



National Science Challenge – A Better Start: E Tipu e Rea

Literacy and Learning Research Symposium Programme

October 26th - 27th, 2017

College of Education, Health and Human Development
University of Canterbury

National
Science
Challenges

A BETTER
START

E Tipu e Rea

*Ko te manu kai i te miro nōnā te ngāhere.
Ko te tamaiti kai i te kōrero pukakuka, nōnā te ao.*

*The bird that partakes of the berry, has the reigns of the forest.
The child who masters reading, has the access to the world.*

UC
UNIVERSITY OF
CANTERBURY
Te Whare Wānanga o Waitaha
CHRISTCHURCH NEW ZEALAND

E ngā waka o te motu, kia hiwa rā, kia hiwa rā. E nga manukura o te ao mātauranga, piki mai, nau mai, haere mai ki te Whare Wānaga o Waitaha mo tēnei hui akoranga.



National
SCIENCE
Challenges

A BETTER
START

E Tipu e Rea

The University of Canterbury is proud to be a part of the National Science Challenge - A Better Start: E Tipu e Rea (*grow and branch forth*).

A Better Start National Science Challenge is a \$34Million Challenge over 10 years, funded through the Ministry of Business Innovation and Employment. The Challenge is focused on research to improve outcomes for our young people in relation to being a healthy weight, having successful learning experiences through establishing strong foundational language and literacy skills and being mentally well, thriving within their communities.

The Challenge is focused on drawing together leading researchers from different disciplines across institutions who are engaged and connected with community, to create innovative solutions to ensure success for all New Zealand children. The Challenge is particularly focused on meeting aspirations for our Māori and Pasifika communities and for children who face significant challenges in realising their potential. The Challenge is guided by Vision Mātauranga Māori – principles focused on enhancing the potential of Māori. The Challenge has adopted a “braided rivers approach” in braiding together knowledges from Māori and western science as well as braiding knowledges and methodologies from different disciplines and clinical practices that support children’s healthy development, education and overall wellbeing.

At the University of Canterbury we have a number of leading researchers and doctoral students engaged in the learning and literacy theme of the Challenge. Together with their research collaborators from the University of Otago, University of Auckland, Auckland University of Technology, Massey University, and their community partners in New Zealand as well as their Australian research collaborators at Flinders University and Griffith University, they are involved in a series of interrelated projects to advance our knowledge of children’s learning success and healthy wellbeing. This Literacy and Learning Symposium showcases a number of these research projects embedded in the Challenge. The symposium also provides our community with an exceptional opportunity to hear world-leading experts discuss critically important topics to ensure young children’s learning and literacy success. We are most grateful to our international colleagues and keynote speakers for their valuable contributions to our symposium.

I would like to warmly welcome you to our 2017 Literacy and Learning Research Symposium. On behalf of our University and the Better Start National Science Challenge I would like to thank you for your participation and hope you enjoy the exciting programme of research presentations, poster session and panel discussions we have prepared.

Ngā mihi nui,

Professor Gail Gillon
Pro Vice Chancellor
College of Education Health and Human Development
University of Canterbury
Co-Director of the A Better Start National Science Challenge

Better Start National Science Challenge Directorate: Director, Prof Wayne Cutfield, Liggins Institute University of Auckland; Co-Director, Professor Gail Gillon, University of Canterbury; and Co-Director Professor Barry Taylor University of Otago.

Vision Mātauranga Leader: Professor Angus Macfarlane University of Canterbury.

For further details visit <http://www.abetterstart.nz/en.html>.

Day 1

Thursday 26th October



8.30am	Registration
8.50-9.00am	<i>Mihi and welcome</i>
9.00-9.15am	Professor Gail Gillon and Professor Angus Macfarlane <i>Overview of the A Better Start National Science Challenge and Vision Mātauranga</i>
9.15-10.30am	Session Chair: Professor Gail Gillon Professor Laura Justice (Ohio State University) <i>Keynote: Fostering reading at home: overcoming barriers that impede parent-child reading</i>
Morning Tea	
Session Facilitator: Dr Amy Scott	
11.00-11.30am	Professor Bill Tunmer (Massey University) <i>The cognitive foundations of reading and its acquisition: a conceptual framework for reading intervention</i>
11.30-12pm	Professor Gail Gillon (University of Canterbury) <i>Integrated phonological awareness and vocabulary intervention to facilitate early literacy success</i>
12-12.30pm	Professor John Everatt (University of Canterbury) and Professor Malt Joshi (Texas A&M University) <i>Interventions for children with dyslexia from different language backgrounds and with additional emotional/behavioural difficulties</i>
Lunch and Interactive Research Poster Session	
Session Facilitator: Dr Lesieli Tongati'o	
1.45-2.15pm	Professor James Chapman (Massey University) <i>Phonics use in literacy instruction: when intention and implementation collide</i>
2.15-2.45pm	Dr Elizabeth Schaughency (Otago University) <i>Nurturing shared reading with preschool children: New Zealand examples</i>
2.45-3.15pm	Dr Karyn Carson (Flinders University) <i>Raising school-entry reading readiness through preschool-wide phonological awareness and phonics instruction</i>
3.15-3.45pm	Professor Barbara Dodd (University of Melbourne) and Dr Daniela Gatt (University of Malta) <i>Identifying delayed bilingual development early: the case of children growing up in Maltese-speaking families</i>
3.45-4.00pm	Professor Angus Macfarlane <i>Reflections on the day</i>
4.15-6.15pm	Drinks and networking : UC Staff Club (Cash bar; nibbles provided)

Day 2

Friday 27th October



8.50am	Professor Gail Gillon and Professor Angus Macfarlane <i>Welcome to day two</i>
9.00-9.50am	Lynne-Harata Te Aika (Te Rūnanga o Ngāi Tahu) <i>Keynote: Intergenerational bilingual literacy</i>
9.50-10.30am	Expert panel discussion on priority areas for young children's literacy and learning success
Morning Tea	
Session Facilitator: Dr Amanda Denston	
11.00-11.30am	Professor Ilsa Schwarz (University of Tennessee – UC Erskine Fellow) <i>Teacher talk: the oral and text-based vocabulary used by kindergarten teachers.</i>
11.30-12pm	Professor Philip Schluter (University of Canterbury) <i>Do pre-school socio-demographic and health developmental indicators predict the future utilization of early primary school-based literacy interventions: a national population study</i>
12-12.30pm	Associate Professor Brigid McNeill (University of Canterbury) <i>Literacy development in children with speech and language difficulties</i>
Lunch; poster displays continue from Day 1	
Session Facilitator Tufulasi Taleni	
1.30-2.00pm	Distinguished Professor Niki Davis (University of Canterbury) <i>Emergent bilinguals in a digital world</i>
2.00-2.30pm	Expert panel discussion on engaging communities for success
2.30-3.00pm	Associate Professor Sonja Macfarlane (University of Canterbury) <i>Creating an authentic research community: Engaging whānau in a National Science Challenge</i>
Professor Gail Gillon Closing remarks	

Presentation Abstracts – Day 1

Fostering reading at home: overcoming barriers that impede parent-child reading

Keynote Speaker: Professor Laura Justice (Ohio State University)

Read-alouds in the home environment have positive impacts on young children's language and literacy skills. In this presentation, I first describe these impacts, and then discuss barriers that prevent children from experiencing frequent read-alouds at home. Finally, I present evidence-based strategies for increasing children's exposure to read-alouds at home.

The cognitive foundations of reading and its acquisition: a conceptual framework for reading intervention

Professor Bill Tunmer (Massey University)

Dr Wes Hoover (American Institutes for Research)

The aim of this presentation is to provide an overview of a conceptual framework designed to help reading professionals better understand what their students are facing as they learn to read in alphabetic writing systems, including students learning to be biliterate. As a consequence of the work of the US National Reading Panel, increasing attention has focused on five instructional components for improving reading outcomes: phonemic awareness, phonics, fluency, vocabulary, and comprehension. However, the Panel did not elaborate on how the "big five" instructional components impacted the cognitive-developmental capacities underlying learning to read. It presented these instructional components as a list without explicitly addressing their interrelations, either in terms of instruction or cognitive development. In contrast, the Cognitive Foundations Framework aims to build a broad understanding of what is cognitively required for learning to read, laying out the relationships between the cognitive requirements. The central claim of this presentation is that what is needed to help intervention specialists achieve better outcomes is a clearly specified conceptual framework of the cognitive capacities underlying learning to read that provides the basis for an assessment framework that in turn is linked to evidence-based instructional strategies for addressing the literacy learning needs of students.

Accelerating early literacy success in Year 1 children who have lower levels of phonological awareness and oral language ability

Professor Gail Gillon (University of Canterbury)

Associate Professor Brigid McNeill (University of Canterbury)

Dr Amy Scott (University of Canterbury)

Dr Amanda Denston (University of Canterbury)

Dr Karyn Carson (Flinders University)

Professor Angus Macfarlane (University of Canterbury)

This session will present the preliminary findings from the year 1 literacy intervention study within the Better Start National Science Challenge. Using a delayed intervention class-group design, data from 173 children in their first year at school who presented with challenges for early literacy success (i.e., low levels of performance on phonological awareness, letter knowledge and oral language measures) were analysed pre- and post-intervention. The intervention comprised structured phonological awareness and vocabulary activities focused on a storybook theme. The

class teacher implemented the instruction 4 sessions per week (30 minutes sessions) over a 10 week period at a large group or class level. That is; the children with weakness in their oral language skills who were the focus for this study were engaged in activities with their class peers. The data supported strong treatment effects. Children in group 1 (who received the intervention first) made significantly more progress in their phonological awareness, word decoding ability and expressive vocabulary than children in group 2 who received their usual curriculum programme during the same time period. When children in group 2 received the intervention their progress in phonological awareness word decoding and expressive vocabulary accelerated to a similar (or better) level to children in Group 1. When both groups had received the intervention at the class level x % showed strong performance in PA and word decoding with X percent being identified for small group work to further develop their PA and vocabulary skills (Tier 2 of the intervention programme). This is one of the first studies internationally to demonstrate a transfer effect to word decoding ability from class level intervention for children with lower levels of oral language.

Interventions for children with dyslexia from different language back-grounds and with additional emotional/behavioural difficulties

Professor John Everatt (University of Canterbury)

Professor R. Malatesha Joshi (Texas A&M University)

The manifestation of reading difficulties can vary across languages and orthographies. Based on the findings across language contexts, the first part of this talk will consider a Componential Model of Reading (CMR) that includes three components: a cognitive component, which is based on the Simple View of Reading; a psychological component, consisting of motivation and interest; and an ecological component, which includes home environment, dialect, and orthography. The CMR can be applied for assessment and intervention of reading problems across different orthographies and provide a basis on which to understand interactions between the components. Consistent with such interactions, experiences of reading failure can lead to negative feelings about learning, poor self-concept and behavioural problems. Interventions discussed in the second part of this talk focused on ways to support literacy development while targeting factors associated with educational experiences, particularly among children from multilingual backgrounds. Results indicated improvements in self-concept and a reduction in negative behaviours, as well as the development of literacy skills. However, interactions between these factors argue for further research: e.g., a focus on literacy developing may be appropriate with younger learners, but additional strategies targeting resilient self-efficacy and self-regulated behaviours may be needed for older learners.

Phonics use in literacy instruction: when intention and implementation collide

Professor James Chapman (Massey University)

Dr Keith Greaney (Massey University)

Dr Alison Arrow (Massey University)

Professor William Tunmer (Massey University)

New Zealand's approach to literacy instruction is predominantly whole language. Many children when learning to read are disadvantaged by this approach. Explicit code-orientated literacy instruction is not favoured, however, most teachers are believed to include phonics in their literacy lessons. No study has been reported on phonics use in New Zealand schools. We surveyed 974 primary school teachers on the use of phonics instruction. We also assessed knowledge of basic

language constructs essential for early reading success with 55 teachers participating in a professional development program designed to enhance the explicit teaching of word-level skills. A word identification prompt task based on 6 common word error scenarios experienced by beginning readers was also administered. 85% to 90% of teachers indicated they used phonics in their literacy instruction. Knowledge of basic language constructs was variable: phonological and phonemic knowledge were generally good, but understanding of phonic and morphological constructs was relatively weak. Only 40% of initial word identification prompts were focussed on word-level information; the remainder (60%) were based on context or were non-specific. The implications of these findings for beginning readers are discussed.

Nurturing shared reading with preschool children: New Zealand examples

Dr Elizabeth Schaugency (Otago University)

Professor Elaine Reese (Otago University)

Jessica Riordan (Otago University)

Melissa Derby (University of Canterbury)

Dr Leanne Wilson (University of Canterbury)

Professor Gail Gillon (University of Canterbury)

During the preschool years, interactions between adults and children provide important contexts for children's learning. Intuitively, shared reading presents opportunities for fostering children's developing emergent literacy skills, although research suggests that learning opportunities may be more powerful when adults and children actively engage and participate during shared reading. This presentation describes efforts to support kaiako in interactive shared reading and oral language interactions with young children. Efforts were informed by international research, New Zealand policy, initiatives, and research, and engagement with early childhood communities and guided by a desire to work from a strength-based perspective that acknowledges the funds of knowledge of kaiako – their knowledge of their children and their experiences – as important resources for supporting children's learning and development. Work to date suggests: Learning how to support children's learning and developed is desired by kaiako; efforts may add to the kete of strategies kaiako use during shared reading; specific strategies may be associated with specific benefits for children's early literacy and learning. Promising findings support future efforts to: effectively engage more families and early childhood communities, support use and adaptation to meet differing needs of families and children, and extend work to other areas of learning and development.

Raising school-entry reading readiness through preschool-wide phonological awareness and phonics instruction

Dr Karyn Carson (Flinders University)

Dr Anne Bayetto (Flinders University)

This presentation will report the results of a study that investigated the effect of preschool-wide, teacher-implemented, phonological awareness (PA) instruction, focused at the phoneme-level, juxtaposed with letter-sound knowledge (LSK), on raising code-based reading readiness among 4-year-old children with Developmental Language Disorder (DLD) and typical development (TD). Ninety-nine 4-year-old children participated. In the experimental condition, 55 children, inclusive of 15 children with DLD, received 10-weeks of preschool-wide, teacher-delivered, phoneme-focused, LSK instruction twice a week integrated into existing preschool activities. In the control condition,

44 children, inclusive of 11 children with DLD, continued with the usual preschool program. Children in the experimental condition performed significantly higher on measures of phoneme awareness ($p=.024$, $d=.48$), LSK ($p=.012$, $d=.28$) and early decoding attempts ($p=.006$, $d=.55$) compared to control children. Similarly, children with DLD in the experimental condition performed significantly higher in phoneme awareness ($p=.007$, $d=.77$) and LSK ($p=.001$, $d=.32$), but not in early decoding attempts ($p=.310$, $d=.04$), compared to children with DLD in the control condition. Preschool-wide phoneme-focused PA and LSK instruction can enhance knowledge of code-based skills for children with DLD and TD in the months leading up to school-entry. A focus on transferring PA and LSK skills to decoding is needed for children with DLD.

Identifying delayed bilingual development early: the case of children growing up in Maltese-speaking families

Professor Barbara Dodd (University of Melbourne)

Dr Daniela Gatt (University of Malta)

Maltese children grow up in a bilingual context where Maltese and English are majority languages. For most children, exposure is predominantly Maltese, with English input being largely fragmented. This presentation first outlines the characteristics of this distinct language-learning context. It then synthesises the more important lexical findings reported for children receiving Maltese-dominant exposure, in order to derive implications for the early identification of language delay in this under-researched population. Language delay may be the first sign of developmental language disorder which, in turn, is highly comorbid with literacy difficulties. Main findings from three studies, two based on Maltese children and one comparing early bilingual vocabularies across different language pairs, are presented. Participants in the first and second study were aged 12-30 months ($N=44$) and 23-34 months ($N=65$) respectively. The larger cross-linguistic cohort ($N=250$) was aged 24-36 months. All studies employed adaptations of the MacArthur-Bates CDI: Words and Sentences (Fenson et al., 2007) to measure expressive vocabulary. Common to the three studies was the immense variability in participants' composite and single-language vocabulary scores. Findings highlight the need for further vocabulary data that elaborate on Maltese children's group-level performance and individual-level classification accuracy, so that language delay may be identified with more confidence.

Presentation Abstracts – Day 2

Intergenerational bilingual literacy

Keynote Speaker: Lynne-Harata Te Aika (Te Rūnanga o Ngāi Tahu)

Lynne will focus her presentation on Ngāi Tahu's aspirations for young children's language, literacy, and healthy wellbeing; Ngāi Tahu's language learning and educational aspirations; and her perspectives on where research should focus around language learning and educational success for Māori.

Panel discussion: Priority areas for young children's literacy and learning success

Professor Gail Gillon – Facilitator (University of Canterbury)

Professor R. Malatesha Joshi (Texas A&M University)

Professor Bill Tunmer (Massey University)

Professor Laura Justice (Ohio State University)

Distinguished Professor Niki Davis (University of Canterbury)

Professor Barbara Dodd (University of Melbourne)

Early reading success is a strong predictor of later reading and subsequent educational achievement. Literacy achievement of New Zealand children requires attention, to lead to better early literacy, learning and health outcomes, particularly for Māori and Pasifika children, and those from low socio-economic backgrounds. This panel of international experts share their priorities for supporting children's literacy and learning success.

Teacher talk: the oral and text-based vocabulary used by kindergarten teachers

Professor Ilsa Schwarz (University of Tennessee Health Science Center; UC Erskine Fellow)

Dr Jillian McCarthy (University of Tennessee Health Science Center)

Kindergarten teachers may encounter up to a five-year range of reading related abilities within their classrooms. This is especially likely in the area of vocabulary, a known predictor of literacy skills. To help mitigate later reading and writing problems, kindergarten activities and lessons should expose children with limited vocabularies to sophisticated words and include robust vocabulary instruction. This study examined the words used by four kindergarten teachers every day across a week of instruction and the vocabulary words they taught. Each teacher wore a voice activated recording device and the tapes of their oral output were transcribed and entered into the Strategic Analysis of Language Transcripts (SALT) computer program for analysis. The transcripts were examined for word use frequency as well as word sophistication based on Dale-Chall (1995) and Word Zones™ (Hiebert, 2005) word lists. The words targeted during instruction were also assessed for their level of sophistication and the techniques used to teach them. As expected, teacher vocabulary consists mainly of high frequency words and the transcripts revealed limited attention to sophisticated word use. Results also demonstrate missed opportunities for enhancing vocabulary. Improving word knowledge through the use of different instructional strategies will be discussed.

Do pre-school socio-demographic and health developmental indicators predict the future utilization of early primary school-based literacy interventions: a national population study

Professor Philip Schluter (University of Canterbury)

Professor Gail Gillon (University of Canterbury)

Associate Professor Brigid McNeill (University of Canterbury)

Dr Rick Audas (Otago University)

Professor Barry Taylor (Otago University)

Dr Barry Milne (University of Auckland)

Dr Jesse Kokaua (Otago University)

Early detection of barriers to literacy learning underpins the provision of successful early intervention. A national health screening programme, the B4 School Check (B4SC) examines hearing, vision, weight, development status, and emotional and behavioural development in 4-year-old children. It may also provide an early screen for literacy intervention need. This study investigates whether variables from the B4SC predict early literacy interventions over and above socio-demographic factors. Time-to-event analysis of children who undertook their B4SC between 1 July 2010 and 30 June 2015 was conducted. Using Statistic New Zealand's Integrated Data Infrastructure, these children were matched to the Ministry of Education's database on literacy interventions. Cox proportional hazard models were employed to model literacy intervention. Predictive performance was assessed using a hold-out sample and Harrell's c-statistic. Data were available from 255,270 children, of whom 20,652 (8.1%) had at least one literacy intervention. All considered socio-demographic and B4SC variables were significantly related to receiving an intervention ($p < 0.001$). Boys were more likely to receive the intervention than girls, as were those living in higher deprivation. However, the multivariable model including all variables yielded a c-statistic of 0.622 (95% confidence interval: 0.617, 0.628) which is less than the threshold for a model considered to have reasonable predictive power. Routinely collected B4SC information predicts the likelihood of a child's subsequent literacy intervention, but additional information is required to increase any screening model's sensitivity and specificity.

Literacy development in children with speech and language difficulties

Associate Professor Brigid McNeill (University of Canterbury)

Professor Gail Gillon (University of Canterbury)

Dr Amy Scott (University of Canterbury)

Dr Amanda Denston (University of Canterbury)

Children with speech production difficulties are more likely to need extra support in their early literacy development. In particular, the type of speech production errors used by the child is differentially associated with literacy outcome. It is important that the response to class-wide intervention to support early literacy knowledge are examined for subgroups of children with speech production difficulty. This study will describe the speech production profiles of children included in the 'Eke Pānui, Ake Tamaiti' intervention cohort. Preliminary data from the first phase of the intervention study will be analysed to examine the impact of the class-wide intervention for children with speech and language difficulties. The implications for supporting the early literacy development of children with speech production difficulty will be discussed.

Emergent bilinguals in a digital world

Distinguished Professor Niki Davis (University of Canterbury)
Associate Professor Una Cunningham (University of Canterbury)
Leona Harris (University of Canterbury)
Saili Aukuso (University of Canterbury)
Leali'ie'e Tufulasifa'atafataf Ova Taleni (University of Canterbury)
Dr Lesieli Tongati'o (University of Canterbury)
Professor Janette King (University of Canterbury)
Dr Lia de Vocht van Alphen (University of Canterbury)
Professor Monica Axelsson (Stockholm University)

The linguistic and cultural capital accumulated by children growing up with multiple languages can have lifelong benefits. Evidence of effective computer-assisted language learning for adults suggest the need for research to sustain young children's multilingualism (Cunningham, 2011; Cunningham, King et al, 2017). Intentional strategies are particularly important given the challenges that children face growing up in a digital world. Researching the interconnections between children's environments, languages and the people involved is enabling us to identify and develop strategies to strengthen these connections (as well as to reduce distractions). Policies and practices that nudge intentional use of community languages are evident and we have identified ways in which the digital world can increase access to language resources. Our case study research of linguistic landscapes is part of a larger project within the Eke Pānui, Ake Tamiti Learning Research Programme (Gillon et al, 2016). The research began with developing our methodology while gathering the first linguistic landscape in an award-winning Māori immersion early childhood education centre (Harris, 2017). Emerging findings from more than 10 schools and centres indicate that, while the digital world is carefully managed, there are unmet needs. We have developed capacity building workshops and web-based resources to increase engagement with children's home languages and cultures in collaboration with participating centres, schools and communities (see <http://latllab.canterbury.ac.nz/a-better-start/>).

Panel discussion: Engaging communities for success

Jan Dobson – Facilitator (Ministry of Education, Participation Facilitator)
Inspector Richard Bruce (Area Prevention Manager Christchurch Metro, NZ Police)
Linda Roper (Head Teacher, Kidsfirst Kindergartens Bromley)
Olivia Brook (Lead Teacher, New Beginnings Preschool)
Garry Williams (Ministry of Education, Manager Education)
Fue Seinafo (Ministry of Education, Manager of Education)

Respectful and genuine engagement is critical for the success of interventions and programmes designed to increase learning success, improve health and wellbeing, and enhance mana in communities most in need. This expert panel shares their experiences with successful community engagement and strategies for applying engagement in practice. Questions are welcomed from the audience during this interactive session.

Creating an authentic research community: Engaging whānau in a National Science Challenge

Associate Professor Sonja Macfarlane (University of Canterbury)
Professor Angus Macfarlane (University of Canterbury)
Professor Gail Gillon (University of Canterbury)

Dr Amanda Denston (University of Canterbury)

Dr John Boereboom (Centre for Evaluation and Monitoring)

Dr Elizabeth Schaughency (Otago University)

The Ministry of Business, Innovation and Employment (MBIE) in New Zealand have funded 11 National Science Challenges (NSC), which aim to tackle the big questions facing the wellbeing of our wider society. An overarching imperative across the Challenges is to give life to MBIE's aspirational Vision Mātauranga – a policy that promotes the vitality of Māori knowledge as a key aspect of the research process. One Challenge, A Better Start: E Tipu E Rea, explores four key focus areas that children encounter in their early development, and unpacks the factors that contribute to forming a solid foundation for fostering wellbeing and lifelong success. Central to the principles of this Challenge is Te Tiriti o Waitangi in that it provides a framework to guide whānau engagement, meaning-making, and policy change and praxis. This presentation will explore how the three Treaty of Waitangi principles of Partnership, Protection and Participation shaped a research approach to whānau engagement; one that is premised on an authentic power sharing partnership between the research team, educational professionals and whānau. Identifiable barriers to whānau are actively targeted so as to bring promise and life to whānau aspirations whilst ensuring that the mana of whānau and their tamariki remains intact.

Interactive Poster Session Abstracts

*ordered by poster number

1. Melissa Derby (University of Canterbury)

'H' is for Human Right: Braiding Western Literacy Indicators with Indigenous Epistemology and Pedagogy

UNESCO defines literacy as a fundamental human right that is pivotal to cultivating self-determination in the areas of health and wellbeing, community engagement, cultural imperatives, and lifelong learning. Ensuring basic literacy skills for all is a central goal of every education system in the world. However, often literacy programs that are intended to support the emerging literacy of Indigenous children are reconceptualisations of earlier colonial projects that undermined Indigenous pedagogy and epistemology. This poster presents a literacy program that is inspired by Māori epistemology and pedagogy to support the emerging literacy of bilingual (English and Māori) pre-school children.

2. Saili Aukuso (University Of Canterbury)

A new perspective on learning languages in a digital world O se vaaiga fou i le a'oina o gagana i se lalolagi o mea faatekonolosi

What are the multilingual landscapes of Samoan children in Year 0/1 in primary schools? This poster presents one such landscape. Family/whānau/fanau voices are also drawn from additional evidence from the project's survey plus an evaluation of a workshop held with a Samoan church community. This poster focuses on the crucial role of language empowerment for Māori and Pasifika children. The purpose of the linguistic landscape in the digital world was, in part, to address the difficulty of developing relationships beyond the school, because teachers looked to family/whānau/fanau others to support their child's language development, particularly where staff were unable to do so. Cultural event such as kapa haka and Pasifika cultural group were also key features.

3. Dr Amanda Denston (University of Canterbury)

Relationship between early language and literacy skills and academic self-esteem and self-efficacy

Previous research has found an association between psychosocial development, such as self-esteem, and school achievement. Experiences of difficulties in learning are considered to lead to a reduction in self-concept, which may have subsequent negative effects for well-being. For children who experience difficulties in their literacy development, such declines in psychosocial development may occur at an earlier age and be more pronounced. In research as part of A Better Start, data were analysed to examine relationships between academic self-concept/self-efficacy and measures of language and early literacy administered early in children's first year of school. Results identified significant associations, particularly between self-concept/self-efficacy and measures of language (such as vocabulary). Relationships were also identified between self-concept/self-efficacy and skills that support the development of early literacy (e.g., letter-sound knowledge). Such relationships were larger for students with language and phonological difficulties, suggesting that those with a broader range of difficulties may suffer negative impacts on psychosocial development more than others. The current research suggests that impacts on self-concept may occur earlier than previously thought, arguing that early intervention is crucial to the well-being of at-risk students.

4. Nikita Gregory (University of Canterbury)

Sharing Student Health Data with Teachers to Improve Academic Achievement: A Proposed Investigation

Sharing student health information with schools may provide direction for appropriate interventions to improve both learning and health outcomes for students with challenging health issues. This investigation seeks to discover whether sharing this health information positively impacts the child's learning and health outcomes, and understand parents' and teachers' perceptions of sharing children's health data with teachers. Considering parent and teacher perception's will allow barriers and concerns to be addressed appropriately, particularly when sharing tapu information.

5. Alice Kim (University of Canterbury)

Pacific children's, mothers' and teachers' perceptions of the children's academic performance at age 6 years

Culture plays an important role in one's views towards education. It is imperative then to assess how students' differing cultural backgrounds influence their learning and how teachers can interact with students given those differences. A cohort study of 1,398 Pacific children is analysed to investigate the differing perspectives of academic performance held by the children and their mothers and teachers. Self-reported measures of children's academic performance at age 6 years were also compared to the results from the British Picture Vocabulary Scale. Negligible to slight agreements were found between the child-mother, child-teacher, and mother-teacher pairwise assessments of children's academic performance. Mothers with post-secondary educational qualifications, proficient in English, and more aligned with the New Zealand culture were more likely to concord with teachers' assessments. The results emphasise the importance of demonstrating cultural responsiveness and incorporating Pacific perspectives into teaching and assessing students' academic performance.

6. Leona Harris (University of Canterbury)

Linguistic landscapes of emergent bilinguals in a digital world

The linguistic landscape is the visibility and salience of any given language within a geographically defined area (Landry & Bourhis, 1997). It reflects the strength of the language policy and influences how languages are perceived and therefore used (Cenoz & Gorter 2006). This research is set within a strand of "Eke Pānui, Eke Tamaiti; Braiding health and education services to ensure early literacy success and healthy well-being for vulnerable children", which is part of the National Science Challenges research programme in New Zealand (Gillon et al, 2016). It is a part of the emergent bilinguals living in a digital world literacy strand (Cunningham & Davis, 2015) of the Better Start research programme. Data, including photos and videos of all displays and interviews with teacher and parents, was gathered from seven ECE centres. Artefacts from the preliminary data will be presented as examples of ways to enhance the linguistic landscapes of emergent bilinguals growing up in a digital world.

7. Gail Gillon (University of Canterbury)

International Survey of SLP practices in working with children with Autism Spectrum Disorder (ASD)

Autism Spectrum Disorder (ASD) is a complex neurodevelopmental impairment that affects children and families around the globe. To better understand the role of Speech-Language

Pathologists (SLPs) in differing countries in supporting children with ASD, the International Association of Logopedics and Phoniatrics (IALP) Child Language Committee developed a survey for SLPs who were currently working with children or adolescents with ASD. The survey comprised 58 questions relating to background information of the respondent, characteristics of children with ASD and the role of SLPs in diagnosis, assessment and intervention practices for children with ASD. The English version of the survey was translated into French, Russian, and Portuguese and distributed on-line through speech language pathology associations who are members of IALP. This poster provides a descriptive summary of main findings from the quantitative data from the 1114 SLPs (representing 35 countries) who completed the survey. Most of the respondents (91%) were experienced in working with children with ASD and the majority (75%) worked in schools or early childhood settings. SLPs reported that the typical age of diagnosis of ASD for children on their caseload was 3-4 years and the majority of SLPs participate in the diagnosis as part of a professional team. Generally, the results support positive global trends for SLPs using effective practices in assessment and intervention for children with ASD. Two areas where SLPs may need further support are involving parents in assessment practices and supporting literacy development in children with ASD.

8. Sharnali Tisi (University of Canterbury)

Process of transmitting language of a migrant parent: A case of Baisakhi

In New Zealand, migration, is causing tensions, which, despite local differences, are in many ways similar around the world. The inability of many immigrants to speak English and their struggles in co-operating with the school environment is mostly highlighted in the literature. This research explores an alternative view to the overriding image of immigrant parents as presenting challenges within the education system and explores the ways they transmit culture to their offspring. It considers two separate but complimentary aspects of culture: the family's original culture and the culture they have immigrated into. A qualitative approach has been used to elicit detailed information from participants and to understand specific contexts, actions and perspectives. The method of data collection was extended semi-structured dialogues with parents originally South Asian, living in Christchurch, New Zealand, in order to generate personalised narratives. The participants have been purposefully selected parents originally from Bangladesh, India, Pakistan, Nepal and Sri Lanka. Each of the parents is being considered as each separate case of how they are transmitting culture to their children and how they are enabling their children to acculturate into the new country. This poster presentation is offering the process of language transmission of one of the seven cases.

9. Tracy Cameron (Otago University)

Assessing children's oral language and emergent literacy skills at school entry: What are New Zealand teachers using and where to next?

All Year 0/1 NZ teachers (1896 English-medium schools) were invited to complete a survey focussed on assessment of new entrant children's oral language and emergent literacy skills with 21% responding (745). Teachers indicated using a variety of methods for assessing children's skills at school entry, from standardised measures to informal teacher judgement. In response to open-ended questions dominant themes were identified—concerns regarding the skill development of many new entrants', a desire for up-to-date, efficient, and user-friendly NZ-based tools to assess oral language and phonological awareness, and more time outside the classroom for assessment and reflection on assessment results.

10. Janice Belgrave (University of Canterbury)

How well does dialect difference predict phonemic awareness and spelling in New Zealand children who are struggling to attain early literacy skills?

This poster reports on the findings from two early literacy intervention studies, which were carried out in Christchurch, New Zealand to ascertain the extent to which children's non-standard form of spoken English (English dialect) impacted on their phonemic awareness and spelling. The first was a case study involving two seven year old female participants, over an eight week intervention period. The second study involved 80 participants from three schools, over a 15-month period. Specific examples of differences between participants spoken non-standard English and academic or school English were recorded, along with data pertaining to spelling and phonemic awareness. Pearson correlations were analysed and revealed that there was an association between the occurrences of dialect difference (dialect density) and children's phonemic awareness and spelling ability based on their dialect density. Suggestions as to how this information can inform teaching practice in Primary schools are discussed, including pertinent teaching strategies for Pasifika and Māori students.

11. Carolyne Obonyo (University of Canterbury)

Mobile Learning Practices in Initial Teacher Education: Preparing Future Teachers

Proliferation of Bring Your Own Device in K-12 classrooms is increasing. This implies that initial teacher education (ITE) programs may need to adopt key strategies to prepare future teachers to effectively integrate mobile technologies into classroom practices. Although much emphasis is on effective integration of mobile technologies into teacher preparation, little is known of how teacher educators introduce such innovative teaching techniques including the digital literacy required. This PhD research explores mobile pedagogical practices that teacher educators use and how they impact the teaching and learning experiences of future teachers in a leading institution in New Zealand. Preliminary findings reveal that some teacher educators structure their courses so that mobile technologies are used to facilitate collaboration, authentic learning, and access learning resources. For example, in an interview one teacher educator spoke about and illustrated her online practices with Learning Management System and Zoom video conference recordings. Mobile pedagogical practises have shaped student teachers' teaching and learning experiences, particularly those of distant students. The four case studies and their comparison aim to inform discussions concerning integration of mobile learning into the ITE curriculum.

12. Seema Gautam (University of Canterbury)

Cross-linguistic influence of Punjabi and Hindi on English Reading Comprehension Skills among Multilingual Children in Punjab, India

Over 400 trilingual children in Punjab (India) from grades 2 to 5 who have developed spoken and reading skills in Punjabi, Hindi and English, were assessed on measures of text reading comprehension and word decoding, as well as listening comprehension, phonological processing, orthographic knowledge and speed of processing. Analyses determined evidence for cross-linguistic influences of Punjabi and/or Hindi linguistic and orthographic processing on English word reading and text comprehension. This allowed the research to propose underlying cognitive skills that may transfer across these languages and to examine further multilingual models of English reading proposed in the literature (e.g., based on the simple view of reading; Gough & Tunmer, 1986); i.e., whether two relatively similar akshara orthographies (Punjabi and Hindi) show positive influences on the development of reading in English (an alphabetic orthography). The findings indicated that

younger students show influences of Punjabi and Hindi measures on English word recognition, whereas among older students (who are expected to have acquired more expertise in decoding skills), listening comprehension, orthographic knowledge and phonological processing in Punjabi and Hindi all influenced English reading comprehension. These findings are considered in terms of the potential factors influencing cross-language interactions including the type of reading task measured.

13. Beth Rees (University of Canterbury)

Engaging with parents to understand the pragmatic profiles of young children with Down syndrome

Children with Down syndrome present with uneven profiles of pragmatic development. Effective family-focussed intervention for children with Down syndrome (DS) relies on parents and professionals having a precise understanding of the child's pragmatic profile. Parents of 48 children completed the Language Use Inventory (O'Neill, 2009) and the MacArthur-Bates CDI. 24 children with DS (mean age 49.75 months (SD: 10.87)) were pairwise matched on LUI Total Score to 24 TD children (mean age 18.75 months (SD: 5.24)). The pairs were matched on the basis of being no more than two points apart on LUI Total Score and represented scores between 14 and 136, out of a possible 161. While both groups used language equally to draw attention to a focus of interest, the reports from the parents of the children with DS suggested that their children made fewer relevant comments and questions and used language less spontaneously than their TD matches. Parent reflections, guided by questionnaires, can support planning of their child's language intervention.

14. Christine Cox Eriksson (Stockholm University)

Early Communicative Development in Swedish Children: Gestures, Vocabulary and Grammar

Research on child language acquisition confirms the importance of early language development for later language and literacy skills, and documents great individual variability in children's acquisition rates. This study aims to investigate early communicative development in a sample of Swedish children based on parental report, using Swedish versions of the MacArthur-Bates CDI. In particular, variables such as early communicative gestures, receptive and productive vocabulary, and grammatical development are explored. The study is a reanalysis of previously collected data (Cox Eriksson, 2014), using a subsample of 128 children with complete records for measures collected at six-month intervals (12, 18, 24 and 30 months of age). The analysis examines both general trends through growth curve modelling in addition to some individual trajectories. Results indicate gender differences in vocabulary profiles, and although there is no main effect of gender, girls exhibit a significantly higher rate of growth. Individual vocabulary trajectories for boys exhibit more variation than those of girls. There is also a significant effect on vocabulary size for use of the pointing gesture at 12 months. Regarding grammatical development, trajectories for girls and boys exhibit differences in variation as well as individual outliers.

15. Vera Leier (University of Canterbury)

Instagram used in a language classroom

This poster presents a pilot study which examines the effect of using a social networking (SN) platform, Instagram. As the instructor, I set up an Instagram for my German language class and posted 8 topics, i.e. 'Berlin', Germany and alternative energies'. The students (n=12) chose one of the topics and made their own Instagram which consisted of at least six artefacts related to their chosen topic. Their completed Instagram was the basis of their oral presentations which took

place in class at the end of the 6-week term. Two research questions are addressed: (1) How do students experience their educational practice on Instagram, specifically their language use and learning experiences? (2) What is the nature of the linguistic environment that the students are exposed to when using Instagram? I addressed these questions using a preliminary and post questionnaire, I conducted 7 semi-structured interviews and collected ethnographic data keeping a research diary and writing fieldnotes. The theoretical framework is multiliteracies (Pegrum, 2011; New London Group, 1996) and activity theory. The preliminary results of the study showed that students perceive the SN as a positive contribution to their learning. The platform allowed them to get to know each other better. Output was improved through a more varied vocabulary and improved L2 pronunciation.

16. Ginj Chang (University of Canterbury)

Phonosyntactic and morpho-semantic interventions in early readers with specific language impairment

This particular research assessed interventions targeted at children with language weaknesses at the beginning of school. Twenty Year 1 children were selected from a larger group of students identified by their classroom teachers. The participants were further screened using standardized language assessments and they all showed evidence of poor scores in expressive and receptive language. Eleven of the students were monolingual English speakers and the remaining nine pupils were bilingual, with another language used at home. The two intervention methods involved phonological awareness training with reading and morphological awareness training. The study considered improvements in word identification and comprehension, as well as measures of language processing. Results pertaining to the effectiveness of the intervention reveal that despite significant difficulties in language prior to training, children who received a combined form of phonological awareness approach with reading and morphological awareness training showed improvement of scores in reading comprehension at post-assessment. This is evidenced by gains in students' test scores in both the word comprehension and passage comprehension sub-tests administered to them. Also, comparison between the two groups of learners shows a consistent increase of word and reading comprehension test scores among bilingual learners across different time points. The findings of the research suggest that providing an integrated phonological awareness and morphological awareness intervention among school-aged children may be an efficient approach to further influence the reading development of students experiencing difficulties in language.

17. Sarah Rouse

New Zealand based storybooks and comprehension-enhancing talk: The effect of book setting on home-based educators' extra-textual dialogue during shared book reading.

Rich extra-textual dialogue between adults and pre-school children during shared book reading can help children's learning of oral language and emergent literacy skills. An aspect of extra-textual talk that may be particularly beneficial for children's comprehension during reading is making connections between the story and children's own experiences. This study explores how the story context may relate to the amount of talk linking book content to personal experiences during reading. Twenty-one home-based early childhood educators were videoed reading two stories to their three to five year old children. Both books had animal protagonists, a similar story structure, and a similar number of propositions. One book was set in a New Zealand forest, the other an African savannah. The videos were transcribed, and extra-textual talk was coded for linking talk. It was found that whilst there was no difference between books in time spent sharing the book, total extra-textual talk or talk relating to facts about the world, there was a higher proportion of talk relating to children's and educators' own experiences in the New Zealand book relative to

the African context book. Books with a more familiar context may encourage more talk linking stories to children's own experiences.

18. Parisa S. Tadi (University of Canterbury)

Shared book reading as a context to encourage father involvement in early childhood education

The present study examined the effectiveness of a shared book programme in facilitating fathers' involvement in early childhood education centres. Participants were 12 fathers who, along with their three to five year old children, completed a three-week emergent literacy programme in the centres. Eight centres were selected, and randomly assigned to either the shared reading programme or a comparison condition. Data collected focused on the frequency and nature of father-teacher interactions, and reading behaviours during shared reading sessions. Overall, the results supported the idea that father-focused programmes can create a positive context for increased involvement of fathers in early childhood education.

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