

**Language Experience:
Teaching for the Integration of Early Literacy
Learning by Using What Children Know to Develop
Active Problem Solving**

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Abstract

Language experience is an approach to literacy teaching and learning with a historical foundation in Aotearoa New Zealand. The approach was prevalent in classrooms at a time when educational practices and the learning outcomes for children in Aotearoa New Zealand were inspirational worldwide. Current classroom practice does not use language experience, although it has been identified as a powerful context for literacy learning.

This qualitative study reintroduced the practice of language experience in two new-entrant classrooms in Tāmaki Makaurau Auckland. The literacy learning of eight children was examined during their first months at school. The study utilised participatory action research where the teacher and the researcher worked collaboratively to make iterative changes to teaching practise to improve the learning outcomes for young children.

During the study, children had conversations with teachers about their experiences to ensure that their messages were meaningful. The integration of literacy in a language-experience approach ensured that messages flowed from talk into writing and reading, enabling young children to initiate active problem solving to gain a message through reading and writing.

As children learnt to write through the co-construction of a story with a teacher, nuanced teaching provided scope for children to connect with what they knew and could do within writing and between writing and reading. The study highlights the critical role of composing and writing stories in learning to read.

Data in the form of transcripts of conversations, notations of teacher-guided writing, children's independent writing, reading records of children reading their writing, notes from research journals and interviews with whānau (family) were collected. The analysis involved categorising and comparing the data using a constant comparative-analysis method.

Children had a purpose for talking, writing and reading: to share and read meaningful messages with others. Connections between home and school developed as children shared their stories with whānau, who became involved and informed about their children's learning.

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Chapter 1: An Introduction to Language Experience

Kō ngā tahu ā ō tapuwai inanahi, hei taurira mō āpōpō (Māori proverb)

The footsteps we lay down in our past create the paving stones upon which we stand today.

Language experience is an approach to literacy teaching and learning that has a historical foundation in Aotearoa New Zealand. Current classroom practice does not make use of language experience, although researchers and educators have encouraged teachers to use the approach as a potentially powerful context for literacy learning (Parr et al., 2009).

From the 1960s through to the 1990s, Aotearoa New Zealand was regarded as a world leader in literacy education, producing some of the highest literacy rates in the industrialised world (King et al., 2003). Researchers and educators from New Zealand changed the footprint of literacy teaching and learning (Gaffney & Jesson, 2021). Educators from other countries aspired to gain knowledge of the literacy teaching practice occurring in New Zealand classrooms. One of the teaching approaches promoted during this time of progressive literacy development was language experience.

Sylvia Ashton-Warner pioneered language experience during the 1960s when she worked with young Māori children in small rural native schools in New Zealand. The children struggled with the *Janet and John* series, the graded readers of the time. The readers used contrived language, unlike everyday talk. Developed in the UK, in 1949, the stories in the series were distant from children's experiences, making the texts difficult to understand. To overcome these difficulties, Ashton-Warner (1963) encouraged children to author their own stories by talking about their experiences and writing about them with teacher support. This writing was then used as the children's first reading material. In this way, the children experienced early literacy success as their talk, writing and reading was relevant and meaningful.

Ashton-Warner (1963) described language experience as "organic teaching" (p. 33) due to the natural nature of the experiences, which easily flowed into language and literacy. The conversation was emphasised as through dialogue a child could organise their inner feelings and write them down, ensuring that the message of the writing was clear. Ashton Warner believed teacher time spent conversing with a child was valuable, "no time is too long spent talking to a child" (p. 44) as it ensured that the message elicited was "made out of the stuff of the child themselves" (p. 34), their experiences, interests, cultural and linguistic identities. Ashton-Warner referred to the conversation between the teacher and the child as a "passionate interchange of talk" (p. 66), saying, "I reach a hand into the mind of the child, bring out the stuff I find there, and use that as our first working material" (p. 34).

This description of using a child's thoughts and language in their learning alludes to the child-centred nature of language experience. The child was seen as an active, capable participant who could make

valuable contributions regarding their individual experiences (Ashton-Warner, 1963; Clay, 2004; Holdaway, 1979; MacDonald, 2016). Teachers utilising this approach acknowledged and celebrated the unique worldview, interests, knowledge and cultural identity each child brought to school. Philosophically, schooling, and the learning that occurred, matched a child's prior experiences and knowledge rather than the other way around (MacDonald, 2016). The concept of *ako*, which reflects the Māori approach to a teaching and learning relationship, in which the educator is also learning from the student, was ingrained within the language-experience approach. The teachers' responsibility was to find out the unique experience and motivations of children to use these resources to support their learning.

Ashton-Warner's work on language experience was developed in response to the concern that children were being forced to learn to read a different language from the one they spoke (Holdaway, 1979). Through language experience, teaching methods were developed to assist children's understanding that written language was talk written down. Thus, children made the critical connection between their familiar language and printed symbols (Ashton-Warner, 1963; Holdaway, 1979).

A significant outcome of language experience was that young children became successful authors who could create their own books for reading (Holdaway, 1979). In addition, children discovered a purpose for talking, writing and reading: to share and read meaningful messages with others (Ashton-Warner, 1963; Holdaway, 1979). In her book *Teacher*, Ashton-Warner (1963) described how children shared their stories with others in the classroom and how the pages of these stories often ended up in "tatters" due to the multiple readings. As writers with an audience, children could understand; they were responsible for sending a clear, interesting message for others to read and enjoy (Holdaway, 1979).

Meaning making is the most powerful reward for any literacy engagement (Ashton-Warner, 1963; Clay, 1991; Holdaway, 1979). The message advanced throughout the integration of subjects in a language-experience approach. The approach was designed to help children express themselves clearly and make meaning from a personal perspective (Van Kraayenoord & Paris, 1994). Therefore, the message sent through talking and writing or received through reading (Clay, 1991) was clear and meaningful as it had a connection to the children themselves.

When talking, writing and reading were integrated, teachers could take advantage of the reciprocal nature of literacy. Clay (2004) described the learning opportunities afforded to noticing teachers who supported children to link what they knew from one subject to another to strengthen their learning. Clay (2004) encouraged teachers to schedule talking, writing and reading together within a classroom timetable to support children in making these powerful links.

As well as integration in a literacy context, the experiences could integrate literacy with other subjects. Language experience was a powerful way to connect children to the real world and integrate literacy with science, social studies, art and drama. First-hand experiences effectively deepen and enrich meaning making due to the often-sensory nature of exploring the real-world environment. These experiences enriched a child's language opportunities, creating personal meanings. Language experience was a way to channel intellectual motivations developed from these real-world experiences into literacy (Holdaway, 1979).

Elwyn Richardson was a prominent educational influencer who made considerable contributions to the landscape of education in Aotearoa New Zealand. Richardson believed that learning must be anchored in authentic experiences. He integrated science, literacy, maths, art, craft, dance, social studies and drama throughout his teaching using a thematic approach. The theme would stay the same, but the children would interpret it across all subject areas from one expressive medium to another (MacDonald, 2016). Richardson utilised the children's natural curiosity and interest in nature as they explored their local environment, from farmland to native bush and the local stream. He taught the children to look closely at the world around them and detail their observations through media such as oral language and writing (MacDonald, 2016). Richardson valued the cultural diversity of the small community of Oruaiti, where he worked as a sole-charge teacher and incorporated te reo Māori (Māori language) into his classroom in the 1960s. He was ahead of his time in recognising the benefits to the children's learning of valuing their cultural and linguistic diversity (MacDonald, 2016).

Language experience is described in the Ministry of Education (MoE, 2003) support materials for teachers, *Effective Literacy Practice in Years 1 to 4*, as one of the approaches to writing. A description of the approach acknowledges the critical features of talking about children's experiences as a basis for writing and the links that become visible to children as they develop an awareness that writing arises from oral language. However, language experience does not feature prominently in present-day classroom practice, research or literature as a way to introduce young children to talking, reading and writing when they begin school.

The progressive educational contributions of the past can assist in paving the way forwards and help shape literacy education for the future (Gaffney & Jesson, 2021). However, if we value the legacy of inspired educationalists and researchers, we need evidence of this within our current classroom practices and educational policy (MacDonald, 2016). Recent research from Aotearoa New Zealand has identified language experience as a supportive context for developing an early literacy processing system for newcomers to school (Aitken et al., 2018). Language experience is an approach to teaching literacy that recognises the knowledge and strengths that young children bring to school and builds onto this knowledge base.

The Reason This Research Was Undertaken

This study has arisen from my previous role as a classroom teacher of new-entrant children and a Reading Recovery teacher. As a Reading Recovery teacher, my teaching practice was guided by a complex theory of literacy learning known as literacy processing (Clay, 1966). In contrast to my teaching of reading, I experienced dissatisfaction with my classroom practice when teaching writing. The learning outcomes for the children I worked with in writing were below their competencies in reading, reflecting ineffective teaching practices rather than the children's lack of ability.

Improvements were needed in my practice. However, professional development for teachers in early writing was scarce. Fortunately for myself, as an educator, and for the children I was working with, I participated in professional development in 2013 from Barbara Watson, who had previously been the national director of Reading Recovery in Aotearoa New Zealand. Watson utilised a language-experience approach, based on the theoretical framework of literacy processing theory, when supporting young children to write. She individualised language experience so that each child was learning to produce their own piece of writing. Watson developed ways of helping children to get to new words by building a writing vocabulary and becoming proficient at using a sound analysis. Resources such as dictionaries were also made use of so children could become independent writers.

Adopting these teaching techniques changed my teaching practice and my enthusiasm for teaching writing. Children with whom I was working with made significant progress compared to other approaches I had used. Children experienced heightened motivation and enjoyment in literacy learning and in sharing their writing which they read to their peers and whānau (families). Whānau became invested in their children's literacy learning as they developed an appreciation of what literacy learning looked like and they could see the progress their children were making.

This research aimed to delve deeper into an investigation of a language-experience approach that I had trialled in my teaching. Throughout this study, I worked collaboratively with two teachers to develop responsive teaching by collectively observing and discussing what we noticed as children engaged in language experience. During the study, I examined teaching moves and the subsequent learning of eight new-entrant children. I investigated the beginnings of a literacy processing system for these children in their first months at school to identify changes over time in their development. I was also interested in examining if reciprocal gains were supported through talking, writing and reading.

Chapter 2: Literature Review

This review investigates the literature on several main themes incorporated within a language-experience approach and is presented based on seven principles underpinning the approach. Part 1 examines early writing and its standing in present literacy learning. Part 2 investigates the reciprocal nature of literacy, where learning can be strengthened when links are created between talking, writing and reading. Part 3 identifies the theoretical underpinnings of this study. Part 4 explores oral language and the conversation between the teacher and the child to facilitate composing messages and the enablement of culturally sustaining practice. Part 5 considers early writing and the literature related to the co-construction of a written text through teacher-scaffolded learning. Part 6 examines a means to identify a child's learning development in early writing by observing change over time in their learning. Lastly, Part 7 investigates the literature regarding early reading, explicitly the reading done as children read their writing.

When exploring these themes, particular attention has been paid to examining the literature on achieving reciprocal gains, as language experience sits at the intersection of reading and writing. Additionally, the development of an early processing system for children at the onset of their literacy learning will be investigated.

Part 1: Early Writing

Less research attention has been focused on early writing than reading despite the valuable contribution of writing to literacy learning (Anderson et al., 2018; Bingham et al., 2017; Harmeý & Rodgers, 2017; McKenney & Bradley, 2016; McNaughton, 2020; Quinn et al., 2021). These circumstances may influence teachers' views on literacy learning and classroom practice. When asked about literacy, teachers' responses emphasised teaching young children decoding skills and preparing them to learn to read (McKenney & Bradley, 2016). Teachers also commented that they seldom supported children's early understanding of print and how it works through the teaching of writing (McKenney & Bradley, 2016). Of the research available on writing, there is a noticeable dearth of research on children learning to write in the first year of instruction (Arrimada et al., 2019; Bingham et al., 2017; Harmeý & Wilkinson, 2019; Quinn et al., 2021; Schrodt et al., 2019). This situation can seriously impact young children who are newcomers to school. Research has established that when children experience difficulties with writing in the first years at school, this can have damaging consequences both academically and socially (Harmeý & Wilkinson, 2019). Harmeý and Wilkinson (2019) have emphasised that empirical research on early writing is critical for informing literacy teaching.

Definitions of "writing" differ among researchers and educators, with little consensus on measuring or tracking early writing development. As a result, there continues to be a lack of knowledge about early writing development (Harmeý & Wilkinson, 2019). The Ministry of Education requested a recent review by Parr et al. (2022) to address this shortfall in our understanding of effective writing practice in Aotearoa New Zealand. However, the current lack of empirical research on writing in the early

years is reflected in the meta-analyses, with a substantial portion of the studies deriving from work with older children and limited studies reflecting teaching practice for those in their first year at school. Comprehensive descriptions of early writing development are needed to inform instruction (Harmey & Wilkinson, 2019).

Part 2: Reciprocity: Where Learning Can be Strengthened by Creating Links Between Talking, Writing and Reading

Research indicates that literacy approaches that teach oral language, writing and reading concurrently and interdependently, strengthen literacy outcomes for children. Children's existing knowledge in one learning area can enhance the capacity for learning in other areas due to the reciprocal nature of literacy (Fitzgerald & Shanahan, 2000; Graham & Hebert, 2011; Harmey & Rodgers, 2017; Parr & Jesson, 2016; Parr & McNaughton, 2014). Reading and writing contain common mutually supportive processes (Parr & McNaughton, 2014) and oral language is a further rich resource serving both these activities (Clay, 1991). For children to benefit from the reciprocal nature of literacy, a noticing teacher needs to use what the child knows to support the child in making connections from one learning context to the next (Graham & Hebert, 2011; Parr et al., 2022; Parr & McNaughton, 2014).

The significance of strengthening literacy learning through the integration of oral language, writing and reading in meaningful ways has been recognised by Parr et al. (2022) in their recent review as a dimension of effective practice. The authors emphasised the need for teachers to understand the reciprocal links that can be made through integration and to alert children to these, particularly in the processes and strategies used to make and create meaning in texts.

Parr and McNaughton (2014) examined the nature and occurrence of links in literacy teaching and learning and identified that during guided reading and teacher-led writing programmes, teachers rarely made links for children during literacy learning. In addition, data from classroom transcripts indicated that opportunities for children to connect something they already understood to something new were underutilised. The authors suggested that research has offered teachers little insight into techniques they could use to support children to link knowledge between reading and writing in literacy learning.

Theoretically, reading and writing involve constructive processes required in constructing a message (Parr & McNaughton, 2014). Readers receive a message from the text; and, in writing, writers send a message through their engagement with oral and written language (Clay, 2014). When talking, writing and reading are taught together, the constructive processes support each other in strengthening the message, which is constant throughout the learning (Clay, 1991). When teaching recognises the reciprocal nature of literacy, learning in one language area can enhance the possibility of learning in another (Clay, 2004). To achieve this, Clay (2001) recommended that teaching should link literacy

learning from the start so that writing, reading and oral language move forward together, ensuring powerful learning opportunities.

Part 3: The Theoretical Background Which Guides This Study

The integration of literacy learning is a dominant theme in this study. However, writing is central throughout the study and when considering the study's theoretical foundation. Written language incorporates both oral language and writing and provides the stimulus for reading within this study. The theoretical perspectives which guide early writing research are contrasting and varied (Harmey & Wilkinson, 2019). Numerous researchers have expressed dissatisfaction with the inconsistent or unclear theoretical perspectives influencing writing research, which could reflect the paucity of research on this topic (Harmey & Wilkinson, 2019).

This study is grounded in social constructivist theory and is based on the work of Vygotsky (1978). The theory positions the individual as an active participant in their learning who constructs knowledge along with the assistance of others, principally the teacher. Writing develops within a social context with adults, children and their peers who endeavour to communicate a message. Writing experiences should be relevant and meaningful for children, and experience, knowledge and learning depend on the child's environment and interactions with others (Vygotsky, 1978). The vital role of language within learning has been emphasised by Vygotsky and the importance of the interrelationship between thinking, talking, and learning. Through talk, children clarify their thinking so that the proficient language user will compose clear messages over time. Writing is regarded as a meaning-making activity where the child represents language in print (Dyson, 1983).

A substantial body of the literature reviewed emphasised the need to teach young children compositional and transcriptional competencies as they learn how to write (Bingham et al., 2017; Coker et al., 2018; Quinn et al., 2021; Schrodt et al., 2019). This study reinforces this view and values learning where message quality and the ability to record the message are given equal recognition. In theory, learning to write is a complex process as children attend to several learning domains in an integrated way ensuring multiple component competencies all interact (Quinn & Bingham, 2019). The expertise and success of the writer are secured through the integration and the multidimensional construct of written language (Quinn & Bingham, 2019).

An alternative theoretical view maintains that, given the complexity of factors involved in writing, teaching transcription skills first is advantageous as it will inevitably free up the children's cognitive load to compose messages (Abbott et al., 2010; Berninger et al., 1992; Juel, 1988). However, other researchers and educators warn against the danger of this approach, citing that the teaching focus may remain on accuracy at the expense of message quality (Bingham et al., 2017; Gerde et al., 2019; Harmey, 2021; Quinn et al., 2021). Glasswell et al. (2003) discovered that children who struggled with writing were more likely to receive instruction regarding accuracy than average-progress writers who received greater support with the deeper features of their writing such as compositional techniques.

Similarly, a study by Arrimada et al. (2019) described the limitations for young children taught only transcribing skills, such as spelling and handwriting, during writing instruction. The study disputed the assumption that children in the early years of writing instruction would unnecessarily become overloaded if taught higher level planning or compositional competencies before they have mastered the mechanics of writing. Their study found that teaching young writers to plan the content and structure of their writing was beneficial even though handwriting and spelling competencies were not yet well established. Research reviewed stated clearly that teachers who facilitated teaching children how to compose meaningful messages used practices that were qualitatively different from teachers who did not (Arrimada et al., 2019; Bingham et al., 2017; Harmeey, 2021; Quinn et al., 2021). Intriguingly, Bingham et al. (2017) found that teachers who focused on composing encouraged children to produce better quality handwriting and invented spelling.

Different theoretical orientations influencing writing practice also involve different philosophies around methods to identify a child's learning development in writing. Harmeey and Wilkinson (2019) identified limitations surrounding tools to measure early writing development and posited that this inevitably highlights the lack of knowledge encompassing this field of learning. Harmeey et al. (2019) have indicated that children's learning development in writing can be seen as the change that takes place over time as children actively engage in writing. *Change over time* refers to the expansion and efficiency in the kinds of information children use and how they problem solve as they progress in their learning (Harmeey et al., 2019).

The child's ability to integrate different kinds of information to problem solve as they write is considered a strategy that promotes self-directed learning (Holdaway, 1979). Teaching children to use different strategies encourages the learner to confirm or correct their responses and "the teacher does not usurp the control which is crucial to mastering a strategy" (Holdaway, 1979, p.136). Teacher observations of children engaging in writing inform teachers of what children can do and what they need to know next, which can enhance teaching practice. When learning is specific to the individual child, each child can take their own personal pathway as they develop their writing competencies (Clay, 2014).

Alternatively, when writing is seen as a skill development with transcription skills preceding ideation skills (Juel, 1988), early learning development is often measured by separate tests to isolate and measure the skills learnt (Harmeey & Wilkinson, 2019). When children learn skills, the teacher tells the child what to do (Holdaway, 1979). According to Freire (1970), this type of learning treats the child as an empty vessel to be filled with knowledge rather than as a co-creator of knowledge. Learning predetermined skills devalues the cognitive aspects of behaviour and emphasises the mechanical, mindless aspects of behaviour (Holdaway, 1979). In their critical review of writing research, Harmeey and Wilkinson (2019) pointed out that skills-based approaches can describe the differences between skilled and less skilled writers. However, they did not show how changes can occur through learning.

Literacy processing theory plays a pivotal role in influencing the theoretical underpinnings of this study. The theory emphasises that the outcome of engaging in literacy is to receive or send a message. Clay (1966) closely observed young children within a literacy setting during her doctoral study and her work revealed the significant implications for the role of writing in early reading. Clay drew attention to the reciprocal nature of literacy. She observed how children could use what they knew in one context to support learning in another, thereby strengthening their learning.

Literacy processing describes the mental activities initiated by the child to problem solve the puzzle of receiving or sending a message (Clay, 1991). As children engage in talking, writing and reading, they build an effective processing system whereby they can independently monitor their reading and writing by noticing errors, search for information using meaning and language and use print (e.g., words, letters, letter clusters and punctuation) to make discoveries. Using this information, “in the head” problem solving can occur when children take unprompted action to make self-corrections (Doyle, 2013). Boocock et al. (1998) identified that reading and writing have slightly different operating characteristics regarding problem solving, but “reciprocal causation,” as described by Stanovich (1986, p. 363), is maintained between both processes.

Learning to Write and Read Within the Context of Continuous Text

As children learn to write and read their stories, they build print knowledge to support their problem-solving ability. These details include concepts of print, learning about letters, alphabet knowledge, words and the sound–symbol relationships children develop as they attempt to write unknown words. Learning these competencies within continuous text is meaningful for young children (Askew & Gaffney, 1999; Chomsky, 1971; Doyle, 2013; Snow et al., 1998). Exposure to actual reading and writing of stories enables children to develop working systems to ensure literacy processing can be initiated (Doyle, 2013). Reading and writing texts allow for storing and integrating information, searching, monitoring, evaluating, confirming, reacting, comprehending and then taking action (Lyons, 2003). These actions correspond to the integration of complex “in the head” processes that occur as children attend to the messages in print (Doyle, 2013). The actions and understandings of the child differ significantly when learning to read and write using continuous text than if they are learning isolated letters or words (Askew & Gaffney, 1999).

Part 4: Talking: Engaging in Conversations to Compose Stories

Studies have shown that opportunities for children to talk and engage in conversations with others before they write benefit writers, especially emergent writers; it is these studies that have influenced the methodology and design direction of this study (Harmey, 2021; Harmey et al., 2019; Harmey & Rodgers, 2017; Myhill & Jones, 2009; Quinn et al., 2021). Composing is one of the most demanding aspects of writing (Harmey, 2021). The learner must consider their message and how to communicate it to an audience effectively. The activity of talking allows the child to know what they want to say (Horn, 2005) so that it can be written down. Conversations with teachers who can help shape their ideas without telling the child what to write are advantageous (Harmey, 2021). This talk, also known

as “oral rehearsal,” gives writers the opportunity to talk and rehearse what they intend to write (Myhill & Jones, 2009). According to Myhill and Jones (2009), this is fundamental to teaching writing. Oral rehearsal can only function at a word, phrase or sentence level rather than stretching through more extended linguistic units of text, which become difficult for the child to remember (Myhill & Jones, 2009).

When children work with flexible teachers who encourage them to change writing topics if desired, they are more inclined to make accelerated progress (Harmey & Rodgers, 2017). During a study by Harmey and Rodgers (2017), children who made accelerated progress in the early literacy intervention of Reading Recovery were compared to those who did not make the same rate of progress. Children who were encouraged to exhibit more control and were not told what to write during the composition process made significant gains, while the children who made less progress interacted with teachers who pursued a writing topic despite the child’s lack of motivation. The study also recognised benefits for learning when conversations involved a “to-and-fro” exchange between the teacher and the child with less teacher talk (Harmey & Rodgers, 2017, p. 414).

Conversations facilitating composing can become difficult. Recent research by Harmey (2021) identifies some patterns of interaction, which can be considered by teachers to support genuine conversations. For example, teachers working with children reluctant to contribute would often resort to questioning children during the conversation (Harmey, 2021). A study by Fullerton and DeFord (2001 as cited in Harmey, 2021) recognised this practice as unconstructive and described the conversation that ensued as a “tug of war” between the teacher and child. The authors identified categories of child–teacher talk to support teachers in transforming their talk from questioning to a more conversational tone. These categories can help guide teacher interactions with children during conversations. Within the categories are examples of what teachers can say to ensure children are more effectively supported in organising their thoughts to write. Clay (1991) also described valuable teacher support when a child has difficulty composing:

If the child’s language development seems to be lagging, it is misplaced sympathy to do his talking for him. Instead, put your ear closer, concentrate more sharply, smile more rewardingly, and spend more time in genuine conversation, difficult though it is. (p. 69)

The notion that print is talk written down is critical for young children to comprehend, as the connection between language and the writing process is not always obvious (Dyson, 1983). Children can clarify and extend their thinking during conversations with a teacher, expanding their perception of writing products and processes (Roskos et al., 2009). Talking, writing and reading have significance for each child, as the print carries a meaningful personal message. In this way, children begin their literacy learning by understanding that “meanings provide the purpose of writing and reading” (Clay, 1991, p. 2). When children write about experiences that hold personal meaning and then read these messages, the message can be gained effortlessly. Engaging in composing

contributes to building a processing system as children monitor the clarity of their messages by rereading their stories to check that the message is as intended or as an indication of what to write next (Boocock et al., 1998). Recent research by Quinn et al. (2021) identified a concerning lack of teacher assistance to develop young children's composing. This inadequate support may be because research focuses on transcriptional competencies, often at the exclusion of composing. For example, early writing research in the United States examined the pedagogical support given to 488 ethnically diverse young children aged between 3 to 5 years old from 41 early childhood classrooms. The results indicated that for these children, teacher support with composing was evident in only 39% of classrooms and represented only 6.7% of all the observed supports (Bingham et al., 2017). Additional research investigating teachers' beliefs about instruction in writing found that few teachers described pedagogical strategies to support children's writing for meaning (Gerde et al., 2019), indicating that opportunities for engaging in composing may have been lost.

Children must develop strong oral language competencies to learn to read and write (McNaughton, 2020). As children engage in conversations with a teacher to compose stories, their oral language will have reciprocal gains for learning to read. Proficient readers use oral language as a source of information for predicting messages and detecting reading errors by attending to semantic and syntactic information (Doyle, 2013). Problem solving in monitoring, checking, rereading, and self-correcting can be facilitated when reading to ensure the message is accurate (Doyle, 2013).

Culturally Sustaining Practice

New learning builds onto what children already know when they begin school. Effective teachers discover what children know and build new learning from each child's unique strengths (Si'ilata, 2014). The rationale of using what children already know is relevant to language experience due to the conversations about the children themselves, their knowledge, experiences, interests, cultural and linguistic expertise. To pursue the learner's knowledge, teachers are urged to establish reciprocal relations with whānau. When teachers engage in learning conversations with whānau that are dialogic rather than monologic, power can be shared and learning situations can be co-constructed by teachers and learners (Si'ilata, 2014). Educational processes can be enhanced when teachers learn about the children's everyday lives, which, according to Gonzalez et al. (2005), are recognised as utilising the child's "funds of knowledge." The term refers to "historically accumulated and culturally developed bodies of knowledge essential for household or individual functioning and well-being" (Moll & Gonzalez, 1994, p. 443). Effective teachers build knowledge of the experiences and expertise of the children with whom they work.

Recently, a survey of literacy educators conducted by The International Literacy Association (2020, as cited in Kelly et al., 2021) ranked the issue of delivering a culturally responsive curriculum as one of the top five issues in literacy education. Paris (2012) disputed using the term "responsive" in addressing the issues of systematic inequalities within our education system. He contended that it does not go far enough in tackling these issues for minority communities. Instead, Paris considered

that the term *culturally sustaining pedagogy* more aptly describes what is needed to support and sustain communities' languages, literacies and cultural practices. The following section examines the literature on critical conceptual features of culturally sustaining practice.

During language experience, children's cultural identities and stories from home are valued. An intervention study by Borre et al. (2019) emphasised family involvement and cultural sensitivity during early writing experiences, which were made into self-authored books about children and their families. The significance of culturally relevant shared writing ensures that the learning is child centred and emphasises that the children's home and community cultures are valued (Borre et al., 2019). Findings from the study indicated that long-term improvements in children's academic trajectories could result from shared writing and reading that supports children's home language and culture during early learning. During the intervention, positive changes were also identified to strengthen children's identity and appreciation of their culture. The authors' study emulated similar processes to those implemented in language experience where the experiences and cultural expertise of the child are motivating factors in their literacy learning (Hoffman & Roser, 2012). Hoffman and Roser (2012) argued that writing must grow from home language and experiences, particularly for learners for whom English is an additional language.

Composing and writing are communicative acts that prioritise children's experiences and linguistic resources (Parr et al., 2009). Oral language and writing provide children from diverse language and cultural backgrounds with frequent opportunities to draw on their expertise and experiences (Jesson & Cockle, 2016). Children can use the resources they bring to school to construct stories revealing their rich cultural and social worlds (Dyson, 2016). Children orally compose their texts with the support of a teacher, who listens and encourages their thinking, allowing the child to plan and develop their story. Storytelling "is at the core of our humanness. By asking students to tell their stories, we place them at the centre of our teaching" (Horn, 2005, p. 35). Effective teachers engage in conversations with children, building shared knowledge about their culture, family and linguistic backgrounds (Si'ilata, 2014). Small-group conversations ensure all children can contribute and share their experiences and expertise (Jesson & Cockle, 2016). In contrast, when teachers lead whole-class conversations, children cannot share what they know.

Teachers should start working with children by identifying their assets rather than beginning with deficiencies. Children from culturally diverse backgrounds have much to offer regarding their linguistic and cultural expertise, which are seen as a resource rather than a problem that needs to be addressed (Si'ilata et al., 2018). Children can exercise their expertise in linguistic knowledge and, in doing so, teach others and make the connection between their first language and English (Si'ilata et al., 2018). Research has indicated that when bilingual children use their first language at school, their learning outcomes are improved (Si'ilata, 2014). Speaking another language can position the learner as an expert who can draw on their funds of knowledge (Si'ilata et al., 2018). Teachers have expressed the power involved for the learner when the teacher can learn from the child. "It was really

good for him to be the expert and for me to say, 'You teach us what it is called'...I think things like that are really good to empower students" (Si'ilata et al., 2018). This description reflects ako, the Māori approach to learning, where the teacher learns from the child.

A recent review on effective approaches to teaching writing highlighted "the need for teachers to take action to learn about students as culturally and socially situated learner writers in the unique context of bicultural and multi-cultural Aotearoa, New Zealand" (Parr et al., 2022, p.4). The authors of this review referenced the term "emergent bilingual learners," which recognises the need for children to acquire the dominant language of schooling while also maintaining their existing linguistic expertise while talking, writing and reading (Parr et al., 2022). The purpose of the review was to improve teacher knowledge and practice in teaching writing in Aotearoa New Zealand.

The learner can take control of their learning when using their resources from home and popular culture and become active rather than passive recipients of learning (Dyson, 2016). Child agency can be promoted when children decide what to write about and construct their own messages. Child agency, according to Dyson (2020), is the child's "power to act on their interests and intentions, on their own inclinations" (p. 120) and "their capacity to act on their world" (p. 121). Recent research by Harmey and Rodgers (2017) found that accelerated progress was made during an intervention when children worked with teachers who allowed them to control the composing process, with less teacher talk. The ability to choose writing topics and change them if desired was equally important (Harmey & Rodgers, 2017).

In contrast, child agency is difficult to achieve when using a code-focused early literacy programme, as the teaching involves direct teacher instruction (Blachman et al., 1994). The teacher predetermines the skills taught and the approach is teacher led (Gillon et al., 2019), which leaves little scope for children to show their expertise or talk about personal experiences. The challenge is for the teacher to recognise and value each child's language, culture and identity meaningfully within literacy learning. Furthermore, the term *instruction* conveys that the teacher is providing the child with knowledge rather than the child actively taking control of the learning themselves (Dyson, 2016), which would more easily reflect their identities and interests in their learning (Si'ilata et al., 2018).

The importance of authorship, where learners find audiences and an authentic purpose for their writing, has been endorsed by several researchers and educators (Borre et al., 2019; Dyson, 2020; Harmey, 2021; Roser et al., 2014). According to Ashton-Warner (1963), children's stories are read by the children themselves and others, including whānau. Sharing stories can form and maintain home-school connections, attributed to improving educational environments for Pasifika learners (Si'ilata, 2014) and subsequently for all learners. Si'ilata (2014) asserted that reciprocal relations can flourish when learning is based on the child's and family's expertise and is not solely from within the school's domain.

An essential component for culturally sustaining practice is for the information about the child to be relevant for teaching (Dyson, 2016). Dyson (1993) advocated a “permeable curriculum,” where children’s interests and skills, including cultural expertise, become part of their learning. However, in Aotearoa New Zealand, many teachers remain uncertain about identifying and utilising the expertise of culturally and linguistically diverse learners within their teaching (Si’ilata, 2014). Miller and Sahni (2016) claimed that teaching programmes that emphasise a one-size-fits-all method, where children are exposed to a narrow set of skills and high-stakes testing, can disadvantage children from low-income, minority backgrounds. They contend this is due to the nature of instruction generated by educators, and what they know, rather than valuing the child’s knowledge.

When considering culturally sustaining practice, Si’ilata (2014) used the metaphor of the *va’atele*, the Samoan name for a double-hulled canoe of the Pasifika people. The analogy concerning Pasifika learners describes how one hull represents the language, literacy, culture and world view of school and the other hull represents the language, literacy, culture and world view of the home. The connecting platform/*fata* ensures that each hull supports the other to enable stability. In this way, when joining home and school knowledge in meaningful ways without devaluing either in the learning process, Pasifika learners and other learners from diverse backgrounds, both culturally and linguistically, will be successful in both worlds (Si’ilata, 2014). Language experience is designed to facilitate culturally sustaining practice, as the knowledge each child brings to school is valued and utilised, enabling learners to be experts and active participants in their learning.

Part 5: Writing

The Co-construction of Early Writing by Scaffolding the Learning

Through collaboration and co-construction, teachers can scaffold learning for young children during their early engagement with literacy (Bingham et al., 2017). Interaction with teachers often occurs for beginning writers as writing is a complex social and communicative process involving the symbolic representation of talk (Dyson, 1983). Parr et al. (2022) identified the benefits for children to work collaboratively as developing writers and how dialogic discussions can positively impact writing outcomes. The concept of co-operatively achieved success, which lies at the foundations of learning and development, was advanced by Vygotsky (Wood, 1988).

Scaffolding was first described by Wood et al. (1976) as the support a teacher provides through interactions to move the learner beyond their current competencies. In the initial stages of learning, teacher scaffolding can ensure that children are not left alone to struggle when the task’s difficulty overrides the child’s level of competence (Wood, 1988). Rodgers and Rodgers (2004) described a scaffold as a process by which a child and a teacher interact as the child moves towards independence. The notion of scaffolding has been refined and adapted over time. Gaffney and Jesson (2019) described an inverted model of scaffolding, which ensures a greater degree of child agency as the learner takes more responsibility for their learning at the onset of the task. Gradually, the child releases responsibility to access support from the teacher when needed. This view goes

against the established premise of scaffolding in which the teacher releases responsibility to a child (Pearson & Gallagher, 1983).

Teacher scribing has been described by Fang and Cox (1999) as a form of scaffolding. The authors described how children can compose stories well before recording their messages. A teacher can initially reduce a child's frustration by acting as a scribe and writing these stories down for the child (Fang & Cox, 1999). When teachers record a child's dictated stories, children are freed of the mechanical demands of writing to focus on the quality and clarity of their compositions (Fang & Cox, 1999). A recent study conducted by Quinn et al., (2020) in the United States examined ($N=245$) 3- to 5-year-old children with a focus on their early composing abilities. The study revealed that children aware of their transcription abilities tend to limit their compositions to simple ideas they can manage within their existing writing competencies. In addition, the research identified that children who used less conventional writing, such as scribbling, drawing or writing random letter strings, produced higher levels of expressive language than those who wrote conventionally and often provided short oral language output (Quinn et al., 2020). Limited language output can constrain text quality and complexity, which validates the benefits of teachers scribing early to ensure children engage in quality messages at the onset of their learning (Fang & Cox, 1999).

The scaffolding model of teaching and learning is metaphorically like a construction scaffold in that the supporting scaffold is systematically used and then, over time, gradually taken away (McNaughton, 2018). This reduces the risk of teacher support, which can limit self-learning by disabling the learner from progressing towards independent activity due to dependency on the teaching. The reduction and ultimate absence of the scaffold establishes the effectiveness of the teaching. McNaughton (2018) asserted that "the teacher acts to make themselves redundant" (p. 36). When developing a literacy processing system, scaffolding must be reduced over time, allowing the learner to engage in problem solving by actively solving challenges (Gaffney & Jesson, 2019; Holdaway, 1979; McNaughton, 2018).

Direct or explicit instructional practices such as demonstrating, prompting, explaining and questioning can be utilised by teachers to ensure successful learning outcomes (Parr et al., 2022). Instruction needs to be provided "just in time" rather than "just in case," as it becomes more meaningful when knowledge is applied immediately to problem solving. However, Parr et al. (2022) identified a disagreement, within the field, regarding the extent of the direct instruction provided.

When considering teaching interactions, a "theory of learning" as distinct from a "theory of instruction" has been recommended for teachers (Gaffney & Jesson, 2019). An outcome of this learning is that teachers build knowledge about each child and know what they know to encourage children to participate actively in problem solving, ensuring that engagement and learning are sustained and the child acts independently. In addition, teachers encourage children to notice and utilise the "full gamut of resources" (Gaffney & Jesson, 2019, p. 34) they have at their disposal to engage in active learning.

Teacher knowledge of the resources children bring to their learning can also promote reciprocal links as children transfer what they know from their writing into their reading or vice versa.

Children can initiate processing and expand their knowledge of knowing and doing over time (Gaffney & Jesson, 2019). An example is the transition from teacher scribing to co-construction, where the written text is partly written by the teacher and partly by the child, but the message remains the child's. When teachers develop tasks with scope, children are encouraged to expand their learning and connect with what they know and can do (Clay, 1996). Developing the child's ideas and expanding the quality and complexity of the child's composition through conversation (Harmey, 2021), which is written down and then read back, increases the scope of the task. As young children write with the teacher's assistance, they understand that they will become more proficient in the information they use and in their competency to problem solve over time (Harmey et al., 2019). Teachers can be responsive to what the child is learning through the co-construction of text by observing and supporting the child's early problem-solving attempts (Wood, 1988).

Active learning is critical to developing a literacy processing system (Gaffney & Jesson, 2019). Through the inverted scaffolding model, children play an agentive role and are recognised as initiators of their learning. The learner must independently construct effective working systems to search for information in print to solve problems effectively (Doyle, 2015). These working systems result in the learner developing self-monitoring and self-correcting strategies in reading and writing. For example, noticing mismatches (self-monitoring), and checking one kind of information with another resulting in a self-correction, can develop once the child can pull many kinds of information together. Such strategies confirm that the learner is becoming self-reliant and can actively engage in problem solving the puzzle of sending or getting a message from the text (Doyle, 2015). Independent problem solving can occur early on as young children draw on their knowledge of language, the world and how books/text work (Clay, 1991).

The Critical Role of Composing and Writing Stories in Learning to Read

Classroom practice is often based on the assumption that children learn to write only after learning to read. However, this perception must be reconsidered according to much of the literature reviewed. Early writing experiences can support and enhance learning to read (Anderson et al., 2018; Chomsky, 1971; Coker et al., 2018; Graham & Hebert, 2011; Harmey & Rodgers, 2017) due to the reciprocal nature of literacy. By improving writing instruction for children, teachers can ensure that reading development is also positively impacted (Harmey & Rodgers, 2017).

Teaching children how to compose and record clear messages is significant, as "writing can contribute to the building of almost every kind of inner control of literacy learning that the successful reader needs" (Clay, 2014, p. 145). When children talk, write and read, they learn first-hand how to send clear messages and the conventions of print used to record these messages, supporting learning to read. Chomsky (1971) emphasised that, ideally, young children should write first and then

read what they have written as writing involves child actions and a consciousness that the writing belongs to them. In comparison, reading has been concocted by others with no connection to the child themselves. Therefore, children's early print explorations can occur in writing rather than reading (Chomsky, 1971).

Early and ongoing success in literacy can be enhanced when young children understand print and how it works before they are introduced to guided reading (Aitken et al., 2018). The MoE, (2003) has endorsed this awareness by claiming that children benefit from guided reading once they have developed several understandings of the text. By monitoring and observing what children know, teachers can be guided to decide when children should begin the more intensive approach of guided reading (MoE, 2003). Engaging in language experience and rich conversations have been recommended to advance children's early literacy success (Aitken et al., 2018). Other approaches also mentioned include shared reading and writing, reading appealing picture books to children, drawing, singing and reading poetry (Aitken et al., 2018). In addition to language competencies, foundational literacy learning includes "discovering concepts about print, knowledge of the written code, seeing the symbols [letters] and patterns of symbols in print and looking at print according to the directional rules of our written language" (Aitken et al., 2018, p. 27).

Learning About Print and How it Works

Learning how print works will inevitably contribute to children's later literacy development (Piasta et al., 2012). Through writing, children can build the working systems needed to search for information in print (Doyle, 2013). A child's early knowledge of print includes understanding the difference between print and pictures. In addition an awareness that writing consists of letters and the conventions of print, which include knowledge of letters and words, that spaces separate words and that writing is arranged linearly from left to right (Puranik et al., 2011). These critical concepts will support early reading attempts (Snow et al., 1998).

An advantage of engaging in writing continuous text is that children learn "where to look, what to look for, and how to fixate and move their eyes across print" (Doyle, 2013, p. 640), which is one of the first things novice readers need to learn. Furthermore, when children understand that print is read by starting at the top, left-hand side of the page and they develop a sensitivity to the directionality of print, it "is a major first step toward reading" (Snow et al., 1998, p.191). Learning to write facilitates understanding print and how it works in reading and writing (Doyle, 2013).

A crucial hallmark in children's literacy development is understanding spacing between words as they write, demonstrating an awareness of one-to-one correspondence between the text and the spoken word (Ferreiro & Teberosky, 1982). This understanding maintains reciprocal causation during early reading when children initially match the text to the spoken word by finger pointing for a short period. Knowledge of this strategy can ensure the child can engage in early processing, such as self-monitoring, leading to self-correction if the child notices independently that there is a mismatch when

finger pointing (Doyle, 2013). Self-correction is an indicator of progress for young literacy learners. Children notice previously neglected information during self-correction and gain satisfaction and control over problem solving (Ballantyne, 2014). Gradually, over time, matching speech to print does not require conscious attention and the child can discard the use of the finger (Clay, 1991).

Writing has also been proposed as an effective way to teach young children about letters and the sounds they make (Diamond et al., 2008). Learning to write directs a child's attention to the many details of the print, such as the features of letters, constructing words letter by letter and segmenting sounds in words to write them (Hildreth, 1963). Children must attend to the visual discrimination of letters and names of letters to write letters, facilitating alphabet knowledge (Puranik et al., 2011).

Learning letters through writing acquaints the learner with features of letters in a tangible way instead of merely looking at letters and naming them or trying to find them in printed words. Constructing letters through writing will inevitably support securing letter knowledge (Hildreth, 1963). The reciprocal value of learning the details of letters as children write continuous text will enhance a child's ability to distinguish visually similar letters when reading (e.g., l/t, n/r, u/y, h/n) (Hildreth, 1963; James & Engelhardt, 2012). In addition, letter learning through writing establishes a means by which children can monitor, search and check grapheme information as they engage in early reading (Doyle, 2013). This knowledge will continue to expand with ongoing reading and writing experiences.

Developing Phonemic Awareness Through Connected Phonation

Research has identified that linking a sound sequence (phoneme) to its corresponding letter or letters (graphemes) is essential knowledge for learning to write and read. As children engage in writing, they learn to identify and link the letter sounds to their corresponding written symbols which supports literacy learning (Harmey et al., 2019). This knowledge is developed as young children solve how to write unknown words (Martins et al., 2016) through invented spelling. Diamond et al. (2008) described invented spelling as the process children use during writing, demonstrating what they hear in speech and how they represent it in print. Teacher feedback is vital as children attempt to spell unknown words (Ouellette & Sénéchal, 2016). Recent research identifies that connected phonation, where teachers encourage the child to slowly stretch out the sounds of a word without stopping between phonemes, is more effective for teaching beginning readers to decode unfamiliar words (Gonzalez-Frey & Ehri, 2021). Connected phonation can be encouraged successfully during writing as children articulate a word to hear the sounds and then write down the letters that represent these sounds. In this way, writing is well suited to developing phonemic awareness (Clay, 1991).

McNaughton (2020) stated that “phonemic awareness needs to be taught well and learnt early and fast” (p. 21), adding that while “reading has been emphasised as the vehicle for systematic phonics instruction, writing can be very effective too, by systematically adding ‘analytic’ phonics to ‘synthetic’ phonics instruction” (pp. 23–24). The potential for teaching phonemic awareness through writing is often overlooked (Doyle, 2013; Harmey et al., 2019; Hildreth, 1963; McNaughton, 2020). When young

children are taught to hear and record the sounds of words through writing, “the constructive nature of the task in writing is probably more obvious to the young child than the breaking down processes that occur in reading” (Clay, 1991, p. 109). Reciprocally, this knowledge of linking sound sequences to letter sequences in which children engage, as they learn to spell, improves reading (Graham & Hebert, 2011).

By using slow articulation to attempt to write an unknown word, children are actively problem solving as they search for information (Boocock et al., 1998). The practice demonstrates the left-to-right scanning of a word which the learner is forced to do as they write letter by letter. In addition, spelling attempts provide a window into the child’s developing alphabetic knowledge and understanding of phonemic awareness, which reciprocally facilitates learning to read (Ouellette & Sénéchal, 2016).

Spelling: Building a Writing Vocabulary.

Children must learn to spell some “high-frequency” words conventionally if writing competencies are to develop (Croft, 1983). These high-frequency words are best learnt as a component of writing and not as a result of studying isolated lists of words as this enables teaching that is responsive to the individual child (Croft, 1983). Developmentally, children should be learning to spell words they almost know. These words will fall naturally within the child’s zone of proximal development, which refers to the gap between what a child can do independently and what can be achieved with the help of a teacher (Wood, 1988). It is beneficial for children to accumulate a collection of words they know in every detail, which will continually expand over time (Clay, 2014). Clay (1975) responded to a claim about learning words through reading by suggesting an alternative view:

One frequently sees a statement that implies, “How can the child write words until he can read them?” If the writing programme fosters the development of self-direction in locating, exploring and producing appropriate analysis of printed forms. Then one is tempted to say, “How can any child who is not exceptional learn to read until he can write some words?” (p. 74)

Orthography is the spelling system of language. One of the reasons children must learn how to use orthographic information is that English is an irregular language. Not all words can be written accurately using phonology (Ehri et al., 2009). Directing a child’s attention to learning to write words systematically will undoubtedly improve their ability to read them in the text if a teacher makes these links apparent to the child (Chomsky, 1971). The main predictor of early reading progress is the number of words a child could generate and write independently in 10 minutes, highlighting the reciprocal nature of literacy (Robinson, 1976). Graham and Hebert (2011) reinforced this rationale and similarly affirmed that spelling instruction in Grades 1 and 2 indicates improved word reading when reading text.

Part 6: Identifying Development in Writing as Change Over Time

The change over time that occurs as children develop a processing system for literacy provides a means of identifying each child's learning in writing, which can inform teacher practice. Development in learning can be conceptualised as the change over time that occurs as children engage in a task (Harmey et al., 2019). Unfortunately, few tools describe change over time in early writing competencies. Furthermore, many are not fit for purpose as they require the children to complete tests separate from their usual classroom writing (Rowe & Wilson, 2015). Harmey et al. (2019) asserted that the most effective assessment tools would involve systematically observing children as they co-construct writing with a teacher in the classroom. An early writing observational rubric (EWOR) was designed by Harmey et al. (2019) to observe and describe changes over time in writing for children aged 6–7 years old within a teaching setting. Their research found that the rubric is reliable and valid and a valuable tool for observing and measuring change over time. According to Pentimonti and Justice (2010), teachers primarily offer support to children that is not individually tailored and specific to each child's current level of understanding. This perception validates using the EWOR, which effectively identifies the child's current competencies through observation.

An emphasis on a child's actions when identifying problem solving (Doyle, 2015; Holdaway, 1979) in writing implies the advantages of examining independent work samples. Only through these authentic examples of children's independent actions can a child's development in literacy learning be revealed. By comparing several early and later independent writing samples, teachers can assess the learning taking place. Reciprocally, the information gleaned from children's independent writing samples can also provide information the teacher may use to individualise reading instruction and recognise and monitor children's development in learning concepts about print (Clay, 1975).

Early writing, according to literacy processing theory, includes two features that change in proficiency over time. These two features are contained within Harmey et al.'s. (2019) EWOR and are described in simple terms: firstly, what the child is using and, secondly, what the child is doing. The first feature (using) refers to the information children use to solve problems while writing. This information includes using oral language to compose, understanding print and how it works, letter-sound knowledge, building a writing vocabulary and using analogy. The second feature (doing) is what the child does to solve problems. For example, the authors state that observations of children independently rereading to monitor the accuracy of what is written or rereading to know what to write next indicate that the child is engaging in problem solving. Other indicators may be if the child is actively involved in self-correcting and the speed at which they can write their stories. All these actions initiated by the child indicate that young writers are engaging in problem-solving activities (Harmey et al., 2019).

Teaching, especially when children start school, must be responsive to the individual child and their unique abilities. Learning is more meaningful for young children when their knowledge and expertise is pertinent for teaching. When observing change over time for individual children in writing, learning begins with what the child can do and teachers observe how the child's learning develops and

changes over time (Harmey et al., 2019). This facilitates responsive teaching for each child. In comparison, demanding instructional practices could lead to inequitable outcomes due to unequal starting points (Aitken et al., 2018). According to Crawford (1995), it is not a matter of preparing children for school and literacy instruction. Instead, we should consider changing schools and literacy instruction to meet the needs of the children.

Stagg Peterson and Friedrich (2021) endorsed the requirement for authentic assessments. Teachers who investigate children's earliest attempts to write "will find a rich commentary on the child's earliest learning about print encapsulated in his accumulated attempts to write" (Clay, 1975, p. 16). By comparing several early and later writing samples of a child's independent work, teachers can assess the learning taking place (Clay, 1975). Reciprocally, the information gleaned from children's independent writing samples can also provide information the teacher may use to individualise reading instruction and recognise and monitor children's development in learning concepts about print (Clay, 1975).

Part 7: Reading: Reading the Co-constructed Writing.

When producing reading material from children's language about experiences that matter to them, Holdaway (1979) expressed the potential for a bridge to be built between familiar language and printed symbols. The language-experience approach naturally links reading and written language (Holdaway, 1979). Historically, researchers and educators saw the development of oral language and writing as inseparable from reading (Ashton-Warner, 1963). Ashton-Warner (1963) and Paulo Freire (1970) extended language experience into critical literacy as the stories written and then read were laden with emotional meanings for the authors. Both educators worked in marginalised communities and, through language experience, could turn lived experiences into learning opportunities. By talking and writing about individual experiences, teachers could support children to learn to read (Hoffman & Roser, 2012).

When children read and reread the texts they have created with support, they build an awareness of the relationship between talking, writing and reading (MoE, 2003). Ashton-Warner (1963) described the importance of children reading their writing as a "bridge from the known to the unknown" (p. 28) and explained how children read their own and then each other's writing. The bridge described by Ashton-Warner refers to the gap that metaphorically spans between the child's own culture and the new culture. In this case, the personal stories and language of young rural Māori children in the 1960s were vastly different to the readers of the day, which were the Janet and John series, which resulted in children struggling to relate to the stories they had to read. When children read their own stories first, "by the time they arrive at the books of the new culture, they receive them as another joy rather than a labour" (Ashton-Warner, 1963, p. 34). The power for children to read their own authentic stories is that the children have a personal connection to what they are reading, which supports their ability to problem solve effectively.

As children read their own stories, there is also the opportunity to reinforce the learning that has occurred during writing (Fitzgerald & Shanahan, 2000; Graham & Hebert, 2011; Harmeay & Rodgers, 2017; Parr & Jesson, 2016; Parr & McNaughton, 2014). Children initially learn about print and how it functions as they write stories with personal meaning. Due to the reciprocal nature of literacy, the importance of these messages and young children's understanding of print supports problem solving when reading. The reader learns to problem solve when they understand the need to be attentive to the message as they orchestrate many kinds of information together. When this occurs, active problem solving such as searching, monitoring and self-correcting can occur (Doyle, 2013).

Conclusion

Learning to write facilitates understanding print and how it works in reading and writing. Despite this, less research is focused on writing than reading, which can influence teachers' views on the importance of early writing. Research identifies that literacy approaches that integrate oral language, writing and reading strengthen literacy learning for young children. The rationale is that children can use what they know in one literacy setting to make connections in another. When this occurs, young children initiate active problem solving as they learn to write stories about themselves and then read and share them with others. Limited information is available in the literature regarding young children reading their personal stories, indicating that this practice is underused and undervalued. There is scope to investigate this further. Clay (2010) saw an opportunity through literacy learning to support children to discover that "What I say, I can write. And, what I write, I can read" (p. 7). The main research question which guides this study is:

How can language experience contribute to building a processing system for literacy in the first months of school?

Question 1 – How does the conversation about an experience in a small group before writing contribute to building a processing system for literacy?

Question 2 – How does the co-construction of a written text between the teacher and the child contribute to building a processing system for literacy?

Question 3 – What does writing look like over time for a child engaged in a language-experience approach during the first months of school?

Question 4 – How does the reading that a child does when they read their own writing contribute to building a literacy processing system?

The four sub questions were created to understand the children's learning in language experience and have guided the methodology of this study towards the findings identified in chapter 5.

Chapter 3: Methodology

This qualitative study was designed to observe young children in an authentic learning situation and to examine their early literacy learning as they engaged in language experience in two new-entrant classrooms. Throughout this study, I aimed to observe the ordinary within a naturalistic environment. Stake (2010) depicted qualitative research as “studying how things work” (p. 2) and he described the significant role of observation, where researchers emphasise what they see over what they feel, to investigate issues. This study’s methodology and design decisions have been influenced by previous research related to early writing, including written transcription and oral language (Bingham et al., 2022; Harmeý, 2021; Harmeý et al., 2019). Data gathered within this study included observations of teachers and children, field notes, discussions with whānau and the examination of artefacts, all contributing to highlighting early literacy-learning processes rather than only outcomes or products (Slavin, 2007).

The methodological approach used in this study is based on participatory action research (PAR). I was interested in working collaboratively with teachers to bring about change or development during the research process rather than describe a situation “as it is” (Munn-Giddings, 2012). According to Munn-Giddings (2012), PAR consciously involves participants in the research process to achieve systemic change iteratively. Insights from the data were intended to create responsive alterations to practice collaboratively between myself and the teachers with whom I was working. During the data collection, the teachers and I agreed to grapple with what we were noticing and make adaptations to improve outcomes for the children. The aim was to utilise this methodological approach collaboratively to achieve reflective and responsive teaching to support early literacy learning.

The focus was on teaching and learning. Teaching interactions were examined in relation to how these interactions contributed to the learning opportunities for eight newcomers to school. The children’s independent work samples were also examined to identify if and how learning occurred.

Participants and Context

At the end of 2021, both schools and their teachers were approached and a slideshow presentation via Zoom (due to COVID restrictions) was delivered, outlining the critical elements of a language-experience approach. The presentation would establish acceptance or nonacceptance of participation and, on this occasion, both teachers and their senior management teams enthusiastically agreed to participate. I had not previously had any contact or relationship with either of the participating schools or their teachers.

The eight children were selected from two new-entrant classrooms in two demographically similar schools in Tāmaki Makaurau West Auckland. To ensure participant confidentiality, participants and schools were given pseudonyms. The two schools were named Tuna Creek and Rangī Toa School.

The Schools

The following describes the two schools, the teachers and the eight children who participated in this study.

Tuna Creek School has 160 students from Years 1 to 6 and serves an ethnically diverse community. According to the latest Education Review Office report, completed in 2018, Samoan children make up 26% of the roll and there are smaller groups of Fijian, Tongan and other Pacific children. Māori children comprise 26% of the school roll and Pākehā (European) children 11%. Many of the children and their whānau speak home languages other than English. The school is situated away from main arterial routes in a quiet suburban street of low-income, stand-alone housing. The properties have green space for children to play, reminiscent of a bygone era before the intensification of urban areas created the necessity for apartment dwellings. The school encompasses values of kindness and caring, incorporated within pastoral-care approaches, and these are emulated by staff in their interactions with children.

Rangi Toa School is larger, with a school roll of 303 children, and ranges from Years 1 to 6. The major ethnic composition of the school is 39% Māori, 32% Pacific and 13% Pākehā. These figures were also gathered from the latest Education Review Office report, completed in 2018. The school observes values of sustainability, pride, aroha (love), respect and kia kaha (strength). In response to the school's strategy of "knowing the learner," the school endeavours to deliver a culturally responsive pedagogy which underpins interactions with children and their whānau. Whānau are visibly present at school, often bringing their children into the classroom daily, which makes sharing information from home and school straightforward. The school is on a main arterial route, close to the motorway. The housing surrounding the school is low-income, stand-alone housing and many of the children live within walking distance of the school. As a result, there is a sense of community and whānau have expressed satisfaction in procuring a house in this area so their children can attend Rangi Toa School.

On acceptance of their participation by all concerned, both principals and the board of trustees for each school were given participation information sheets (PISs) (see Appendix 1) outlining their participation in the study and seeking permission for me to access their schools to complete the study. In addition, a consent form (CF) was signed by each principal. Due to COVID restrictions, I was unable to visit the schools in person to explain the procedures, so these were outlined during the Zoom session at the end of 2021 and emailed to the participants.

The Teachers

Two female Pākehā teachers who had been approached initially by their senior management and who also participated in the Zoom session, volunteered to engage in this study. Both teachers were given PISs, outlining the requirements for their participation, and a CF to sign (see Appendix 2). Kate teaches at Tuna Creek School and Sonya at Rangi Toa School. The teachers had different teaching

experiences and expertise and the following account describes each teacher and their teaching background.

Kate had trained in early childhood education and had 14 years of teaching experience as an early childhood education teacher. In 2018, Kate transitioned to primary school teaching and, at the time of this research, was in her 5th year of primary teaching at Tuna Creek School. Kate's classroom experience ranged from teaching Year 2/3 children to new entrants. She was the team leader for the Year 0 and 1 team, comprising two full classes of children and two teachers, including herself. Kate initially explained that she had received no additional training when transitioning to primary school teaching. This may have motivated her to participate in this study as she indicated that the opportunity to co-teach using a language-experience approach could benefit her literacy teaching and support the children's learning. During informal interviews with whānau members after the study, it was evident they admired Kate as an educator and were content with their children's education at Tuna Creek School.

Sonya had been teaching for 15 years. Her teaching experience ranged from Years 0–6 and this was her second year as a new entrant teacher. Sonya was also a trained Reading Recovery teacher. Her job description involved teaching a literacy block in the classroom in the morning and working with three Reading Recovery children and one group of children engaged in early literacy support in the afternoon. Sonya had been a Reading Recovery teacher for 7 years and, at the time of this research, was her school's junior school syndicate leader. She was keen to participate in this study as she was interested in teaching literacy and wanted to improve her ability to teach new learners. During discussions with the management team and whānau, it was apparent that Sonya was a highly respected teacher at Rangī Toa School.

The Children

Each teacher selected four children in their classrooms to participate in the study. These children were selected due to the timing of their arrival at school. In Aotearoa New Zealand, children enter school when they turn 5 years old, which requires classrooms to continue introducing newcomers to school throughout the year, one by one. The observations were intended to begin during each child's first weeks at school and end after 16 weeks at school. However, due to unforeseen circumstances, I had to select two children who were slightly older than the others; and observations began after their first 12 weeks at school and ended after 20 and 23 weeks at school. The whānau of the children were given PISs that outlined the requirements for their child's participation and a CF to sign on behalf of their child. I introduced myself to those whānau who came into the classroom before school to meet them and answer any questions. In addition I gave the children an assent form and described their participation in the study in a language they could understand (see Appendix 3). The following is a brief description of each child.

Ada is of Indian ethnicity and was born in New Zealand. She is the middle child of three girls. Ada speaks fluent Punjabi at home and is learning to write Punjabi with her sisters. Ada lives near the school with her parents and siblings and can walk to and from school. Ada plays with her two sisters at home and likes doing puzzles, telling stories, singing and role playing. During role play, the girls will often portray being teachers and children at school. Ada teaches her mother te reo, which she is learning at school. Her mother can speak and write five different languages.

Nauri's whānau immigrated from Samoa to Aotearoa New Zealand when she was 6 months old and Samoan is the language used at home. Nauri is the third of four children in her family. In 2019, Nauri's family went on a trip to Samoa for a holiday and stayed with her grandparents. The family had a wonderful time and is looking forward to another trip to Samoa. Nauri has extended whānau living in New Zealand, who are all members of the Assembly of God church. Nauri attended a Samoan preschool that is very close to her present school. Nauri loves playing with her siblings and cousins and enjoys bringing home and sharing the stories she has written at school.

Zak's mother is Māori with extended whānau living in the Hokianga. His father is Cook Island Māori. There are seven children in Zak's whānau and he is the fifth child. Zak likes singing songs and reciting his pepeha (an introduction of yourself in Māori) for his whānau at home. Zak spent 2 weeks attending a school in a provincial city before he was enrolled at the participating school. Zak's experience at this first school was not a happy experience for him and he was withdrawn and quiet when he transitioned to Kate's class. However, throughout the study, he became much happier and began to come to school willingly. Zak is an active boy who shows enjoyment in playing outside and drawing.

Connie is Māori, from Ngāpuhi, Ngāti Kuri and Tainui iwi (tribe) . She is the youngest of five children. One of Connie's older sisters is in the same class at school as her. Connie loves school and has settled in quickly, as she has older siblings and a cousin who look after her. Her whānau would love to learn te reo and try to incorporate as much at home as possible. Connie's whānau love to hear her recite her pepeha at home and they enjoy reading the stories she has written at school and brings home to share.

Tanu was born in New Zealand and is of Indian ethnicity. Her whānau have lived in New Zealand for 20 years and Tanu speaks Hindi at home and has one older sister. Tanu's father walks the girls to school every day, and her mother picks them up at the end of the school day. Their family home is just over the fence from the school. Tanu and her sister love playing with their dolls. Her whānau celebrate traditional Indian festivals such as Diwali and Raksha Bandhan.

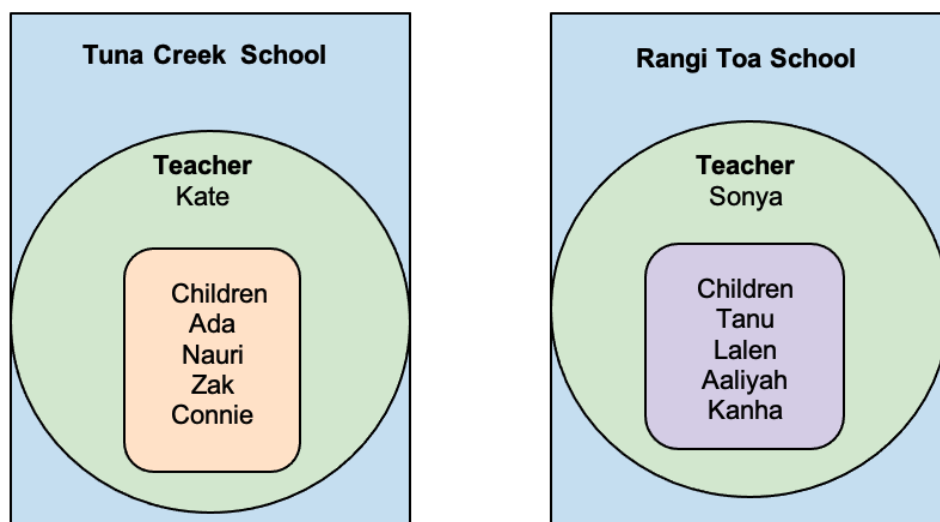
Kanha's parents are Fijian Indian and have lived in New Zealand for 13 years. Kanha was born in New Zealand. He speaks Hindi at home. Kanha has one older sister who attends the same school. He loves playing soccer and watching cartoons. Kanha's whānau celebrate Diwali, Raksha Bandhan

and Holi. Recently his whānau have managed to buy their first house very close to the school and they are delighted that Kanha and his sister can attend Rangī Toa School. Kanha has no extended whānau living in New Zealand.

Lalen is a Pākehā boy. His family have lived in the same community for three generations and Lalen went to the same kindergarten as his grandfather. He likes playing with his two sisters at home and also plays with his older sister at school. Lalen’s mother described how he loves making up stories with fictitious characters and has a vivid imagination. Lalen was also described as a reticent child by his mother, who mentioned that he could be talkative once he gets to know you.

Aaliyah’s dad is Fijian Indian and has lived in New Zealand for 20 years. Her mother is of Tokelauan descent, born in New Zealand. Aaliyah lives with her parents, three siblings and her grandparents and great grandma. Aaliyah’s great grandma speaks Hindi and Aaliyah can speak a little Hindi with her at home. Her three siblings are aged 10 years, 6 years and 4 years old. Aaliyah’s mother mentioned that she is helpful at home and does her chores. She likes reading and arts and crafts and is always full of energy bouncing on the trampoline, riding her scooter or bike and playing tiggy with her siblings. Aaliyah’s whānau enjoy playing board games at home, watching movies or going on family outings to the zoo, Kiwi Valley or the beach. In April next year, Aaliyah will go to Tokelau with her mother and one of her siblings. This will be their first visit to Tokelau, and they are looking forward to exploring the island and connecting with family. Figure 1 shows a diagram of the two schools, the teachers and the eight case study children.

Figure 1: The Participant Schools, Teachers and Children



My intention was that the classroom teachers would gather information from the children and their whānau as outlined in the PISs for the teachers, principals and whānau members. However, it transpired that the information was collected in the following ways.

When a child is enrolled at Tuna Creek School, school procedure warrants that the principal has a face-to-face discussion with whānau. The information gleaned from this discussion regarding the child's cultural background and identity, languages spoken, information on other whānau members, interests, health and preschool experiences is then circulated to the teacher. The teacher at Tuna Creek School, Kate, then passed this information to me for the four children I observed. Additionally, I collected information informally at the end of the study when I interviewed whānau casually regarding their children's experiences at school. The information at Rangī Toa school was collected informally by me in person when I spoke informally to whānau when they dropped their children at school. The information I gathered about their children was passed onto the teacher.

Research Design

Phase 1: Participatory Action Research

Language experience was a new concept for both teachers. However, they were enthusiastic about adopting this approach within their new entrant classes. The teachers agreed to teach co-operatively with me in the first term of 2022. The concept of ako played a significant role in the study whereby the teachers, the children and I would bring knowledge to the learning situation and learn from each other. To ensure a language-experience approach was utilised, the study was conducted in two phases.

Phase 1 occurred at different times for each teacher, with Kate beginning Phase 1 in Term 1 of 2022 and Sonya in Term 2. Each teacher was consulted regarding the ways of working and communication that best suited them and, as the study progressed, allowances were made to accommodate their preferences.

Co-operative teaching of language experience began for both teachers after the first few weeks of Term 1 for Kate and Term 2 for Sonya. Teachers used the time before co-operative teaching to establish routines so small groups of children could work with the teacher while the other children engaged in other literacy activities. The classroom arrangement for these additional literacy activities was left to the teachers' discretion and management. The only proviso was that most of the children in the class needed to be working independently, thus enabling the teacher to withdraw and work intensely with small groups of three to four children at a time.

Literacy was ideally taught in the initial 2-hour block of the day. The frequency and scheduling of co-operative teaching sessions, where the teacher and I worked with a small group of children, were negotiated. Both teachers identified the benefits of co-teaching when requested but also found it beneficial to have time to teach alone to hone their practice. Over the term, co-operative teaching occasions occurred for Kate on 10 occasions and Sonya on seven occasions. Generally, apart from the initial co-teaching experience, the teacher controlled the topic to be written about that day and I would co-teach alongside them.

Throughout this time, the teachers and I kept research journals that included our notes regarding organisational and observational aspects of the teaching practice and information about the subsequent learning outcomes for the children. In addition, the teachers were asked to record any questions or queries regarding teaching and learning and the progress of particular children for later discussion. As the study progressed, the teachers and I would inevitably decide on some alterations that could be made to practice by referring to the notes in our journals to support improved outcomes for children. On several occasions, I shared useful educational readings with the teachers that pertained to the oral language or the writing component of language experience and the teachers welcomed these.

Brief meetings with each teacher were arranged fortnightly. The teacher and I would use the journals to discuss aspects of teaching and learning that were going well and identify some changes to practice that could more effectively support children's learning outcomes. At times, these discussions led to changes being made. However, there were occasions when negotiated changes were not jointly made and suggestions regarding adjustments to teaching did not occur. It became apparent that I needed to respect the teachers' autonomy. As we progressed, any suggestions I shared regarding changes to practice were merely suggestions and uptake of these was optional. The only necessity was that the children were engaged in talk, which was written down and then read.

Many fortnightly meetings could not be scheduled due to the teachers' responsibilities and demands, which had the potential to affect the quality of responsiveness of the teaching. Another means of communication was needed during the second term. Correspondence in the second term transformed into regular written notes for the teacher by myself after observations of children rather than a face-to-face discussion. This proved to be a more successful means of communication.

Phase 2: Data Collection

Once language experience was underway, I became a nonparticipant observer of the children as they engaged in early literacy. The data were collected in both classrooms during the morning literacy block, which extended from 9.00–11.00 most mornings. During this 2-hour literacy block, both classrooms began with the teacher talking to a small group of children about an experience they had or a shared classroom experience. Following the conversations, the children would compose a story orally and then write the story with teacher support. At 10.00am, both classrooms would have a healthy snack break and, additionally, the children would listen to their teacher reading a picture book at this time. During the second hour of literacy, the teacher would call the children from their independent literacy activities to engage in guided reading. Those children who had written a story that day with teacher support would read their story to the teacher during guided reading. In addition, Sonya's classroom started the literacy block every day with a shared book story that the teacher and the children would read throughout the week. The shared book was pivotal in the session and a valuable addition to reinforce literacy learning.

Observations of Children. Each case-study child was observed four times during the data-collection period in Phase 2 of the study. Ideally, the observations were spread out and timetabled to occur every 3 to 4 weeks, allowing for a change in the children’s learning development over time. Due to COVID-related matters and other life happenings for the teachers, the weeks between observations varied. With a high rate of child and teacher absences due to the tail end of the COVID pandemic, time at school was recorded as actual days present at school rather than calendar days. Every child received four observations with actual weeks at school ranging from 7.4 weeks (nearly 2 months) to 23.2 weeks (nearly 6 months). Most children were observed in their first few weeks at school. However, observations commenced for two children after they had been at school for 12 weeks. Table 1 identifies the observation timeframe for each child.

Table 1: *The Observation Timeframe for Each Child*

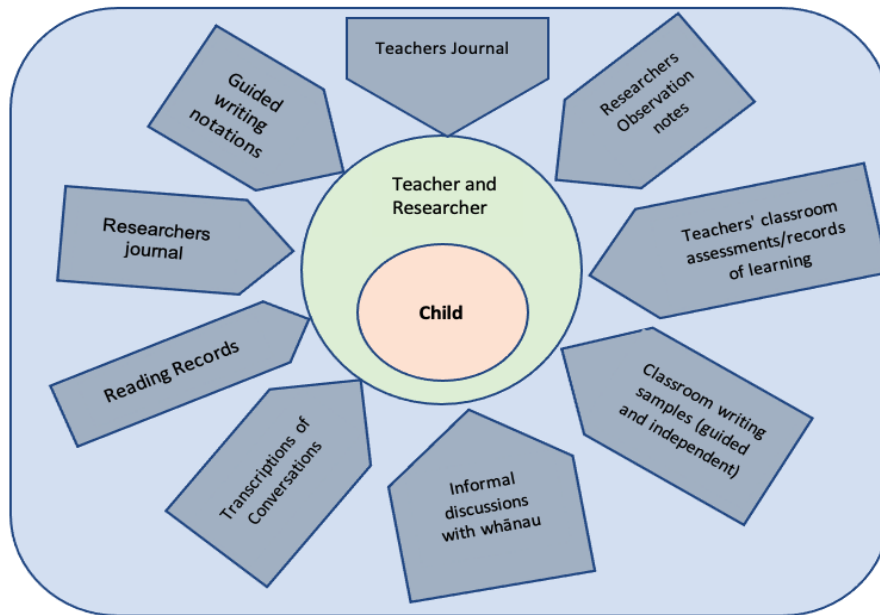
Child	Weeks at school			
	Observation 1	Observation 2	Observation 3	Observation 4
Ada	12 weeks	14.8 weeks	20 weeks	23.2 weeks
Nauri	11.5 weeks	14 weeks	18.4 weeks	20 weeks
Zak	4.6 weeks	8.6 weeks	10.2 weeks	12 weeks
Connie	1 week	3.5 weeks	5.6 weeks	7.4 weeks
Tanu	2 weeks	3.2 weeks	7.2 weeks	10.6 weeks
Kanha	2 weeks	5.4 weeks	8.9 weeks	10.7 weeks
Lalen	1 week	5.2 weeks	6.4 weeks	9.2 weeks
Aaliyah	2 weeks	4 weeks	7.2 weeks	10.2 weeks

The oral language and writing observations were recorded via a voice memo application on my phone. In addition, the reading observations, where the children read their writing to the teacher, were video recorded.

Sources Used for Data Collection

Data was collected from multiple sources. Due to the cyclical nature of PAR, analysis and reflections on the data were used to inform the teaching and support learning. Figure 2 illustrates the multiple data sources that the teacher and I used to inform teaching practice and iteratively improve learning outcomes for the children.

Figure 2: *Multiple Sources of Information Utilised During Data Collection to Inform Teaching and Support Learning*



Researcher's Observational Notes

The observational notes recorded as the children engaged in literacy depicted the child's actions during the observations. The teachers' moves to facilitate these actions and my thinking during these observations were also identified. The notes were shared with the teachers at the end of each observation, ensuring transparency. There was no verbal discussion regarding these notes. Instead, the notes identified my thoughts regarding the teacher's moves that strengthened the child's literacy learning. Suggestions for adaptations that could support further practice were also included. Any uptake regarding these suggestions was left to the teachers' discretion. These suggestions were sometimes reflected in subsequent practice, and sometimes they were not. The form for the observational notes is included (see Appendix 4). Although the teachers were willing to make some changes to their practice, teacher autonomy was vital to the co-operative working relationship. Data were collected during Phase 2, which extended throughout Terms 2 and 3 of 2022.

Transcriptions of Teacher–Child Conversations

The voice memos were replayed after the observation and the child–teacher talk was transcribed. To accurately transcribe the dialogic interchange between the teacher and the child, the voice memo needed constant replaying due to general classroom background sound and the softness of some children's voices. This proved an arduous process, but it eventually delivered a satisfactory account of the conversation.

Notations of the Guided Writing

After the conversation transcription, the voice memo recording was replayed and the child's writing was annotated. A key was used with symbols to represent teacher and child moves resulting in a

record of the child's contributions to their writing and the teacher's contributions. Table 2 shows the key with the notations used to capture teacher and child actions. Teacher prompts and the child's responses were included underneath the notation to give a fuller picture of teaching and learning interactions during the writing.

Table 2: Notations Used to Record Teacher and Child Actions During Guided Writing

The notations used to capture teacher and child actions during guided writing			
Key			
	Teacher reread the story for the child		Child copies the word or letter
	Teacher told the child to reread their story		Child wrote word independently
	Child re read their story independently		Child learnt this word and added it to their writing vocabulary
	Teacher encouraged independence "What's your job?" "What are you going to do next?"		Word from the child's writing vocabulary but still unknown
	Teacher reminded child to leave a space		Unknown word from writing vocabulary. Learnt again.
	Teacher indicated that letters are close together in a word		Teacher articulates the word for the child
	Child recorded letter with teacher help		Child articulates word independently and records the sounds they hear.
	Child recorded letter independently		

Reading Records

During the reading component of literacy, which ideally occurred in the second half of the literacy block, the children read their writing to the teacher. The children were arranged in small groups, similar to a guided reading group. I initially observed the children participating in this reading and attempted to document a reading record. However, it quickly became apparent that due to the complex and varied responses from young children as they read, every detail of the reading interaction could not be recorded accurately via observation. Hence, the children's reading was video recorded, allowing me to accurately record what occurred during the reading. The children were ideally videoed reading their stories independently. The initial reading records often involved children reading their stories several times to the teacher before the videoing occurred to enable teacher support with finger pointing before attempting this independently. The video recording was later viewed and annotated as a reading record. The recording of the reading record is principally derived from the conventions for recording a Running Record (Clay, 2019, pp. 60–63). Figure 3 shows an example of a reading record.

throughout the research. Sonya left her research journal on her desk so I could access and read it. The entries would often identify changes she was making to practice and the reasons for these changes and she frequently asked questions about organisation or teaching practice. I would read Sonya's entries and respond to her thoughts and questions on a blank page in the journal. In this way, the journal became a collaborative written communication tool for both of us, effective when the time for discussions was limited in a busy new-entrant classroom.

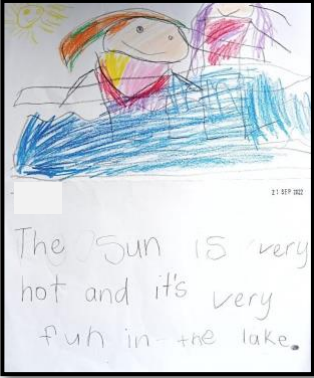

Researcher's Journal

I also used a journal to record responses and thoughts about an emphasis that could be made regarding the intervention, email correspondence with teachers and general thinking during classroom interactions.

Classroom Writing Samples

Samples of the children's writing were photographed and collected. Two different kinds of writing occurred during language experience. The first type of writing was written collaboratively by the teacher and the child and was called (guided writing). The second type of writing was independent writing, which was completed by the children daily and was independent of any teacher support. Independent writing provided opportunities for children to practise what they knew and make discoveries for themselves. Figure 4 identifies samples of guided writing and independent writing.

Figure 4: Two Kinds of Writing Samples That Were Collected as Artefacts

Co-constructed writing/guided writing	Independent writing/no teacher support
 <p data-bbox="252 1630 738 1693">The teacher and the child wrote the story together collaboratively.</p>	 <p data-bbox="823 1630 1366 1722">Children had opportunities to write independently to practise what they knew and make discoveries for themselves.</p>

Teachers' Classroom Assessments and Records of Learning

Copies of classroom letter identification and word assessments were also collected for some children to provide additional information regarding the children's existing knowledge. Classroom documentation was photographed and collected. This documentation included the children's lists of known high-frequency words they had learnt over time during the guided writing process and knew how to write independently (see Figure 5). For example, during guided writing, if a child wrote a high-

frequency word unexpectedly or almost knew how to write a particular word, a procedure was used to learn how to spell the word in every detail. The purpose was for the child to build a bank of high-frequency words they would know how to spell and use when needed.

The children also used “try cards” during guided writing (Figure 5). A try card documented the children’s attempts to hear and record the sounds of unknown words. The try card consisted of a piece of paper ruled into two columns. In the first column, the child attempted to record an unknown word by slowly articulating the word, recording all the sounds they could hear using connected phonation (Gonzalez-Frey & Ehri, 2021). The teacher then wrote the correct word in the second column while acknowledging what the child could do independently. The try cards were collected as artefacts as they provided a written record of a child’s developing phonemic awareness. Of the eight children, only two used a try card successfully. The remaining six children were working on building initial alphabet knowledge, and once this was established would then proceed to use a try card. Figure 5 shows examples of these records utilised during the study. The first shows an individual child’s list of known words they had learnt how to spell during the writing process. The second shows an example of a try card used to support the development of phonemic awareness.

Figure 5: *One Child’s List of Known Spelling Words Learnt During the Writing Process and a Try Card, Used to Support the Development of Phonemic Awareness*

A child’s list of known high-frequency words used to build a writing vocabulary	A child’s try card used to develop phonemic awareness	
<p style="text-align: center;">Child’s name</p> <p>I to the my a up</p>	<p style="text-align: center;">Child</p> <p>R 15 Kot Famley loyn Fai</p>	<p style="text-align: center;">Teacher</p> <p>restaurant family Indian food</p>

Storage of Artefacts

Photographs of all classroom artefacts were taken and stored electronically or in print copies.

Electronic Filing of Artefacts. The photographs taken by phone of all the artefacts were uploaded and filed onto the researcher’s computer and arranged into folders. All voice memos and video recordings were uploaded and stored in these folders, along with the flow charts for the four observations completed for each child. These files were organised into folders under each child’s name and then into a folder for each school. The files were all backed up to the cloud.

Hard Copy Folders. In addition to an electronic filing system, I also printed out the photographs of the artefacts and collated them into folders for each school, with artefacts filed under each child's name. This ensured that I could visually examine the artefacts more readily. The documents were used to identify if and how the child's prior knowledge had been used in their learning and whether reciprocal gains were evident.

Summary of Chapter 3

In this chapter, I have presented information about the methodology used for this study and information about the schools and participants. Information about the procedures for collecting multiple data sources, including observations, record keeping and artefacts, have also been described.

Chapter 4: Data Analysis

Data were collected to gain insights and understand the phenomenon under investigation (Dyson & Genishi, 2005). The analysis process involved categorising, comparing and identifying the data sets. Throughout the analysis, I was interested in observing and investigating teaching interactions and the learning that emerged. The expectation was that this methodical process would enhance an understanding of what occurred during my observations of teaching and learning in the context of language experience.

According to Askew and Gaffney (1999), when teachers initiate tasks with scope, they allow learners to connect with what they know and can already do. This concept was integral to analysing language experience, where teachers craft their teaching to the individual child, utilising their existing knowledge and expertise as a foundation for new learning. This type of teaching enables the child to be an active learner who can initiate processing and extend their expertise (Gaffney & Jesson, 2019). In comparison, when teachers are more directive, they narrow down the task (Gerde et al., 2019). However, during the early stages of learning, it is expected that there will be occasions when teachers will both be directive and allow learners to connect with what they know and can do. Throughout the analysis, I drew on this distinction to consider how teaching moves would reflect extending the scope or narrowing the task, operationalising the two categories by describing the opportunities for learning offered and the learning that emerged.

The analysis process identified the type and frequency of teaching used and established whether this changed over time relative to the learning development of eight children. According to Gerde et al. (2019), narrow, directive teaching can involve the teacher doing the thinking rather than the child. Therefore, it was important to understand how this teaching would change over time to allow the child to contribute their expertise and expand their agency as learners. In addition, I was also interested in identifying opportunities to strengthen learning by connecting what was being learnt in writing to reading, linking the child's knowledge from one literacy setting to another. Making these connections provides an additional opportunity for the teacher to assist the child in contributing their expertise. Within the context of this research, language experience provided opportunities to teach reciprocally.

I was also interested in how the teaching during language experience contributed to building a processing system for newcomers to school. Therefore, children's reading records and independent writing data were examined for early signs of a developing processing system. The emphasis was notably on independent work samples rather than teacher-supported work, as literacy processing can only be revealed through the child's ability to take independent, unprompted action (Doyle, 2015; Gaffney & Jesson, 2019; Holdaway, 1979).

Data were collected and organised under category headings from Harmeey et al.'s (2019) Early Writing Observational Rubric (EWOR). The category headings are theoretically informed by literacy

processing theory. They contain two features: first, what the child is using, and second, what the child is doing. The first feature (using) refers to the information children use to solve problems while writing. The information used in this study includes using oral language to compose, knowledge of print, building letter knowledge, building a writing vocabulary and developing phonemic awareness. Building letter knowledge was an additional heading, which was included due to the focus on newcomers to school in this study.

The second feature (doing) references what the child does to solve problems. For example, Harmey et al. (2019) stated that observations of children independently rereading to monitor the accuracy of what is written, or rereading to know what to write next, indicate that the child is engaging in problem solving. Other indicators may be if the child is actively involved in self-monitoring or self-correcting, and the speed at which the children can write and read their stories. Another problem-solving action, identified by Boocock et al. (1998), was using slow articulation (phonemic awareness) to attempt to spell unknown words, which, within this category, is identified as an independent action. These actions undertaken by the child indicate that young writers and readers are independently engaging in “doing” some problem solving (Harmey et al., 2019). A significant factor to acknowledge when considering using the EWOR is that Harmey et al. (2019) used the rubric to evaluate teacher-supported writing for children aged 6–7. However, during this study, it was used to assess independent reading and writing for newcomers to school.

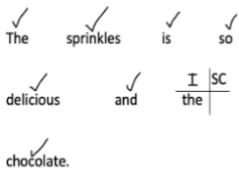
Data Collected

Resources used in teaching were intended to deepen or extend a child’s literacy experiences (Gerde et al., 2019). Therefore, these resources were included under the first feature of using information to solve problems when writing.

A constant comparative analysis method was used to compare the two kinds of teaching moves. In conjunction, insights from research journals, information from the observational notes I shared with the teachers and comments from whānau were also examined under the EWOR headings to investigate the interrelationships between these different data sets. Table 3 outlines all the data sources, the numbers collected and a description of each.

Table 3: *Summary of the Data Collected From the Children*

Type of data and number collected	Data sources and scope	
	Description of how the data were collected	
32 x transcriptions of conversations.	The eight children had four conversations each with the teacher, recorded on a voice memo. These were later written up as transcripts of conversations.	
32 x notations of guided writing interactions and samples of the actual guided writing.	8 children were recorded on a voice memo as they wrote with a teacher on four occasions. These were later written up as notations which captured teacher and child actions.	

Data sources and scope	
Type of data and number collected	Description of how the data were collected
32 x reading records 	32 videos of children reading their writing were recorded. Each child was videoed on four occasions. The videos were viewed to capture what occurred and a reading record was written. The reading record used the same recording conventions as a running record (Clay, 2019, pp. 60–64).
3 x samples of independent writing for four children	The three independent writing samples were carefully selected from numerous samples to determine if any self-initiated learning had occurred over several months.
Classroom assessments and records of learning:	
5 x writing vocabulary lists	Writing vocabulary lists were used during guided writing by five children (see description pp. 42–43).
3 x try cards	3 children used try cards and these were collected. However, five children did not have try cards. The teacher considered these children did not have the alphabet knowledge to use a try card (see description pp.42–43).
5 x classroom assessments of letter knowledge	5 children had alphabet knowledge assessments. The assessment was done in response to teacher concern about the children’s alphabet knowledge. There were two kinds of assessments given: <ol style="list-style-type: none"> (1) 3 children had letter identification assessments (Clay, 2019, pp. 84–87). (2) 2 children had assessments which consisted of checklists of sight vocabulary and alphabet knowledge (This was a school-based and used assessment).

In addition to data collected from the children, research journals and my observational notes, comments from informal interviews with whānau were also collected (See p. 41).

There are three parts to Chapter 4. The first involves the data collected from teaching interactions regarding using language to compose. The second examines data collected regarding the teaching interactions to support children in using information during guided writing and reading. Finally, the last part involves the problem solving that occurred for four children as they wrote independently and read their own writing.

Teaching Interactions to Support Children to Use Language to Compose (Using)

During the analysis, 32 child–teacher conversations before writing were examined in detail. The conversations were coded into categories of talk, which were assistive supports for teachers created by Fullerton and DeFord (2001, as cited in Harmey, 2021). The categories indicated the types of scaffolding available and included initiating an idea, expanding on ideas and clarifying. These teacher scaffolds were created to enable children to exhibit more control over the composition process and discuss their ideas by participating in a genuine conversation with a teacher before composing (Harmey, 2021).

The examples from Fullerton and DeFord's (2001, as cited in Harmeey, 2021) categories of talk reveal how teachers can encourage genuine conversations when working with children to compose. The teacher must be an attentive listener and facilitator to encourage child participation. Table 4 indicates the categories of talk chosen from the EWOR and examples have been incorporated for clarification.

Table 4: *The Categories of Teacher Talk During Composing from Fullerton and DeFord*

Category	Description and Example
Initiating an idea	Teachers initiate an idea to start the conversation. Language experience can originate from a shared experience or information about a particular child's knowledge or expertise.
Expanding on ideas	Teacher: <i>"Tell me a little bit more about what else you know."</i> The teacher asks the child to expand on their ideas by viewing the child as the expert.
Clarifying	The teacher repeats what she heard to see if this is what the child meant rather than asking what, why and how questions.

The following sections examine the categories of talk; they first provide a context for each category. A table comparing the two data sets using a comparative analysis method is used, along with an interpretation of these data. The interpretation is supplemented with other data sources contributing additional information within each category. Information collected on using the child's linguistic knowledge in their learning is also discussed due to the relevance of culturally sustaining practice, which is an integral aspect of language experience. Finally, each section concludes with a summary.

Initiating an Idea for a Conversation

Context. Engaging in conversations with others before writing is beneficial, particularly for emergent writers (Harmeey, 2021; Harmeey & Rodgers, 2017; Myhill & Jones, 2009; Quinn et al., 2021). Teaching moves which reveal what the child knows could "open up" the conversation. When the construction of a conversation is based on some prior experience of the child, there could be greater scope for the child's responses. According to Gaffney and Jesson (2019), when child agency is enlisted, the child becomes the expert and a knowledgeable initiator in their learning. Therefore, initiating a conversation by referencing something familiar to the child can unleash their expertise. In contrast, conversations which do not reference the child's expertise or knowledge can "close down" the dialogic space and limit scope for the child. When this occurs, the teacher may take over the control of the conversation as they attempt to encourage greater participation from the child.

Comparison of Data. Table 5 shows examples of teacher statements that do not refer to the children's expertise alongside teacher statements which mention some expertise of the child.

Table 5: Examples of Teaching Moves Used to Initiate a Conversation with and without Reference to a Child's Known Expertise.

No reference to the child's expertise.	Reference to a child's known expertise
<p> <i>"I bet you are thinking of some things to talk about."</i> <i>"Would you like to tell me about your story?"</i> <i>"Tell me your story."</i> <i>"Tell me your idea for your story."</i> <i>"Have you already got your story for me? Tell me your story."</i> <i>"What is your story going to be about today?"</i> <i>"Tell me about your story today."</i> <i>"What can you tell me?"</i> <i>"What shall we write about today?"</i> <i>"What would you like to write about today?"</i> <i>"I want to hear your ideas."</i> </p> <p>Used a topic from a shared book x 5 The teacher directed the children to discuss an aspect of the story and relate it to their own experiences.</p> <p>Of the 32 conversations, no idea was initiated on 19 occasions.</p>	<p> Used the child's own experience x 8 <i>"Would you like to write a story about your mum and dad today? Tell me something about them."</i> Used a shared experience x 3 <i>"We are going to talk about the baking sale we went to today. Tell me about what you saw."</i> Used child's prior knowledge x 2 <i>"You go up North a lot, don't you? Did you go to the Urupa? Tell me about what you do at the marae."</i> </p> <p>Of the 32 conversations, teachers initiated a conversation on 13 occasions.</p>

Interpretation of the Data. On 19 occasions, the teachers directed the topic to be discussed or expected the child to have an idea to write. They did not refer to the child's expertise or knowledge. However, during observations, most children came to one of the teachers with an idea for a story that involved a personal experience. The children knew their job was to prepare and think about a story before conversing with the teacher. The teacher encouraged this.

Teacher: *"Have you already got your story for me?"*

Informal discussions with whānau additionally confirmed that children often had conversations at home to identify interesting topics to share for writing.

During the study, when a topic from a shared book was utilised to initiate a conversation, the teacher would often direct the children to an aspect of the story (e.g., picnics, dogs or helping someone). The teacher chose these topics for conversations and, on occasions, the children lacked interest or prior knowledge of the topics. When children talked about experiences outside their prior knowledge, they could not bring their knowledge to the learning. For example, several children may have found the concept of a picnic outside their prior experiences; therefore, they were challenged to draw on their expertise. Similarly, one parent commented that she was surprised that her son was writing about dogs because he was scared of them.

The teachers initiated a conversation by referring to something the children knew about on 13 occasions. There were two occasions when the teacher used specific knowledge about a particular child to initiate a conversation. Three different means were used to encourage dialogue with the children within this category. These included the child's own experiences and a shared experience in

which three children participated. The two least used means to instigate dialogue were a shared experience and prior knowledge about an individual child. On nine occasions, the teachers' initial statements to children referred to writing rather than talking. For example,

Teacher: *"What shall we write about today?"*

These statements indicated that teachers were viewing the conversation as a process to get a message to write down rather than an opportunity to listen to and capture the children's oral stories.

Insights From Research Journals and Whānau. Whānau commented on their appreciation of how much they enjoyed their children bringing home stories to read. The children's stories about themselves and their whānau were valued and encouraged by teachers, as writing about personal experiences is a significant aspect of language experience. In addition, the teachers were urged to have informal conversations with whānau regarding the children's interests, experiences, cultural background and knowledge. However, during the study, this did not eventuate as planned. Subsequently, I collected the information and, when possible, passed the information to the teachers. However, some information was collected at the end of the study that limited the potential to utilise the information for teaching and learning.

One teacher did not see the necessity to converse with whānau as her principal had in-depth conversations with all whānau when they enrolled their children at school. The information collected by the principal was then passed on to the classroom teacher. The information gathered was valuable, although it did not always pertain to the types of experiences or interests of the child required to facilitate talking and writing. Strong home–school relationships were evident at the school. However, to utilise the children's funds of knowledge (Gonzalez et al., 2005) in a teaching and learning sense, teachers needed involvement in informal conversations with whānau.

Comments from Researcher's Observational Notes. Table 6 displays an entry from the observational notes suggesting ways a teacher could use the child's existing knowledge and expertise to initiate a conversation.

Table 6: *An Entry from Observational Notes Outlining a Suggestion to Promote Using the Child's Existing Knowledge or Expertise to Initiate a Conversation*

Activity	Child	Teacher	My thinking
Initiating an idea for a conversation.	The child is drawing a picture.	<i>"You are going to write a story and I am going to help you. Have you got something in your head?"</i>	You could think about initiating ideas (see Harmey article) and use the information you know about this child from whānau to start a conversation. The child will have more to talk about if the conversation is about them and their experiences, expertise and interests.

In addition to writing about personal experiences, the children could be given opportunities to write about shared experiences. The foundation of language experience is built on the language generated from experiences. The experiences facilitate conversations where rich oral language exchanges thrive and descriptive language and vocabulary can develop. Shared experiences can promote a shared language and understanding of what occurred. When experiences are shared, the teacher can draw on the child's expertise and knowledge from the experience. However, it became apparent that when the teacher did not understand the experiences discussed, she adopted a more directive questioning stance, narrowing the task to gain insights from the child. One teacher mentioned she needed clarification about the sorts of shared experiences to offer. Table 7 identifies an example from the observational notes, suggesting ideas for shared experiences to initiate a conversation with the child.

Table 7: *An Entry from Observational Notes Outlining Ideas for Shared Experiences to Assist in Initiating a Conversation*

Activity	Child	Teacher	My thinking
Initiating an idea for a conversation.	The child is reluctant to contribute to the conversation.	<i>"What's been happening at school? Have you had another teacher? What did you do with Miss Norton?"</i> <i>"Let's go and draw a picture."</i>	You could have a shared experience, e.g., the children could retell a favourite shared book or bring interesting nature finds to school to talk and write about. Grow seeds or study insects. You could have experiences together like going for a spring walk or blowing bubbles. This way, you can encourage a shared language from shared experiences.

The teachers were concerned about the time factor necessary for shared experiences. The comments recorded in one teacher's research journal indicated she did not see a reason to engage in a shared experience. Instead, she said the children always came up with some idea to write about, usually about themselves and their whānau.

Teacher: *"I don't want to make them write about something they are not motivated to write."*

Summary of the Initiation of an Idea for a Conversation. The two least used means to instigate dialogue were a shared experience and prior knowledge about an individual child. However,

children still wrote stories about themselves, their whānau and their experiences. It was noticeable that the stories told were generic as they rarely denoted any cultural or specialised knowledge of the children. This lack of cultural identity and specialisation within the children’s stories would indicate that the teachers had limited knowledge of the children or didn’t consider the relevance of children utilising their cultural or personal expertise within learning. Additionally, shared experiences providing authentic happenings for children to discuss could have been utilised. Through shared experiences, the teacher and the child possess a shared understanding and knowledge, which supports a two-way conversation. Teachers’ prompts indicated that the conversation was often used to get a message to write down rather than a way to facilitate talk.

Expanding on Ideas

Context. During conversations with children, according to Harme (2021), the ideal is for the teacher to elicit more talk from the child and participate in less teacher talk. A study by Harme and Rodgers (2017) identified that children who made the most significant progress during composing were those children who displayed more control over the composition process. Within this category heading, teaching, which invites the child to expand and offer more information, could generate a significant contribution to the conversation by the child. In comparison, teaching moves that narrow the task by asking a closed question can limit the quality and duration of conversations.

Comparison of Data. Table 8 identifies two kinds of teacher prompts. The prompts include teachers asking children direct questions and encouraging them to expand on their ideas.

Table 8: *Two Kinds of Teaching Moves Used to Encourage the Children to Expand on Their Ideas During a Conversation*

Closed questions	“Tell me more...”
<p>“Did it take a long time to do your shopping?” “What colour was your cake?” “Have you talked to mum since she has been in India?” “Did you hurt yourself?” “What colour was your umbrella?” “Did you go in an aeroplane?” “Did she feel better after the medicine?” “Which brother took your ice cream?” “Are you going to bring your umbrella to school?” “Did it take a long time to do your shopping?” “Did you get another cat?” “Do you help your mum?” “What colour was your favourite car?” “Have you had scones before?”</p>	<p>“Tell me more about going to the mountain.” “Tell me more about it.” x 5 “Tell me about your dad.” “Tell me about your picture.” “Tell me what it looks like.” “Tell me about playing with your sister.” “Tell me about what you did at the marae.” “What else can you tell me about your dad?” “Tell me something about them.” “Tell me about playing with Brian.” “Tell me about your dog.”</p>
<p>Of the 32 conversations, the teachers asked closed questions on 131 occasions.</p>	<p>Of the 32 conversations, the teacher used the “tell me more” prompt on 13 occasions.</p>

Interpretation of the Data. Of the 32 conversations observed, teachers asked closed questions on 131 occasions. These questions required only a one-word response. When teachers

asked questions, they seemed to assert dominance and control the direction of the conversation while the child sustained a passive role. There were 13 occasions, however, when the teacher used the prompt “tell me more.” When using this prompt, the teacher allowed the child to make a significant contribution to the talk, allowing the child to control the direction of the conversation. Generally, during the conversations, there was more teacher talk than child talk, which was highlighted by one teacher who said,

Teacher: *“There was not much talk from the children but lots of talk from me.”*

Table 9 reveals a comment from my research journal which aligns with the teacher’s comment.

Table 9: *Excerpt From My Personal Research Journal About Teacher-Child Conversations*

My observation	My thinking
There is a lot of teacher talk during discussions and not much talk from the children.	Are the children interested in the writing topic? Are they experts in the topic so that they have a lot to contribute? The lack of child participation highlights the importance of knowing what the children know so that they can excel during the conversation.

The following examples highlight how teacher moves can open the conversation for the child to contribute more or close down the conversation, thus limiting the child’s contributions,

The teacher used the “tell me more” prompt, encouraging the child to expand on their idea:

The teacher and the child are having a conversation about washing the dishes.

Child: *“I help to wash the dishes.”*

Teacher: *“Tell me a bit more about that...”*

Child: *“I wash the dishes with my sister. She washes and I dry.”*

The following example identifies what can occur when the teacher asks questions to encourage the child to expand on her ideas.

The child tells the teacher she is going to a snowy place.

Teacher: *“Make a snowman. How will you make a snowman?”*

Child: *“Umm, make balls.”*

Teacher: *“Make balls. How many will you need?”*

Child: *“2”*

Teacher: *“2... one for the body and one for the head. What else will you need to make a snowman?”*

Child: *“A hat.”*

Teacher: *“A hat that will keep him nice and warm. Anything else?”*

Child: *“Eyes.”*

Teacher: *“What will you use for eyes?”*

Child: *“Rocks.”*

During the snowman conversation, it was clear that the teacher wanted the child to expand and provide more information; however, the directive questions interfered with the child's ability to contribute. In contrast, the first example identifies how the teacher can encourage greater participation from the child by allowing the child to play an active role during the conversation.

The use of teachers' questions to expand children's thinking indicated a sense of urgency from the teacher to seek information to construct a message which could be written down. In contrast when teachers used the "tell me more" prompt, the focus of the conversation appeared to be more about encouraging the child to talk and control the conversation.

Summary of Expanding on Ideas. When teachers used the "tell me more" prompt, children were given the opportunity to expand on their ideas. Unfortunately, this occurred less frequently during conversations. At times, even though teachers used the prompt, children didn't expand as the conversations were not initiated from their knowledge base. Frequently, teachers asked children questions in an attempt to encourage children to expand on their ideas. However, questioning closed the conversation as it took control away from the child, who responded in simple one-or two-word responses. The teachers' questioning also seemed to indicate pressure to construct a message for writing, whereas the "tell me more" prompt focused on the child and their contribution to the conversation.

Clarifying

Context. During clarification, the teacher repeats what she has heard to see if this is what the child meant. This alleviates the need for the teacher to ask what, why and how questions and encourages a genuine conversation with greater child participation (Harmey, 2021). Clarifying in this way indicates that the teacher is attentive, listening to the child, and providing scope for the child to elaborate. In comparison, teachers often did not seek clarification to ensure they followed the conversation or to support the child's clarity of thought. Instead of clarification, teachers often continued to ask questions.

Comparison of Data.

Table 10 shows examples of teachers' statements when clarifying children's thinking and teacher questions that did not support clarification.

Table 10: Examples of Teachers Asking Questions and Supporting Children to Clarify Their Ideas

Teacher questions	Repeating child's statements (Using what the child knows)
<p>Child: <i>"My mum...my mum gave the medicine to my sister. She drank it."</i></p> <p>Teacher: <i>"Did she... and what did it help with? Her asthma? Did it help with her asthma? Was she feeling much better after her medicine? Do you want to tell me your story one more time? Tell me how you were playing with your sister."</i></p> <p>Child: <i>"When I was playing with my sister we were drinking on the tablet and then we got off but my sister had a sore hand."</i></p>	<p>Child: <i>"Something was helping....(inaudible). They called the... they called the teacher."</i></p> <p>Teacher: <i>"They called the teacher in Hairy Bear?"</i></p> <p>Child: <i>"Yes cos someone was helping so they calling the teacher."</i></p>
<p>Child: <i>"I went on those car things."</i></p> <p>Teacher: <i>"The car things. Did you drive one? What colour was your favourite car?"</i></p> <p>Child: <i>"Blue."</i></p>	<p>Child: <i>"She don't like it. I help my sister. I help her for.... the spinning thing."</i></p> <p>Teacher: <i>"When she's afraid of the spinning thing, you help her? That's kind."</i></p> <p>Child: <i>"I mean the pole."</i></p>
<p>Teacher: <i>"Tell me your story."</i></p> <p>Child: <i>"Whaea¹ Kate went to my mum and I got a ice cream and then my brother came and took it off me because...."</i></p> <p>Teacher: <i>"Why did he take your ice-cream off you?"</i></p> <p>Child: <i>"Because he wanted it."</i></p> <p>Teacher: <i>"Which brother?"</i></p> <p>Child: <i>"Caleb."</i></p> <p>Teacher: <i>"Oh, not Caleb! So mum came... Tell me your story again."</i></p> <p>More conversation occurred with the teacher asking questions.</p> <p>Teacher: <i>"So tell me your story again?"</i></p> <p>Child: <i>"You came to my mum and I had a ice cream and Caleb took the ice cream off me and then...he still... and I told mum and then it was a chocolate one and then he still took it off. I had two."</i></p>	<p>Child: <i>"He's going to buy it cos he don't know to cook it."</i></p> <p>Teacher: <i>"He doesn't know how to cook?"</i></p> <p>Child: <i>"Only my mum knows."</i></p> <p>Child: <i>"I'm going to get so many pets...lizards...ah guinea pigs I think..."</i></p> <p>Teacher: <i>"You're going to get lizards and guinea pigs?"</i></p> <p>Child: <i>"And I'm going to get a dog."</i></p>

Interpretation of the Data. During clarification, when teachers repeated what the children said, the children elaborated and provided more information. This response indicated to the children that the teachers were listening, creating a genuine conversation where the child could offer greater elaboration.

Alternatively, sometimes teachers did not seek clarification even though it would have been helpful for the child, and instead, they continued to ask questions. In contrast, the purpose of the teachers' questions was often related to the teachers' emphasis on getting a message to write rather than assisting the child to clarify their thinking. In this instance the focus is on the message rather than on

¹ Whaea means mother or auntie in Māori and is also used to respectfully address teachers.

the child as the owner of the message. An example of this is during the conversation about the ice cream, where the teacher repeatedly asked the child throughout the conversation, “*Tell me your story again,*” in an attempt to encourage the child to compose a story so it could be recorded.

Summary of Clarifying. Generally, repeating what the child said offered the child a greater opportunity to expand and clarify their thinking. In contrast on many occasions, teachers did not seek clarification. Instead, teachers’ interactions signified the importance of getting a message to write down rather than listening to the child’s message and supporting clarification.

Summary of Using Language to Compose. Teachers rarely initiated ideas using the child’s cultural expertise, prior knowledge or interests. Consequently, children were unable to utilise their capabilities and lead conversations. The stories told were generic and lacked cultural or linguistic diversity. Additionally, occasions for shared experiences were limited, reducing opportunities to talk about the experiences and develop a shared language. Teachers occasionally expanded on the children’s ideas by using the prompt, “tell me more,” and sometimes clarified the children’s thinking. However, teacher questioning was dominant during conversations, narrowing the conversations and often limiting the children’s contributions. Overall, the teachers contributed more to the conversations than the children. The teachers and the children knew that the purpose of the conversation was to get a message which could be written down. However, this interfered with the conversation. Teachers were genuinely striving for quality messages, although opportunities to listen to the child’s voice were reduced due to focusing on the message rather than the children’s ideas and language.

Using the Children’s Linguistic Knowledge During Conversations

Context. Using children’s linguistic knowledge is an additional category heading, which has been included due to the provision for teaching practice to recognise the learner’s cultural and linguistic competence (Paris, 2012). According to Si’ilata et al. (2018), children can exercise their linguistic expertise and, in doing so, teach others and make the connection between their first language and English. This was encouraged during the study and discussed with teachers. Table 11 highlights a discussion with a teacher, recorded in my research journal, which emphasised using some of the children’s first language in their stories to enable children to maintain their existing linguistic expertise while talking, writing and reading (Parr et al., 2022).

Table 11: *An Example of a Discussion About Using the Child’s First Language During Their Writing*

Nauri’s story	Discussion with the teacher
My dad was going to buy cake. It tastes like strawberries.	As Nauri’s first language is Samoan, the teacher and I discussed how Nauri could use her first language (Samoan) in her story – e.g., using (Tama) instead of (Dad) and (keke) instead of (cake).

Comments in the teacher’s journal regarding using the children’s linguistic knowledge mentioned that throughout the day the teacher asked the children to translate words into their own language. For example,

“Where’s your solo/towel?” (solo is towel in Samoan).

Māori language was also used extensively in the classroom for commands and greetings and as the children recited their pepeha. During the day, the teacher and the children were creating opportunities to use languages other than English to enable children to celebrate and use their first languages. However, during the learning that occurred in writing I did not see any examples of the children using their first language.

Teaching Interactions to Support Children to Use Information During Guided Writing and Reading (Using)

Teaching moves during guided writing and reading were also examined. These were sourced from my observation notes, the writing notations and relistening to the audio recordings of the guided writing and guided reading videos. Additional insights were collected from the research journals. Unlike the transcribed conversations, which were straightforward to classify and compare, identifying frequency during the 32 guided writing occasions became problematic. Therefore, I decided to use four phrases to indicate frequency. Table 12 outlines the rubric used to quantify the frequency of teacher moves.

Table 12: *Phrases to Quantify the Frequency of Teacher Moves During the 32 Guided Writing Occasions*

occurred once	rarely occurred (once or twice)	sometimes occurred (three or more times)	frequently occurred (constantly)
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Teaching moves under this heading included a combination of directive teaching to support learning and building on what the children already knew to promote learning. It would also be advantageous for teachers to reciprocally strengthen the child’s knowledge from one literacy setting to another.

Knowledge of Print

Context. Learning about print and how it works is fundamental to all literacy learning. Guided writing allows young children to develop their essential print knowledge through actual involvement. As children were learning about print and how it worked, the expectation would be that within this category, some directive teaching would occur in addition to teaching which built onto the children’s existing knowledge. Of interest in this study is whether this type of teaching would change over time to promote active participation, child agency and reciprocity.

Comparison of Data. Table 13 includes examples of direct teacher prompts to build print knowledge and prompts that reinforce what children already knew.

Table 13: Examples of Teachers Use of Directive Prompts and Using What Children Already Know to Build Print Knowledge

Print Knowledge	
Directive prompts to build print knowledge.	Using what children already know to build print knowledge.
<p>Writing <i>“Start writing here.”</i> <i>“Write the next word here.”</i> <i>“Leave a space between your words.”</i> <i>“Let’s move this word over and start on the side of the page here.”</i> <i>“You forgot to leave a space. I am going to rub this out and you can write it again here with a space.”</i> <i>“Remember to start with a capital letter.”</i> <i>“Put your letters close together in a word.”</i> <i>“(a) goes around like a (c), up and down.”</i> <i>“We are going to put a full stop at the end of the sentence.”</i> <i>“We are going to start with a capital letter.”</i> frequently occurred</p>	<p>Writing Teacher: <i>“Do you know how to write the letter (b)? Go and find it on the word wall.”</i> frequently occurred</p> <hr/> <p>Writing The child and the teacher have talked about leaving spaces between words several times. Teacher: <i>“What are you going to remember today when you are writing?”</i> Child: <i>“To leave finger spaces.”</i> occurred once</p> <hr/> <p>Writing The child is forming the letter (a) incorrectly. Teacher: <i>“You can write the letter (a). You have it in your name.”</i> rarely occurred</p>
<p>Reading <i>“Read your story with your finger.”</i> <i>“You are covering up the words. Point under the words.”</i> frequently occurred</p>	<p>Writing The child is writing their story with big oversized letters. Teacher: <i>“That’s a bit too big. Write nice and small just like you did when you wrote your name.”</i> occurred once</p>
	<p>Writing Teacher: <i>“You know how to write that letter/word. You wrote it the other day.”</i> sometimes occurred</p>
	<p>Writing Teacher: <i>“OK, you know how to start. Write it down.”</i> occurred once</p>
	<p>Writing Teacher: <i>“What will (looking) start with? It starts like your name.”</i> After Reading Teacher: <i>“Can you find the word (looking) in your story? It starts like your name.”</i> occurred once</p>
	<p>Writing Teacher: <i>“You know how to write (am). Write it down.”</i> After Reading Teacher: <i>“Can you find the word (am) in your story? Can you find another word that starts like (am)?”</i> Child points to (at) Teacher: <i>“That’s right. That word is (at) and you wrote it today.”</i> occurred once</p>

Print Knowledge	
Directive prompts to build print knowledge.	Using what children already know to build print knowledge.
<p>Writing The child writes the word (me) and notices that (e) is also in her name. Child: <i>"It's just like my name."</i> The child made the link independently.</p>	

Interpretation of Data. During the examination of the data, I noticed the teachers used many directive prompts, which were helpful at this early stage to inform children about print details and concepts about print. In addition, some teaching encouraged children to use the word-wall resource, or teachers linked new learning to something the child already knew. However, over the weeks, I observed teachers tended to repeat directive prompts rather than advance their prompts to ones that permitted the children to utilise what they had learnt. Furthermore, when children were told what to do, they often waited for teacher direction. Table 14 captures an excerpt from my research journal.

Table 14: *An Excerpt from My Research Journal Considering the Need to Make Links to What Children Already Know*

Observation note	My thinking
Some children need to retain letter knowledge.	I am thinking about how influential it is for children to learn to write their names. To provide scope for learning, we could consider using what children know about their names in their learning (e.g., known letters, letter formation and the concept of a word). Once children know how to write their names, this knowledge will strengthen learning during writing and reading.

Over time, as a result of the observational notes and discussions with teachers, the change from teachers using directive prompts to using what children already knew by making links started to take effect as iterative changes to teaching practice progressed. During the study, we worked on advancing teaching to encourage active learning by supporting children to use what they knew to make connections.

Insights from Teachers. Teachers in their research journals made the following comments.

The children are learning a lot more about print and how it works.

Children have picked up 1–1 finger pointing within a couple of days by reading their writing.

Tama was struggling to write his name. We spent a lot of time working on the formation of the (a) and (m). The next day he wrote it by himself without my help.

Teaching children to leave spaces between words in writing profoundly impacted their ability to point one to one and match text with the spoken word in reading. Children grasped this strategy quickly.

One teacher commented that children struggling to get one-to-one matching using magenta books (level 1 on the colour wheel) for guided reading quickly established this strategy after a couple of days by reading the stories they had written.

Summary of Print Knowledge. Teachers initially used many directive prompts to inform children of print knowledge. However, as teachers began to more closely observe children, and refer to the observational notes and collegial discussions, they began to use what children knew to support print knowledge in writing and between writing and reading.

Building Letter Knowledge

Context. Both classrooms used word walls as a scaffold to build alphabet and word knowledge. Figure 6 shows an example of a word wall from one of the classrooms.

Figure 6: A Classroom Word Wall



Comparison of Data. Table 15 shows examples of directive teacher prompts to build letter knowledge in reading and writing and, comparably, teacher prompts that use what children already know.

Table 15: Examples of Teachers’ Prompts to Build Letter Knowledge in Reading and Writing

Building letter knowledge in reading and writing	
Directive teacher prompts	Using what the child already knows
<p>Writing Teacher: “What does (sun) start with? It starts with ‘s’ like snake. We are going to go and find (s) for (sun) and (snake) on the word wall.” frequently occurred</p>	<p>Writing Teacher: “What will (dad) start with? It starts with a (d) like (duck). Go and find the (d) on the word wall.” frequently occurred</p>
<p>Writing As the child writes their name at the beginning of their story, the teacher draws attention to the letters in their name. Teacher: “That’s right, the (h) comes next. Now do your (e) and now the (k).” sometimes occurred</p>	<p>Writing The child is writing about his brother Zion. Teacher: “Zion starts with a (Z) like your name Zak.” rarely occurred</p>

Building letter knowledge in reading and writing

Directive teacher prompts	Using what the child already knows
<p>Writing Teacher “Go and find the letter (h) on the word wall.” Child “I know how to write an (h).” This comment from the child indicates that the child may not need to be so reliant on the word wall. occurred once</p>	<p>After Reading Teacher: “Can you find the word that says Tihani in your story?” The child points to the word Tihani. Child: “Tihani starts like my name Tanu.” Teacher: “That’s right, they both start with the letter T.” rarely occurred The child is independently making links between what she knows and a new word.</p>
<p>Writing Teacher: “We have already written (swing). (Slide) starts the same way. What will (slide) start with?” occurred once</p>	<p>Writing The child needs to write the word (me). Teacher: “It starts like your sister’s name Mia. What will it start with? Can you find it on the word wall?”</p>
<p>After Reading “Can you find a word in your story that starts with an (m) like Mia?” rarely occurred</p>	<p>Writing Teacher: “What will (mum) start with? It starts with (m) like (Mia) and (my). Can you find the word (mum) on the word wall?” sometimes occurred</p>

Interpretation of Data. The frequency of using directive teaching and using the child’s existing expertise in strengthening letter knowledge was similar, possibly due to the use of the word-wall resource. The prompts evolved from a directive stance:

Teacher: “We are going to find the letter (s) on the word wall.”

To use some existing knowledge of the child,

Teacher: “You go and find the letter (d) on the word wall.”

The word wall was a resource the teachers taught the children to use; eventually, they could use it independently. However, there was a danger of overusing the word wall and creating dependency on this scaffold. For example, teachers and children sometimes relied on the word wall to build letter knowledge. This dependency was exemplified through teaching, which required children to constantly go and find letters on the word wall rather than teaching flexibly by making links to what the children already knew. Table 16 references an example from the observational notes suggesting flexible ways to support print knowledge by utilising what children already know.

Table 16: *Examples from the Observational Notes that Suggest Flexible Ways to Support Print Knowledge by Using What the Child Already Knows*

Activity	Child	Teacher	Thinking
Guided writing	The child has just learnt how to spell the word (me). Now she wants to write the word (mum).	<i>“What does (mum) start with? Go and find (m) for mouse on the word wall.”</i>	Instead of using the word wall, you could say, “Mum starts like another word you have just written in your story.”
Guided writing	A child wants to write the word (sleeping) and is unsure how to write the letter (s).	<i>“Go and find (s) on the word wall.”</i>	Instead of using the word wall, you could say, “You know how to write (s). It’s in your name.”

During the first few weeks of school, all children learnt to write their names. Teachers shared in their research journals how they used a sign-in sheet where children would sign their names daily. They emphasised that, as a result, most children began to write their names and form the letters correctly. As a result of this focus on name writing, the letters in children’s names were the first letters they learnt. However, teachers only occasionally used what the children knew about the letters in their names during writing and reading. The potential to use this knowledge resource at the children’s disposal could be used more extensively.

During one classroom’s guided reading, when the children read the stories they had written, there were seven occasions during the 16 guided-reading opportunities when the teacher used what the children knew about letters to identify words in reading. This reciprocally reinforced what the child knew about letters, thus strengthening letter knowledge. Some children were experiencing difficulty in building letter knowledge. For these children, the benefits of supporting what they knew, or had previously learnt during writing, reciprocally into reading would be advantageous. Table 17 references an example from the observational notes, illustrating how reciprocal learning can occur.

Table 17: *An Example from the Observational Notes Supporting the Reciprocal Nature of Literacy*

Activity	Child	Teacher	Thinking
Guided writing	During writing, the child was very excited to hear the /j/ sound in (jumped) and found the letter (j) independently on the word wall.	<i>“What will (jumped) start with? Go and find the (j) on the word wall.”</i>	Kanha was so excited to hear the /j/ sound in jumped today. After the reading, you can reinforce this learning by saying, “Can you find the word jumped? How do you know that word says jumped?”

Insights From Teachers. The following comments were sourced from teachers' research journals.

A child today was taking words from the word wall for writing and then asked me where to put the word back on the wall. After a while, she clicked and said, "Oh, it goes under the first letter."

This statement from a teacher alludes to a child learning about letters, words and alphabetisation.

The children are having conversations at the word wall with friends during independent writing about which letter words start with. They are helping each other and learning about letters at the same time.

The children are taking it on themselves to make sure the word wall is all correct and all the words are put back under the right letter.

Nauri has gone from only knowing/recognising one letter to gaining a few more in just a few days. She is so proud of herself.

Summary of Building Letter Knowledge. The word wall was a valuable resource for building letter knowledge. However, teachers and children became dependent on the word wall rather than considering flexible ways to support alphabet knowledge by connecting to what children already knew. This did begin to occur over time.

Building a Writing Vocabulary/Spelling (Known Words When Writing)

Context. Children learnt to spell high-frequency words throughout the guided writing process. These words were then recorded on a writing vocabulary/spelling list so the teacher and the child knew the words learnt (see Figure 5, p.42—43). Teachers could be directive or utilise what children already know to support learning to spell words. However, developmentally, children should be learning to spell words they almost know (Wood, 1988). Therefore, within this category, it would be ideal if teachers used the children's existing knowledge when supporting children in building a writing vocabulary. Directive prompts may be less effective as they would not link the child's knowledge about a word to learning to spell that particular word.

Comparison of Data. Table 18 identifies teachers' directive prompts and, comparably, teacher prompts that utilise what children already know to build a writing vocabulary.

Table 18: Examples of Teachers' Prompts to Support Children in Building a Writing Vocabulary

Building a writing vocabulary	
Teacher directed	Teaching by using what the child already knows and appropriate materials or resources.
<p>Writing The teacher writes the word (and) for the child. Teacher: <i>"I think we can learn this word today. This is a new word for you. Let's work on this one."</i> frequently occurred</p> <p>Writing The child has previously learnt how to spell the word (went), which has been recorded on their writing vocabulary list. However, they still cannot spell the word (went) when writing on other occasions, so the teacher directs them to copy it off their writing vocabulary card. frequently occurred</p>	<p>Writing Teacher: <i>"Can you find (was) on the word wall? That's a good word to learn. Let's learn that word."</i> sometimes occurred</p> <p>Writing The teacher slowly articulates the word (a-m) for the child. Teacher: <i>"You say it."</i> The child articulates (a-m) and writes it correctly. Teacher: <i>"We are going to learn that word today."</i> sometimes occurred</p> <p>After Reading Teacher: <i>"You learnt the word (the) today. Two words say (the) in your story. Can you find them? That's right. This (The) has a capital (T) and this (the) has a little (t)."</i> rarely occurred</p> <p>Writing Teacher: <i>"You know that word (l). Write it down."</i> As the child reads their writing As the child reads, they hesitate at the word (l). Teacher: <i>"You know that word. You can write it."</i> rarely occurred</p> <p>Writing The child has previously learnt how to spell the word (with). During writing, the child wrote wif/with. Teacher: <i>"Let's learn (with) again."</i> rarely occurred</p> <p>Writing Teacher: <i>"You know how to write (is) write it down."</i> sometimes occurred</p> <p>Writing The child finds the word (and) on the word wall and writes it into their story. During Reading The child reads in/and, and self-monitors their reading by stopping. Teacher: <i>"You found that word on the word wall today."</i> occurred once</p>

Interpretation of Data. Teachers combined using what the child already knew and directing the child to specific tasks to support building a writing vocabulary. However, it was apparent that when teachers were directive, the learning could not build from the knowledge the child may have already had about a particular word. Learning to spell a word without any prior knowledge of the word would be challenging.

When knowledge from the child regarding a word was utilised, it could contribute markedly to the child’s ability to learn how to spell the word. By using the word wall, children were required to draw on some knowledge they had for a specific word. As children learnt to spell high-frequency words, the teachers needed to know what the children knew in terms of letter and word knowledge. Therefore, a list of known words that the children had learnt was essential. However, this list of words became problematic when children copied words they had previously learnt but still needed help to spell. Copying words was unhelpful as it did not contribute to knowing a word in every detail. When children initially attempted to spell a word they were unsure about, and built upon existing knowledge of that word (e.g., wif/with), the learning task could become manageable as they were building onto some existing knowledge of the word.

Teachers supported reciprocal links during literacy learning by asking children to locate known or recently learnt words after reading their writing. This reciprocal reinforcement can strengthen literacy learning (Parr et al., 2022). This occurred nine times out of the 16 guided-writing and reading opportunities observed. Reference to the advantages of this for enhancing children’s learning was reinforced through the observational notes, and, as the study progressed, this began to occur more frequently. Table 19 shows an example from the observational notes where the teacher reinforces the reciprocal nature of literacy learning.

Table 19: *An Example from the Observational Notes Highlighting a Teacher Responding to the Reciprocal Nature of Literacy*

Activity	Child	Teacher	Thinking
Guided reading (which occurs after the writing).	During guided reading, the child reads the story they wrote.	When the child finishes reading, the teacher says, “ <i>You wrote (am) today all by yourself. Can you find the word (am) in your story?</i> ”	Great to reinforce what Lalen is learning in writing again in his reading. This will strengthen this learning.

Insights from Teachers. The following insights from teachers were sourced from their research journals.

The children are excited to be adding more words to their writing vocabulary lists and the celebration and pride they show when they know a new word is wonderful.

I have noticed that some children recognise words from their own writing in other books.

Ada has gained some more known words and is absolutely excited and confident.

Summary of Building a Writing Vocabulary/Spelling. Children learnt how to spell some high-frequency words as they learnt to write. Words that children had some knowledge of assisted the learning process. Teachers made children aware that if they knew a word in writing, they would also know how to read that word.

Hearing and Recording Sounds in Words (Developing Phonemic Awareness/Invented Spelling)

Context. During guided writing, the children used a try card as a resource to hear and record the sounds of unknown words (see Figure 5, p. 42—43). To develop phonemic awareness, children must have some alphabetic and letter-sound knowledge (Ouellette & Sénéchal, 2016). Therefore, teachers needed to build on the child’s existing expertise. During directive teaching, the teacher articulates the word slowly for the child but does not give the child the opportunity to articulate themselves. In comparison, when the teacher utilises the child’s expertise, the child can contribute to the learning and progressively develop independence.

Comparison of Data. Table 20 identifies examples of teacher prompts that demonstrate using phonemic awareness and prompts which assist the child in actively using phonemic awareness.

Table 20: *Examples of Teaching Used to Support Children to Hear and Record the Sounds in Words*

Hearing and recording sounds in words	
Teacher controlled	Teaching which encourages active participation using what the child already knows
<p>Writing The teacher articulates the word c-a-t slowly for the child. Teacher: “What can you hear?” frequently occurred</p>	<p>Writing The teacher articulated the word slowly for the child. Teacher: “You try.” The child articulates the word slowly. Teacher: “What can you hear? Write it down.” sometimes occurred</p> <p>Writing Teacher: “You can stretch it (the word) out. What can you hear? Write it down.” rarely occurred</p> <p>Writing Teacher: “You say it. What can you hear? Write it down” rarely occurred</p> <p>Writing Teacher: “Try to write (place) in your try card.” Child: The child articulates independently without a demonstration from the teacher and writes pls/place rarely occurred</p>

Interpretation of the Data. During guided-writing observations, teachers initially articulated for the children, thus controlling what occurred. However, iterative changes were made to their teaching by encouraging active participation from the child. The teachers grasped that this shift in their teaching would develop the children's independence in using phonemic awareness.

The following teacher insights were sourced from teachers' research journals.

I have been pulling away from stretching out words for the children and telling them to stretch it out for themselves.

Children are helping each other at the independent writing table to say words slowly.

On the independent writing table, Ada can write the first sound of each word when she writes her story.

These comments indicate that some children can independently use phonemic awareness to record the sounds of unknown words, as the teacher was referencing occasions when children write independently. The teachers recognised that by encouraging children to articulate themselves during guided writing, children would develop independence and use this competency when writing independently. One teacher commented in her research journal,

Matalita has been showing her mum how to write unknown words by saying them slowly. Her mum mentioned to me how clever Matalita was at this and how grateful and surprised she was.

Summary of Hearing and Recording Sounds in Words (Phonemic Awareness/Invented Spelling). Initially, the teachers controlled the learning by demonstrating slow articulation to develop phonemic awareness. However, over time, teachers reduced the level of scaffolding by encouraging the children to actively participate in the slow articulation of unknown words. The teachers noticed that as children began using phonemic awareness during guided writing, they could transfer this strategy to their independent writing.

Summary of Teaching Interactions to Support Children to Use Information During Guided Writing and Reading. Teachers did begin to use what children knew about print, letters, words, phonemic awareness and spelling within their writing and between writing and reading. When children used what they knew to make connections, the learning was strengthened and children became active participants in their learning. Active learners are critical to developing a literacy processing system (Gaffney & Jesson, 2019) and the transformation teachers made to encourage children to think and act during guided writing and reading was significant.



What the Child Does to Solve Problems in Writing and Reading (Doing)

The observational lens for the following section will shift from a focus on teaching to a focus on the child’s learning. The EWOR references what the child does to solve problems (Harmey et al., 2019). Harmey et al. (2019) state that observations of children independently rereading, self-monitoring and self-correcting indicate that young writers are engaging in doing some problem solving. Additional problem solving includes using slow articulation (phonemic awareness) to attempt to spell unknown words as children write independently (Boocock et al., 1998). The EWOR is designed for children between 6–7 years learning to write with teacher support. However, this study examines 5-year-old children producing independent writing and as a result, variations in the extent of problem solving involved in this study need to be considered. Independent writing was examined when considering problem solving as a child’s literacy development can only be revealed by examining a child’s unassisted, independent problem solving during writing (Doyle, 2015; Gaffney & Jesson, 2019; Holdaway, 1979; McNaughton, 2018).

A Description of Independent Writing

During language experience, the children were engaged in guided writing with the teacher and independent writing. Guided writing is where the children learnt how to write. Independent writing was independent of any teacher contribution. It allowed children to practise what they had learnt and to make discoveries for themselves, empowering child agency. Independent writing was also an effective way to inform teaching of the problem solving children could engage in autonomously and what they needed to learn next. Figure 7 shows Tanu’s guided and independent writing at approximately 8 weeks at school. During this study, I was interested in comparing several early and later writing samples of a child’s independent work to assess if learning was developing.

Figure 7: Tanu’s Guided and Independent Writing Samples

Guided writing	Independent writing
 <p>The Sprinkles is so delicious and the chocolate.</p> <p>The guided writing has been written with teacher support and as a result, can be read by the child and others. During guided writing, the child is learning how to write.</p>	 <p>SIA DO JESSICA</p> <p>Independent writing allows the child to practise what they know and make discoveries for themselves.</p>

One teacher was unsure about offering new entrant children the opportunity to write independently. Table 21 shows an excerpt from my research journal regarding a teacher’s hesitancy to engage young children in independent writing.

Table 21: *An Excerpt from My Research Journal Regarding Independent Writing*

Teacher comment	Thinking
<i>"I don't think the children are ready to do independent writing yet."</i>	As a result of this comment, we examined the independent writing samples and discussed the things we noticed. Children could write their names. They knew where to start writing and which way to go. Some children could write words. We could identify the words they knew. Some children could write letters. Often the letters they used in their writing were from their names (known letters). One child wrote the word (look) in his independent writing, which had been emphasised during the shared book reading that day. We could see progress for each child as we looked at the writing samples over time.

After examining the independent writing samples collegially and discussing what we noticed, both teachers provided opportunities for guided writing to occur in small groups with the teacher and for independent writing to occur daily (for about ten minutes) during independent literacy activities. The following insights regarding independent writing were sourced from the teachers' research journals.

I am noticing that I have children attempting to sound out words as they write independently.

Tanu has been working on forming the letter (a) in her name. I have noticed that now in her independent writing she is forming the (a) correctly.

I have been talking to the children about their independent writing looking like their guided writing.

Zak is learning to write his name. When he was writing on the independent writing table, he ran over to show me that he wrote his name all by himself! He was so excited.

From looking at Lalen's independent writing I can see he knows the words (I) and (am).

These comments affirm that children practised what they had learnt and made discoveries for themselves as they problem solved how to write. Furthermore, as the learning was specific to each child, teachers used independent writing formatively to understand what individual children could do and what they might need to learn next.

Samples of Independent Writing and Reading for Four Children to Show Change Over Time in Early Processing

Three independent writing samples were collected and examined for four children Ada, Tanu, Lalen and Kanha. In addition, four reading records of the children reading their guided writing were also collected. These records showed each child's unique development in early literacy processing at the onset of their learning.

The format used to examine the work samples was to first provide background information on each child to understand their strengths and expertise. Following this, a description of each child's learning and processing capacities were identified from their three independent writing samples, which changed over time. Then an outline of each child's future writing development was included, which would need to be supported through guided writing. Teachers would examine the children's daily

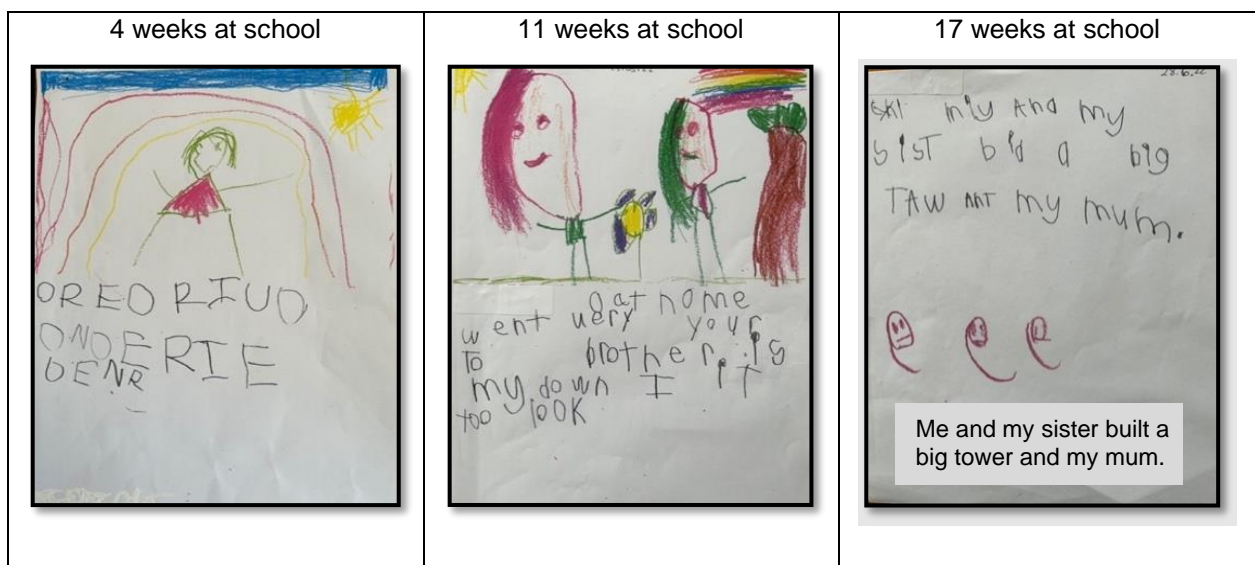
independent writing to determine if children were able to apply what they were learning during guided writing.

Additionally, three guided writing samples and the subsequent reading records were examined for each child along with a summary of the child's processing in reading. To conclude, a summary of processing in reading and writing was written for each child. Of interest to this study was whether the child's problem-solving ability was advancing over time in writing and reading.

Ada

Ada's Background. Ada is of Indian ethnicity and she speaks fluent Punjabi at home. Ada loves learning and enjoys role-play with her two sisters at home, where they pretend to be teachers and children at school. Ada is quietly spoken in the classroom, although she always listens attentively. Ada's mother talks to and reads with her children at home. Ada enjoys reciting her pepeha to her family and teaches her mother some Māori language, which she is learning at school. Ada's mother already speaks five different languages and wants to learn Māori. Figure 8 shows Ada's three independent writing samples collected over several months.

Figure 8: Ada's Independent Writing Samples Showing Change Over Time in Processing



Learning Development and Processing in Writing. Ada could write her name. Initially, Ada's writing consisted of a string of uppercase letters. She knew where to start writing and recorded these letters from left to right. She knew that a return sweep takes her writing back to the left-hand side of the page under the starting point.

The second writing sample indicated that Ada has maintained the correct directional sequence during writing. She could now write words, which indicated her growing awareness of the concept of a word and the understanding that stories are made up of words. Interestingly, Ada is now using lowercase letters to write the words and has spaces between them.

Ada's writing is easy to read, and many letters have been formed without difficulty. During guided writing, Ada had been learning some of the words recorded (I, went, to, is, my). Other words may have been copied from around the room. Ada wrote the word (to) and (too), which suggests a growing awareness of orthographic knowledge.

Ada's last writing sample indicated that she has progressed to writing a simple story which others can read. Ada spelt some high-frequency words in her writing (and, my, mum, big). Using these words correctly during independent writing indicated that she knew how to spell these words, although the second time she wrote (and), she misspelt it, which identified an area of focus for teaching. Ada used phonemic awareness to hear and record the sounds of unknown words (sist/sister, bid/build, law/ tower, miy/me) and used a full stop at the end of her story.

Problem Solving as Outlined in the EWOR

Rereading. Ada would have reread her writing so that she knew what to write next.

Phonemic Awareness. Ada could use slow articulation (connected phonation) to attempt to write unknown words.

Self-Correction. The first writing attempt was crossed out, which may indicate an early self-correction. However, we cannot determine what led her to alter her writing.

Future Developments (Supported Through Guided Writing). Ada's ideas and vocabulary could be extended during conversations. As well as conversations about herself and her family, Ada could be offered shared experiences where she could be encouraged to be descriptive and use sensory language to extend her vocabulary (Holdaway, 1979). Ada could write some words in her first language (Punjabi). By sharing her knowledge, Ada would realise that she has unique expertise to offer, which is valued. Ada could continue to build a bank of high-frequency words she knows how to spell and practise using phonemic awareness (connected phonation) to attempt to spell unknown words. Figures 9 and 10 show three guided-writing samples, the resulting reading records, and a summary of the problem solving that occurred in reading for Ada.

Figure 9: Ada's Guided Writing Samples

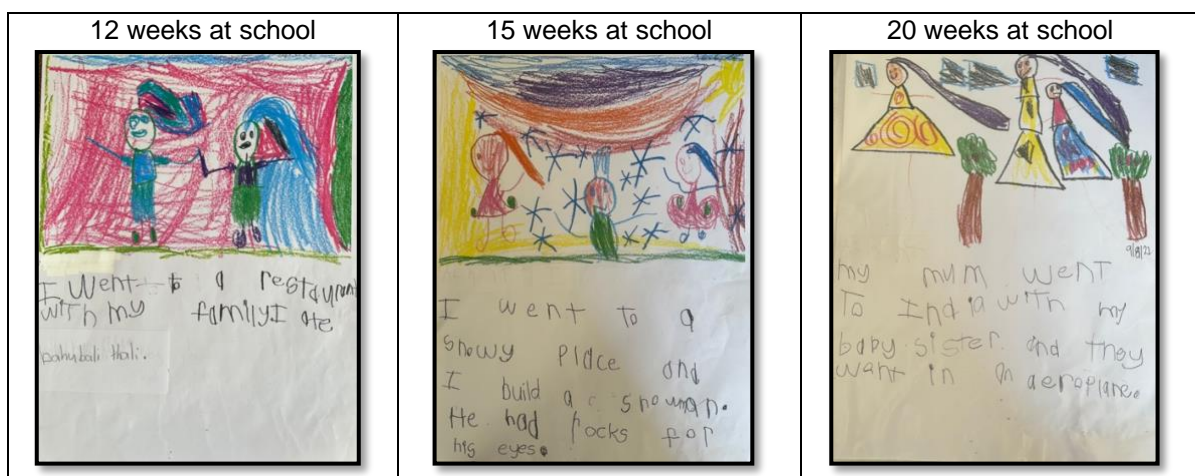


Figure 10: Ada's Reading Records and Summaries of the Processing Occurring During Reading

Reading Records		
<p style="text-align: center;">12 weeks at school</p> <p> <input checked="" type="checkbox"/> I <input checked="" type="checkbox"/> went <input checked="" type="checkbox"/> to <input checked="" type="checkbox"/> a <input checked="" type="checkbox"/> restaurant <input checked="" type="checkbox"/> and <input checked="" type="checkbox"/> my <input checked="" type="checkbox"/> family. TTA <input checked="" type="checkbox"/> I <input checked="" type="checkbox"/> went <input checked="" type="checkbox"/> to <input checked="" type="checkbox"/> a <input checked="" type="checkbox"/> restaurant <input checked="" type="checkbox"/> with <input checked="" type="checkbox"/> R <input checked="" type="checkbox"/> my <input checked="" type="checkbox"/> family. <input checked="" type="checkbox"/> and <input checked="" type="checkbox"/> I <input checked="" type="checkbox"/> ate <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> bahubali thali. </p>	<p style="text-align: center;">15 weeks at school</p> <p> <input checked="" type="checkbox"/> I <input checked="" type="checkbox"/> went <input checked="" type="checkbox"/> to <input checked="" type="checkbox"/> a <input checked="" type="checkbox"/> snowy <input checked="" type="checkbox"/> place <input checked="" type="checkbox"/> and <input checked="" type="checkbox"/> I <input checked="" type="checkbox"/> built <input checked="" type="checkbox"/> a <input checked="" type="checkbox"/> snowman. <input checked="" type="checkbox"/> He <input checked="" type="checkbox"/> had <input checked="" type="checkbox"/> rocks <input checked="" type="checkbox"/> for <input checked="" type="checkbox"/> his <input checked="" type="checkbox"/> eyes </p>	<p style="text-align: center;">20 weeks at school</p> <p> <input checked="" type="checkbox"/> My <input checked="" type="checkbox"/> mum <input checked="" type="checkbox"/> went <input checked="" type="checkbox"/> to <input checked="" type="checkbox"/> India <input checked="" type="checkbox"/> with <input checked="" type="checkbox"/> my <input checked="" type="checkbox"/> baby <input checked="" type="checkbox"/> sister <input checked="" type="checkbox"/> and <input checked="" type="checkbox"/> she <input checked="" type="checkbox"/> R <input checked="" type="checkbox"/> sc <input checked="" type="checkbox"/> they <input checked="" type="checkbox"/> went <input checked="" type="checkbox"/> in <input checked="" type="checkbox"/> an <input checked="" type="checkbox"/> aeroplane. </p>
<p>Ada was beginning to self-monitor her reading, although this was not consistent. She knew when she made an error (and/with) and hesitated at the end of the sentence but was unsure how to make a self-correction. During her second attempt to read, she could identify the tricky word (with). When the teacher told her the unknown word, Ada repeated it, which supported the message. Ada had difficulty with one-to-one matching during her reading and inserted a word to maintain the story's meaning. Ada was reading word by word carefully and slowly.</p>	<p>Ada was able to read accurately. She was matching her language to the text and could point to each word one after the other. Ada was attending carefully to the print. Finger pointing was slowing down her reading and using her finger is now no longer necessary.</p>	<p>Ada was once again able to self-monitor her reading and noticed when she made an error, which motivated her to reread. This was followed by a self-correction. Ada's error made sense in the context of the story. She may have noticed the mismatch by attending to visual information as during writing Ada had attempted to write the word (they/theiy) on her try card. Ada's reading has improved in fluency and is sounding more like a story rather than reading words.</p>

Summary of Ada’s Processing in Reading and Writing. Ada’s independent writing indicated that she has knowledge of print and how it works and has developed alphabet, letter and word knowledge and the ability to use phonemic awareness. These competencies have enabled her to spell some known words and attempt to record unknown words successfully so that others can read her writing. Learning to write during guided writing has supported Ada’s ability to write independently. After 4 months at school Ada was able to do some problem solving during independent writing as outlined in the EWOR. Additionally, guided writing has supported her to read her writing and engage in problem-solving if necessary. During reading Ada has learnt to attend to print and has a connection to the message of her story as it was her own. She matched her language to the text, which began as finger pointing but has developed into being able to track the print with her eyes and read at pace ensuring her reading sounded like a story rather than reading words. The guided writing process may also have contributed to her problem-solving ability to notice mismatches resulting in self-monitoring her reading and developing self-correction over time.

Lalen

Background on Lalen. Lalen is a Pākehā boy whose family have lived in the same community for three generations. Lalen loves playing imaginary games with his two sisters. At school, Lalen is very quiet in the classroom. He listens conscientiously and gets on with his work quietly. Lalen seems unsure and hesitant at school; however, his mother mentioned that he is often quiet initially, but once he gets to know you, he can be very talkative. She also mentioned that he has a vivid imagination, which is interesting information for teaching and learning. Figure 11 shows some of Lalen’s independent writing samples collected over time.

Figure 11: Lalen’s Independent Writing Samples Showing Change Over Time in Processing.



Learning Development and Processing in Writing. What was evident from Lalen’s initial writing sample was that his message was compassionate, identifying that at this early stage of writing, Lalen’s thinking can venture into critical literacy. His message has given us a better understanding of him as a sensitive, caring boy. Lalen conveyed his message through his picture. He has attempted to write his name and knew some letters that appear in his name. He also knew

where to start and which way to go. Lalen wrote the letters in his name one after the other, moving from left to right. There were spaces between his letters, indicating that he was unsure about the concept of a word.

Lalen's second writing sample showed a shift in his understanding of a word. He wrote his name with the letters close together. All the letters in his name were recorded, but some were upside down. Lalen had some concept of what writing should look like and was practising writing letter-like shapes and some recognisable letters. He knew where to start and which way to go but was still unsure of the return sweep. Lalen's confusion with the left-to-right direction of print in his independent writing could alert his teacher to possible confusion for Lalen with directionality when reading.

The third writing sample indicated that Lalen could now write his name. He was practising writing letters. Some of these letters he could form easily and others he found challenging. Lalen began to leave some spaces between words, although this was inconsistent. Lalen's partial use of spacing indicated a shift in his understanding of print. Previously, he recorded print as a constant stream of letter shapes and lines with no spaces. Now he was beginning to understand the concept of a word. Lalen wrote two recognisable words, (I) and (am), which he had been learning during guided writing. This writing sample could indicate a growing awareness of these two words. Learning these words through writing will support recognition of these words in reading as well.

Future Developments (Supported Through Guided Writing). Lalen would benefit from conversations with the teacher to build a relationship where he feels safe and comfortable, can share ideas and use his imagination. The teacher could have further conversations with his mother about Lalen's other interests so he could use his expertise when talking and writing. Lalen was making progress in understanding the directional principles of print. However, emphasis could be placed on the direction of print during guided writing, for example, "*Where will you write the next word?*" He could be supported to build knowledge of the return sweep and the need for consistency to leave spaces between words. Lalen showed a growing awareness of two high-frequency words (I) and (am) and it would be advantageous for his writing and reading to learn more words. Figures 12 and 13 show three guided writing samples and the subsequent reading records with a summary of the problem solving that was occurring in reading for Lalen.

Figure 12: Lalen's Guided Writing Samples.



Figure 11 Lalen's Reading Records and Summaries of the Processing Occurring During Reading

Reading Records		
1 week at school	5 weeks at school	7 weeks at school
<p>1 ✓ My 2 ✓ family 3 <u>building</u> are</p> <p>5 <u>train</u> building 6 <u>track</u> a 4 <u>a</u> train</p> <p>- track.</p>	<p>I R sc ✓ is R sc ✓</p> <p>My dog has a</p> <p>✓ long ✓ tail.</p>	<p>I ✓ am ✓ washing ✓ the ✓</p> <p>dishes ✓ helping R ✓ Mum. ✓</p>
<p>Lalen was pointing to the print but was confused by the left-to-right direction of print and the return sweep, which aligns with what was occurring during his independent writing. The red numbers indicate where he was pointing.</p> <p>Lalen does not yet understand that certain conventions of print remain constant.</p> <p>Lalen's reading was slow and steady and he was reading word by word.</p> <p>He seemed to notice an extra unread word at the end of the story and looked puzzled.</p>	<p>Lalen was able to match language to text and point one to one. His reading showed an understanding of the return sweep, although this still needs to be reflected in his independent writing.</p> <p>His reading was slow and steady as he attended intently to the print.</p> <p>Lalen's understanding of how print works has developed since his last reading record.</p> <p>Self-monitoring and self-correcting</p> <p>Lalen could self-monitor his reading and reread when he noticed a mismatch, followed by a self-correction. These problem-solving strategies identify his ability to engage in complex problem solving after only 5 weeks at school.</p>	<p>Lalen was looking carefully and pointing one to one. His reading was still slow and word by word.</p> <p>Lalen reread his story when he came to the word (helping). He seemed unsure of this word. However, once he had reread, he seemed reassured and continued to read.</p> <p>Lalen's rereading indicated some form of checking by attending to the print and possibly the message as he read to ensure accuracy.</p>

Summary of Lalen’s Processing in Reading and Writing. Through guided writing, Lalen is learning to write letter by letter, word by word, moving left to right across the page with a return sweep. His understanding of print and how it works is developing, which is critical as his early reading and independent writing indicated confusion with directionality. Lalen’s growing ability to match his language to the text as he reads is evidence of his developing knowledge of print direction. However, until his independent writing confirms that the return sweep has been mastered, we cannot be confident that this understanding is secure. Lalen has learnt to spell (l) and (am) during guided writing. Independent writing provides Lalen with the opportunity to strengthen this knowledge by practising using these words. Knowing these words in writing will support his ability to read these words. Significantly, as Lalen read, he solved problems by self-monitoring and self-correcting after 5 weeks at school. These problem-solving strategies indicate that he can now attend to print and draw on many different kinds of information simultaneously. By rereading, Lalen is indicating that he knows print holds a message and he is checking the accuracy of this message as he rereads. This understanding should ensure future success during literacy learning.

Tanu

Background on Tanu. Tanu was born in New Zealand and is of Indian descent; she speaks Hindi at home with her family. Tanu is happy and cheerful at school. She is very sociable and has many friends. Tanu’s father mentioned she was sad to leave kindergarten and the friends she made there and she would rather play with her friends than do schoolwork. Tanu still plays with her kindergarten friends after school and during weekends and these friends often feature in her stories. In the classroom, Tanu listens and contributes to conversations. She loves chatting with her neighbours as she works and is beginning to make new friends. Tanu loves mermaids and often writes about them. Figure 14 shows the changes in learning for Tanu during independent writing.

Figure 14: Tanu’s Independent Writing Samples Showing Change Over Time in Processing.



Learning Development and Processing in Writing. Tanu’s first writing sample indicated that she could write her name using uppercase letters. Tanu wrote a mixture of uppercase and

lowercase letters on the page. She knew that print moved from left to right, although observing her as she writes is necessary to confirm this understanding. Tanu was experimenting with letter forms and had the correct formation of letters like (h) and (n).

In Tanu's second writing sample, she drew a very detailed picture with a clear message. The message, written down by the teacher, was unconstrained as Tanu told her story without the requirement to record it and depicted her own voice. Tanu wrote her name twice with a capital letter and the other letters were lowercase, indicating a shift from her last writing sample. She attempted to write the name of one of her kindergarten friends (Zivah). The name was written randomly on the page and was written backwards. The letters were jumbled, but all the letters in (Zivah) were present. Tanu also wrote other letters on the page that looked like words. She knew what a word should look like but was still determining where to start her writing. Tanu's writing displayed her uncertainty about the directional principles of print, which may indicate difficulty pointing to the words when reading.

The third writing sample showed a growing awareness of the concept of a word and Tanu was able to write several words randomly on the page. One of the words she wrote was (Nadia), one of her friend's names. Nadia was written on the top left-hand side of the page, which indicated that she may know where to start writing. However, the other words were randomly placed on the page and didn't follow the directional principles of print, which continued to indicate the need for support with finger pointing when reading.

Self-Correction. Tanu showed signs of knowing how to form the lowercase (a). She was working on this formation and self-corrected the formation of an (a) on one occasion.

Future Developments (Supported During Guided Writing). Tanu could express herself well and needs many opportunities to lead conversations while the teacher listens and encourages her to talk. She loves writing about mermaids and this topic could be used to initiate conversations during guided writing to use her expertise. For example, *"Tell me what you know about mermaids."*

Tanu needs to learn about the directional conventions of print, which can be emphasised during guided writing. For example, *"Where are you going to start writing? Where will your next word go?"* Tanu's alphabet knowledge could be supported during writing and reading by using what she knows about her friends' names. Tanu needs to learn how to spell more high-frequency words, which will assist her writing and reading. Figures 15 and 16 show three guided writing samples and the subsequent reading records with a summary of the problem solving that occurred in reading for Tanu.

Figure 15: Tanu's Guided Writing Samples.

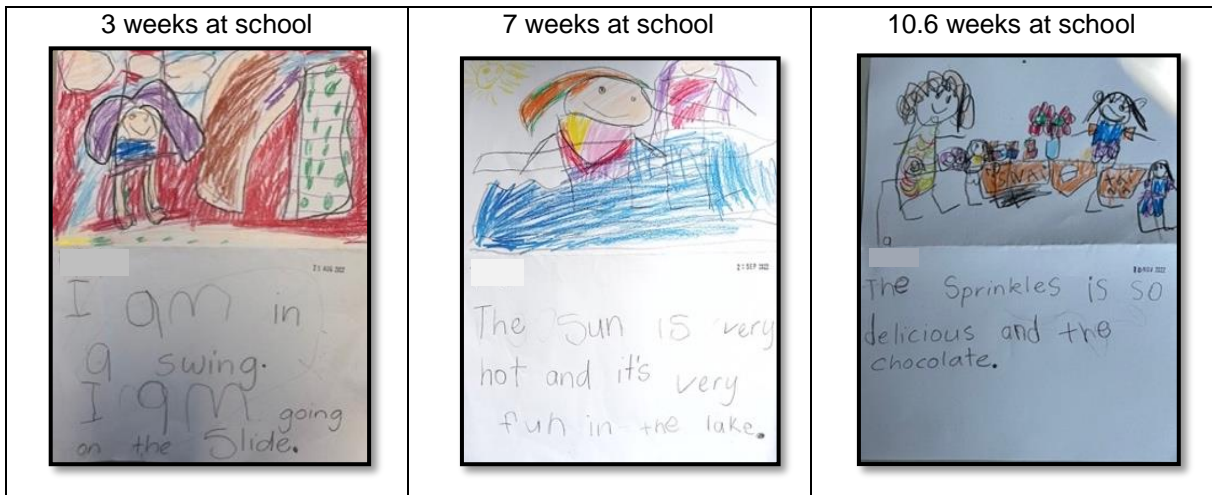


Figure 16: Tanu's Reading Records and Summaries of the Processing Occurring During Reading.

Reading Records		
<p style="text-align: center;">3 weeks at school</p> <p> <input checked="" type="checkbox"/> I <input checked="" type="checkbox"/> am R T <input checked="" type="checkbox"/> in <input checked="" type="checkbox"/> the R T <input checked="" type="checkbox"/> swing. <input checked="" type="checkbox"/> ...I <input checked="" type="checkbox"/> am <input checked="" type="checkbox"/> going <input checked="" type="checkbox"/> in R T <input checked="" type="checkbox"/> the <input checked="" type="checkbox"/> slide. </p>	<p style="text-align: center;">7 weeks at school</p> <p> <input checked="" type="checkbox"/> The <input checked="" type="checkbox"/> sun R <input checked="" type="checkbox"/> is <input checked="" type="checkbox"/> very <input checked="" type="checkbox"/> hot <input checked="" type="checkbox"/> and <input checked="" type="checkbox"/> it's R T <input checked="" type="checkbox"/> so R T <input checked="" type="checkbox"/> very R T <input checked="" type="checkbox"/> fun <input checked="" type="checkbox"/> in R T <input checked="" type="checkbox"/> the <input checked="" type="checkbox"/> lake. </p>	<p style="text-align: center;">10.6 weeks at school</p> <p> <input checked="" type="checkbox"/> The <input checked="" type="checkbox"/> sprinkles <input checked="" type="checkbox"/> is <input checked="" type="checkbox"/> so <input checked="" type="checkbox"/> delicious <input checked="" type="checkbox"/> and <input checked="" type="checkbox"/> I sc the <input checked="" type="checkbox"/> chocolate. </p>
<p>Tanu was unable to point to the words during reading. The teacher supported one-to-one matching by pointing to the top of each word while Tanu pointed under the word. Tanu's independent writing alerted the teacher to this uncertainty with direction. Tanu was reading word by word with teacher support.</p> <p>When Tanu made an error the teacher told her the word straight away, which did not allow for problem solving to take place. However, when Tanu hesitated the second time she read the word (I), the teacher said, "You know that word. You can write it." The teacher was making the connection for Tanu by alerting her to the reciprocal nature of literacy. Tanu is learning that what she knows in writing will assist her when she reads her writing.</p>	<p>Tanu has now progressed to reading the text by herself without teacher support. She pointed to each word carefully, indicating that progress has been made.</p> <p>Rereading Tanu read the first two words and then reread, possibly to check her reading.</p> <p>Self-monitoring When Tanu made a mistake (so/very), she noticed the discrepancy and self-monitored her reading by stopping. The teacher told her the word after 3 seconds and Tanu repeated the word, ensuring her attention to the message.</p> <p>Tanu was able to self-monitor her reading independently after 7 weeks at school, which is significant. Furthermore, her error made sense and sounded right, which indicated she had a connection to the language structure and message of her story.</p>	<p>Tanu has made progress and can now point one to one and match her language to the text. Her reading was improving in pace.</p> <p>Self-monitoring Tanu was able to self-monitor her reading when she noticed a discrepancy (I/the), which was then followed by a self-correction.</p> <p>Self-correction The ability to self-correct showed development from her last two reading records. Tanu knew how to write the word (I) independently in writing and this may have supported her ability to self-monitor and then self-correct her reading.</p>

Summary of Tanu’s Processing in Writing and Reading. As Tanu wrote independently, she knew about words and the spaces between words and she could write her name and some of her friends’ names. Her independent writing indicated that she was uncertain that print moves from left to right across the page, with a return sweep, which was also identified during reading. What is clear is that, over time, Tanu developed an attention to print, which eventually enabled her to self-monitor her reading when she noticed an inaccuracy. In addition to self-monitoring, she could also self-correct her reading, which could have occurred due to knowledge of the word (I), learnt during guided writing.

Kanha

Background on Kanha. Kanha is a Fijian Indian boy born in New Zealand; he speaks Hindi at home. Kanha’s parents have lived in New Zealand for 13 years and Hindu customs and celebrations are important in their family life. One day Kanha came to school with a rakhi band around his wrist as his family celebrate Raksha Bandhan at home. Kanha could not explain the significance of the rakhi, band although his father was delighted to describe the celebration to me.

Kanha is an active boy who loves watching cartoons and playing soccer. He is talkative and enjoys conversations and interacting with others. Kanha has a close friendship with another boy in his class who attended the same kindergarten. Kanha is always full of action and frantically busy. During a classroom word and alphabet assessment, Kanha knew how to read 17/54 words. Kanha’s teacher indicated that he has possibly learnt these words at home. Figure 17 identifies Kanha’s three independent writing samples.

Figure 17: Kanha’s Independent Writing Samples Showing Change Over Time in Processing.



Learning Development and Processing in Writing. In Kanha’s first writing sample, he drew a detailed picture and attempted to write his name. All the letters in his name are present but are in

the wrong order. Kanha wrote a string of letter-like forms to represent print. Some letters were recognisable. He knew where to start writing and which way to go.

Kanha's second writing sample indicated that he could now write his name correctly and all the letters were in the correct order. Kanha wrote the words (play, big). He may have copied these words from around the room, or he may be learning these words at home. Kanha knew that writing comprises of words and seems to know that all the letters are close together in a word. However, he still needs to leave spaces between words. Some of the letters he wrote use the correct letter formation. When asked about his story, Kanha could articulate a simple message.

Over time, Kanha's message has developed in complexity as he used some descriptive language and complex sentences in sequence. Using this kind of language has yet to occur during guided writing in the classroom. Often, he has had difficulty expressing himself when having a conversation, which can confuse the listener. This story was one he was motivated to tell. He wrote the word (me), which could indicate that he recognises that word.

Future Developments (Supported During Guided Writing). Kanha could have more opportunities to talk and write about his personal expertise. For example, Kanha's father mentioned that he was interested in cartoons. Kanha's use of descriptive language is a strength and could be encouraged and shared with other children. Additionally, the teacher could find information about Hindu celebrations that Kanha and his family celebrate, to include in his writing. Assessments show that Kanha can read some words in isolation. However, this knowledge is not helping him when writing or reading continuous text. Learning words in isolation from writing and reading is unhelpful (Croft, 1983). Kanha knows how to write his name and he knows the concept of a word. He could work on learning how to spell more high-frequency words during guided writing, which would be beneficial for both writing and reading. Figure 18 and 19 show three samples of Kanha's guided writing and the subsequent reading record.

Figure 18: Kanha's Guided Writing Samples.

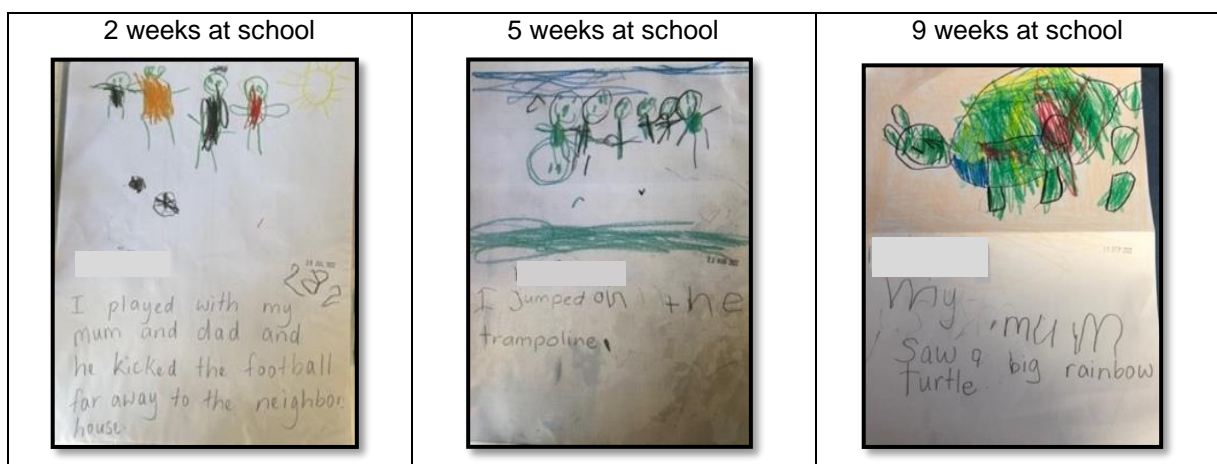


Figure 19: Kanha's Reading Records and Summaries of the Processing Occurring During Reading.

Reading Records		
<p style="text-align: center;">2 weeks at school</p> <p> <input checked="" type="checkbox"/> I <input checked="" type="checkbox"/> played <input checked="" type="checkbox"/> with <input checked="" type="checkbox"/> my <input checked="" type="checkbox"/> mum <input checked="" type="checkbox"/> and <u>my</u> dad <u>dad</u> and <u>R</u> <u>hel</u> <u>T</u> <input checked="" type="checkbox"/> kicked <u>it</u> far away in the neighbour's house. <u>far</u> <u>away</u> <u>to</u> <u>the</u> <u>neighbours'</u> <u>house.</u> </p>	<p style="text-align: center;">5 weeks at school</p> <p> <input checked="" type="checkbox"/> I <u>jump</u> <u>ing</u> <u>on</u> <input checked="" type="checkbox"/> I jumped on the <u>the trampoline</u> <u>trampoline.</u> </p>	<p style="text-align: center;">9 weeks at school</p> <p> <input checked="" type="checkbox"/> My <input checked="" type="checkbox"/> mum <u>sawed</u> <input checked="" type="checkbox"/> a <input checked="" type="checkbox"/> big <input checked="" type="checkbox"/> rainbow <u>saw</u> <input checked="" type="checkbox"/> turtle. </p>
<p>Kanha began matching his language to the text using a finger, but as the story was somewhat long, he began to recite his story from memory, hovering his finger over the text rather than attending to the print. Kanha understood the direction of print and he clearly knew the message of the story.</p>	<p>Kanha knew the direction of print and the message of the story. He needs help to attend to print by finger pointing and matching his language to the text.</p>	<p>Kanha has made progress in his ability to attend to print and can now point to each word and match his language to the print during reading.</p>

Summary of Kanha's Processing in Writing and Reading. Kanha knew about print directionality and has over time learnt to attend to print by pointing one to one when reading. Kanha could write his name and he understood that all the letters in a word are close together. During guided writing, it would be advantageous for Kanha to learn to spell some high-frequency words. Learning these words within continuous text would be memorable and meaningful for Kanha and support his reading. To make connections between writing and reading, it would be helpful for Kanha to locate known words after reading. For example, *"You know the word (the). Can you find (the) in your story?"* Over time, this attention to print will support his ability to self-monitor his reading. Kanha expressed himself well and, when unconstrained during independent writing, could use exciting descriptive language when telling stories. He needs to know that this is a strength as he can make his stories interesting and exciting for others to read. Using descriptive language will also expand his learning opportunities.

Summary of Processing Systems Identified in the Independent Writing and Reading Examples for Four Children

Through learning to write during guided writing, all four children developed early understandings of print, which supported their ability to write independently and to read their guided writing. Progress was made by all children in different areas and at different rates.

Problem Solving During Independent Writing. All children could independently construct a clear message. Kanha was additionally able to use some descriptive language, making his story enjoyable to read. The actions taken by new comers to school differed from what was outlined in the EWOR for 6-7 year olds. The problem-solving that occurred during this study related to early concepts about print, which needed to be mastered prior to developing the kinds of problem-solving identified in the EWOR. Knowing where to start writing and which way to go, learning about letters, words and the need for spaces between words. Learning to write their names and writing words they had learnt during guided writing were all early competencies children discovered and problem-solved during independent writing. Establishing this essential print knowledge and concepts about print initially would ensure the children would be on track to also engage in the kinds of problem solving described in the EWOR, which would occur over time at different rates for each child.

One child, Ada, did engage in the kinds of problem solving outlined in the EWOR as she wrote stories others could read after four months at school. She could reread, self-correct and use phonemic awareness to attempt to spell unknown words as she wrote independently. Undoubtedly, teacher support during guided writing would have contributed to what was occurring during independent writing.

Problem Solving During Reading. The learning that occurred during guided writing also supported young children's early attempts to read as they could attend to the message and print details. Data indicated that early on children could notice mismatches, which resulted in their ability to self-monitor their reading. The children's connection to the messages they composed, their knowledge

of one-to one matching, knowledge of words, which they knew, or had written with teacher support, knowledge of letters and phonemic awareness all contributed to their ability to self-monitor and, at times self-correct their reading. Problem solving occurred early on for these children by drawing on many different kinds of information together. Kanha was not, as yet, self-monitoring. However, his growing attention to print and the learning that was occurring during guided writing would ensure this kind of processing would develop over time.

Additionally, independent writing and reading records provided valuable information for teachers by identifying what specific children knew, areas of confusion and what support they required next. Evaluations could be made between what children knew in writing and how this knowledge played out in reading and vice versa. Teachers had the opportunity to advance children's learning by using independent writing and reading to identify the kind of support required during guided writing and reading.

Summary of Chapter 4

Teaching interactions identified that teachers used what children knew in their learning to make connections within writing and between reading and writing, which strengthened their learning. However, teachers did not use what children knew personally when talking and writing. Children were writing about their own experiences, however the children's stories were generic, without connection to their prior knowledge, worldview, cultural or linguistic diversity. During conversations teachers often resorted to asking questions as they had limited knowledge of the children's experiences and shared experiences were rarely offered. Teacher questioning dominated conversations and often resulted in more teacher talk and limited contributions from the children. The teachers and the children knew that the purpose of the conversation was to get a message, however this interfered with the need for the teacher to listen to the child's voice to capture their own language and message.

Independent opportunities to write identified that children, over time, were problem solving the puzzle of the written code by establishing early understandings of print and how it worked. Children attended to concepts about print, alphabet knowledge, letters and words, which built a strong foundation for future problem solving in writing and reading. All children had learning strengths and expertise and were learning different competencies at different rates. One child who had been at school longer than the others, developed processing strategies such as rereading, self-monitoring and self-correcting and could use phonemic awareness to attempt to write unknown words. The other three children were developing strong foundational competencies to develop attention to this kind of processing over time.

As children read their writing, the reading records identified the capacity for young children to match their language to the text by finger pointing. Through this growing attention to print details and each child's connection to the message of the story young children could draw on different kinds of information together. During their first months at school children began to independently problem solve by self-monitoring as they noticed discrepancies.

Chapter 5: Findings, Implications and Conclusion

This study considered how young children develop an early processing system for literacy within the context of a language-experience approach. This section presents the study's five findings. Language experience was investigated due to the approach's seamless integration of talking, writing and reading at the onset of learning (Ashton-Warner, 1963; Holdaway, 1979; Parr et al., 2009). Through integration, teachers can assist children in using their knowledge to make connections, expanding their learning opportunities.

The reintroduction of a language-experience approach was researched in two new entrant classrooms in Tāmaki Makaurau Auckland. Once the approach was underway, the focus was to observe and examine the role of the teacher and a small group of new-entrant children to identify the development of a processing system for literacy for these children. This study proceeded to investigate the following question:

How can language experience contribute to building a processing system for literacy in the first months of school?

To answer this question, the study examined the integrated components of talking, writing and reading within a language-experience approach to identify their contributions to building a literacy processing system. Teacher actions were categorised, compared and examined to determine which teaching moves supported children to use information to solve problems. The data collected to investigate this included transcripts of conversations, notations, audio files of guided writing interactions and samples of guided writing. The observational lens was then shifted from teacher to child actions. Data collected identified what children did to solve problems independently. The data sources included videos of children independently reading their writing, the reading records and a collection of children's independent writing samples. Additionally, insights from the teachers and myself and comments collected from whānau were examined.

During this study, teachers made iterative changes to their practice by observing children, considering the observational notes, reviewing data and through collegial discussions. These changes took time to implement and take effect. The following account presents the five key findings that emerged from the investigation. Results from the data have been integrated with information from previous research to explain the findings. Each finding concludes with implications for learning and teaching.

Finding 1: Valuing Children's Knowledge Assists Conversations

Data confirmed that when teachers had limited awareness of the children's expertise, cultural identity or knowledge, and shared experiences were reduced, conversations evolved where teachers asked numerous questions. Equally, when teachers attempted to encourage children to expand and clarify their ideas, they would sometimes adopt a questioning stance to elicit information from the children.

Teachers' questions shut down the conversations as children were only required to respond with one- or two-word answers instead of complete sentences. Consequently, the conversations often resulted in more teacher talk due to limited teacher knowledge regarding the discussed topic. Harmeay and Rodgers (2017) stress the benefits for learning when conversations involve a to-and-fro exchange between the teacher and the child, with less teacher talk.

Data identified that the least used means to initiate a conversation were using a shared experience and prior knowledge about the child. Although children wrote about their personal experiences, the stories told and written down were generic. Teachers did not often provide scope for conversations by finding out what children knew, through informal discussions with whānau. The teachers did not seem to consider that information about the children's expertise or prior knowledge could be relevant to or benefit learning. A recent review on effective approaches to teaching writing for the MoE highlights "the need for teachers to take action to learn about students as culturally and socially situated learner writers in the unique context of bicultural and multi-cultural Aotearoa, New Zealand" (Parr et al., 2022, p.4).

Opportunities for shared experiences involving teachers and children were also limited within this study. One teacher was unwilling to offer shared experiences. The other teacher made an attempt, however she grappled with the types of experiences to offer and methods to motivate children. Consequently, the experiences offered were not shared events but topics taken from classroom readings of shared books chosen by the teacher. At times, it was apparent due to frequent teacher questioning and restricted responses from children that the children had limited prior knowledge, interest or connection to some of the chosen topics. The absence of shared experiences contradicts the essence of language experience, which posits that first-hand experiences enrich a child's language opportunities and create personal meanings (Holdaway, 1979). Furthermore, the experiences and the language that arise from these experiences can create a way to channel intellectual motivations developed from real-world encounters into literacy (Holdaway, 1979).

Data indicated that teachers resorted to asking questions when they had limited knowledge of the children they were working with or when children had limited knowledge or interest in the topics they discussed. The practice of teacher questioning has been identified as unconstructive (Harmeay, 2021; Harmeay & Rodgers, 2017). When teachers asked questions, they took control and asserted dominance in the conversation while the child sustained a passive role. Research asserts that conversations involving more talk from the child and less from the teacher benefit learning (Harmeay & Rodgers, 2017). Gaffney and Jesson (2019) have advocated seeking intersubjectivity and redistributing control of the learner–teacher roles.

Implications of This Finding for Teaching and Learning

Improved discussions where children can contribute more fully would advance the quality of the messages constructed, thus improving learning opportunities for children. Harmeay (2021) has

identified techniques for teachers to improve conversations with children by supporting the initiation of ideas, encouraging more child and less teacher talk, and techniques to elicit more information from children. These techniques require teachers to adopt the role of an attentive listener and facilitator, providing more scope for children to utilise their knowledge and contribute more fully to the conversations. During some conversations, teachers did at times encourage children to take an agentive role. For example,

“Tell me about what you did at the marae.”

“Tell me about playing with your sister.”

Teacher knowledge surrounding the children’s cultural or linguistic identity could lead to stories that have a connection to the children themselves. Effective teachers build knowledge of the experiences and expertise of the children with whom they work. When teachers engage in learning conversations with whānau that are dialogic rather than monologic, power can be shared and learning situations can be co-constructed by teachers and learners (Si’ilata, 2014).

Shared experiences provide another avenue to build children’s expertise and knowledge, which can complement using children’s experiences as a base for talking and writing. The purpose is to create shared knowledge and language, which reduces the need for teacher questioning. Conversations benefit from a shared experience as children acquire knowledge of the experience to discuss and describe. According to Holdaway (1979), children need sensory experiences and real situations to expand their thinking and language opportunities. Shared experiences allow themes to be explored through all mediums, reflective of the work of Elwyn Richardson in the 1960s. Richardson utilised a theme that would stay the same, but the children would interpret it across all subject areas. Through integrating topics, experiences can be explored in depth, which is how quality, written expression arises (Holdaway, 1979).

Finding 2: Teachers Used the Children’s Knowledge About Literacy in Their Learning but not Knowledge of the Child

Teachers made iterative changes to support connections in learning and active participation from children as they learnt to write. Over time teachers recognised the power of using children’s knowledge to reinforce and support active learning. Data indicated occasions when teachers identified a child’s knowledge about print, letters, words and phonemic awareness within their writing. For example,

“You know where to start writing.”

“You know that letter. It is in your name.”

“Can you find (was) on the word wall? That’s a good word to learn. Let’s learn that word.”

“What will (mum) start with? It starts like your sister’s name (Mia).”

“You have already written (swing). (Slide) starts the same way. What will (slide) start with?”

“You say it slowly. What can you hear? Write it down.” (building phonemic awareness)

Data also confirmed that teachers used what children knew in writing to make connections reciprocally in reading. These connections between writing and reading ensued effortlessly through the integration of talking, writing and reading during language experience. The significance for the children’s learning was that they understood that what they knew in writing would assist their reading. This outcome has been emphasised and endorsed through the work of numerous researchers (Fitzgerald & Shanahan, 2000; Graham & Hebert, 2011; Harmey & Rodgers, 2017; Parr & Jesson, 2016; Parr et al., 2022; Parr & McNaughton, 2014). The following examples highlight teachers connecting what children learn in writing to their reading.

During Writing:

“You know that word (l). Write it down.”

As the Child Reads Their Writing:

“You know that word. You can write it.”

During Writing:

“(Me) starts like your sister’s name (Mia). What will it start with? Can you find (me) on the word wall?”

After Reading:

“Can you find a word in your story that starts with an (m) like Mia?”

When teachers provided scope for children, by using what they knew to extend their learning, it was noticeable that children were required to think and act. According to Gaffney and Jesson (2019), active learning is critical to developing a literacy processing system. In comparison, data revealed that when teachers narrowed the task by telling children what to do, children were prevented from taking action, making problem solving challenging. According to Holdaway (1979), telling children what to do constrains the development of a processing system as it devalues the cognitive aspects of behaviour and emphasises the mindless, mechanical aspects of behaviour.

Data indicated that although teachers used what children knew in a learning context, they did not build knowledge of the child’s personal expertise to ensure learning was relevant to the children. Children’s cultural and linguistic expertise was not utilised within their literacy learning. Similarly, teachers did not capitalise on the children’s interests or passions. This finding reveals the necessity of considering the term *knowledge* in a more holistic and child-centred way. Although the teachers knew that respectful relationships with whānau and children needed to be established, they did not see the benefits of engaging with whānau to learn more about the children to support child-centred learning. Educators and researchers have drawn our attention to the benefits of holistically viewing the children we work with to know them as learners and as people (Ashton-Warner, 1963; Dyson, 1993; Holdaway, 1979; Parr et al., 2022; Si’ilata, 2014). Lack of teacher knowledge of the children resulted

in stories that did not celebrate and acknowledge the cultural and linguistic diversity of the children or their specific interests and passions.

Implications of This Finding for Teaching and Learning

Effective teachers make connections for children by using what they know and apply it to new learning. When talking, writing and reading are taught together as literacy, connections can easily be made from one subject to another, strengthening the learning. As children are encouraged to think, make connections and take action, they begin to develop a processing system (Gaffney & Jesson, 2019). Comparatively, when teachers constantly tell children what to do, the child is prevented from thinking for themselves and becomes dependent on the teacher.

Teachers can also make connections for children by using each child's expertise in their learning, enabling them to play an active role and feel valued as people. Conversations with whānau enable teachers to discover more about the children they are working with so that the child's talents and expertise can be used during literacy learning. Viewing children holistically ensures that teachers acknowledge the responsibility to learn about the child as a learner and in the larger context outside school. The stories told and written can be significant and relevant for each child as they see themselves in their learning. Ashton-Warner (1963) described this child-centred approach to language experience as "made out of the stuff of the child themselves" (p. 34).

Learning outcomes will improve when children can use their first language at school (Si'ilata, 2014). Children's unique linguistic expertise can be used as they write stories with a teacher. In this way, children learn that they have expertise, which is valued. Children who speak two or more languages can be celebrated for their linguistic diversity (Si'ilata et al. 2018). Additionally, children can teach others by using their own language. The concept of ako is instilled within learning as the child connects to their own identity and culture in conjunction with the learning occurring at school.

Finding 3: Message Getting Can Get in the Way of Talking

Throughout this study, transcripts of conversations indicated that the teachers and the children knew that the purpose of the conversation was to get a message that could be written down. However, on closer examination, it became clear that the teachers' focus on obtaining a message interfered with the fundamental aspect of language experience, which was to capture the children's own language (Ashton-Warner, 1963; Holdaway, 1979). Teachers strived to extend and clarify the children's thinking by asking questions. When this occurred, the teacher controlled the conversation, and the children often became passive, as their contributions were reduced. Overall, the teachers talked more than the children, and a comment from one teacher indicated her awareness of the amount of teacher talk during conversations.

"There was not much talk from the children but lots of talk from me."

The teachers' questions could sometimes lead the child off track, impeding their thinking and restricting their contributions. An example of restricting a child's contributions is illustrated in the snowman conversation (see p. 53).

The purpose of language experience is to capture the child's own language to create a bridge between language and printed symbols (Holdaway, 1979). Opportunities to listen to and record the child's voice were reduced due to interference by teachers to obtain a message that could be written down.

Implications of This Finding for Teaching and Learning

A significant aspect of language experience is to develop reading material from the child's own language. The messages constructed and written down must be captured from the child's voice. Often, well-meaning teacher interference during the conversation could alter or distort the child's message, making it difficult for the child to gain this message as they read their writing.

Teacher–child conversations, which allow the child to talk and develop their thinking and oral language competencies, are advantageous. When teachers listen during conversations, they allow the children to express themselves and participate more fully. Furthermore, teacher facilitation to encourage children to expand and clarify their ideas can be achieved in a way that encourages greater participation from the child (Harmey, 2021). A quality conversation led by the child and their knowledge (Harmey, 2021) is more likely to result in compositions that extend children's thinking and capture the child's own language, which can then be read successfully by the child.

Finding 4: The Children's Independent Writing Indicated a Developing Processing System The data collected included several samples of children's independent writing, collected over time, which identified the development in literacy learning specific to each child. An emphasis on a child's independent actions when identifying problem solving has been stressed by Doyle (2015), Gaffney and Jesson (2019) and Holdaway (1979), and indicates the advantages of examining independent work samples. Independent writing was self-sufficient, sustained child agency and autonomy, and gave the teacher insights into what the children knew.

Data indicated that the four new entrant children who were closely examined could actively problem solve, as the information they were learning through varied literacy experiences occurring within the classroom was reiterated in independent writing. Progress was made over time regarding the complexity of children's compositions, knowledge of print, letter knowledge and word knowledge. Children used known letters and words they had learnt to spell during guided writing in their independent writing. Learning these competencies built a strong foundation for future problem solving to take place. One child began to use the problem solving identified by Harmey et al.'s (2019) EWOR which was designed for children aged 6–7 years, as she wrote stories others could

read after 4 months at school. She could reread her writing, so that she knew what to write next; attempt to spell unknown words using phonemic awareness; and was able to self-correct her writing.

By comparing several writing samples of children's independent work over time, teachers could assess the learning development that was taking place for each child. Harmey et al. (2019) asserted that children's learning development in writing can be seen as the change that takes place over time as children actively engage in writing. Data indicated that the learning during independent writing was particular to each child. The information collected in this study indicated that teachers could use writing samples formatively to understand what children knew and what they needed to learn next. Teachers reiterated this through their comments. For example,

"From looking at Lalen's independent writing, I can see he knows the words (I) and (am)."

"I have been talking to the children about their independent writing looking like their guided writing."

"On the independent writing table Ada can write the first sound of each word when she writes her story."

By examining independent writing, teachers were additionally alerted to the children's strengths or possible confusions regarding print that could occur as they learnt to read.

Pentimonti and Justice (2010) pointed out that teachers primarily offer supports that are not individually tailored and specific to the child's current level of understanding. However, when using independent writing samples, each child's current competencies can be identified, enabling responsive teaching to acknowledge each child's strengths and future learning. Furthermore, independent writing samples are authentic, as they are a daily feature of the usual classroom programme. Therefore, the child is not required to do additional assessments that differ from the usual classroom happenings. The advantages of authentic assessments have been endorsed by Fredrich et al. (2021).

Implications From This Finding for Teaching and Learning

This study endorses and promotes using independent writing to allow children to make discoveries and practise what they know. When used formatively, independent writing provides teachers with valuable information regarding what children know and need to learn next. This information is child specific, making the subsequent learning relevant to the individual child. Additionally, the children's personalities and passions shone from their early writing attempts, contributing to additional teacher knowledge of each child.

Advances in literacy development require teacher-supported literacy learning and independent writing to occur simultaneously. For example, literacy learning that ensures children engage in guided writing, reading shared books, conversing with teachers and peers, reading poems, reading stories, listening to stories, drawing and reading their own and others' stories, supports independent writing.

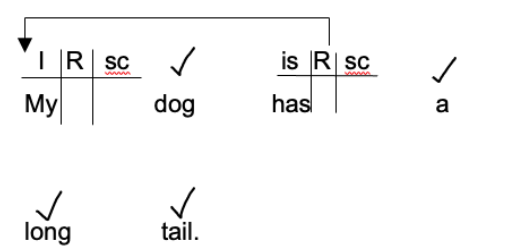
Finding 5: Children Were Able to Independently Self-Monitor When Reading Their Writing During their First Months at School

Children attended to print details early on as they read their writing. The physical act of writing during guided writing influenced the children’s understanding of how print worked, which had a reciprocal gain for reading. This understanding has been posited by educators and researchers avidly over the years (Chomsky, 1971; Doyle, 2013; Graham & Hebert, 2011; Parr et al., 2022; Parr & McNaughton, 2014; Snow et al., 1998) and endorses the practice of language experience where the integration of literacy occurs at the onset of learning. Comments from teachers also reinforced the concept of the writing process supporting children’s early attempts to read. For examples of these comments (see p. 59).

The strategy of finger pointing by matching language to text was established early on as children read their writing, allowing them to attend to print, contributing to their self-monitoring ability. The child’s attention to print, which was established during the writing process ensured they could independently notice when their reading did not appear to correspond to their messages, print details or visual information. Data identified children who noticed these mismatches and stopped reading, indicating their ability to self-monitor.

Developing this strategy early on is critical when developing a processing system, as further problem solving can only occur if the child initially self-monitors by noticing for themselves that there is a discrepancy (Doyle, 2015). In addition to self-monitoring, reading records also identified children rereading, demonstrating that the child was checking the accuracy of their reading. Figure 20 highlights a child’s self-monitoring, rereading and self-correcting as they read their writing after 5 weeks at school.

Figure 20: A Reading Record Showing a Child’s Self-Monitoring, Rereading and Self-Correcting



Implications of This Finding for Teaching and Learning

By integrating subjects in a language-experience approach, the learning that occurs in writing can support learning in reading as children read their own stories. Integration allows for connections to be made easily from one literacy subject to the next, strengthening the learning. Teachers can assist children in making these connections if the children have not already made them themselves.

Children need to know about print and how it functions before they can begin to read (Aitken et al., 2018). Language experience provides an opportunity for this to occur. Early writing experiences can support learning to read as children read their writing (Anderson et al., 2018; Clay, 2014; Coker et al., 2018; Graham & Hebert, 2011; Harmeey & Rodgers, 2017). By improving writing instruction for children, teachers ensure reading development is also positively impacted (Harmeey & Rodgers, 2017).

Conclusion

This study is based on the assumption that all children come to school with unique expertise and knowledge. The teacher's responsibility is to discover the capability and motivations and knowledge of each child and use these resources to support children to take an agentive role in their learning. When children begin their learning by using what they know, they can become active problem solvers who can initiate processing and expand their learning opportunities. Throughout this study, emphasis was placed on what children knew as they participated in talking, writing and reading.

The study's findings highlight the need for educators and researchers to view the term knowledge more holistically and ensure that, in addition to recognising what children know in a learning sense, they also build information of each child's unique world view, interests, knowledge and cultural identity. When children are supported to become capable participants by utilising their full expertise, the learning becomes personally relevant and meaningful for the child. In contrast when the learning has no connection to the child and they are told what to do, they can become passive recipients of learning.

The study identified the significance of early writing to support and enhance learning to read. As teachers emphasised what children knew, children could transfer their knowledge from teacher-supported learning into independent writing and reading due to the reciprocal nature of literacy. When children read stories about themselves and their experiences, which had been co-constructed with a teacher, they could develop the ability to problem solve effectively by noticing and working on difficulties. Significant discoveries were made by children regarding understanding concepts about print as they engaged in problem solving during independent writing. The child's independent writing was informed by what they knew and what they were learning from varied classroom literacy learning. Children progressed at different rates and in different competencies as they took unassisted action to write independently. The study identified that early literacy development occurred for all children in reading and writing as they made progress over time.

This study began by looking back to a time when Aotearoa New Zealand was a world leader in early literacy education and language experience was prevalent in classrooms. The reintroduction of language experience recognised a child-centred approach to literacy learning, where teaching begins by valuing what children know holistically as a basis for future learning. The integration of talking, writing and reading, within a language-experience approach, uses the child's knowledge reciprocally

to make connections from one subject to the next, strengthening their literacy learning. This study promotes language experience as a successful way to introduce young children to early literacy learning. Children can develop agency and become independent problem solvers when they build onto and make connections with what they know as they engage in talking, writing and reading.

Kō ngā tahu ā ō tapuwai inanahi, hei taurira mō āpōpō

The footsteps we lay down in our past create the paving stones upon which we stand today.

Limitations of This Study

The study introduced a language-experience approach to two new-entrant classrooms in Tāmaki Makaurau Auckland. The teaching and learning of two teachers and eight children were examined to identify how children in the first few months of school could build a processing system for literacy as they engaged in a language-experience approach.

One important limitation of this study was that it was conducted during the COVID pandemic when teacher and child absences were extreme. These absences affected the continuity of teaching and learning. When teachers or children were away, language experience did not take place, which can compromise learning progress.

Recommendations for Further Research

As a result of this study, further research would be beneficial. This research identified the value of promoting more talk from children when the teacher has knowledge of the learner and their whānau. Further research into developing teacher knowledge of the learner in a personal, cultural and linguistic sense, and how this can advance children's oral language, would be beneficial.

To address the present limitations surrounding classroom tools to measure early writing development (Harmey & Wilkinson, 2019), the use of independent writing as a form of formative assessment could be further examined. The influence that other kinds of literacy learning may have on a child's independent writing could be explored, as well as the concept of viewing progress as the change that occurs over time for a child in their learning.

Appendices

Appendix 1: Principal/ Board of Trustees Participation Information Sheet

School of Curriculum and Pedagogy
Te Kura o te Marautanga me te Ako



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Participant Information Sheet

Principal/ Board of Trustees

Project Title: How Can Language Experience Contribute to Building a Processing System for Literacy in the First Months of School?

Principal Supervisor: Rebecca Jesson

Co-Supervisor: Janet Gaffney

Student Researcher: Janet Hawkins

Dear _____,

I am undertaking a small research project as part of the requirements for my Master of Education degree through the University of Auckland. The project is under the supervision of the Faculty of Education staff members: Professors Rebecca Jesson and Janet Gaffney.

This letter is to seek permission for access to your school to work with _____ and observe 3-4 sample children. _____ has been recommended to me by a Reading Recovery Tutor. They have indicated that she is a committed teacher who may be willing to work with me to examine how language experience might contribute to building a literacy processing system for newcomers to school.

This research has been motivated by my interest and experience in literacy teaching and learning and the development of children's processing systems for literacy. I have had experience as a classroom teacher, Reading Recovery teacher, and Reading Recovery Tutor in the last ten years. The purpose

of this research is to gain a better understanding of how teachers can support successful literacy outcomes early on by using a language experience approach when children start school. My intention is to work with a new entrant teacher in term 1, supporting the implementation of a language experience intervention in their new entrant classroom. Once the intervention is operating, I will then observe and collect data for 3-4 sample children who have just started school to track their learning as they engage in language experience.

Project description

The time frame for the project is from February 2022 until the end of the third term in 2022. The concept of ako will be acknowledged within the study whereby the teacher, the children and the researcher all bring knowledge to the learning situation and can learn from each other. The project will progress in two phases.

Phase 1 (December 2021)

This study is an intervention study and a requirement for participation is that a new entrant teacher implements the intervention of language experience in their classroom. I will meet the teacher in December 2021 and discuss the approach of language experience and the implementation within a classroom setting. If the teacher agrees to participate, they can begin using a language experience approach in their classroom at the beginning of 2022.

Phase 1 (Term 1 2022)

Throughout the study, the teacher and I will be working co-operatively on the language experience intervention. We will need to prearrange dates so that I can observe language experience in operation within the classroom. After the observation, together the teacher and I can discuss the teaching and learning during the intervention and identify our thoughts regarding,

1. The things that are working well with the intervention
2. Any issues with the intervention that may require adaptations to practice.

By referring to relevant literature, the teacher and I can identify and record 2-3 aspects of teaching practice to work on over the next few weeks. These will be reviewed during our subsequent discussions to see if the adaptations made to practice have been effective.

Research Journals- During the research process, the teacher and I will both need to keep a research journal to record our observations, reflections, discussions and any adaptations made to practice. To ensure transparency of information, we will need to share the information from our journals with each other. The contents of these journals will be confidential in that information from the

journal may be referenced in the completed research study, but the identity of the participants will not be disclosed.

Phase 2 (Terms 2 and 3 of 2022)

During terms 2 and 3, the focus will be to closely observe 3-4 newcomers to school and track their learning in their first three months as they engage in language experience. I will need to observe each child twice during terms 2 and 3 which will include a maximum of 8 child observations. The observations will only last the time that the child is engaged in the activity that I will be observing. It would be helpful for the teacher to continue to write reflections in their research journal during terms 2 and 3 as these will provide valuable insights into the intervention and how it can contribute to developing literacy learning for young children.

Classroom Observations

During language experience, I intend to observe the children,

- As they engage in a conversation with the teacher in a small group.
- As they are co-constructing a written text with the teacher.
- As they read their own writing
- As they engage in independent writing

The observations during terms 2 and 3 will be pre-determined after consultation with the teacher and timetabled. During the project, all data collected will be stored securely on the University of Auckland server. At the conclusion of the research, all data will be kept for six years and then destroyed (written data will be shredded and audio recordings will be erased).

Conversations with Whānau

Whānau will be interviewed in an informal conversation twice during the study. The teacher will need to conduct the first conversation, and I will interview whānau at the end of the study. The first conversation will occur before the children start school, possibly during the child's pre-school visits to the classroom. As the language experiences often come from the children's interests, experiences, knowledge and cultural background, this conversation will help the teacher get to know the children better and ensure that teaching and planning for language experiences are responsive to the child. At the end of the study, I will conduct the second conversation which will involve asking whānau about their children's literacy learning and whether it reflects what is important to their child.

The identities of the children, their whānau and the teacher, and that of your school will be confidential. However, the information collected will not be confidential as it may be used in the study. Any data collected and interviews made will be "de-identified," i.e., the identity of the participants will not be revealed. Data may be included in the completed theses and consent for this will be sought from the children and their whānau.

The benefit to your school will be that a teacher at your school will receive professional development around implementing a language experience approach to teach literacy. As a classroom teacher, I have used language experience in several new entrant classrooms and I am enthusiastic about the successful outcomes for children and about sharing this with others. The practice is grounded in literacy processing theory and empirical research. The teacher will also receive formative information regarding the sample children's progress in early literacy learning.

Your school's participation in this study and that of the teacher, children and whānau is voluntary. If you agree to participate, your school or any participants involved will have the right to withdraw from this study at any time without the need to give any explanation. Any data can be withdrawn up until 30th September 2022, which is the final date assigned for the completion of data collection.

Yours sincerely,



Contact Details

Please feel free to contact any of the researchers should you have any questions or concerns.

Principal Investigator/Supervisor: Associate Professor Rebecca Jesson

Faculty of Education University of Auckland

Email r.jesson@auckland.ac.nz

Phone 09 623 8899 ext 48162 (office)

Student Researcher: Janet Hawkins jhaw010@aucklanduni.ac.nz

Co-Supervisor: Janet Gaffney janet.gaffney@auckland.ac.nz ph. 09 623 8899 ext 48323

Faculty of Education, Head of Curriculum and Pedagogy contact details:

Associate Professor Katie Fitzpatrick k.fitzpatrick@auckland.ac.nz ph. 623 8899 ext: 48652

For any concerns regarding ethical issues, you may contact the Chair, the University of Auckland Human Participants Ethics Committee, Office of Strategy Research and Integrity, University of Auckland, Private Bag 92019, Auckland 1142. Telephone 09 373-7599 ext. 83711

Email: humanethics@auckland.ac.nz

Approved by the University of Auckland Human Participants Ethics Committee on 25th/11/2021, for three years. Reference number UAHPEC23537

Appendix 2: Teacher Consent Form

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Auckland 1150, New Zealand

Consent Form

Teacher

This form will be held for 6 Years.

Project Title: How Can Language Experience Contribute to Building a Processing System for Literacy in the First Months of School?

Principal Investigator/Supervisor: Rebecca Jesson

Co-Supervisor: Janet Gaffney

Student Researcher: Janet Hawkins

I have read the Participant Information Sheet, have understood the nature of the research and why I have been selected. I have had the opportunity to ask questions and have them answered to my satisfaction.

- I agree to participate in this research.
- I understand that the Principal/BOTs have given assurance that my participation or non-participation not affect my employment status or influence my relationship with the school.
- I understand that I am free to withdraw my participation at any time and to withdraw any data traceable to me up until September 30th, 2022.
- I understand that I will agree to the implementation of a language experience approach to teach early literacy in my new entrant classroom.

- I understand that I will work cooperatively with a researcher over 3 school terms regarding the implementation of a language experience intervention in my classroom.
- I understand that a researcher will observe in my classroom during language experience in term 1 on 5 occasions (every fortnight) and I will meet up with the researcher afterwards outside of class time.
- I understand that I will discuss the intervention with the researcher after these observations for ½ hour outside of classroom time in term 1. Together we will plan for possible adaptations to practice to improve learning outcomes for all children in the classroom.
- I understand that the researcher will observe and track the learning of 3-4 sample children who are newcomers to school in terms 2 and 3. This will occur on a maximum of 8 occasions throughout the two terms.
- I understand that the parents/whānau of the new entrant children selected for the study will be asked to sign a consent form if they agree for their child to participate and that they will be invited to help their child complete an assent form.
- I understand that all written data and audio recordings will be kept securely on the University of Auckland server and will be destroyed after six years.
- I understand that I will be required to keep a research journal as part of the data collection. My reflections may be used in the published theses, but my identity will remain confidential.
- I understand that I will perform an informal initial conversation with the whānau of the 3-4 sample children to learn about the interests, experiences, cultural background and knowledge that each child brings with them to school.
- I agree to be audio recorded and I understand that I have the right to ask that the recordings cease at any time without giving a reason.
- I wish/do not wish to have my recordings returned to me.
- I understand that this consent form will be kept secure by the principal investigator for six years before it is destroyed.
- I wish/do not wish to receive the summary of the findings.

Email address _____

Name: _____

Signature: _____

Date: _____

Approved by the University of Auckland Human Participants Ethics Committee on _____ for three years. Reference Number _____

Appendix 3: Child's Assent Form

School of Curriculum and Pedagogy
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Auckland 1150, New Zealand

Assent Form

Child

This form will be kept for six years.

Title of Project: How Can Language Experience Contribute to Building a Processing System for Literacy in the First Months of School?

Principal Supervisor: Rebecca Jesson

Co-Supervisor: Janet Gaffney

Student Researcher: Janet Hawkins

My parents have told me about Janet's study.

My parents have answered my questions.

I know that I don't have to be in the study, if I don't want to.

- I agree to take part in Janet's study.
- I understand that I can stop at any time.
- I understand that I will be taped in my groupwork.
- I understand that Janet will not use my name in her study.
- I understand that Janet is studying at University, and that she will write about what she finds out.
- I understand that Janet will take photos of my work for her study. She will not show my name.
- I understand that my teacher and my Principal are happy for me to take part, or not.

My name is: _____

Date: _____

Approved by the University of Auckland Human Participants Ethics Committee on 25th/11/2021, for three years. Reference Number UAHPEC23537

Appendix 4: Form for Classroom Observation Notes

My Thinking	
Teacher Actions	
Child Actions	
Activity	

Appendix 5: Informal Interviews with Whānau

Semi-structured conversation with whānau before the intervention. The teacher will do this.

These conversations will be about listening to whānau talk about what is important to them and their children. In this way, the teacher will better understand the new child starting school and the interests, experiences, knowledge, culture and worldview they bring to school with them. The teacher will take notes and inform the researcher of her insights regarding the children. These insights will be considered when working with children and planning for language experiences.

Semi structured conversation with whānau when child begins school Before having a conversation the teachers would convey that they would like to get to know their child better to ensure that the child's learning at school is relevant to them, their interests, experiences, knowledge, language and culture.

The teachers would be discussing informally with whanau about some of the following.

- The whānau's cultural background, ethnicity, language/s spoken at home,
- The child's interests, what their child did before coming to school eg. did they attend kindergarten, kohunga reo (Māori immersion kindergarten), stay at home with whānau?
- What they like doing together as a family and any other information about the child that could help the teacher to understand the child and use the child's world as a base for further learning.

Semi-structured interview questions after the child has been at school for a month. The researcher will do this in the form of a casual conversation. The following ideas would be covered,

- Does your child feel confident and happy at school and do you as whānau feel informed about what is happening at school in terms of your child's learning?
- Does your child seem interested in the language experiences they have been engaged in at school and do they share the writing that they bring home with you?
- Does your child read and talk about the stories they bring home?
- Do you feel that these stories are reflective of your child's interests, experiences, knowledge and cultural identity?
- Is there anything else you would like to share about your child's learning in literacy at home or at school?

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