	KEQ1 & KEQ2
	10. What training and support from the Ministries have teachers and involved staff been given for implementing	10. What training and support from the Ministries have special support staff been given	KEQ2

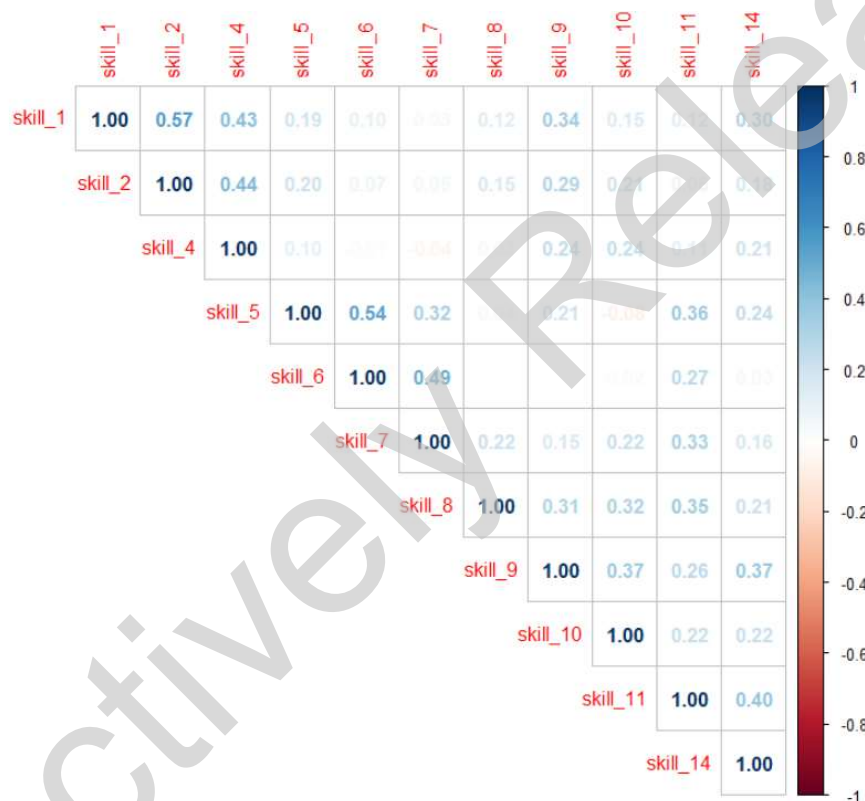
	Phase 2 of the Alert Program®?	for implementing Phase 2 of the Alert Program®?	
	11. How well do you think the collaborations between the Ministries, schools, and whānau has worked for implementing Phase 2 of the programme?	11. How well do you think the collaborations between the Ministries, schools, and whānau has worked for implementing Phase 2 of the programme?	KEQ2
	12. In what specific ways have the collaborations supported and/or hindered the implementation of Phase 2 of the Alert Program®?	12. In what specific ways have the collaborations supported and/or hindered the implementation of Phase 2 of the Alert Program®?	KEQ2
<i>Programme coherence</i>	13. What other programmes/interventions are being carried out at your school to support learners with special needs?	13. What other programmes/interventions are being carried out at your school to support learners with special needs?	KEQ3
	14. How well does the Alert Program® align with other school programmes?	14. How well does the Alert Program® align with other school programmes?	KEQ3
	15. What gaps or overlaps are there between the Alert Program® and other school programmes?	15. What gaps or overlaps are there between the Alert Program® and other school programmes?	KEQ3
<i>Improvements</i>	16. Do you have any suggestions for improvements?	16. Do you have any suggestions for improvements?	KEQ 1, 2, 3
<i>Closing</i>	17. Is there anything else you want to share to help us understand your experience and perspectives with the programme (implementation, effectiveness, design, delivery, relevance, and coherence)?	17. Is there anything else you want to share to help us understand your experience and perspectives with the programme (implementation, effectiveness, design, delivery, relevance, and coherence)?	KEQ 1, 2, 3

Factor analysis: Alert Skills Development questionnaire

Both exploratory and confirmatory factor analysis was used to explore the items (questions) within the Alert Skills Development questionnaire. The questionnaire contained 14 items, divided into 3 sub sections: identifying engine speed; experimenting with methods to change engine speed; and regulation.

Two of the 14 items were removed for having low response rates. Item 3 was also removed as it was highly correlated with item 1 for a subset of the data (teachers pre) $r(21) = 0.94$, $p < 0.05$. After these items were removed, there were no significant correlations between items (Figure 14).

Figure 14: Correlation matrix for the overall dataset (n=70).



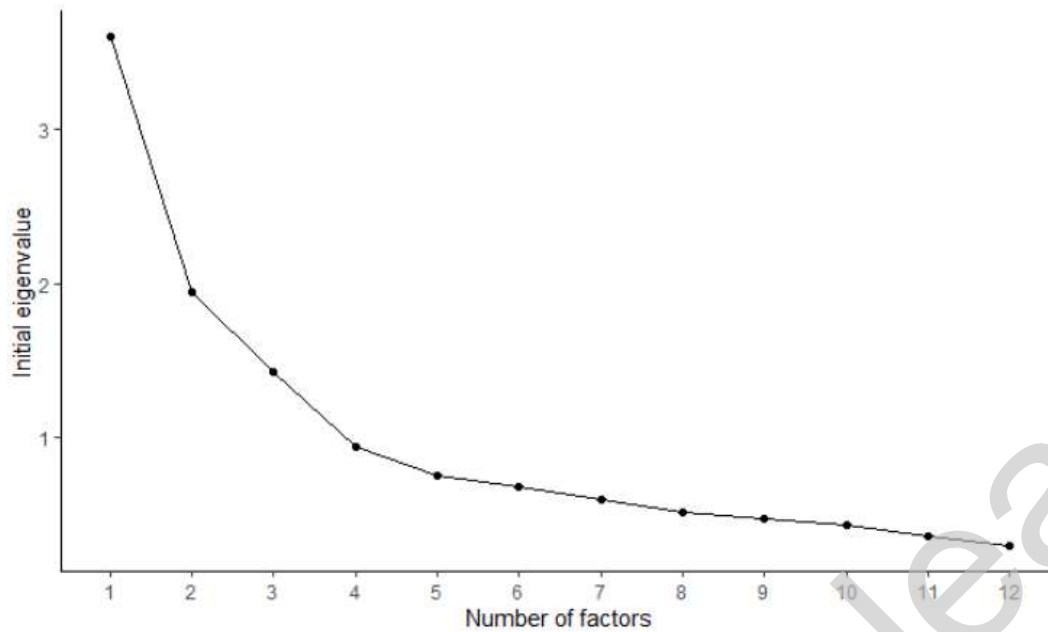
Exploratory factor analysis

As factor analysis requires a minimum of 5-10 responses per item, all the available data (teacher pre/post and parent pre) was used despite effects only being calculated for teachers. To ensure that parents and teachers did not differ significantly, and therefore that combining this data was appropriate, an ANOVA was performed on the baseline data for each construct (c.f. Figure 15).

Responses with further incomplete data were removed, resulting in $n=70$.

In the explanatory factor analysis, the Kaiser–Meyer–Olkin (KMO) coefficient and Bartlett test were analysed to make sure the data was suitable for factor analysis. The data was found to be sufficient (KMO = 0.71, Bartlett test < 0.005).

Figure 15: Scree plot illustrating the suitable number of factors.



A scree plot was then used to estimate the number of factors. The number of factors was set at 3 based on the cut-off eigenvalue score of 1 as well as the shape of the scree plot. From here the factor loadings were examined (c.f. Table 6).

Table 6: Factor loadings (loadings below 0.3 removed).

Item	Factor 1	Factor 2	Factor 3
skill_1		0.74	
skill_2		0.73	
skill_4		0.57	
skill_5	0.60		
skill_6	0.91		
skill_7	0.56		
skill_8			0.55
skill_9		0.33	0.53
skill_10			0.47
skill_11	0.35		0.57
skill_14			0.52

For the most part the factors align neatly within the questionnaire groups. There is split factor loading in items 9 and 14, however, the difference is greater than 0.1 so we prescribe the factor to the highest score. In the instance of measurement design, it would be advisable to tweak the wording of these two items, so they align more with their groups. It is worth noting that the factor loadings were also examined for both 2 and 4 factors to ensure that 3 was the best fit for this data.

Technical details assessments analysis

Table 7: Alert Skill Development teacher data analysis using paired Wilcoxon signed rank paired test (n=22 learners).

Teachers	V	Z	n	p	effect size r
Identifying engine speed	16.5	2.715	22	0.007	0.578
Experimenting with methods to change engine	58.0	0.317	22	0.751	0.211
Regulating engine speed	44.5	1.200	20	0.23	0.232

Table 8: Alert Skill Development parent data analysis using Wilcoxon signed rank paired test (n=10 learners).

Parents	V	Z	n	p	effect size r
Identifying engine speed	11.0	0.917	10	0.359	0.358
Experimenting with methods to change engine	26.5	0.421	10	0.674	0.147
Regulating engine speed	7.5	1.419	10	0.156	0.409

Table 9: SDQ teacher data analysis using Wilcoxon signed rank paired test (n=21 learners).

Teachers	V	Z	n	p	effect size r
Overall	59.5	1.689	21	0.091	0.37
Emotion	37.0	1.861	21	0.063	0.44
Conduct	34.0	1.165	21	0.244	0.25
Hyperactivity	61.0	0.507	21	0.612	0.12
Peer Problems	12.0	2.749	21	0.006	0.58
Pro social	73.0	1.284	21	0.199	0.32

Table 10: SDQ parent data analysis using Wilcoxon signed rank paired test (n=11 learners).

Parents	V	Z	n	p	effect size r
Overall	20.5	1.076	11	0.282	0.34
Emotion	17.5	0.976	11	0.329	0.30
Conduct	5.0	1.078	11	0.281	0.30
Hyperactivity	22.0	0.000	11	1.000	0.01
Peer Problems	14.0	0.503	11	0.615	0.19
Pro social	45.0	1.762	11	0.078	0.56

Table 11: Teacher implementation checklist analysis using Wilcoxon signed ranked paired test (n=10)

Teachers	V	z	n	p	effect size r
I gather and prepare...	2.0	0.288	10	0.773	0.183
Use alert language, visuals and/or tools...	6.0	1.443	10	0.149	0.548
Use positive and specific strategies...	7.5	0.800	10	0.424	0.316

Table 12: Parent implementation checklist analysis using Wilcoxon signed ranked paired test (n=7)

Parents	V	Z	n	p	effect size r
I gather and prepare...	12.5	1.273	7	0.203	0.53
Use alert language, visuals and/or tools...	10.0	1.800	7	0.072	0.756
Use positive and specific strategies...	21.0	2.164	7	0.031	0.883

Proactively Released

