

Child Well-being Research Institute

Te Kāhui Pā Harakeke









A Better Start E Tipu e Rea

Successful Learning Theme

Phase One Final Report Maruaroa | June, 2019 This research forms part of the National Science Challenge, A Better Start E Tipu e Rea.

A Better Start Challenge Directorate:

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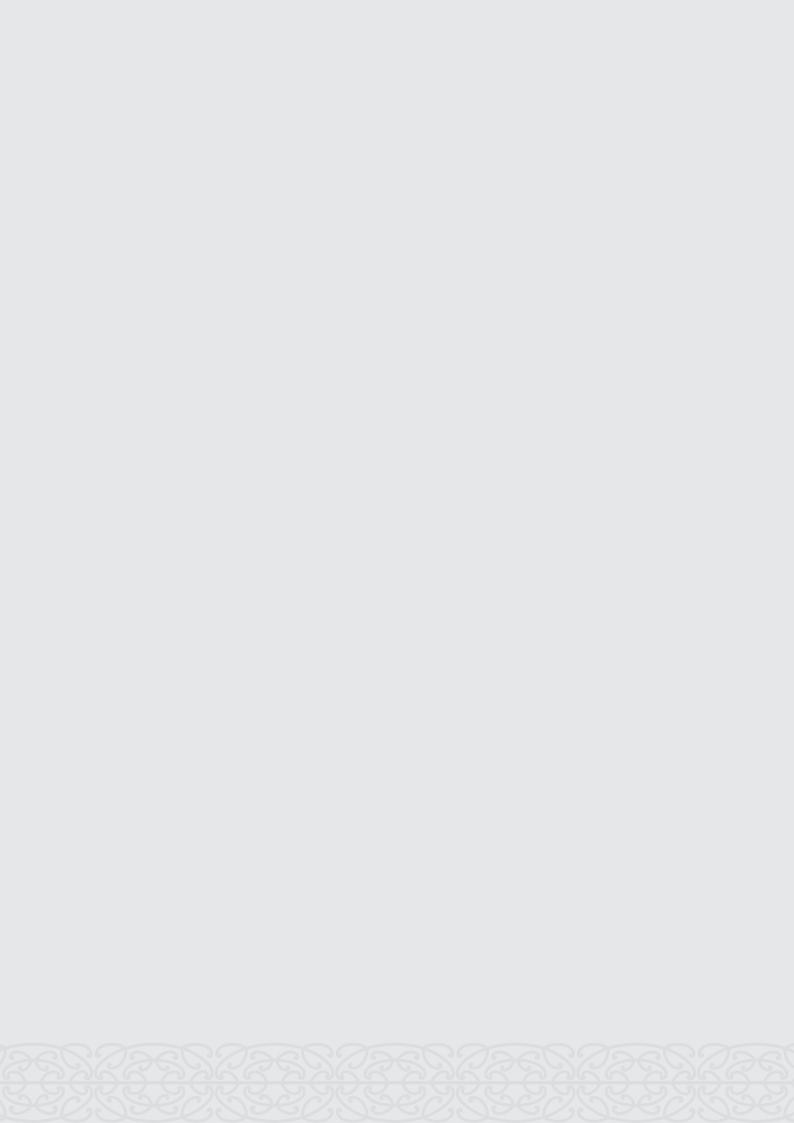






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Kupu Whakataki | Introduction

A Better Start Successful Learning theme, which commenced in 2016, is a programme of research exploring early literacy and learning achievement and healthy well-being in young children. The project comprises four interconnected studies which advance research through a 'Braided Rivers' (He Awa Whiria) approach; discerningly integrating Māori epistemologies and other science theories and braiding together education and health related disciplines.

mātauranga, nōna te ao. The one who partakes of the flora and fauna, that will be their domain. The one who engages in education,

Ko te manu e kai ana i te miro, nōna te ngahere.

Ko te manu e kai ana i te

This report provides a celebration of achievements from the first phase of funding across our four keystone projects, one contestable funding project linked to our kaupapa, the diverse range of projects undertaken by our cohort of PhD students, and an insight into the positive impact this research has had on its communities.

The four key projects of the Successful Learning theme addressed child well-being and learning from a range of different disciplines and research approaches. Project 1 used an epidemiological approach to gain a better understanding of factors that influence early literacy success within Aotearoa New

Zealand. Project 2's intervention study determined (i) the feasibility, acceptability and appropriateness of an integrated intervention approach designed to accelerate Year 1 literacy development for all children and particularly those who enter school with lowers levels of oral language ability and (ii) the feasibility and value of parent/whānau home reading workshops. Project 3's mixed method approach described the richness of 'linguistic landscapes' (the child's linguistic environment including their digital world) that help facilitate emerging bilingualism in young preschool and school-aged children. Finally, Project 4 examined the effectiveness of the

Better Start Literacy Approach used in Project 2, for children with a developmental disability (speech sound disorder).

opportunities are boundless.

In 2017, A Better Start and Cure Kids co-funded a series of projects through a contestable funding round. One of these projects aligns closely to our successful learning theme. This project investigated literacy interventions that support self-esteem/self-efficacy, and enhance positive behaviours in struggling readers.

Together, this series of projects provided a collaborative, holistic and interdisciplinary approach to supporting children's literacy and learning success and their healthy well-being.



"While this report outlines research publications, it espouses that the activities extend beyond and into the critical domains of whānau engagement, teachers' cultural awareness and effectiveness, and expresses a boldness toward making changes to achieve equitable outcomes."

Professor Angus Macfarlane Challenge Vision Mātauranga leader



Ringa Raupī, Ringa Raupā | Our People

Research Team

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Saili Lemalu Aukuso (Samoa)

Community Partners

Linwood/Aranui Early Childcare Centres Linwood/Aranui Primary Schools

Ilam School

Waimairi School

Tuahiwi School

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Resource Teachers and Learning and Behaviour – Ministry of Education

Linwood Wellbeing Hub

Te Rāngai Ako me te Hauora | College of Education, Health and Human Development Pasifika Advisory Group

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Professor Janis Paterson

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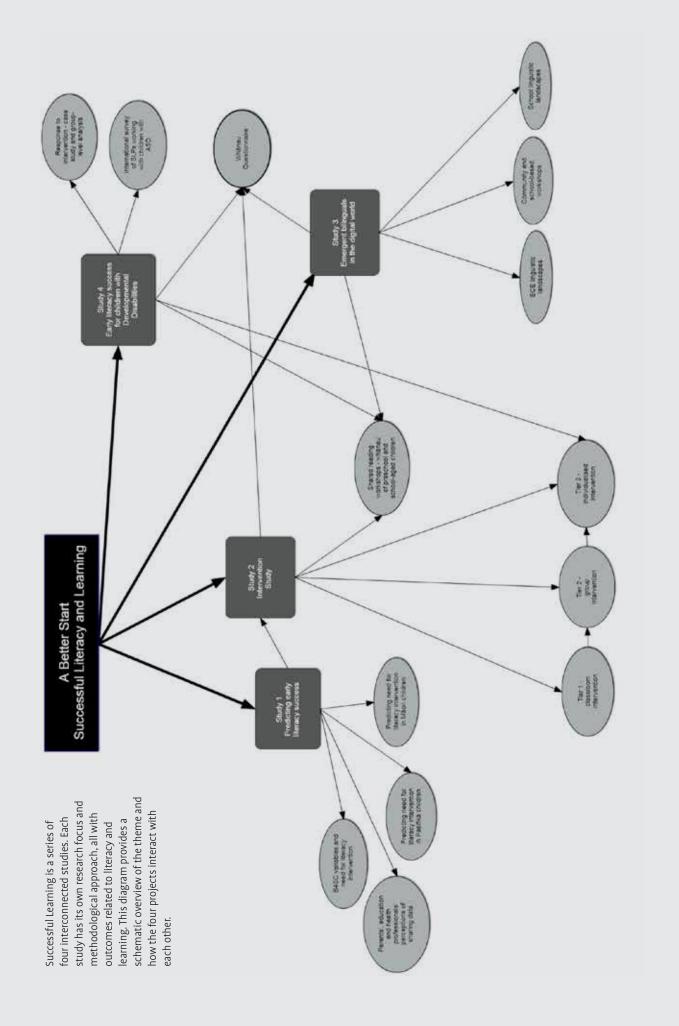
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Dr Karyn Carson Flinders University, Australia

Tirohanga Whānui | Project Overview



Pūtere 1 | Project 1 Predicting Early Literacy Success

This project's kaupapa braids together large-scale data from health and education sectors, to better understand factors that inhibit and support children's early reading success within the Aotearoa New Zealand cultural context.

Several rich, cross-disciplinary relationships have developed, providing opportunities to engage with large Aotearoa New Zealandbased data sources, including PIF (Pacific Islands Families Study) and IDI (Integrated Data Infrastructure – Statistics NZ). This enabled the publication of four manuscripts exploring facilitators of early reading success for young Aotearoa New Zealand children from a variety of perspectives.

Key findings from Project 1 include:

- Before School Check variables have useful predictive value when identifying risk factors for children receiving a literacy intervention in early primary school, however, they only tell us part of the story. A robust national screening programme will need to consider including more direct literacy measures to increase predictive power.
- Predictive modelling demonstrated
 maternal acculturation and performance
 in an early development screening test at
 4 years are two factors predicting Pasifika
 children's English receptive vocabulary at 6
 years old. These results suggest the cultural
 environment to which Pacific children are
 exposed to in early childhood plays an
 important role in their development of
 critical early literacy skills.
- 3. Cultural environment was incorporated into a prediction model for Pacific children's English-receptive vocabulary at 6 years of age, and the results emphasise the importance of maternal cultural orientation in distinguishing children with strong English-receptive vocabulary skills from those who scored below the age-appropriate range. The findings stress the importance of culturally responsive practices including engagement and co-construction of the intervention approach with the child's family, ensuring intervention content is culturally relevant and valuing the child's culture within the therapy and school context.

Project 1 Key Outputs

- Kim, H. M., Schluter, P. J., McNeill, B., Everatt, J., Tautolo, E.-S., Taleni, T., & Gillon, G. (Under review). Perceptions of Pacific children's academic performance at age 6 years: a multi-informant agreement study.
- Schluter, P. J., Kokaua, J., Tautolo, E.-S., Richards, R., Taleni, T., Kim, H. M., . . . Gillon, G. (2018). Patterns of early primary schoolbased literacy interventions among Pacific children from a nationwide health screening programme of 4 year olds. Scientific Reports, 8(1), 12368-12368. https://doi.org/10.1038/s41598-018-29939-w
- Schluter, P. J., Audas, R., Kokaua, J., McNeill, B., Taylor, B., Milne, B., & Gillon, G. (Epub ahead of print). The Efficacy of Preschool Developmental Indicators as a Screen for Early Primary School-Based Literacy Interventions. Child Development. doi: https://doi.org/10.1111/cdev.13145
- Kim, H. M., Schluter, P. J., McNeill, B., Everatt, J., Sisk, R., Iusitini, L., Taleni, L. T., Tautolo, E-S. & Gillon, G. (2019). Integrating health, education and culture in predicting Pacific children's English receptive vocabulary at 6 years: A classification tree approach. Journal of Paediatrics and Child Health.



"Findings from phase 1 stress the importance of culturally

responsive practices including engagement and co-construction of the intervention approach with the child's family, ensuring intervention content is culturally relevant and valuing the child's culture within the therapy and school context."

Professor Philip Schluter



High-quality children's books are the foundation of the Better Start Literacy Approach, providing rich vocabulary-learning opportunities and links to phonological awareness activities.

Pūtere 2 | Project 2 **Intervention Study**

The intervention study for Successful Learning aimed to facilitate early literacy success for children commencing school with lower levels of oral language ability. This study has followed 247 children in the Eastern suburbs of Ōtautahi Christchurch, through their first year of school.

The primary focus of this project has investigated the response to a classroombased intervention for 143 of these children who commenced school with lower oral language skills. The intervention is an integrated instructional approach implemented by teachers to enhance children's phonological awareness, vocabulary and letter knowledge through shared book reading and associated activities.

Several sub-projects with this community of learners have also occurred. Shared reading workshops for whānau of preschool and Year 1 children have been provided; a comprehensive kaupapa Māori whānau questionnaire has been developed and implemented; a subgroup of children have been followed through additional small group and individualised support; and a further pilot study of the classroom intervention has been conducted in a bilingual te reo Māori-English classroom.

Project 2 has exceeded expectation in all deliverable areas, including surpassing projected numbers for recruitment, forming

- relationships with several key stakeholders in the community and demonstrating positive intervention results are all tiers of the Response to Intervention framework. Key findings include:
- 1. An integrated phonological awareness and vocabulary intervention employed in New Entrant and Year 1 classrooms in highrisk populations can accelerate children's development of key early literacy skills when compared to the usual classroom literacy curriculum. Positive results were also noted in priority learner groups, including boys and Māori and Pasifika learners.
- 2. A pilot study of the same classroom intervention in a bilingual te reo Māori-English classroom demonstrated pleasing intervention gains in phonological awareness and non-word reading, and supports existing findings that growth in phonological awareness skills in L1 support the development of L2 language skills.

3. Engagement of parents or caregivers in educational research activities that support the learning of their children is mutually beneficial, but challenging. Multiple culturally-responsive and 'manaenhancing' methods can be implemented to maximise family participation and improve outcomes for children.

Project 2 Key Outputs

- Gillon, G., McNeill, B., Scott, A., Denston, A., Wilson, L., Carson, K., & Macfarlane, A. H. (2019). A better start to literacy learning: findings from a teacher-implemented intervention in children's first year at school. Reading and Writing. https://doi.org/10.1007/s11145-018-9933-7
- Schaughency, E., Riordan, J., Reese, E., Derby, M., & Gillon, G. T. (Under review). Developing a community-based oral language shared book-reading program: Exploring feasibility and social validity.
- Macfarlane, S., Gillon, G. T., Gregory, N., & Denston, A. (In preparation). Engaging families in educational research: Understanding home context for early literacy success.
- Denston, A., Martin, R., McNeill, B., Gillon, G. & Macfarlane, A. (In preparation). A classroom-based programme for facilitating phonological awareness and vocabulary development in a bilingual Te reo Māori-English setting: A collaborative, co-constructed case study.
- Scott, A., Gillon, G., McNeill, B., Denston, A. (In preparation). Engaging the research evidence to effect change in class literacy instruction.



"The Better Start Literacy Approach accelerated phonological awareness, letter knowledge and vocabulary knowledge in children who entered school with lower levels of oral language

ability. Importantly, the results indicated that the approach supported children to transfer these newly acquired skills to the reading and spelling process, helping them build critical foundational learning skills for more positive learning trajectories and life outcomes."

Professor Gail Gillon

Pūtere 3 | Project 3 Emergent Bilinguals in a Digital World

The kaupapa of Project 3 explores the intertwining of emergent bilingual development and the use of digital technologies to support the development of bilingualism in the early years of education. This project has two main strands – the gathering of 'linguistic landscapes' (descriptions of the linguistic environment) in early childhood education (ECE) and primary school settings, and the implementation of workshops to showcase best practice and increase the richness of ECE and school classroom environments to support multilingual children.

Project 3 has contributed significantly to the evolving landscape of knowledge on best practice for fostering emerging bilingualism and multilingualism in the early years. Key findings from the project include:

- The linguistic landscape of an education space, both in person and online, communicates to tamariki, whānau and the community the relative importance of all the languages and cultures.
- The presence of signs in educational settings of more than one language, as well as including cultural artefacts prompts and supports the use of multiple languages thus enabling children and adults to engage and build multilingual language and social skills.
- The digital world can be effectively deployed to strengthen connections between homes and centres to support multilingual language development.

- 4. Early childhood centres, their families and communities want guidance with strategies that can safely enrich the ecosystems of early childhood (both physical and digital) with all their children's languages.
- Co-construction of policy and practice (relating to technology and multilingualism) in educational ecosystems is essential, so that emergent bilinguals can have a better start in the digital world.

Project 3 Key Outputs

- Cunningham, U. & King, J. (2019). Greening the information desert: Supporting emergent bilinguals with research-informed workshops, *Australian Review of Applied Linguistics*, 42(1), 37–58.
- Cunningham, U., King, J., Davis, N. E., & Kim, J. (In Preparation). Policy guidance towards a better start for multilingual children in a digital world.

- Davis, N. E., Harris, L. & Cunningham, U. (2019).

 Professional ecologies shaping technology adoption in early childhood education with multilingual children. British Journal of Educational Technology, 50(3), 1320-1339. http://dx.doi.org/10.1111/bjet.12774
- Harris, L., Cunningham, C., King, J., & Stirling,
 D. (In press). Landscape design for language revitalisation: Linguistic landscape in a
 Māori immersion early childhood centre. In
 E. Krompák, V. Fernández-Mallat, & S. Meyer
 (Eds), Linguistic landscapes and educational spaces. Bristol, UK: Multilingual Matters.
- Cunningham, U., & King, J. (2018). Language, ethnicity, and belonging for the children of migrants in New Zealand. SAGE Open. https://doi.org/10.1177/2158244018782571
- Harris, L., Davis, N. E., de Vocht, L., Cunningham, U. (2018). Languages seen are languages used. The linguistic landscapes of Early Childhood Centres, *Early Education Journal*, 64, 24-28.
- Harris, L., Davis, N. E., Cunningham, U., de Vocht, L., Macfarlane, S., Gregory, N., ... Dobson, J. (2018). Exploring the opportunities and challenges of the digital world for early childhood services with vulnerable children. International Journal of Environmental Research and Public Health, 15(11), 2407.

https://doi.org/10.3390/ijerph15112407

King, J. & Cunningham, U. (2017). Tamariki and fanau: Child speakers of Maori and Samoan in Aotearoa/New Zealand, Te Reo, 60, 29-46.



"The digital world can be intentionally deployed to strengthen connections between education and homes for linguistically diverse children, including connections focused on promoting

intergenerational language transmission. Teachers, families, stakeholders and policy makers appreciate guidelines and strategies for an environment that best supports young multilingual children."

Distinguished Professor Niki Davis



Pūtere 4 | Project 4 Determinants of early literacy success and healthy wellbeing for children with developmental disabilities

Project 4 comprises a sub-sample of the 247 children participating in the Year 1 classroombased intervention (described in Project 2). This subsample are those with diagnosed developmental disabilities, and their response to the class level intervention has been evaluated.

The key outcomes of Project 4 include:

- 1. A subset of 40 children with developmental speech disorder were identified from the wider intervention group (see Project 2), and have participated in a three-tier Response to Intervention framework.
- 2. Children with speech sound difficulties in addition to lower levels of oral language showed a similar response to the intervention as children with lower oral language skills alone for phonological awareness and letter sound knowledge and accelerated growth in vocabulary learning. However, they needed additional support to transfer gains in these skills to the reading and spelling process.

Project 4 Key Outputs

Gillon, G., Hyter, Y., Fernandes, F. D., Ferman, S., Hus, Y., Petinou, K., ... Westerveld, M. (2017). International Survey of Speech-Language Pathologists' Practices in Working with Children with Autism Spectrum Disorder. Folia Phoniatrica et Logopaedica, 69(1-2), 8-19. https://doi.org/10.1159/000479063

McNeill, B., Gillon, G. T., Scott, A., & Denston, A. (In preparation). Early Literacy Development in Children with Speech Sound Disorder: Response to Class Intervention.



"The similar response of children with speech sound difficulty and

lower levels of oral language compared to children with lower levels of oral language alone adds further strength to the robustness of the Better Start Literacy Approach for children at heightened risk for persistent literacy difficulties."

Associate Professor Brigid McNeill

Te Pūtere Pūtea | A Better Start E Tipu e Rea National Science Challenge & Cure Kids 2017 Competitive Fund Project

In 2017, a team of researchers within A Better Start's Successful Learning theme were recipients of a competitive funding grant (co-funded by A Better Start and Cure Kids) to complete a project investigating ways to facilitate emotional well-being and positive behaviours in children with literacy learning difficulties. This research focused on an intervention aimed at supporting reading and writing development, but also targeted factors associated with poor self-concept and behaviour issues in children (in school years 4-6) who have experienced significant challenges in their literacy learning.

In the current project, assessments of literacy, self-concept and behaviour provided the data on which to determine effectiveness. The intervention concentrated on developing strategies for reading and spelling that made use of skills that should lead to success in word decoding/processing. There was a specific focus on language processes, including the development of vocabulary and phonological and morphological awareness. The intervention also aimed to support reading texts that were appropriate for the student's age, background and interests, thereby maintaining positive motivation.

The results for the first year of the study have provided evidence for the positive impact of the intervention. At the point when half of the students had experienced the intervention and the other half were about to undergo the intervention (a delayed intervention control group), the intervention group showed specific gains in most literacy areas compared to the waiting-control group. These differences disappeared once the waiting-control group had experienced the intervention.

The evidence suggests that this relatively short-term intervention led to specific gains in morphological awareness, word reading and spelling, and vocabulary development. There were also gains in reading comprehension, though these were smaller than found for reading accuracy.

There was also evidence of changes in measures of self-concept, self-efficacy, resilience and internalising (emotional feelings) and externalising (negative behaviours) problems. However, these latter effects developed over the course of the year, rather than immediately after the intervention, suggesting a need for the strategies developed to be used outside of the intervention and for a reasonable period of time to impact on selfconcept and resilience.

Key Output

Everatt, J., Denston, A., Prochnow, J. & Taleni, L. T. (In preparation). Facilitating emotional well-being and positive behaviours in children with literacy learning difficulties.



"This relatively short-term intervention led to specific

gains in morphological awareness, word reading and spelling and vocabulary development. Additionally, we observed a delayed positive effect on measures of self-concept, self-efficacy and resilience."

Professor John Everatt

Vision Mātauranga me te Angitu o ngā ākonga Pasifika | Vision Mātauranga and Pasifika Success

Successful Learning is committed to success for Māori and Pasifika learners, and has engaged with these key groups throughout the entire research process. In Aotearoa New Zealand, we have advanced our commitment to our tamariki learning te reo Māori and are acknowledging the significant additive benefits of bilingualism and early bi-literacy for both Māori and Pasifika students.

Successful Learning contributes to this advancement in a number of ways.

- · Our programme of research has, and continues to advance Vision Mātauranga through continued, authentic engagement and consultation with mana whenua; its focus on word learning in both te reo Māori and in English; mana-enhancing engagement with whānau; involvement of Māori researchers and doctoral students; and inclusion of Māori-based measures of learning when establishing efficacy of interventions.
- The research programme addresses a topic area of critical importance for Māori as articulated in Ministries of Education and Health strategies as well as Iwi strategy documents.
- We have engaged in collaborative research with a local bilingual school – Tuahiwi, on the adaption of the Better Start Literacy Approach to be suitable for their context.
- · We have participated in continued engagement and consultation with UC Kaiārahi and Pasifika representatives including Te Whare Wananga o Waitaha | University of Canterbury Ngāi Tahu leaders (Liz Brown, Kaiārahi Matua and Jeanine Tamati-Elliffe, Kaiārahi Māori); Amber Clarke, Te Rūnanga o Ngāi Tahu – Programme Leader, Hauora; Tufulasi Taleni, Kaiārahi Pasifika; and the Pasifika Advisory Group.

Vision Mātauranga

The programme of research undertaken in the Successful Learning theme has authentic Māori conceptualisations (ako, tuakana-teina, mana motuhake, mana tū, mana ūkaipō), and engages experienced research-award winning Māori leaders and co-leaders. In accordance with a Treaty approach, we have collaborated with some of the best and most culturally attuned researchers, Māori and non-Māori within our sphere of operation, and have identified emerging researchers to grow their

respective talents. Our VM approach resonates with Durie's three goals for Māori - to live as Māori, to enjoy good health, and to be globally connected. These are evident within the objectives and activities of the projects described in this report. While the report outlines research publications, it espouses that the activities extend beyond and into the critical domains of whanau engagement, teachers' cultural awareness and effectiveness, and expresses a boldness toward making changes to achieve equitable outcomes.

Pasifika Success

Lifting the educational achievement and success of Pasifika students is one of the key priorities in our New Zealand Education system. As Pasifika leaders in education and the community, a clear strong focus on the impact of effective leadership is critically important in leading and bringing about worthwhile changes in creating opportunities to develop strategies, supports and initiatives to assist Pasifika students making a better start in their early learning success and wellbeing. 'It takes a whole village to raise a child', and it takes effective leadership to bring everyone involved together to make a better start for Pasifika learners in their learning and wellbeing.

Selected Outputs

Macfarlane, A., & Macfarlane, S., Teirney, S., Kuntz, J.R., Rarere-Briggs, B., Currie, M., Gibson, M. & Macfarlane, R. (2019). The Hikairo Schema: Culturally responsive teaching and learning in early childhood settings. Wellington, NZ: NZCER Press.

Macfarlane, A., Macfarlane, S., Derby, M., & Webber, M. (2018). Bridges to success for Māori: An aspirational lens. Psychology Aotearoa, 10(1), 11-15.

Macfarlane, A., Macfarlane, S., & Curtis, T. (2018). Navigating Kaupapa Māori fields of knowledge: Perspectives, provocations, and pathways. Kairaranga Journal of Educational Practice, 9-14.

Taleni, T., Macfarlane, A., Macfarlane, S. & Fletcher, J. (2018). O le Tautai Matapalapala: Leadership strategies for supporting Pasifika students in New Zealand schools. Journal of Educational Leadership, Policy and Practice (JELPP) 32(2), 16-32.

Taleni, T., Macfarlane, S., Macfarlane, A. & Fletcher, J. (2018). Tofa liuliu ma le tofa saili a ta'ita'i Pasifika: Listening to the voices of Pasifika community leaders. The New Zealand Journal of Education Studies (NZJES), 53(2), 177-192.



"There is always an expectation from Pasifika families for

their own children to perform well academically without losing their identity, language and culture in/through the process of achieving and succeeding – being successful as a Pasifika learner is an important part of what success looks like for Pasifika."

Leali'ie'e Tufulasifa'atafataf Ova Taleni -Kaiārahi Pasifika

Ngā Tāura Kairangi | Doctoral Students

Phase 1 of A Better Start's Successful Learning theme has supported five exceptional scholars to complete their Doctoral research in the area of children's literacy, health and wellbeing.

Saili Lemalu Aukuso

SAILI E MANU: Identifying the most effective strategies in early literacy learning of emergent bilingual learners in a multicultural New Zealand - Pasifika context

This research explores how education supports the goal of securing early literacy success for children growing up as bilingual. The primary focus of this project has been the development of New Zealand's first phonological awareness assessment tool for Samoan-speaking children. Data on 100 participants (Year 2, 6-year-old Samoan children) in four schools in Samoa has been collected to establish a baseline of phonological awareness development in native Samoan speakers. This research will support educators in both Samoa and New Zealand to evaluate phonological awareness development in Samoan-speaking children, and in children who are emerging bilingual in English and Samoan, and to monitor the impact of early classroom instruction on developing these foundation skills that are critical for early literacy success.



PhD student, Saili Aukuso, travelled to Samoa to support the development of a Samoan phonological awareness assessment tool (SEPA).

Melissa Derby

Ngāti Ranginui

Restoring Māori Literacy Narratives to Create Contemporary Stories of Success. Ko te kai a te rangatira he korero. Discussion is the food of chiefs

This research explored literacy with bilingual four-year-old children attending a dual language (te reo Māori and English) early childhood centre in Ōtautahi Christchurch. More specifically, it sought to determine the efficacy of a home-based literacy intervention, which used traditional Māori pedagogy and practices, in supporting Māori children's emerging literacy skills. It focused on two key sets of cognitive skills - phonological awareness, and aspects of oral language, including vocabulary knowledge, and story comprehension and retell skills. The researcher worked with eight whanau, and explored the influence of the home literacy environment on children's literacy acquisition, as well as the effects of the intervention on both the home literacy environment, and the aforementioned cognitive skills. The findings from the various series of data reported in this thesis, interpreted through statistical and sociocultural lenses, indicate that the intervention trialled in this work was effective in creating shifts in whānau literacy practices, attitudes, and the home literacy environment in general. Furthermore, the intervention had a substantial effect on the phonological awareness skills, and aspects of oral language proficiency, of the children participating in this study.

Nikita Gregory

Sharing Student Health Information with Teachers - Principles and Perceptions

The realisation of the value of data sharing, and the extended capability for collaborative practice, has led to the growing development of data sharing systems between organisations and sectors. In the school environment, sharing a student's health information may facilitate how schools and teachers manage health conditions and provide additional support and interventions both in and out of the classroom. These additional supports and tailored interventions may improve academic achievement, whānau and community engagement and the holistic health of students. Sharing tapu and sensitive information however does not come without its risks and concerns from parents and teachers. In order to protect this information, there is a growing need for governments to provide direction in the collection, use and management of this information, monitor the use of such information containing to its' citizens, and understand public perception when utilising this information within their own practice. This research will discuss current legal and ethical frameworks of sharing information in Aotearoa New Zealand, establish a health profile of students with low oral language skills, and discover what key stakeholders' perceptions are regarding sharing students health information with schools. It aims to consider the future development of a culturally responsive digital health information sharing system, that will improve the academic outcomes of students whose health could negatively impact their academic development.

Leona Harris

The language environments of young emergent bilinguals growing up in a digital world

Language, literacy and learning occur across all environments (both physical and digital) and across entire linguistic repertoires of emergent bilinguals. An important way educators and policymakers can value and support bilingual and multilingual children's use of all their languages is to include their language and related cultural artefacts in their linguistic landscapes. This research describes the linguistic landscapes of seven early childhood centres and five primary schools to understand the language and digital technology policies and practices in the physical and digital environments of young emergent bilinguals, with a focus on educational services and their links with whānau. The two-phase data collection consisted of photos, screenshots, videos of linguistic landscapes and interviews with teachers and whanau. Findings show that Māori language visibility in educational environments increased significantly over one year, indicating development aligned with curriculum guidelines and a commitment to work within the bilingual context of Aotearoa New Zealand. Other heritage languages were less visible and teachers expressed a need for further support to engage with the diverse languages and cultures of children. Support and use of children's heritage languages were enhanced by working in partnership with the children's whānau to increase the value and authenticity of their languages.

Alice Kim

Determinants of learning success among Pacific children aged 6 years in New Zealand

This study aimed to identify and analyse common traits among successful Pacific learners by integrating elements from health, psychosocial, socioeconomic and cultural domains into predicting Pacific children's early learning outcomes using data from the Pacific Islands Families Study. In recognition of ethnic, linguistic and cultural diversity inherent in Pacific population, the study explicitly incorporated a measure of cultural orientation into a quantitative research framework thus demonstrating that cultural and linguistic environments matter to Pacific children's early language development. The empirical findings emphasised the importance of cultural considerations and improving home-school communication and cultural continuity for achieving optimal intervention and academic outcomes. In addition, the ethnic-specific analyses revealed some important differences across Pacific ethnic groups suggesting that a cultural specific approach could better serve Pacific children and their whānau. The research also highlights the importance of reflecting holism and using an integrated framework in studying educational and wellbeing outcomes of Pacific children. This was evidenced by the significance of healthy birthweight, early childhood development and maternal cultural orientation on children's early language development. The study reaffirms the need for better intersectoral coordination and provision of wrap-around support for Pacific children to optimise service outcomes.



"The opportunity to complete my PhD research through A Better Start has been fantastic. Working with such a diverse range of world-leading experts from multiple disciplines has been the most

amazing learning experience and one I know will hold me in good stead for my future career."

Alice Kim Doctoral student

A Better Start at Bromley School

Teachers at Bromley School found that introducing initiatives from A Better Start – National Science Challenge, Successful Learning theme, improved children's experience in the classroom and upskilled their professional practice as well.

With support from researchers from the Child Well-being Research Institute and A Better Start Successful Learning theme at the University of Canterbury | Te Whare Wānanga o Waitaha, Bromley school adopted the framework in term 3, 2017.

"It made us increase our expectations of what children are able to achieve – particularly around using higher quality children's books and more sophisticated language," Bromley School teacher Lindi Newth says. "Before this programme, we would have used simpler stories and less complex language with this five and six-year-old age group."

Other techniques were uncomplicated, but effective, Lindi says. "We noticed a big improvement in children's ability to hear and record sounds in words when writing, and to use this as a strategy to read unknown words. It increased teacher knowledge in Phonological Awareness."

"We also learnt simple things such as not simultaneously teaching letters and sounds

that sound or look the same. This is just one example of something really simple that is having a big impact on student learning."

The first years of school establish foundational literacy skills that influence later academic success, yet in Aotearoa New Zealand there are significant challenges to raising literacy success for all children. Director of the UC Child Well-being Research Institute and Principle Investigator on A Better Start's Successful Learning theme, Professor Gail Gillon says "of particular concern is the large gap between our highest and lowest performing readers, as shown by the 2016 PIRLS (Progress in International Reading Literacy Study) data. We need to focus more on what contributes to literacy success, especially for priority groups - Pasifika and Māori learners, and boys. Literacy success not only positively influences academic achievement, but also social and emotional well-being."

Researchers from the Child Well-being Research Institute explore this important area of child development from a range of academic perspectives and, most importantly, they share their knowledge with the sector and support teachers with practical strategies that they can implement in classrooms to improve teaching practice.

"Children's attitudes towards themselves as a person and as a learner are formed in the early years," Lindi says. "This is with them for life. If we get this right, this has positive effects on their mental, social and economic well-being, as well as positively influencing the social and economic well-being of the country."

The knowledge emerging from the UC Child Well-being Research Institute, through A Better Start - National Science Challenge, is making a difference in the sector. "This work is crucial," Lindi says. "Please keep doing it and reporting back to us."

Breeze Robertson
UC Senior Communications Advisor



He Ara ki Mua | Future Directions



Phase 2 of A Better Start will begin in July of 2019.

The research proposed in phase 2 will extend research findings from the first phase of our Successful Learning theme in several important ways:

- It will extend the first phase research programme through the strong integration of early learning success with building resilience for our young tamariki's mental well-being.
- It will integrate developing knowledge of our Māori and Pasifika learners, and factors that facilitate their literacy and learning success. Firstly, through acknowledgement of factors that successfully engage whanau in supporting their children's learning in mana-enhancing ways; secondly, through a developing understanding of Pasifika perceptions of early learning success; thirdly, through pilot literacy intervention work in bilingual whānau, preschool and Year 1 contexts; and finally, through extended understanding of the linguistic environments that foster learning for multilingual children.
- It will advance the successful pilot intervention involving 23 Year 1 classes in accelerating children's vocabulary and phonological awareness skills through greater consideration of effectiveness in bilingual and immersion Year 1 literacy contexts, and advancing these skills in a younger age cohort of 3-6 year old children to optimise intervention outcomes.
- It will utilise developing knowledge of the wide range of different variables (including hearing, vision, BMI, developmental and behavioural/emotional factors and demographic factors such as ethnicity, sex and deprivation) that are shown to be associated with the likelihood of young children receiving a literacy intervention. This knowledge provides support for the need to consider wider factors of health and well-being as they relate to children's oral language such as word learning.

Our theme has secured two additional research grants that are aligned with expanding the learnings from phase 1.

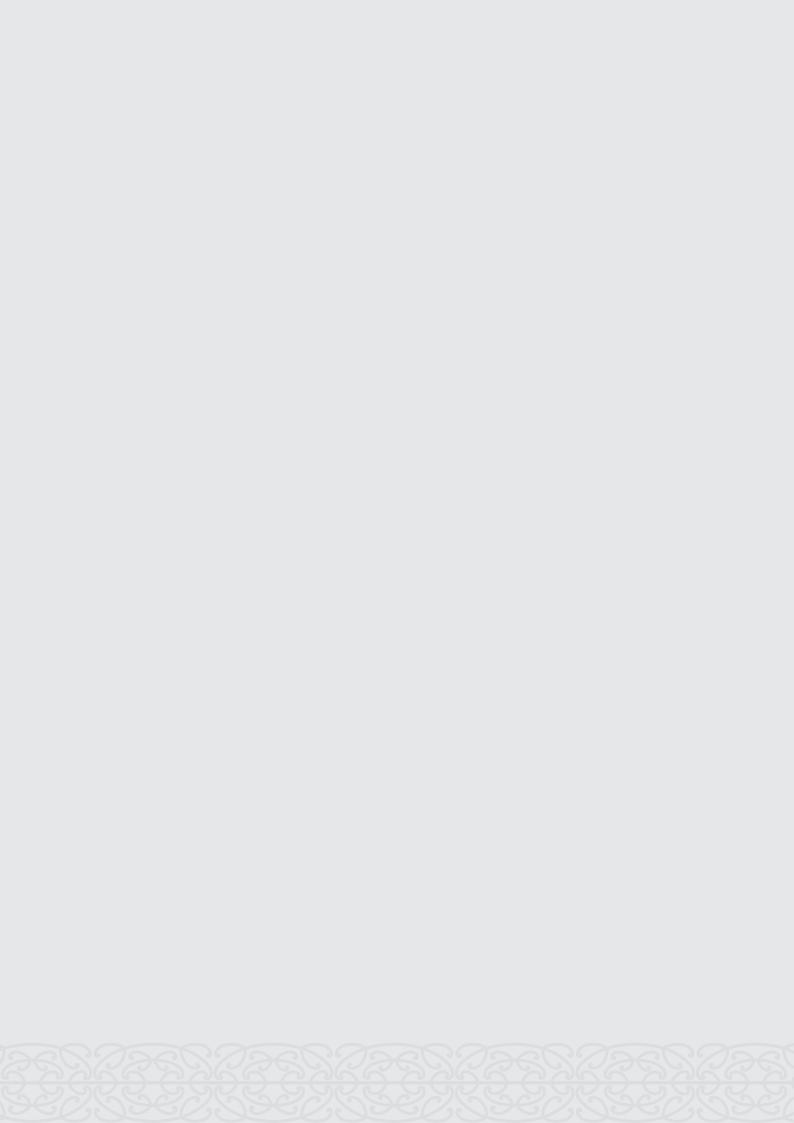
- Rātā Foundation will provide support to undertake aspects of a preschoolbased longitudinal study evaluating the impact of research informed professional development provided to Early Childhood Teachers in Waitaha Canterbury on 3 and 4 year old children's key foundational knowledge (oral language, word learning, print concept knowledge and selfregulation behaviours) to better support children's well-being and their successful transition to school. The funding is for the period June, 2019 - June, 2021.
- Te Tāhuhu o te Mātauranga | Ministry of Education will support an extension of the classroom-based intervention study focused on enhancing the foundational learning skills across curriculum areas for children in mainstream English classrooms in Year 1 and in Year 8. Aspects of this Ministry contract includes extending the Better Start to Literacy Approach in Year 1 classes across two Kāhui Ako (in Tāmaki Makaurau Auckland and in Ōtautahi Christchurch). It has a particular focus on understanding how to accelerate foundational learning skills in children who are at risk for persistent educational challenges and those currently experiencing learning difficulties (including children with dyslexia, dyspraxia and Autism Spectrum Disorder).

Our theme also looks forward to welcoming three new PhD students to the research team in areas of aligned research.

Tūtohu Paearu Matua Key Performance Indicators

Responding to A Better Start Key Performance Indicators (KPIs) is an ongoing focus of the Successful Learning theme. This section highlights a selection of key KPIs targeted by our theme, and how we have meet or have exceeded these targets.

КРІ	Our actions
Projects will demonstrate clear co-creation methodology	We have actively engaged with community and stakeholders throughout the design and implementation of the intervention study; our research team includes members from differing disciplines and institutions; and we have an ongoing commitment to collaborate cross-culturally, with our team comprising several Māori and Pasifika investigators, PhD students and advisors.
Early career researcher involvement in projects	The Successful Learning theme has a high proportion of early career researcher involvement, including Research Fellows, PhD students and research assistants.
Projects will include public media engagement and announcements of Challenge activities across all communication forums (print, broadcast, digital and social media)	Our theme engages with public media through a variety of forms. We produce a quarterly newsletter, which is distributed to 300+ subscribers; we have been involved with several local and national news media providers via print and broadcast mediums, both in English and Samoan; we produced a promotional video for sharing on social media channels; and provide regular updates on our theme's activities for inclusion in the wider A Better Start newsletter and on the A Better Start Facebook page. We have hosted two research symposia in 2017 and 2019, which were very well attended by both practitioners and researchers. Ongoing engagement has occurred with several workshops hosted across the projects with both a co-construction and dissemination focus, huis with Māori and Pasifika Advisory Groups, and meetings with representatives from health and education sectors.
Evidenced-based guidelines are developed for teachers and parents for appropriate use of digital technologies to foster emerging bilingual literacy development	Project 3 contributes strongly to this KPI through the gathering of linguistic landscapes with exemplars of best practice that include the languages of all children in early childhood education, particularly English, Māori and Samoan. These findings have been used to create resources and guidelines for fostering multilingualism. The <i>EBinDW website</i> has been created to house these resources, and workshops have engaged with and shared findings with community and stakeholders.
Research will demonstrate improvement in literacy in year 1 children, notably Pacific and Māori children and those from less affluent families	Results from Project 2's intervention study have demonstrated the positive impact of the intervention to accelerate the literacy development of children with lower levels of oral language in a community with a high proportion of Māori, Pacific and children from low-socioeconomic families benefiting from the programme. Further work in this area has been advanced through the collaborative research project in an immersion te reo Māori/English school around adapting the literacy intervention to best suit this bilingual language learning context. In addition, the development of phonological awareness assessments has occurred, in te reo Māori and Samoan, allowing for culturally responsive assessment for these priority groups.



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www.canterbury.ac.nz/education/research/a-better-start-literacy-and-learning-theme/www.abetterstart.nz/