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Teacher and peer support of lone speakers of home languages other than English attending early childhood centres

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Abstract

This study investigated the English language learning experiences of 12 children who were lone speakers of home languages other than English attending three English medium early childhood centres [ECCs] with different philosophies, programmes, and practices: a sessional kindergarten, and two all day care centres. The study focused on the interpersonal environments of the centres; specifically the participants’ interactions with teachers and peers, and how these were influenced by differences in aspects of the centres’ temporal environments including the organisation and nature of free play activities, mat times, and lunch times.

The longitudinal, mixed method design of the study incorporated observations, teacher and parental questionnaires, and the British Picture Vocabulary Scale [BPVS], a measure of the participants’ receptive English language progress. Six observations of each participant over a nine month period provided a series of snap shots of the participants’ productive language and language acquisition opportunities at the centres. Audio recordings and observer field notes provided data on the frequency and nature of interactions between the participants and their teachers and peers.

The results showed that the participants at the sessional kindergarten participated in a greater frequency of extended reciprocal interactions with their teachers and more frequent interactions with peers than the participants at the day care centres. These interactions appeared to provide the kindergarten participants with more English language acquisition opportunities. Moreover, the kindergarten participants made greater progress on average, in receptive English language acquisition as shown by the BPVS results, and demonstrated greater English productive language abilities than the day care participants.
The study findings suggest that differences in early childhood centres’ temporal environments influence the centres’ interpersonal environments, and thus the English as a second language learners’ English language acquisition opportunities.

This thesis makes some tentative recommendations for practice and policy to help teachers to provide more optimal English language acquisition support for lone speakers of home languages other than English acquiring English at ECCs.
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Chapter One: Introduction

Increasing numbers of young children speaking home languages other than English are attending Early Childhood Centres [ECCs] in New Zealand (Ministry of Education, 2007). Teaching English to young children is becoming the responsibility of all early childhood teachers. A large number of languages are spoken throughout the country, but some of these languages are spoken by very few children in schools and ECCs (Peddie, 2003). This means that there are children attending ECCs who are the only (lone) speaker of their home language. This study investigates the experiences of twelve such children attending three English medium ECCs in a linguistically diverse area of Auckland.

1.1 Background rational

As an early childhood teacher in England I did not reflect on how the children with home languages other than English were learning to speak English in my class. They very quickly appeared to make friends, follow my instructions and the routines of the classroom, and make their needs known to me. I did not consider how these children acquired the English to enable them to interact with me and their peers, or indeed to learn the concepts being taught. It appeared a natural process. Later, when working overseas in countries where bilingualism was the norm I became interested in the topic and completed a Masters in teaching English to young learners. This course promoted my awareness of the lack of empirical research into teaching and learning English as a second language [ESL] with preschool children. As a migrant to New Zealand lecturing in an early childhood teacher training college, I became aware of the linguistically diverse nature of the ECCs at which the student teachers were gaining practical experience. The teachers at these centres indicated that they were unsure as to how to
best support ESL children. I took ‘How teachers support children with home languages other than English’, as the topic for my doctoral studies and this thesis presents the findings of my investigation.

1.2 Impact of immigration on ECCs

The rise in the number of children attending ECCs speaking home languages other than English in New Zealand is due to a large rise in immigration of families from non-English speaking countries, and an increase in children born to bilingual parents in New Zealand (Statistics New Zealand, 2006a). The 2006 census showed that 35% of children born overseas and 11% of those born in New Zealand spoke a home language other than English (Statistics New Zealand, 2006b). Enrolments of children identified as Asian at ECCs increased by 31.6% between 2005 and 2009 compared to an overall increase of 10% for all children (Ministry of Education, 2009). The actual numbers of children with home languages other than English attending ECCs is not presently audited; however McNaughton, Keegan and MacDonald’s (2006) study of three south Auckland primary schools suggests that up to 50% of the children attending ECCs may be learners of English as a second language [ESL].

1.3 Significance of this study to ECC sector

The New Zealand government places a strong emphasis on the importance of early childhood education, and all children have the right to enrol and receive quality early childhood education (Ministry of Education, 1996, 1998). Moreover, good quality, effective early childhood education has been recognised as critical for laying the foundations for later success in education (Wylie, Hogden, Ferral, Dingle, Thompson, and Hopkin, 2006).
A wide range of early childhood services provide for the education and care of children from the age of three months until the age of five years. These services provide a choice of differing philosophies and practices and include all day care centres, community and workplace crèches, government kindergartens, play centres, and community playgroups (Early Childhood Development, 2001).

Statistical data (Ministry of Education, 2007) indicates that the uptake of different services varies according to cultural background. Asian families throughout New Zealand are more likely to enrol their children in government kindergartens which provide half day sessions for three and four year olds. In contrast, European/Pakeha families uptake of all day ECCs is greater. Eight percent of children attending kindergartens and six percent at all day care are Asian compared with 65% European/Pakeha families at kindergartens and 71% at all day care (Ministry of Education, 2007).

Children generally attend ECCs with experience in one language. They have some understanding of how language works and are experienced in communicating with others. However, for children with home languages other than English to fully participate in the centre’s programme and later in mainstream education, it is necessary for them to acquire English as a second language [ESL].

Reciprocal partnerships with adults are essential for children to successfully acquire ESL (Halliday, 2004) and for ESL children attending ECCs it is likely to be the teacher who will have the most influence on the child’s learning, especially in the early stages (Chesterfield, Hayes-Latimer, Chesterfield, & Chavez, 1983). However, teachers report a lack of knowledge and confidence in how to provide an optimal environment for ESL.
children (Robinson & Jones-Diaz, 2006; Schofield, 2007). This is possibly due to lack of empirical research in teaching English to very young children.

1.4 Purpose of the study
The purpose of this study is to investigate how different kinds of ECCs are supporting the English language acquisition of children who are lone speakers of home languages other than English. The findings from the study are used to suggest how centre environments could be optimised for lone ESL learners. A further purpose of this study is to make recommendations for teacher practice and EC policy.

1.5 Organisation of the thesis
This thesis comprises of nine chapters:

Chapter One provides the rationale for the study its context, significance and purpose.

Chapter Two reviews theoretical and research literature relevant to teaching and learning languages in early childhood. The chapter reviews theories of first and second language acquisition and bilingualism; describes early childhood education provision in New Zealand, and reviews literature on the role of the teacher and learner within ECCs interpersonal and temporal environments.

Chapter Three describes the study participants and provides an overview of the study design its measures and procedures.

The next four chapters relate to the results of the study:

Chapter Four identifies similarities and differences in the interpersonal environments of the three participant centres from the perspective of child participant-teacher interactions.
Chapter Five identifies similarities and differences in the child participants’ interactions with peers.

Chapter Six identifies similarities and differences in the temporal environments of the three participant centres.

Chapter Seven reports the child participants’ productive English language abilities and their progress in receptive English language. This chapter also provides a comparison of the participants’ English and home language experiences and their English language progress.

Chapter Eight discusses the study findings and results in relation to the theoretical and empirical research literature. This chapter finishes by identifying aspects of ECCs temporal and interpersonal environments that may provide an optimal ECC environment for ESL children who are lone speakers of home languages other than English.

Chapter Nine makes some recommendations for practice and policy based on the findings of the study; discusses the limitations of this study, and makes suggestions for future research. The thesis concludes by identifying how the study has contributed to the field of ESL in ECCs.
Chapter Two: Acquiring English as a second language in early childhood: A review of theoretical and empirical literature.

As discussed in the previous chapter, the numbers of children with home languages other than English attending English medium early childhood centres throughout New Zealand is increasing. However, very little is known about how ESL children are being supported in different types of English medium ECCs. To provide a theoretical and empirical context for this investigation, this chapter first reviews literature on first and second language acquisition and discusses bilingualism with an emphasis on early childhood. As this study is situated in the New Zealand early childhood education sector, the chapter identifies different types of early childhood centres in New Zealand and describes the bi-cultural curriculum statement Te Whaariki on which the EC programmes of all New Zealand centres are based. The three facets of an ECC environment: interpersonal, temporal and physical, are then discussed. This is followed by a review of the existing literature regarding teaching and learning English as a second language in ECCs, including the roles of the teacher, learner and peers, and the role of the temporal environment. The chapter finishes with a summary leading to the questions posed by the research study.

2.1 Home language development and second language acquisition theories in early childhood

Children acquire their first language naturally rather than through formal learning, and young children acquire a second language in much the same way (Krashen & Terrell, 1983; Nunan, 2001). This is in contrast to adults, who generally ‘learn’ a second language through formal lessons involving vocabulary lists, grammar exercises, and oral repetition. This review of the literature explores the first and second language
acquisition of very young children, with an emphasis on language acquisition rather than formal language learning.

**Stages of first language acquisition**

Children acquiring their first language are seen to pass through recognised stages of development (Girolametto, Weitzman, & Greenberg, 2004; Halliday, 2004; Lybolt & Gottfred, 2003; Menyuk & Brisk, 2005). At around nine months of age children begin actively using sounds, actions and expressions to communicate their needs and feelings. Halliday (2004) describes this as the protolanguage stage. This system of symbols eventually becomes a spoken language with grammar and vocabulary. Between the ages of 10 and 14 months, children typically begin using one word utterances consisting of labels, actions and expressions (Menyuk & Brisk, 2005). A rapid vocabulary development then follows, and by 18 months the average child is able to produce up to fifty words and combine two or three to produce noun verb phrases for example, ‘Mummy drink’ (McLean & Snyder-McLean, 1999). By the age of three years the length and complexity of utterances has generally increased so that the child is able to manipulate questions, and at four years he/she becomes aware of the past tense. At five years, the majority of children can use elaboration for describing events, telling stories and communicating their feelings.

**Stages of second language acquisition**

It is recognised that, as with first language, children acquiring a second language pass through a number of stages or developmental sequences (Tabors, 2008). Clarke (1992) refers to these as ‘phases’. Initially the child does not realise that there is a difference between their own language and that used by others and so continues to communicate in his/her home language. Saville-Troike (1987) termed this ‘dilingual discourse’. In her investigation of 40 children aged 18 months to 12 years Saville-Troike (1987) found that
the younger the child is when introduced to a second language, the longer this stage lasts.

Following the dilingual discourse phase, when the child seems to realise that he/she cannot communicate with peers or teachers in his/her home language, the child enters a settling in stage known as the ‘non-verbal period’ (Clarke, 1992; Tabor, 1997). During this stage the child observes and listens to others and relies on non-verbal language to gain attention and fulfil their needs. Children use non-verbal language to request items or support, for example, pointing to ask permission to use certain apparatus. Children may also use body-language to make jokes or to protest, for example, when another child tries to take a piece of equipment that the child is using (Tabor, 2008). The ‘non-verbal period’ should not be confused with a ‘silent period’ which refers to an inability to communicate either verbally or non-verbally due to factors such as developmental delay or trauma of some kind (Clarke, 2003).

Second language learners then move onto using formulaic language. This is the use of ‘chunks’ or phrases of language that they hear others using. They do not appear to understand the meaning of the individual words but seem to realise that the phrase can be used in order to fulfil a need (Tabor, 1998) for example, asking permission to use the toilet. At around this time children also begin to use ‘telegraphic language’ (Tabor, 1998) which involves the use of single words. With this comes a rapid development of vocabulary, similar to that of an eighteen month old developing their first language. Productive speech then follows. Productive speech involves the learner building their own sentences from the vocabulary and grammatical rules that they have acquired through the telegraphic and formulaic stages.
2.2 Behaviourist and Nativist theories

Behaviourist theories, for example Skinner’s (1957) theory of verbal behaviour, suggest that children acquire the language of their environment solely by imitating the sounds and words that they hear. On receiving positive feedback for these sounds and words, children are encouraged to continue to vocalise and add to their ‘vocabulary’, eventually producing free productive language (H. D. Brown, 2000; Lightbrown & Spada, 1999; Skinner, 1957). In contrast, nativist theory argues that children have pre-existing structures that enable them to acquire language. Chomsky (1993), a key nativist theorist challenged Skinner’s behaviourist theory by arguing that if Skinner was correct then the language that children produce should reflect only what they hear. In support of his argument Chomsky found that children produced utterances that they had not heard. Chomsky’s resulting theory suggests that children are biologically programmed to learn languages. He believed that children only have to be exposed to a language to be able to understand and produce that language. Chomsky’s theory suggests that languages have a ‘Universal Grammar’ and children are born with a Language Acquisition Device that they use to formulate the general ‘rules’ or ‘principles’ of language. Chomsky believed that these rules are universal to all languages. Chomsky’s later work examined what he termed language Principles and Parameters in his Government Binding Theory. In this theory he suggested that once a child has grasped the general rules of language then he/she identifies the ‘parameters’ or grammatical rules of the specific language that he/she is exposed to, and then begins to produce speech (Bialystok, 2001).

Constructivist, social interactionist and sociocultural theories

The nativist theory was in its turn challenged by constructivist theories. Constructivists criticised the nativists for focusing on syntactic development and not attending to the
communicative role of language (Siegler, DeLoache, & Eisenberg, 2010). Constructivists argue that during the process of acquiring a language children generalise and refine their use of the language’s grammatical rules making mistakes as they progress. Nativist theory does not provide an explanation for this phenomenon. However, constructivist theory proposes that the grammatical properties of language are acquired through interactions with other people (Berk, 2009; Siegler et al., 2010).

As described in the previous section, the behaviourist and innatist theories hold the view that exposure to a language is sufficient for a child to acquire that language. However, constructivist, social interactionist, and sociocultural theories argue that interaction with an adult or more able other rather than merely exposure to language is required for language acquisition to take place. The constructivist theories of Piaget and Vygotsky both relate language and cognitive development to social interactions, although in contrasting ways (McLean & Snyder-McLean, 1999).

Piaget’s individualist constructivist theory claimed that a child’s verbal development is related to his/her cognitive development or, as Piaget referred to it, the child’s knowledge of the world (Piaget, 1997). Piaget stated that cognitive development underpins linguistic development. The Piagetian model identifies children as individual active scientists (Bruner & Haste, 1987) who construct language individually through interaction with their cognitive capacity (H. D. Brown, 2000; Donaldson, 1978; Vygotsky, 1986). In contrast, Vygotsky’s social interactionist theory (1978) places more emphasis on the role of social interaction in language development, and states that verbal interactions with adults or more able peers are a prerequisite to cognitive development (H. D. Brown, 2000; Vygotsky, 1986; Vygotsky, 1978).
Language acquisition from the social interactionist perspective stresses the child’s role in his/her own language learning (Chapman, 2000). It proposes that children are motivated to understand others and to communicate with them. The approach suggests that by initiating verbal interactions with an adult or peer, the child prompts the adult or peer to provide language experiences that are appropriate for his/her language development (Bohannon & Bonvillian, 2009). The socio interactionist approach also proposes that the child’s social skills, which relate to his/her ability to provoke appropriate interactions with adults, predict his/her success in language acquisition (Gleason & Ratner, 2009).

Sociocultural theory focuses on how the language, values, beliefs, customs and skills of a culture are passed to the next generation (Berk, 2009). In relation to language, sociocultural theory suggests that children learn to speak the language or languages around them through sustained, meaningful interactions with adults and peers (Rogoff, 1994). It emphasises the relationship between the social, cultural, and linguistic aspects of a child’s learning (Drury, 2007; Gibbons, 2002; Halliday, 2004). Sociocultural theory takes into account the child’s home experiences, stating that he/she utilises the linguistic knowledge of his/her family, household, and community in his/her language acquisition (Cullen, Hawarth, Simmons, Schimanski, & McGarva, 2009).

**Interactions with adults and peers**

This section discusses the critical role of the adult in a child’s first and second language development and acquisition.

According to social interactionist theory, for first or second language acquisition to occur it is essential that the child’s relationship with the adult should be a reciprocal partnership (Jarvis & Lamb, 2001). The theory proposes that language acquisition is a
process of construction, requiring language exposure through sustained, meaningful interactions with others (Halliday, 2004). In support of this theory, research has shown that there is a relationship between the types of language input that a child receives at home, school or childcare, and the child’s language development (Hoff, 2006). In particular, the quality and frequency of interactions between the adult (parent, teacher, or more able other) and the child influence the pace and the quality of a child’s language acquisition (Girolametto & Weitzman, 2002; Nunan, 2000), and the size of his/her vocabulary (Hoff, 2006; Schwanenflugel, Bradley, Ruston, & Restrepo, 2005). Slow or atypically poor first language development has been linked to poor quality parent child interactions (Jarvis & Lamb, 2001; Nunan, 2001), or inadequate stimulation referred to as ‘poverty of stimulus’ (Bialystok, 2001). Children who do not participate in reciprocal interactions with adults do not acquire the language as successfully as those who interact with adults or more able peers. For example, children exposed to English as a second language through television only are likely to be less successful in their English acquisition (Hoff, 2006).

The role of the adult has been explored by both first and second language development and acquisition theorists, including Nunan (2001), Bruner and Haste (1987) Vygotsky (1978) and Krashen (1981). For learning to take place the vocabulary and grammar used by the adult, or more able other, should be at a level that is understood or ‘comprehensible’ to the learner (Krashen, 1981). Adults have been found to adapt their speech to this level (Wells, 1987) using what has been termed ‘child’ or ‘infant directed speech’ (Bruner & Haste, 1987; Hetherington & Parke, 1999; Vygotsky, 1978), ‘motherese’ (Nunan, 2001), or ‘foreigner talk’ when used with second language learners (Tsui, 2001). It generally involves slowing down the rate of speech, using exaggerated pronunciation and simplified grammatical structures (Carter & Nunan, 2001).
During language acquisition the input or understanding precedes the level of output. Krashen and Terrell (1983) describe this as (n+1), where ‘n’ is the level of the child’s language production and +1 is the level of understanding one above that which the child produces. Krashen and Terrell’s theory implies that adult-child interactions during which the adult’s input is at the level of (n+1) will support a child’s language acquisition more successfully than adult input that is at the level at which the child is presently producing.

Additionally, language acquisition may not take place where a learner feels anxious due to what Krashen and Terrell (1983) call the ‘affective filter’. The ‘affective filter’ may be defined as a screen that blocks language acquisition. This screen is raised if the learner is anxious so he/she is unable to comprehend input. Krashen and Terrell suggest that it is necessary for a learner to feel confident and relaxed for their ‘affective filter’ to be lowered. For example, celebrating a learner’s efforts at productive language without correction is recommended to keep the interactions as relaxed and enjoyable as possible so keeping the affective filter low (Barratt Dragon, 2005). This explains why adults often find learning languages difficult. Adults have high personal expectations and may be anxious about making mistakes, so raising high affective filters.

2.3 Bilingualism before the age of five

The age at which a second language is acquired or learnt, and the process of acquisition or learning experienced by an individual can affect bilingual success. The present study focuses on the English language acquisition of children with home languages other than English acquiring English around the age of three. This section reviews the literature specific to bilingualism in early childhood. It discusses models linking early brain development and bilingualism. It then discusses the effects of acquiring a second language on a first language and the importance of maintaining a first language. The
section finishes with a discussion of Basic Intercommunication Skills [BICS] and Cognitive Academic Language Proficiency [CALP] and their relevance to bilingualism in early childhood.

**Models linking brain development and bilingualism**

Children who are exposed to two languages together from birth, sometimes referred to as simultaneous bilinguals, acquire the two languages together (Meisel, 2001). It is argued that children introduced to a second language before the age of three can also be referred as simultaneous bilinguals because the intense neurological reorganization occurring in the young brain at that time can accommodate the necessary additional organisation (Foster-Cohen, 2003). The Common Underlying Proficiency Model developed by Cummins (1981) from an idea by Vygotsky, and the Iceberg analogy described by Meisel (2001) suggest that when two languages are acquired simultaneously from an early age they are controlled by one language processing area in the brain. Leopold’s case study on his own daughter who was German/English bilingual from birth supports this theory. Leopold observed that his daughter at the age of two had one lexical system and used a mix of German and English words (Leopold, 1978), suggesting that both languages were controlled by the one language processing area.

In contrast, Tabors (1997) uses the Multiple Container analogy to describe brain development in successive bilinguals. In her analogy, Tabors suggests that successive bilingual children, who learn a second language after their first is established have separate language centres for each language. The child’s first language is represented by a glass container that fills with liquid as the child acquires the language. A second container represents the second language. It already has some liquid in it as the child has an understanding of language in general. The two containers fill at different rates
depending on the child’s exposure to the two languages. Recent brain imaging techniques provide evidence that supports these analogies. One language centre is activated in the brains of simultaneous bilinguals, and two centres are seen on the imaging when successive bilinguals are stimulated by the two languages (Mushi, 2002).

**Balancing two languages**

Acquiring two languages in early childhood, either simultaneously or successively, has been shown to have an initial detrimental effect on a child’s vocabulary and grammar development, in one or both of the child’s languages (Baker, 2000). This language delay was thought to be temporary (Baker, 2000; Lightbrown & Spada, 1999), however more recent research suggests that the delay can last throughout the primary school education years. Oller and Eller (2002) compared the English language abilities of English monolingual children and bilingual children who started second language acquisition in early childhood. They found that up to the age of ten, the bilingual children performed less well in English language assessments than their English monolingual peers.

Children acquiring two languages simultaneously have been found to have smaller vocabularies in each language than monolingual children (Baker, 2000). The size of vocabulary and knowledge of grammar in each of their languages is argued to be due to the amount of exposure to each language and the contexts in which the language is used. For example, the kinds of activities and the vocabulary for these activities will differ between home and school (Hoff, 2006). This concept demonstrates Tabor’s multiple container analogy in that the two languages develop separately, filling up the containers at different rates depending on the language exposure (described above). Hence, it is important to maintain exposure to both of a child’s languages if proficiency in both languages is to be maintained.
Minority speaking language children risk losing their first language completely if it is not supported and maintained either at home or at school (Lightbrown & Spada, 1999; Tabor, 1997; Wong Fillmore, 1976). This loss of a language due to an imbalanced exposure, or use of one language, is known as subtractive bilingualism. However, Cummins ‘Developmental Interdependence Hypothesis’ [DIH] states that if a child’s first language is learnt and maintained at home and supported in the community, a second language learnt in school is likely to be at a high level, and the child’s first language is not compromised (Cummins, 1979).

In contrast to simultaneous bilingualism in very young children, older children who learn their second language before they have a good grounding in their first do not achieve as high levels in fluency as those children who have a good knowledge of their first language (Espinosa, 2008). This theory is supported by Kennedy and Dewar’s (1997) investigation of non English speaking background students: ‘A study of programmes and support in New Zealand schools’. The 54 primary school teachers that participated in Kennedy and Dewar’s study agreed that bilingual children with a poor grasp of their home language had greater difficulties acquiring English as a second language than those who were more able in their first language (Kennedy & Dewar, 1997).

Additive bilingualism is demonstrated in children who are able to continue using their first languages whilst learning English. These children continue to develop concepts, make sense of their environment, and participate in their centre’s programme, without having to wait for their English to develop (Clarke, 1992; Cummins, 1979; Mason & Leadbetter, 2004). As Mason and Leadbetter (2004) point out, if the child’s first
language is ignored or not used, then one of the child’s greatest resources is being wasted.

**BICS and CALP**

If a child acquires two languages simultaneously from birth, or before the age of three, then it can be argued that he/she will acquire the two facets of communication, Basic Intercommunications Skills [BICS], and Cognitive Academic Language Proficiency [CALP] as identified by Cummins (1981) together in both languages. BICS is the everyday language that individuals need to function in social contexts. For young children, BICS is the language required to make friends and take part in social and cooperative play (Dau, 2000). CALP is the abstract language required for reasoning, hypothesising and classifying. Cognitive skills and knowledge learnt in one language are transferred from the language in which they are learnt to the other language as long as the new vocabulary is provided. However, successive bilinguals who learn their second language after their first is established may take two years to acquire the BICS skills and at least five years to catch up with the CALP of native speakers (Cummins, 1999). This suggests that the optimum age for a child to become bilingual is before the age of three, and that ideally children should be given the opportunity to develop the concepts that they are learning and the relevant vocabulary in both languages from a very young age.

**2.4 Early childhood education in New Zealand**

This section identifies the range of Early Childhood Services available in New Zealand. It describes the bicultural, bilingual (Maori and English) curriculum statement Te Whaariki and the features of ECC environments relevant to ESL children’s language development.
**Early childhood services in New Zealand**

New Zealand offers parents a diverse range of Early Childhood Services to suit their family needs and educational preferences (Early Childhood Development, 2001). These include: home care organisations; government run and privately owned kindergartens; community crèches, and private day centres. Parents may also participate in parent run Play Centres, the NZ Correspondence School, or the Parents as First Teachers programme.

There is some provision for children to maintain home languages or acquire cultural languages through services such as Te Kohanga Reo, Puna Reo, Maori Immersion programmes; Pacific Island language nests; and first language, (for example, Chinese or Korean) preschools. However, the majority of Early Childhood Centres in New Zealand are monolingual English, where English is used as the medium of interaction and the teachers are mostly monolingual English speakers.

**Te Whaariki**

All licensed ECCs in New Zealand are required to follow the curriculum statement Te Whaariki (Ministry of Education, 1996). Te Whaariki is the first bicultural curriculum statement of New Zealand, and relates to the care and education of children from 0 to 5 years of age. Written in both English and Maori, Te Whaariki recognises the importance of maintaining Maori and Pacific Island languages, and cultural practices in New Zealand. It also recognises that New Zealand is becoming increasingly culturally and linguistically diverse, and proposes that a centre’s programme should reflect the cultures, traditions and languages of the children attending that centre (Ministry of Education, 1996):
‘Each early childhood education service should ensure that programmes and resources are sensitive and responsive to the different cultures and heritages among the families of the children attending that service’ (Ministry of Education, 1996, p. 18).

‘Whaariki’ or ‘mat’ represents the weaving of four principles (empowerment; holistic development; family and community; and relationships), and five strands (well being; belonging; contribution; communication; and exploration) to form the curriculum. The strands and principles draw on Maori values and knowledge.

Te Whaariki is also based on the sociocultural approach to pedagogy that emphasises the roles of social and cultural mediated learning and of reciprocal and responsive relationships (Ministry of Education, 1996). The main theory underpinning Te Whaariki is that of Bronfenbrenner (1979). In his ecological model, Bronfenbrenner describes the child as the centre of a series of systems. He identifies the child as the centre of his/her system. This central system, referred to as the child’s microsystem, also includes the people with whom the child interacts on a daily basis, such as his parents, siblings, peers and teachers. The next layer, the mesosystem, encompasses the connections between the various members of the microsystem such as family and ECC teachers. The outer layers of the model, the exosystem and macrosystem, include the extended community, followed by the societal values, legal and organisational systems. Bronfenbrenner’s theory emphasises the importance of a child’s relationship with his/her parents, teachers and peers, and between the child’s parents and the teachers. This is reflected in the Principles of Te Whaariki, that state that the ‘family and community [are] an integral part of the early childhood curriculum’, and that ‘children learn through responsive and reciprocal relationships with people, places and things’ (Ministry of Education, 1996, p. 14). The child does not interact with the institutions in the outer layers (mesosystem and
exosystems), however these do affect the child’s development. For example, the parenting and educational experiences of a child brought up in China will be influenced by a different social and cultural ideology, than that of a child raised in New Zealand (Hetherington & Parke, 1999)

Although all centres in New Zealand are expected to base their programmes on the curriculum statement Te Whaariki, their environments vary considerably. The unique nature of a centre’s environment is dependent on the theories that underpin the centre’s philosophy. In turn, a centre’s philosophy has a direct effect on the children’s experiences in terms of how it influences teaching practices (Hojnoski et al., 2008). For example, a centre that incorporates aspects of the Reggio Emilia approach, based on the theories of Piaget, Vygotsky and Bronfenbrenner (Penrose, 1998), will place more emphasis on child led projects (Wurm, 2005); centres reflecting a Montessori approach will have a more structured task based programme (Gordon & Williams Browne, 1999) and centres based on theories of play such as those of Tina Bruce (2001) or influenced by social interactionist theories such as those of Vygotsky (1986), will provide extended play sessions or shared play opportunities.

Every early childhood centre in New Zealand is required to display a Centre Charter (Ministry of Education, 1996) which outlines the beliefs and values that guide the centre’s practice. Parents are thus able to choose the centre that they feel best fits their child-rearing style, and child development beliefs.

**ECC environments**

The nature of the early childhood environment affects relationships, and thus the interactions between ESL children and teachers and also with peers. These interactions in turn relate to children’s first language development and second language acquisition
(Kontos & Wilcox-Herzog, 1997). The ECC environment comprises of three main aspects: interpersonal, temporal, and physical (Gordon & Williams Browne, 1999). A centre’s interpersonal environment incorporates the interactions between teacher and children, the children and their peers, and the teacher and child’s family or community. It includes the number and nature of the teachers, the ages and numbers of children and their home backgrounds. The interpersonal environments of centres vary enormously in regard to geographical area; the cultural mix of the community, and the teacher’s personalities, experiences, skills and personal philosophies (Gordon & Williams Browne, 1999).

A centre’s temporal environment involves the daily routines; the structure of the day, the timings and the transitions from one activity to another. This includes the organisation of routines such as arrival times, lunch and snack times as well as teacher directed large and small group activities, and free play activities. For the purposes of this study ‘free play’ is defined as when children are allowed to select activities to play with rather than be directed by the teacher (Dickinson, 2001). The temporal environments of centres vary from very structured, where the clock plays a major role, to less structured regimes, where the timing of activities is related more to the children’s interests and activities.

A centre’s physical environment describes all the equipment and materials with which the child will interact during the day.

2.5 Teaching and learning English as a second language at ECCs

Children bring to the Early Childhood Centre the culture of their home and take home the culture of the centre (Ashworth & Wakefield, 2004). An ECC’s environment ideally reflects the cultures of the teachers and children. A centre’s environment can be defined as ‘the sum total of the physical and human qualities that combine to create a space in
which children and adults work and play together’ (Gordon & Williams Browne, 1999, p292). Research has shown that the environment is of major importance to the development of all children. According to Penrose (1998) children learn best when they feel secure, and when their physical, intellectual, social and emotional needs are met. Early childhood teachers attempt to address these needs by providing a programme that caters specifically for the children in their care. The optimal programme for ESL learners may therefore differ to that of English native speakers.

This section discusses two strategies that are used by preschools providing support for groups of ESL children. Differences between immersion and submersion are firstly addressed, and then the practice of withdrawing children from the mainstream class for specific language support is discussed.

**Submersion and immersion in ECCs**

Two models of teaching bilingual children in schools and early childhood centres have been identified and documented; immersion and submersion (Cook, 1993; Datta, 2007; Krashen, 1996). The immersion approach gives support to the child who is learning English as a second language, whereas the submersion approach offers children nothing specific to help them acquire the second language or to build on what they already know of language. The immersion model relies on the teachers’ language input being comprehensible to the learners (Cook, 1993). Datta (2007) provides the analogy of learning to swim. The immersion model provides armbands (floats) for support. For example, input is comprehensible either because bilingual staff or peers are able to translate and support the ESL child’s understanding, or the English used by the teachers is at a level that is understood by the child. In the submersion model there is no support (armbands), thus the input is not necessarily comprehensible to the child. He/she is
unable to communicate with teachers or peers and so he/she is at risk of ‘sinking’ and not acquiring the language of the classroom as successfully as a child in an immersion situation.

One form of immersion education used in Early Childhood Centres is two way bilingual immersion (for examples see Chesterfield et al., 1983; Clarke, 1996; Lee, 2007). These programmes generally include English and an immigrant minority language of the country. Bilingual immersion centres provide foreign language learning for the majority language speakers, and majority language learning for the minority language speakers. Two way immersion supports Cummin’s DIH. In his hypothesis, Cummins emphasises the importance of first language maintenance for the acquisition of a second language (Cummins, 1989). Examples of two way bilingual immersion programmes in the early childhood sector include the two Spanish/English preschools in the United States that participated in Chesterfield et al’s (1983) study of bilingual children’s interactions with teachers and peers. The participants in this study spoke English or Spanish as a first language and learnt the other language at preschool. The teachers were bilingual in Spanish and English, with either Spanish or English as their first language. The children used both English and Spanish at preschool. They were not restricted in their use of language but were free to use either at any time.

Another example is provided by the Wycliffe Nga Tamariki Kindergarten study (Haworth et al., 2006b). The participants experienced immersion in English whilst at the same time being supported in Samoan, their home language. The small group of five Samoan children were encouraged to communicate at the kindergarten in their first language with Samoan peers and a bilingual support worker, and in English with the teacher and English native speaking peers. This enabled them to learn in Samoan, so
sustaining their cognitive development, while at the same time acquiring English (Cullen et al., 2009). This strategy is possible in preschools that have bilingual staff, or groups of children speaking the same home language. However, the majority of bilingual children in New Zealand do not have the opportunity to attend preschools that have such bilingual support, but attend English medium centres or linguistically diverse centres where they are the lone speaker of their home language. Children attending these centres experience immersion in English if the teachers are skilled in providing comprehensible English, or are themselves bilingual in the language of the child; or submersion if the teachers do not provide this type of support.

**Withdrawal support**

The practice of withdrawing ESL children from the mainstream group or providing separate classes for English language learning and practice is common in primary and secondary schools, but not in English medium ECCs in New Zealand. An example of where this approach has worked successfully in a New Zealand primary school setting is a bilingual tutor programme held at Sunnybrae Normal Primary School (Mason & Leadbetter, 2004). The five year old Chinese, Korean and Samoan speaking participants were withdrawn for ninety minutes a day for specific language tuition. Testing showed that the Sunnybrae children progressed more quickly in their English acquisition when participating in the withdrawal programme than they had previously without the programme. Preschool examples from international research include work by Clarke (1996) who studied four Vietnamese speaking four year olds in an Australian bilingual preschool. Clarke’s findings indicated that participation in interactions with teachers and peers in the bilingual preschool setting did not result in significant second language acquisition. Rather that the participants’ English abilities progressed faster when they had additional interaction time in the form of withdrawal groups with native speaking
teachers alongside peers who were also acquiring the language. Another example, the Box Hill Nursery Project, which studied three and four year olds of ethnic Pakistani origin attending a nursery in northern England came to the same conclusion as Clarke. The Box Hill study showed that children progressed faster in English language acquisition when provided with additional support and input from fluent English speakers (Thompson, 2000). In contrast, Fassler’s (1998) study ‘Room for Talk’, which focused on six 5-year old children learning English in a North American multilingual kindergarten classroom that did not have withdrawal sessions, found that the linguistic support provided by the participants’ multilingual peers enabled all of the participants to acquire sufficient English to participate in discussions and group learning activities set by the teacher (Fassler, 2003). This suggests that the organisation of the temporal environment and the provision of learning activities which encouraged peer interaction was an important factor at Fassler’s participant kindergarten. However, a comparison of Clarke’s, Thompson’s and Fassler’s studies cannot provide conclusive evidence that withdrawal from mainstream classes is or is not beneficial. Firstly because of the differences in the settings of the studies, and secondly because data on the levels of English attained from these studies is not available for comparison.

**Summary 2.5**

Two approaches are used by ECCs to support children acquiring English as a second language; immersion or submersion. Immersion provides support for ESL children’s language acquisition and may provide a more optimal environment than submersion where children are not given the support necessary to acquire English. Moreover, two way immersion supports Cummin’s Developmental Interdependence Hypothesis (1989)
by providing the opportunity for children to continue to develop their home language alongside their second language.

Withdrawal groups or classes from the mainstream group for English support have been studied and findings suggest that this practice may benefit ESL children in their acquisition of English (Clarke, 1996; Thompson, 2000). However, the findings of these studies are not conclusive and further research is required.

2.6 The ECC interpersonal environment: The role of the teacher

Teachers develop their own philosophies of teaching and learning by relating the theoretical knowledge learnt in teacher training, both initial and on-going, with their own teaching experiences, their daily practice and experiences of working with children (Tang, 2004). These philosophies are also related to a teacher’s culture, cultural experiences and their own language learning experiences (Robinson & Jones-Diaz, 2006). Teachers also develop a ‘unique teaching repertoire’ or set of practices acquired through their own learning, and professional school experiences (Tang, 2004). A teacher’s teaching and learning philosophy, and his/her teaching repertoire, together form the teacher’s ‘teaching self’ (Tang, 2004). This continues to evolve and develop throughout a teacher’s professional career. Good practitioners are those who reflect on their experiences, observations of other teachers, and professional development opportunities, and who are open to incorporating new theories and perspectives into their practice (O’Connor & Diggins, 2002). Bilingual teachers have an advantage over their monolingual colleagues as they have their own language learning experiences on which to base their ESL language teaching, whereas monolingual teachers have only their colleagues’ practices and their own theoretical knowledge (Schofield, 2007).
The teacher is the ‘critical factor’ in the early childhood classroom (Hestenes & Carroll, 2000). However, until recently, there has been little research on which teachers can base their ESL pedagogy (Drury, 2007). The literature that is available ‘does not clearly discern a role for teachers in developing young children’s bilingualism’ (Haworth et al., 2006a, p. 296). Haworth suggests that this dearth of research is because of the dominance of Krashen’s theory of natural acquisition and Chomsky’s Language Acquisition Device theory in early childhood teacher training (both theories discussed earlier). These two theories suggest that children acquire a language through exposure or natural interaction with speakers of that language. Until recently this ‘exposure’ has been expected to occur with little assistance from the teacher. However, the adoption of sociolinguistic and sociocultural approaches and their emphasis on the centre’s interpersonal environment through the child’s interactions with teachers, peers and his/her community, means that the teachers’ role is less to do with language teaching but more with providing an environment that encourages reciprocal child-teacher and child-peer interactions (Stratham, 2008). Establishing trusting relationships with the children and with their parents and community is one practice that will enable a teacher to provide a more optimal language acquisition environment for ESL children (Cazden, 1972a; Pollard, 1985).

The following sections discuss how the teacher can interact with the learner through sustained shared thinking, scaffolding and co-construction and how these practices contribute to children’s language acquisition. This is then followed by a review of the literature regarding teachers’ use of questioning and directives and how these types of communication may also influence language acquisition.
Sustained shared thinking and negotiation of meaning

Sustained shared thinking between teachers and children is linked to the children’s cognitive interests and has been found to be effective in children’s learning (Sammons et al., 2005; Siraj-Blatchford, Sylva, Muttock, Gilden, & Bell, 2002). Sustained shared thinking is defined as an episode in which two or more individuals “work together” in an intellectual way to solve a problem, clarify a concept, evaluate activities, extend a narrative etc. Both parties must contribute to the thinking and it must develop and extend. (Siraj-Blatchford et al., 2002)

Brodie (2009) suggests that sustained shared thinking involves the meeting of minds and the learning that occurs on both sides. The Researching Effective Pedagogy in the Early Years [REPEY] report based on data from 14 of the UK preschools participating in the five year longitudinal Effective Provision of Preschool Education [EPPE] found that sustained shared thinking occurred more commonly in one-to-one teacher-child interactions than in group interactions (Siraj-Blatchford et al., 2002). Teachers who participate in sustained shared thinking with children and who recognise the contributions made by the child were found to have longer teacher-child interactions during which the child played a more active role (Siraj-Blatchford & Manni, 2008).

Negotiation of shared meaning (thinking) is a further strategy used by teachers. In Fassler’s study ‘Room for Talk’ (2003) negotiated meaning with the participants was used to build a sense of belonging and understanding between herself and the children. This practice was also observed to occur between the study participants and their peers (Fassler, 1998).

Intersubjectivity is described as interactions in which the teacher and the child understand the situation in the same way (Fassler, 2003). The teacher in Fassler’s
multilingual study, achieved this by having ‘in jokes’ which she and the children understood and shared. One example was pretending to stretch after sleep time. This routine developed, and was added to by both the children and the teacher. According to Fassler this shared understanding ensured a sense of belonging to the group. It also supported the language learning of the ESL children by enabling them to become part of the activity thus increasing their exposure to English through interactions with peers and the teacher.

**Scaffolding and co-construction**

Vygotsky (1978) emphasised the role of language in a child’s learning and the special role of the ‘more able other’ in ‘scaffolding’ or supporting learning. He introduced the term Zone of Proximal Development [ZPD] which he defined as:

> the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers (Vygotsky, 1978).

Early Childhood Teachers use scaffolding strategies related to Vygotsky’s ZPD with young children to assist them in their language, social, emotional and cognitive development (Jordan, 2004). In contrast to scaffolding, co-construction involves the child working together with a teacher or a peer to construct knowledge together. In the co-construction model the teachers and children are both teachers and learners alternating between the two roles (Cullen et al., 2009; Rogoff, 1994).

Scaffolding and co-construction involve differences in power. When scaffolding children in their learning, the teacher holds the power. Scaffolding focuses on experts providing support for learners, whereas co-construction requires the learner to take a more active part in his/her learning. Teachers scaffold learning for the children, whereas
teachers co-construct learning with the children (Jordan, 2004). Hawarth et al (2006b) found that the teachers participating in the Wycliffe Nga Tamariki research study moved intuitively between scaffolding and co-construction to support the learning of the Samoan children.

Payler (2009) compared scaffolding and co-construction in her study which investigated a preschool which fostered co-construction and a primary school class that used scaffolding towards predetermined learning objectives. Payler found that the two strategies produced different kinds of learners. The preschool children who participated in co-construction took risks in their learning and were more confident learners. In comparison, the primary school children who experienced scaffolding were less confident in their learning and were more dependent on their teachers.

Rogoff’s Pendulum and Community of Learners models (1994) help to further explain the difference between scaffolding and co-construction. In her Pendulum model, the pendulum swings from adult run teaching to child run learning. When the adult takes the active role in the interaction by scaffolding learning that he/she has planned, the child is passive. In contrast, when the pendulum swings the other way, and the child takes the more active role, the teacher becomes passive and does not contribute so the child does not benefit from the teachers knowledge. However, in Rogoff’s Community of Learners model, the children and teachers are both active; the teachers are responsible for guiding the overall process, but the children participate in the management of their learning and involvement (Rogoff, 1994).

**Frequency and quality of teacher-ESL child interactions**

The frequency and quality of teacher-child interactions have been found to affect children’s language acquisition. For example, McCartney (1984) found in her
investigation into the affect of adult speech on the language development of 166 three to five-year-olds attending nine ECCs in Bermuda, that the frequency of utterances directed at children by caregivers predicted the children’s language acquisition. However, other research suggests that it is the nature of the interactions which provide children with appropriate language learning opportunities. Barnes, Gutfreud, Satterly and Wells’ (1983) study of the relationship between teacher input and children’s language acquisition, part of the UK Bristol Longitudinal study, found that teachers’ skills in maintaining and extending teacher-child interactions affected the children’s language acquisition, more than the frequency of teachers’ utterances.

**Questioning and directives**

Interactions initiated by teachers with children most commonly take the form of Initiation Response and Evaluation [IRE] or Initiation Response and Feedback (or follow-up) [IRF] (Cazden, 2001; Sinclair & Coultard, 1975; Siraj-Blatchford & Manni, 2008). Both IRE and IRF interactions generally begin with the teacher asking a question. However, a teacher using the IRE approach evaluates the child’s response to her question, not expecting the child to respond to the evaluation. This strategy is believed to inhibit the conversation (Siraj-Blatchford & Manni, 2008). In contrast, when using the IRF approach, the teacher requests justification of the child’s response and this can encourage the child to participate in a more extended conversation. Nassiji and Wells (2000) investigated the teacher-pupil interactions in nine primary and middle school classrooms in Toronto, Canada. During their study Nassiaji and Wells found that teachers’ use of utterances such as justifications or counter arguments extended IRF interactions into reciprocal conversations. Furthermore, interactions initiated by the teacher as IRF interactions can become reciprocal interactions where the teacher...
becomes a resource that the children can draw on (Cazden, Baratz, Labor, & Palmer, 1972).

The types of questions used by the teachers to initiate and sustain interactions appear to affect the child’s learning. Questions can be categorised as open or closed. Closed questions result in short factual answers that require the child to state an observation, recall a fact, or to give a yes or no answer (Siraj-Blatchford & Manni, 2008). The answer may be previously known to the child and probably also the teacher. In contrast, open questions require thinking responses (Eliason & Jenkins, 2008). They promote higher order thinking and the answers are not known or predetermined by the teacher (Siraj-Blatchford & Manni, 2008). The REPEY study found that closed questions were used by teachers more frequently than open questions (Siraj-Blatchford & Manni, 2008). Ninety four percent of the questions asked by teachers in centres categorised as effective or excellent were closed questions and 5.5% were open-ended (Siraj-Blatchford & Manni, 2008).

Interactions between teachers and children may also be initiated by teacher directives for example, ‘wash your hands’. A search of the literature provided no relevant studies into the use of teacher directives. However, mothers’ use of directives with children has been investigated (Barnes et al., 1983; McDonald & Pien, 1982) but with opposing results. In their study of the affects of different types of mothers utterances on the language development of their 2 year old children, Barnes et al.(1983) found that directives were positively associated with language progress. Whilst McDonald and Pien (1982) in their study of 11 mothers use of directions with their 2.5 to 3-year-old children, found a negative relation between the mothers use of directions and the children’s language
development. Both of these studies were small so neither can provide conclusive results and the area requires further research.

Furthermore, the use of teacher explanations has been shown to predict the success of children’s language acquisition. Dickinson’s (2001) investigation into teacher-child interactions during large-group and free-play times in 119 kindergarten classes across the US found that the teachers’ use of explanations to inform children of the teachers’ decisions, was related to children’s greater success in language development.

Summary 2.6

Research and theory have provided teachers with little guidance as to their role in supporting ESL children in their English language acquisition. Krashen’s theory of natural acquisition (1983) and Chomsky’s Language Acquisition Device theory (1993) have dominated the field suggesting that mere exposure to a language is necessary for children to acquire that language. However, with the emergence of sociolinguistic and sociocultural theories the role of the teacher is focussing more on providing an interpersonal environment that encourages reciprocal child-teacher and child-peer interactions (Stratham, 2008). Teacher-child interactions that involve sustained shared thinking and negotiation of meaning have been identified as practices that provide ESL children with English language acquisition opportunities (Sammons et al., 2005; Siraj-Blatchford et al., 2002). Moreover, the practice of teacher-child co-construction enables children to play a more active role in their own learning.

Teachers’ use of IRF (Feedback) as opposed to IRE (Evaluation) (Cazden, 2001) provides more optimal language acquisition opportunities, as the resulting interactions become more reciprocal and enable the children to draw on the teachers as a language resource (Cazden et al., 1972). Moreover, teachers’ use of open questions as opposed to
closed questions promote higher order thinking (Siraj-Blatchford & Manni, 2008). The practice of asking open questions thus provides ESL children with greater language acquisition opportunities.

2.7 The ECC interpersonal environment: The role of the learner

The ability to maintain the social contact required to interact with both teachers and peers varies between children. Children who initiate more interactions with their peers may have more exposure to, and therefore more success in acquiring English (Tabors, 1998). Motivation to learn English can be internal, from the child themselves, or external, from the parents or community. If the child is internally motivated to acquire English, possibly due to a desire to participate socially and to acquire friends, he/she is likely to initiate more interactions with peers. This provides the child with more language learning opportunities so he/she is generally more successful in language acquisition than a child who is not motivated (Tabors, 1997).

Children acquiring both first and second languages develop and use strategies that enable them to interact with peers and adults and support their language acquisition. For example, Pollard and Flier’s case studies of five 5-year olds attending early childhood classes in England (1996) focused on the ways the participants learned and passed through new situations and experiences. In their work, Pollard and Flier proposed that every child possesses a unique ‘learning stance’ that consists of strategies that enable the child to learn from his/her experiences and challenges. This ‘learning stance’ is influenced by the child’s culture, languages, sense of identity and their interpretation of learning challenges. It incorporates not only their motivation but also self-confidence and what Pollard and Flier (1996) call the individual’s strategic resources, or strategies
that he/she uses to form and maintain friendships and learn about social and cultural expectations.

Research has shown that children play a key role in their own language learning (Drury, 2007; Gibbons, 2002). In her study ‘Young bilingual learners at home and school’, Drury (2007) observed three 4-year old girls’ language experiences at home and at nursery classes in England. Drury found that the three study participants adopted strategies to help them acquire both English and the culture of early schooling. These strategies included practising and rehearsing; asking questions; and language play. Drury suggests that these strategies demonstrated the ways that the girls took control of their own learning and led her to suggest that the child plays a more active role in their English acquisition than the teacher. This explanation is supported by other research (Corsaro, 1985, 2001; Pollard & Flier, 1996; Tabors, 1997). For example, Cosaro (1985; 2001) investigated strategies that children use to enable them to become part of the social group, and allow them to participate in interactions which support their language acquisition. In his review of child friendships and peer culture, Cosaro (1985) identified non-verbal strategies that provide children with access to interactions with peers. These included children placing themselves in the area and watching so that they were familiar with the expected behaviour when they tried to join in; walking around the area watching (encirclement) and copying other children’s behaviour with toys. Cosaro (2001) identified a verbal strategy which involved the use of phrases such as ‘We’re friends right?’ (verbal reference to affiliation).

In contrast, Fillmore Wong (1979) in her study of five Spanish speaking children observed the children using cognitive and social strategies to participate in interactions and form friendships that supported their acquisition of English. The cognitive strategies
identified by Fillmore involved children using formulaic language and/or whatever vocabulary he/she had to make him/her understood. The social strategies included pretending to be part of the group and giving the impression that they could understand and speak the language. Research has also shown that children use the cognitive language strategies; repetition and imitation (O’Malley & Chamot, 1990), and metacognitive strategies for example, planning and rehearsing (O’Malley, Chamot, Stewner-Manzares, Kupper, & Rosso, 1985), to support themselves in their second language acquisition.

In addition some children have a particular strength or aptitude for language (Lightbrown & Spada, 1999). Gardner (1993) calls this ‘promise’ in linguistic intelligence. Rather than a generic intelligence, Gardner’s Theory of Multiple Intelligences identifies eight separate independent intelligences, each of which has a discreet set of processing operations. Gardner’s theory suggests that children with a high level of linguistic intelligence or ‘promise’ are able to acquire a second language more easily than those who have a weakness or are thought to be ‘at risk’ (Gardner, 1983).

Interactions between the ESL learner and his/her peers

Verbal interaction with peers has been found to play a vital role in the success of both first and second language acquisition (Girolametto et al., 2004). However, interactions with peers is considered by some to play a lesser role than interactions with adults. This is possibly because peers cannot necessarily take on the role of the ‘more able other’ (Vygotsky, 1978) and provide n+1 opportunities (Krashen & Terrell, 1983). To illustrate, McCartney et al (1984) studied the affect of the quality of nine early childhood centres as measured by the Early Childhood Environment Rating Scale (Harms, Clifford, & Cryer, 1998) on the language development of 166 three to five year olds. McCartney
et al found that participants who interacted more frequently with peers than teachers made less progress in language development than participants who interacted more frequently with teachers than peers.

Minority language children have to acquire the majority language of the classroom so that they can use it to talk with peers and become part of the social group (Ashworth & Wakefield, 2004). Chesterfield et al’s (1983) study illustrates this notion. Chesterfield et al (1983) observed the influence of teachers and peers on the English language acquisition of 11 Spanish speaking preschool children in the US. They found that the child participants chose to use English, the language of the majority of the children, rather than Spanish which was their home language and the language of the teacher. The participants interacted more frequently with peers than teachers even though this required them to use their second language.

Children have more equal relationships with their peers, compared to their relationships with teachers (Philip, Mackey, & Oliver, 2008), and speak to each other in ways that they would not use when speaking with the teacher (Fassler, 2003). During interactions with peers, children express their feelings, ideas regarding classroom activities, the behaviours of others and happenings at home using ‘in’ or ‘slang’ words. They develop classroom and playground vocabulary, expressions and non-verbal behaviours, which individuals need to be able to use to socialise and become part of the group. Interactions with peers thus provide ESL children with opportunities to acquire developmentally appropriate vocabulary and grammar. Peer interactions also assist children to develop the language required to negotiate conflicts, provide explanations, engage in joint planning, and tell stories (Hoff, 2006). It is important therefore for children to interact
with peers to participate in the peer social group, and for the learning opportunities these peer interactions provide.

Children who do not or cannot speak to their peers and who are not included in the social group are at risk of not being spoken to. Children who do not succeed in becoming part of the social group were termed ‘omega’ children by Garnica (1983). An ESL child who is unable to communicate in English may be verbally neglected and ignored by his/her peers so becoming an ‘omega child’. This situation may result in the child being unable to participate in the type of interactions with peers that are critical to his/her English language acquisition. However, once a child has acquired some simple phrases, the child appears to be able to communicate, and he/she is more likely to be accepted by peers. This ‘double bind’ strategy (Tabors, 2008) encourages peers to include him/her in their play. Additionally, the type of peer with whom the child interacts and makes friends may also affect his/her social success and language acquisition. If he/she can form friendships with more ‘popular’ children in the class/centre, then he/she may be more readily accepted by the other children and so able to participate in more interactions (Hruska, 2007).

The risk of becoming an omega child can be reduced through peer tutoring: a strategy which assists children in learning the first steps to becoming an accepted member of the group. Peer mentoring (Hirschler, 1991), peer mediation (Moguil, 2003) and a buddy system (Barratt Dragon, 2005), have been successfully used with three to five year old preschoolers and primary aged second language learners, and also with children with language development delay (Goldstein & Gallagher, 1992). Hirschler, (1991), conducted an intervention study in a mixed age preschool class of 50% native English speakers, 25% Khmer speakers and 25% Spanish speakers in the US. She trained five
native English speaking three to five year old children in the use of strategies to encourage and assist them in approaching and sustaining interactions with ESL children. These strategies were: initiation, reinitiation, slower rate, enunciation, requesting clarification, and recasting and expansion. Following intervention, the frequency of interactions initiated by the five trained children with the English language learners increased by 2.5 to 3 times, and the lengths of interactions between the native English speakers and the English learners increased. Hirschler also found that girls initiated three times more interactions with ESL learners than the boys, and the girls interactions lasted longer and involved more utterances then the boys interactions.

This pedagogical strategy does not appear to have been used elsewhere with children under five years of age in ECE settings, however, peers have been observed supporting kindergarten and preschool aged ESL learners. For example, in Fassler’s (1998) study the children in this multilingual class began the academic year with little or no English. The target group came from Cantonese, Haitian-Creole, French and Russian speaking backgrounds and the class teacher was a monolingual English speaker. Fassler (2003) noted that, although initially, some of the children preferred to interact with the teacher, the majority of the participants’ interactions were with peers, suggesting that these interactions were the major means of learning English. This appeared to be driven mainly by the children’s social need to be accepted by the group, for which they needed to be able to converse in the common language of English. Fassler observed the children using each other as models to encourage the production of comprehensible speech. She also observed the participants and peers extending the intersubjectivity introduced by the teacher, and building on it in their interactions with each other. Fassler also observed participants and peers negotiating meaning, which she believed increased the levels of their individual and group vocabulary and productive speech.
The children in Fassler’s study were from a variety of home language backgrounds and therefore acted as individual language learners. However this is not always the case. Although Tabors (1997) suggests that a group of children with the same language may not feel sufficiently motivated to begin speaking English themselves, Meyer et al’s study (1994) of four Korean girls attending an English medium US preschool, suggested that using a first language can be beneficial to the language acquisition of a group. The group can work as a whole and thus support each individual. In Meyer et al’s study (1994) the four Korean speaking girl participants formed an isolated group or clique (Ashworth & Wakefield, 2004). Myer et al.(1994) initially thought that, as the participants belonged to a cohesive supportive social group that met their immediate needs they would not be motivated to learn the majority language of the class. However, the girls worked as a group assisting each other to acquire English. The girls were observed to pass together through the normal stages of second language acquisition. However, they did not exhibit the silent period usual with second language children beginning at preschool, but, they did use non-verbal means to bid for attention and make requests using the same strategies that Meyer et al. observed in the native English speakers of the class. The girls used formulaic speech to fulfil their needs and very quickly moved onto productive sentences. Myer et al. (1994) suggest that the strategy of working as a group assisted the girls, who would probably not have progressed as fast with their language acquisition had they been the only Korean speaker in the class. They imitated the behaviour and language of each other during the year, thereby learning from each other. They worked in their individual Zones of Proximal Development (ZPD) (L. S. Vygotsky, 1978) acting as the ‘more able other’ for each other.

The situation was different in Fillmore Wong’s (1976) investigation of five individual Spanish/English bilingual children, age between five and a half and eight years attending
bilingual primary schools in the US. Fillmore Wong (1976) observed the participants interactions with peers during play sessions when the participants were free to choose their play partners and sessions when the participants were paired with native speaking peers. From her study findings Wong concluded that social contact with native speakers has to be specifically promoted, planned and facilitated by the teacher in order to provide the interaction opportunities to expose the children to the comprehensible language necessary for the acquisition of English.

**Summary 2.7**

Children appear to play a key role in their own language learning (Drury, 2007; Gibbons, 2002). They develop a unique learning stance consisting of strategies based on their social and cultural experiences (Pollard & Flier, 1996). Through the use of these strategies children take control of their own learning (Drury, 2007) and prompt adults and peers to provide them with language acquisition opportunities that are relevant to their cognitive, social and linguistic development.

Interactions with peers are vital to the success of second language acquisition (Girolametto et al., 2004). ESL children acquire developmentally appropriate classroom and playground vocabulary and grammar from their peers (Hoff, 2006). Children who lack the strategies to interact with peers are at risk of becoming ‘omega’ children (Garcia, 1983); unable to participate in the interactions with peers that are critical to language acquisition. Pedagogical strategies including peer mentoring (Hirschler, 1991), peer mediation (Moguil, 2003) and pairing with English native speakers (Wong, 1976) have been used with positive effects to enable ESL children to interact with English speaking peers.
2.8 The ECC temporal environment

Aspects of the ECC temporal environment (described on page 21) including the ratio of teachers to children, the consistency and predictability of routines, the provision of a developmentally appropriate language rich environment and the organisation and types of activities provided by the teacher have been found to affect ESL children’s acquisition of English. These are now discussed.

Teacher-child ratios

Teacher-child ratios might be expected to be an indicator of the frequencies of teacher-child interactions (Smith, McMillan, Kennedy, & Ratcliffe, 1989; Tizard, Cooperman, Joseph, & Tizard, 1972). Support for this possibility comes from Smith et al (1989) who investigated the effects of introducing a third teacher into two teacher kindergartens in New Zealand. The study found a greater frequency of teacher-child interactions in the kindergartens with a third teacher, than the kindergartens with two teachers. In contrast, Tizard et al’s (1972) investigation of 85 children aged 2 to 5 years at 13 residential nurseries found that when the staff-child ratio improved, because of child absence, the frequency of staff-child interactions did not change. However, it must be noted that Tizard et al’s study participants were trained nursery nurses, not teachers, working in a residential setting.

Consistency and predictability of routines

Primary aged children need to know how to ‘do’ school in order to be successful (Kottler & Kottler, 2002) and this is also the case for younger children attending Early Childhood Centres. Consistency provides predictability, and with a predictable routine a child will recognise what is going to happen next and how he/she should behave. Hence, consistency and predictability of routines provide a safe environment for the beginning language learner (Barratt Dragon, 2005). Music or spoken phrases can be used as
mediators (Bodrova & Leong, 2007) to notify children of routines, for example, when it is time to tidy up the play equipment or go to the mat for mat time.

The routines of a centre’s temporal environment also help a child concentrate on the language of teachers and peers, and as such contribute to success in language acquisition (Atiles & Allexsaht-Snider, 2005). This was demonstrated in Fassler’s study. The temporal environment of the class revolved around consistent predictable routines. With these physical routines went a regularity of spoken phrases so the children related the physical action with the spoken word. The teacher in Fassler’s (2003) study had stock phrases for certain activities. She was also observed using procedural language, that is, she explained what she was doing as she did various tasks, so that the children could experience the ‘here and now’ vocabulary and relate the phrase with the action.

**A developmentally appropriate language rich environment**

It is also argued that teachers should provide a developmentally appropriate language rich environment (Tabors, 1998). As discussed above, the appropriateness of the exposure to English and the quality of the child’s interactions with teachers and peers predict the success of their language acquisition (Krashen & Terrell, 1983; Wells, 1987). According to Krashen and Terrell’s Natural Acquisition Theory (Krashen & Terrell, 1983), for learning to take place the language input has to be comprehensible for the learner. Input for ESL learners should thus be developmentally, cognitively and culturally appropriate (Facella, Rampino, & Shea, 2005; Justice, 2004). Teachers should therefore adapt their language to provide appropriate comprehensible language for ESL children. It has to be remembered that second language learners have the vocabulary and skills to use one language already, and have developed cognitive skills and knowledge through that language. For this reason cultural appropriateness is important. The use of
concrete items, songs and props from a child’s culture can assist the vocabulary acquisition associated with the concepts already known through a first language (Boutte, Van Scoy, & Hendley, 1996).

The young learner also accesses the spoken language more easily if it is accompanied by visual clues such as mime, gesture, or facial expression (Facella et al., 2005; Justice, 2004). This can be described as a multisensory approach (Facella et al., 2005). For example, by pointing at a paint table, indicating an apron, and asking if the child wishes to paint, the teacher provides the child with a multisensory input through which he/she can link the spoken word with the activity.

**Appropriate activities and experiences**

A teacher’s pedagogy and practices may also predict the child’s vocabulary development (Dickinson & Tabors, 2001). For example, Cote (2001) found in her investigation of teachers’ behaviour during meal times in a Head Start preschool that the teachers’ behaviour affected the quality and content of interactions between teachers and children. Cote observed the teachers using non-present talk, that is, discussions about past or future events and experiences, including narratives. The teachers’ non-present talk increased when the teachers were stationary, for example, when the teacher ate his/her meal with the children or sat at the table assisting children. In contrast, Cote observed that teachers use of more present talk, including directions and/or questions regarding the food increased when the teacher stood to observe the children eating, or circulated around the tables. Furthermore, in their investigation of teacher talk directed at three year olds attending 20 Head Start classrooms, Gest, Holland, Coviello, Welsh, Eicher-Catt and Gill (2006) found that although the teachers spoke less frequently to the children during meal times, the teachers were more likely to use non-present talk during
meal times than during other activities. Gest et al suggested that this may be due to the face to face seating and the lack of distractions, for example, toys, which encouraged the teachers to initiate conversations about the children, or events other than the meal. The non-present talk observed by Cote (2001) and Gest et al (2006) provided stronger and more varied vocabulary acquisition opportunities for the children than present talk.

The type of activity used with ESL learners and how activities are organised affects the frequency and types of interactions between teachers and children (Girolametto, Hoaken, Weitzman, & Van Lieshant, 2000) and thus language acquisition opportunities (Dickinson, 2001; McCartney, 1984; Schwanenflugel et al., 2005). For example, Dickinson (2001) found that children who engaged in more pretend talk during free play activities made greater progress in their language development than children who did not participate in pretend talk.

The Phonological Awareness and Vocabulary Enhancement (PAVEEd for success) programme which investigated 720 4-year-olds at 37 prekindergarten classrooms in America led to the identification of two activity approaches to language teaching: implicit and explicit activities (Schwanenflugel et al., 2005). Implicit activities focus on the activity rather than the vocabulary used. In contrast, explicit activities are used when the teacher intends the child to ‘learn’ a preconceived vocabulary through that activity. Schwanenflugel et al.’s (2005) research investigated the use of play dough as an implicit activity and story time as an explicit activity. The study found that the quality and the frequency of interactions between the teachers and the children was greater in the implicit activity than the explicit activity.

In contrast to Schwanenflugel et al’s findings, McCartney’s (1984) study of 166, 3 to 5-year-olds attending nine early childhood centres in Bermuda, found that children from
centres which provided more structured activities aimed at preparing children for school attained higher language abilities, as measured by the Preschool Language Assessment Instrument (Blank & Berlin, 1978), than the children attending centres that provided less structured activities. Further to this, Wong Kwok Shing (2006) in their review of English language teaching methods, recommend the use of nursery rhymes to ‘teach’ age appropriate vocabulary to Chinese speaking preschoolers in Hong Kong. Wong’s recommendation is based on formal English as a second language teaching which has a more explicit character, based on language learning rather than acquisition.

A further example of an explicit activity for children in the formulaic stage of English language development is language supported play involving scripted fantasy play in the home corner as investigated in Goldstein and Gallagher’s study at a US preschool. The teachers taught the ESL children ‘chunks’ of formulaic language to use during their play in the home corner. This strategy was found to increase the quantity and quality of teacher-child interactions (Goldstein & Gallagher, 1992).

The type and organisation of activities can also affect children’s interactions with their peers. For example, the teacher in Fassler’s (2003) study used small group activities and encouraged cooperative work and peer interaction. In order to complete the tasks set by the teacher the children were expected to communicate and were therefore required to produce ‘comprehensible output’, that is, utterances that could be understood by the rest of the group. The children were therefore, intentionally or not, helping and supporting each other in their language acquisition. For this type of activity to be successful the activities must be interesting to the children, that is, within the children’s experience, and they must involve the manipulation of concrete materials to assist with meaning (Schwanenflugel et al., 2005).
Summary 2.8

An ECC’s temporal environment is likely to shape the nature of interactions with the teachers and peers and thus the language acquisition opportunities available to children at the centre. Specific aspects include the teacher-child ratio which may influence the frequencies of teacher-child interactions (Smith et al., 1989); the routines and activities provided by the teachers at ECCs; the organisation of meal times; and the types of activities and the teachers pedagogical approach to these activities (implicit and explicit).

2.9 The ECC physical environment

The quality of the physical environment is also thought to have a direct affect on language development (Lybolt & Gottfred, 2003). The physical environment has an impact on the quality and quantity of interactions between children, teachers, and peers (McLean & Snyder-McLean, 1999). For example, classrooms with open areas for specific activities, with materials arranged either conceptually or schematically, plus authentic dramatic play areas with real world props, are thought to promote language development (Justice, 2004). Additionally, a physical environment that encourages small group play as opposed to individual activities provides more opportunities for language learners to observe and participate in peer interactions.

2.10 Chapter summary and the study research questions

This chapter has considered research and theories pertaining to the acquisition of languages and the teaching and learning of first and second languages in early childhood. Although not exhaustive, the review of the literature identified two factors
that may predict the success of English acquisition in children with home languages other than English attending English medium Early Childhood Centres.

The first factor is the interpersonal environment of the early childhood centre. The type, quality and frequency of interactions with both adults and peers have been shown to have a major influence on young children’s first and second language acquisition (Donaldson, 1978; Girolametto et al., 2004; Jarvis & Lamb, 2001; Krashen, 1981; Nunan, 2001). Aspects of an early childhood centre’s temporal environment can affect the quality and quantity of interactions between teachers and ESL children. These aspects include: the consistency and predictability of routines (Barratt Dragon, 2005); the provision of a developmentally appropriate language environment (Facella et al., 2005; Justice, 2004), and the provision of implicit and explicit activities (Schwanenflugel et al., 2005).

The second factor that predicts success is the balance of the ESL child’s exposure to their home language and to English. Children who continue to hear and speak their home language at home and in the community whilst acquiring English have been found to make faster progress in English language acquisition (Cummins, 1979).

Second language acquisition and bilingualism in young children have been researched in preschools and kindergartens in the UK and US involving groups of children with the same home languages. However, this review highlights the apparent lack of empirical research relating to lone children speaking home languages other than English attending English medium ECCs.

To date, the research into English as a second language acquisition in the education sector has mostly been with five year olds in preschools, or older children in primary schools (for example Fassler, 2003) or with children in bilingual preschools (for
example Chesterfield et al., 1983; Clarke, 1996). Excepting Haworth et al’s (2006a) kindergarten study there is a lack of empirical research occurring in New Zealand in relation to supporting ESL learners in ECCs in particular in English medium ECCs.

In addition, the interpersonal environment of the child care centre, and in particular the interactions between the ESL learner and his/her teachers and peers, is a relatively unexplored area.

Based on these gaps in the research the aim of this study is to examine the programmes and practices used in different types of English medium ECCs to support lone speakers of home languages other than English.

This aim is addressed by asking:

How are different types of English medium Early Childhood Centres supporting lone children speaking home languages other than English?

This question is answered by investigating the interpersonal and temporal environments of English medium centres:

1. Do the interpersonal environments of English medium ECCs differ?

This question is addressed firstly from the perspective of the teachers:

- How do teachers interact with lone ESL children at different types of English medium ECCs?

More specifically:

How frequently do teachers initiate interactions with lone ESL children at different centres?

What types of initiators do teachers use to initiate interactions with lone ESL children?

Do the lengths of interactions between teachers and lone ESL children differ between centres?
What types of utterances do teachers use to sustain interactions with lone ESL children?

Do teachers support the children’s home languages at the centre?

Question one is then addressed from the perspective of the lone ESL children and the interactions that they initiate with teachers:

- How do lone ESL children interact with teachers at different types of English medium ECCs?

More specifically:

  - How frequently do lone ESL children initiate interactions with teachers?
  - What strategies do lone ESL children use to gain the teachers attention?
  - How successful are these strategies?

Question one is further addressed from the perspective of lone ESL children’s interactions with peers:

- How do lone ESL children interact with peers at different types of English medium ECC’s?

More specifically,

  - How frequently do ESL children interact with peers?
  - What is the nature of ESL children’s interactions with peers?

The relationship between ECCs temporal and interpersonal environments is then investigated by asking:

2. How do the temporal environments of different types of English medium ECCs differ?

The study then asks:
3. What is the relationship between the lone ESL children’s progress in English language acquisition and the English language learning opportunities provided by the interpersonal and temporal environments of different types of ECCs?
Chapter Three: Method

3.1 The research study design

A longitudinal mixed method comparison study (Bouma, 2000) was used to investigate the language acquisition experiences of twelve children with home languages other than English attending three Early Childhood Centres [ECCs] with different philosophies and pedagogical approaches. The focus of the study was to compare the English language learning experiences of children across different ECCs. The question ‘How are different types of English medium Early Childhood Centres supporting lone children speaking home languages other than English?’ was addressed through a comparison of the interpersonal and temporal environments of the participating ECCs. This approach was used rather than separate case studies which would have provided opportunities to analyse and ‘probe deeply’ (Cohen, 2000) but not the opportunity for comparison of differences in the centres’ language learning opportunities. Observations of child participants within the ECC environments provided a comparison of the child participants English language acquisition opportunities across the three centres.

The study was conducted in two stages. The first stage involved the selection of three centres and twelve child participants. The centres were chosen to represent three different Early Childhood services and programmes. Their selection was based on a discussion with their head teachers, and an analysis of their centre documentation, to identify the centre philosophies and expected practices. The data from these discussions and documents allowed the researcher to see how the centres’ philosophies and practices interacted to produce their unique character(s) (Thomas, 2003), and the nature of the language experiences that might be provided for the child participants. The linguistic diversity of the children attending the centres was identified at this stage to ensure that a suitable sample number of child participants would be available.
Once the centres were selected, potential child participants were identified through recommendation by the centre teachers. Semi-structured interviews were then conducted with the parents of the potential child participants to identify their language experiences at home and in the community to ensure that they met the criteria for selection (these are discussed later on page 76).

Stage two of the study, took place over nine months, March to November, and investigated the language experiences of the child participants at the three centres. The data collection methods included observations of: the nature of the child participants’ interpersonal interactions with their peers and teachers; the language use of the participants, peers and teachers; the nature of the three centre’s temporal environments and the child participants’ experiences within these, and an assessment of their receptive English language progress using the British Picture Vocabulary Scale. At the commencement of the observation period the teachers of the child participants were invited to complete a questionnaire to identify their professional and personal experiences of language learning and teaching. At the end of the observation period the child participants’ parents were invited to complete a questionnaire to identify any changes in their child’s or family use or exposure to English and their home language.

The next section of this chapter describes the three centres and the twelve child participants. Section 3.3 then outlines the procedures and measures of the two parts of the study.
3.2 Participants

Participant Centres

The aim of this study, (as discussed in the previous chapter), was to address a gap in research by investigating the experiences of lone children with home languages other than English attending different early childhood centres.

The three centres which participated in the study were Kowhai Kindergarten, a sessional government kindergarten with a programme based on free play; Bay Preschool, an all day childcare centre that incorporated aspects of the Reggio Emilia approach into its programme, and North Road Learning Centre, an all day care centre with a programme based on a combination of free and teacher directed play.

The three centres’ programmes, staffing, linguistic diversity, physical environments, and philosophies are now described.

Kowhai Kindergarten

Kowhai Kindergarten was a government public kindergarten run on a sessional basis with five morning sessions a week for four-year olds, and three afternoon sessions for three-year olds. Kowhai Kindergarten was licensed for 45 children per session and employed two full-time teachers and one full-time head teacher providing a ratio of 15 children to each teacher. The teachers were all qualified and registered. Volunteer parents were rostered for each session to help with preparation of morning and afternoon tea, and to assist in the clearing up at the end the session.

The kindergarten reflected the cultural diversity of the local community, with four children attending with home languages other than English at the beginning of this study. This number remained the same throughout the study, with one child leaving and
one starting. They were lone speakers of Hindi, Thai and Cambodian, Tongan, Afrikaans, and Korean.

Kowhai Kindergarten had a large outdoor area containing climbing apparatus, sand and water play, a swing area, a grassed area for group activities such as circle and team games, and a covered area used for painting, printing and other art activities and puzzles or small group games such as lotto and matching or sorting games. The indoor area was on two levels. The upper level was carpeted and incorporated an area large enough to seat the 45 children plus the teachers during mat times. During free play sessions the carpeted area was used for play with construction toys, wooden blocks, musical instruments, and jigsaws. The upper area also housed a large home corner, a reading area, and the main entrance to the kindergarten with a parent information table, a cloakroom area, and a signing in board for children. The lower level was tiled and housed the art tables, an office for socio-dramatic play, and a small reading area and nature table.

Kowhai Kindergarten’s philosophy aimed at providing a safe, dynamic and enriching learning environment where the teachers guided and supported children to initiate and take responsibility for their own learning (as outlined in the centre documentation). The kindergarten association’s philosophy of valuing play was reflected in the centre’s daily programme, which allocated long periods of time to free play. Each session included a mat time of 15-20 minutes which all children were expected to attend. These generally included a story, either read from a book or told using magnetic visual aids, plus action songs or rhymes, or some form of movement to music. Each session also included a morning or afternoon tea time. The children’s attendance at these was not compulsory. Morning tea was generally held outside with the children sitting along the wall around
the climbing area, and afternoon tea was usually held indoors on the mat. The fruit for tea times was provided and prepared by the parents and was served by the teachers.

Kowhai Kindergarten’s curriculum statement was centred around a quote from Te Whaariki

…children will grow as confident learners and communicators; healthy in mind, body and spirit; secure in their sense of belonging and in the knowledge that they will make a valued contribution to society (Ministry of Education, 1996, p. 9).

The teachers planned themes and relevant activities were based on the interests of individual or groups of children. During the free play sessions the children chose to play inside or out, weather permitting, with the equipment and activities set out by the teachers. During this study the themes included: the night sky, dinosaurs and ice-cream.

Bay Preschool

Bay Preschool was a privately owned and managed all day centre catering for the childcare needs of working parents in the community. It was open from 7.30am to 5.30pm for children aged six months to five years. The majority of the children attended five days a week for six or eight hours a day, depending on the work routines of their parents. The preschool was licensed for 38 children with a maximum of nine under twos and 29 two-to five-year olds. The ratio of children to teachers was five to six children to each teacher. Four of the five teachers working with the two-to five-year olds at the commencement of the study were qualified and registered; the other teacher was in training. However, she left after the second round of observations in July and was replaced by relievers until a qualified teacher began in October. A full time cook was also employed by the centre. His role was to prepare the food for lunch and morning/afternoon tea, set out and clear the tables, and assist the teachers to supervise the children during tea and lunch times.
The children attending the centre reflected the cultural diversity of the community that it catered for with six of the 29 two to five-year-old children on the roll speaking home languages other than English. These included a Chinese Mandarin speaking brother and sister; two sisters and another girl who spoke Afrikaans at home, and a boy who spoke Greek as his first language. The older Afrikaans speaking sister left the preschool and started attending school during the study.

Bay Preschool consisted of two houses. The smaller house catered for the under twos and the larger house for the two-to five-year-olds. The larger house had a smaller carpeted room for the two-year-olds which led to a deck and a grassed area shared with the under twos. The two-year-olds spent most mornings and their sleep time in this room and outdoor area with two teachers. The three-to five-year-olds room was larger with a carpeted area for mat times and socio-dramatic play, and a vinyl floored area set out with tables for art activities. The kitchen and dining area were positioned at one end of the room. A kitchen bench divided the two areas. Two doors led outside into a larger outdoor play area comprising of two large sand pits, water play, climbing equipment plus a deck area, and a large gazebo with a home area, construction toys and further outdoor art tables. In the afternoons the two-year-olds were often given the opportunity to play with the older children in the larger room and outdoor area.

The philosophy of Bay Preschool emphasised the importance of relationships and described their children, parents, whānau and educators as a community that learns and grows together. The teachers at Bay Preschool had investigated the Reggio Emilia philosophy to teaching and learning and incorporated some Reggio Emilia beliefs and practices into their curriculum. All of the teachers including relievers were familiar with, and sensitive to, the Reggio Emilia philosophy underpinning the centres practices. They
believed that children are competent learners, rich in resources, and that the role of the teacher is to support the children’s learning by acting as a provocateur, observing the children’s play and only then interacting with them and assisting them to extend thinking, investigation and questioning skills.

The preschool’s equipment reflected the Reggio philosophy and was made mostly of natural materials, for example, wooden bowls, metal sand spades and rush baskets. The activity tables and displays of children’s work were carefully and attractively presented. The play activity areas were made inviting with the use of fabrics, plants and mirrors. Paints were placed in small glass containers and natural objects such as shells, stones, plants and pebbles were often displayed for children to examine and observe. Displays and activities often involved lights or overhead projectors shining onto the walls with coloured foils and artefacts for the children to investigate.

Children ate morning tea, lunch, and afternoon tea sitting at small tables using china plates, and drank from glasses which they filled themselves from china water jugs placed on the tables. The children served themselves lunch and snacks from serving plates on the tables. During meal preparation times the children were able to observe and help, if they wished. The kitchen bench was open to the dining area. By standing on wooden risers the children were able to observe or participate in the food preparation without being in the kitchen.

The preschool’s programme incorporated long free play sessions during which the children were able to play inside or out as they wished, weather permitting, with the teachers moving with the children and following their interests. Short meeting times, conducted separately for the two-year-olds and the three-to five-year-olds, were held at around nine a.m., during which the teachers and children greeted each other and passed
on any announcements and messages. Separate mat times took place just before lunch for the two groups in their rooms. These lasted from 10-15 minutes for the two-year-olds and 20 minutes for the older children. They generally included a story, singing and or drama/movement sessions. After lunch the two-year-olds were encouraged to sleep on mattresses in their room, and the three-to five-year-olds were expected to take a short rest relaxing on pillows in the carpeted area in their room.

Planning was done by the teachers following the interests of the children. The topics were initiated by individuals or groups of children, and developed by the teachers. The teachers planned art and craft activities and other learning opportunities and set up the environment and equipment to enable the children to follow their interests. The children’s interests during this study were extensive including: cars and transport; spiders; ourselves and our families; the colour green; butterflies; dinosaurs, and plants.

**North Road Learning Centre**

North Road Learning Centre was an all day childcare centre that was part of a large group of centres nationwide. The centre was open from 7.30 am to 5.30 pm. It had separate rooms for babies, toddlers, two-year-olds, three-year-olds and preschoolers. The children moved rooms to join the next age group on or near to their birthday, depending on space. The child participants in this study began the data collection period in preschool two, the room for three-year-olds, and moved into the four-year-olds’ room, preschool one, during the data collection period. Each room had three qualified and registered full time teachers, and took a maximum of twenty eight children: a ratio of nine children to each teacher.

Of the 28 children attending the three-year-olds’ room, preschool two, at the beginning of this study four spoke home languages other than English. Two children were from
Korean and two from Mandarin speaking homes. During the study a number of children either left the centre completely or were transferred to preschool one. New children joined the room from the two-year-olds, room or came new to the centre; however, the numbers of children with home languages other than English remained constant at four, with two or three Mandarin speakers and one to two Korean speakers. The roll in preschool one, the four year-olds’ room was more stable. During the two months that the Korean participant in this study attended preschool one she was the only Korean speaker and the Mandarin speaking girl was one of two in the room during the three months that she was attending.

The two rooms involved in the study had carpeted areas with home corners for socio-dramatic play, construction toy areas, and mat time areas. The carpeted areas were also used for sleep times. The rest of the floor was tiled and contained tables used for messy activities such as art and cooking, and for quiet play such as games and puzzles. The tables were also used for eating. Each room had access to an outdoor area with a fixed climbing frame and slide, swings, sand and water play and room for ball games and ride-on toys. Preschool two shared their outdoor area with another room, preschool three which also catered for three year-olds. The children from the two rooms played together in the outdoor area and were supervised by teachers from both rooms.

The owners of North Road Learning Centre based their philosophy on working in partnership with parents and learning through play. They believed that children learn best by doing, and aimed at providing a stimulating, fun environment. This was reflected in the rooms which were brightly decorated, and incorporated displays of children’s work on the walls. The play equipment and apparatus were also brightly coloured. Music was often played in the three-year-olds’ room during free play sessions.
North Road Learning Centre’s curriculum was based on Te Whaariki. Planning involved observing individuals or groups of children during play, setting learning outcomes, and providing activities to extend their interests. During the study the teachers in preschool two focussed on providing equal opportunities for the diverse group of children in that room by encouraging all children to participate in the full range of activities available.

The programme included free play and teacher directed activities. During the free play times the children were able to play outside if a teacher was available, otherwise they were restricted to inside activities. Each day one of the teachers had responsibility for setting up and supervising the children outside. The second teacher took responsibility for inside, and the third teacher ‘floated’ between the two depending on the interests and needs of the children, for example, helping children with toileting, changing wet or soiled clothes and washing hands before and after meals. Activities and equipment were placed on the inside tables by the teachers. There was generally one table activity supervised by a teacher. This changed daily and included art, craft, and cooking.

Two mat times were held each morning and one in the afternoon. These mat times occurred before lunch and morning/afternoon teas, allowing time for one member of staff to prepare the tables for eating, and to arrange the sleep time beds before lunch. The mat times lasted 20–30 minutes and included stories read from books, singing led by the teacher or to CDs, and occasionally number and counting songs or activities.

Lunch, morning and afternoon teas were vegetarian following the religious practices of the owners of the centre. The food was cooked in the centre’s kitchen by a full time cook and delivered to each room. Lunch was served into individual plastic bowls by the teacher whilst the children were at mat time. At morning and afternoon teas the children served themselves from large platters. The children sat at three large tables. After lunch
all children were allocated plastic pallets with a pillow and sheet. The children in preschool two were expected to sleep whilst the preschool one children were encouraged to rest.

**Child participants**

The study began with twelve participants (See Table 1, page 68). All were from families that spoke a language other than English at home either exclusively or for the majority of the time. One participant was four years old, nine were three and two were two years old at the beginning of the data collection. Three of the participants attended Kowhai Kindergarten, five were at Bay Preschool, and four attended North Road Learning Centre. Two participants at North Road withdrew during the study: So Yeon returned to Korea for family health reasons after four months, and Jordan went to China for an extended holiday after five months and did not return to the centre. Ten study participants completed the study.

**Kowhai Kindergarten Child Participants**

The three participants at Kowhai were: James who was Thai/Cambodian bilingual when he started kindergarten, speaking Thai with his mother and Cambodian with his father; Kamesh who came from an extended Fijian Indian family speaking Hindi, and Sita who spoke Tongan at home with her parents and younger sister.

*James*

James came from a multilingual home. His mother was a native speaker of Thai and his father was a Khmer (Cambodian) speaker. Until the age of two, James lived with his Cambodian grandparents in Australia, and spoke only Khmer until he moved to New Zealand when James’s mother introduced him to Thai. She continued to try to use only Thai with him. When he began to acquire some English words she pretended not to
understand him. James’s father was not as strict. He tried to communicate using Khmer but used English if James answered him or initiated a conversation in English. They hoped that James would become fluent in their own languages as they believed that being multilingual is an advantage, especially in New Zealand where they believed that the majority of children speak only English. Outside the family home James communicated in Kymer with his grandparents in Australia and Thai with family friends and their children.

James’s mother studied English at university in Thailand. She attended a kindergarten there where the emphasis was on learning English through memorising vocabulary. This type of language learning continued throughout her schooling and university course. On arrival in New Zealand, James’ mother found that she acquired English more easily through immersion and wanted James to learn languages in a similar way. Her experiences in NZ also made her evaluate her beliefs in early childhood education, and she chose Kowhai kindergarten for her son because its programme emphasised free play and the development of social skills. James began attending the kindergarten afternoon sessions six months before the study began and transferred to mornings during the fifth month of the study, close to his fourth birthday.

Kamesh

Kamesh came from a Hindi speaking family that originated in Fiji. At the beginning of the study his parents owned and ran a local dairy where he lived with his mother, father, younger brother, and maternal grandparents. The family spoke only Hindi to the children as they wanted them to know their mother language. Kamesh did hear some English spoken by his parents and customers in the shop, and his mother believed that he began to realise that customers spoke differently when he was about three years of age.
Kamesh began attending the afternoon sessions at Kowhai Kindergarten two months before the study began, when he was three years six months old and transferred to the morning sessions during the last month of the study. His parents chose to send Kamesh to Kowhai as it was close to their shop, and had been recommended by customers and friends. They believed that Kamesh would benefit from playing in the outdoor play area as he did not have that opportunity at home.

Sita

Sita was born in NZ to Tongan born parents. They chose to speak only Tongan in the home whilst Sita and her younger sister were of preschool age, as they wished both children to be fluent in their cultural language before speaking English. The family regularly attended a Tongan speaking church. At the beginning of the study Sita’s mother had started to introduce English at home by encouraging her to watch the Disney and Natural History channels on the television; praising her when she pointed to and said English words such as ‘tree’. She had also put an English alphabet poster on wall, but admitted that this was confusing for Sita as some letters have more than one sound in English.

Sita began attending Kowhai Kindergarten at the beginning of the academic year. Her parents chose this kindergarten shortly after moving to the area, as it was next door to their local primary school.

Kowhai Kindergarten was Sita’s first experience of Early Childhood Education. She began attending the afternoon sessions at the age of four years three months, with the three-year olds, two months before the study began, whilst waiting for a morning place, generally attended by the four-year olds, to become available. Her attendance was fairly
regular until her fifth birthday at the beginning of December when she left to begin primary school.

Sita’s mother expected the centre to teach her to speak English and to teach her to write her name. She indicated that ECCs are different in Tonga but would not describe how. However, she did compare the discipline in the Tongan schools that she experienced when growing up in Tonga with her perceptions of discipline in New Zealand schools based on media reports and discussions with Tongans living in New Zealand. She explained that teachers in Tonga slap children or hit them with a stick. She also commented on the discipline at Kowhai Kindergarten reporting her observation that the teachers have to speak only once to the children whereas she often had to repeat herself at home before Sita would do as she was told.

**Bay Preschool Participants**

The five participants attending Bay Preschool were: Georgia and David, a Mandarin speaking brother and sister; Ian who spoke Greek at home; and Ruby and Melissa who were both from Afrikaners speaking families.

**David and Georgia**

David and Georgia were brother and sister. David was the youngest participant at two years and two months at the beginning of the study, and Georgia was three years nine months. Both children were born in New Zealand after their parents moved here from southern China. The family spoke Mandarin at home. They were very strict about speaking only their home language to each other because they wanted their children to retain their Chinese language and culture. The children respected this responding in Chinese even when their mother addressed them in English. At the centre Georgia spoke
Mandarin to her brother; her understanding was that her parents wished her to speak to David only in their home language, including during their time spent at preschool.

David and Georgia’s mother was not concerned about their English learning because they would be exposed to it at preschool and later at school, whereas they could only learn Mandarin at home. She believed that children find it easy to learn languages when they want to learn. She expected David and Georgia to learn sufficient English at the preschool so that communication would not be a barrier to their learning when they started school. Eventually their mother wanted the children to be fluent in Mandarin, Cantonese and English and to be able to read and write in Chinese and English.

Georgia began attending the centre six months before the beginning of the study close to her third birthday. David started attending just before the start of the study when their mother began a course of study at the local business school.

Georgia and David’s parents were aware that preschools in China are very different and they wanted David and Georgia to experience the ‘Kiwi’ approach based on play. They also wanted the centre to encourage social skills and personal independence, and were pleased when David began to feed himself after only one week at the centre.

Towards the end of the study David began attending weekly English classes, and both he and Georgia attended a weekly music group where they used both English and Mandarin.

Ilan

Ian was three years eight months old at the beginning of the study. His father was Greek and his mother was born in New Zealand although she grew up in a German speaking area of Switzerland. She lived in Greece for some years where she became fluent in Greek. Ian lived with his parents, two older sisters, and an older brother. Ian’s parents
spoke Greek exclusively at home with him and his siblings, as they wanted their children to be fluent in his father’s native language and knew that they would acquire English at preschool and school.

Ian’s father was his primary care giver until he returned to work when Ian was three years two months old. Ian’s father read stories to him in Greek and used an alphabet chart to teach him the Greek letter names and sounds. Throughout the study Ian continued to use only Greek to speak to his father and grandparents.

Ian began attending Bay Preschool six months before the beginning of the study. His parents chose the centre because it was opposite the primary school attended by his older siblings.

Ruby
Ruby was born in South Africa and moved to New Zealand when she was less than one year old. She was two years and five months at the beginning of the study. Ruby lived with her Afrikaans native speaking mother and her English native speaking father. They communicated mostly in Afrikaans at home. Ruby’s parents wanted her to be bilingual so that she could understand and speak both of their languages. Ruby’s Afrikaans speaking grandmother, who lived nearby, spoke only Afrikaans to her.

Ruby’s parents chose Bay Preschool as it was owned and run by an Afrikaans speaking teacher. Although they were aware that the centre used English as the medium for communication they felt that her transition to child care would be easier in an environment that understood her culture and was familiar with some of the vocabulary used by them at home such as ‘peepee’ for toilet. They also felt more comfortable with a centre that had a South African approach to discipline and one that would understand their standards and expectations for behaviour and manners.
Melissa

Melissa was three years four months old at the beginning of the study. Her parents, both Afrikaans native speakers, moved to New Zealand before Melissa’s birth. Melissa’s older sister attended the same centre until her transition to school early in the study. Melissa’s parents tried to speak mostly Afrikaans in the home and used it exclusively when talking together. They also taught Melissa nursery rhymes and read stories to her in Afrikaans. However, at the beginning of the study, they reported that Melissa was reluctant to speak in Afrikaans at home. Her father was concerned about this, as he wanted her to be able to communicate at a level that would enable her to understand her heritage, even though it is a language only used in South Africa and one that would be of limited use to her living in New Zealand.

Other than at home Melissa heard and used Afrikaans at weekly church meetings, on the phone to family in South Africa and with family friends in New Zealand.

Melissa’s parents chose Bay Preschool for convenience of position and opening times. At the time of her enrolment they did not know that the preschool was owned and run by an Afrikaans couple.

North Road Learning Centre Participants

The two participants who attended North Road and participated for the full study were Na Soon whose family was from Korea, and Jessica who spoke Mandarin. The two participants who withdrew during the study were So Yeon from Korea and Jordan from China.

Na Soon

Na Soon was born in New Zealand to Korean parents. She was three years six months at the beginning of the study. Her parents wanted Na Soon to learn to speak English and
experience the ‘kiwi’ culture at the centre, and learn her Korean language and culture at home. She began attending North Road Learning Centre at the beginning of the year, three months before the beginning of the study.

Na Soon’s parents were aware that she played mostly with Korean speaking friends at the centre and were concerned that she was not learning English as quickly as they had hoped. They occasionally used simple English sentences at home to encourage her to practise the vocabulary she was acquiring through her limited interactions with English native speaking peers and the teachers at the centre.

Na Soon spoke Korean to her parents, grandparents, family members overseas on the phone, and family friends here in New Zealand. She also attended a swimming class which used Korean. Her only experience of English outside the centre was watching television for approximately 30 minutes a day.

Jessica
Jessica was born in New Zealand after her parents emigrated here from China. She was three years eleven months at the beginning of the study and had been attending the centre for one year. Jessica’s mother and father spoke only Mandarin at home with Jessica and her older brother because it was their first language and they wanted their children to speak it as their first language.

Both of Jessica’s parents worked and they chose to send her to North Road Learning Centre because it was close to their home, and because they believed it encouraged similar values to theirs, for example, learning to greet people, to love others and to practice hygiene routines such as washing hands before eating.
So Yeon

So Yeon was three years eleven months old at the beginning of the study. Her family originated in Korea. She lived with her parents, younger sister, a lodger and the lodger’s ten year old son. The family’s home language and culture was exclusively Korean and So Yeon did not speak any English before attending the centre. Her mother was planning to enrol her in a Korean Saturday school so that she would experience more of her culture and learn to read and write in her home language.

So Yeon briefly attended a public kindergarten at the age of three, when her parents began managing a sandwich bar in the local shopping centre. They transferred her to North Road Learning Centre after two months when a place became available as they preferred the lower child to teacher ratio at North Road Learning Centre.

So Yeon’s younger sister became ill during the study and her parents returned to Korea to seek medical advice. So Yeon did not return to North Road and her participation in the study ceased after five months.

Jordan

Jordan spoke Mandarin at home where he lived with his parents and 19 year old sister. He was three years eight months at the beginning of the study. Jordan’s parents immigrated to New Zealand from China with his older sister two years before his birth.

Jordan’s mother felt that her English was not a good model for him, so used Mandarin exclusively at home, and enrolled him at North Road Learning Centre primarily to learn English. He began attending the centre two months before the study began when his mother started to attended English language lessons at the local college to improve her chances of employment.
Jordan returned to China for an extended family holiday after the fourth round of observations. Although he was due to return to NZ after four to six weeks, North Road Learning Centre was unable to reserve a place for his return and his participation in the study ceased.
<table>
<thead>
<tr>
<th>Name</th>
<th>Centre and attendance</th>
<th>Languages used at home at beginning of study</th>
<th>Age at beginning of study</th>
</tr>
</thead>
<tbody>
<tr>
<td>James</td>
<td>Kowhai Kindergarten</td>
<td>Cambodian and Thai</td>
<td>3 years 6 months</td>
</tr>
<tr>
<td></td>
<td>3 afternoons (transferred to 5 mornings after 4th observation)</td>
<td></td>
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<tr>
<td>Sita</td>
<td>Kowhai Kindergarten</td>
<td>Tongan</td>
<td>4 years 3 months</td>
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<td></td>
<td>3 afternoons (transferred to 5 mornings after 1st observation)</td>
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<tr>
<td>Kamesh</td>
<td>Kowhai Kindergarten</td>
<td>Hindi</td>
<td>3 years 6 months</td>
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<td></td>
<td>3 afternoons (transferred to 5 mornings after 5th observation)</td>
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<tr>
<td>David</td>
<td>Bay Preschool</td>
<td>Mandarin</td>
<td>2 years 2 months</td>
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<td></td>
<td>5 days</td>
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<td>9.00-3.00</td>
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<td>Georgia</td>
<td>Bay Preschool</td>
<td>Mandarin</td>
<td>3 years 9 months</td>
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<td>Ian</td>
<td>Bay Preschool</td>
<td>Greek</td>
<td>3 years 8 months</td>
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<td></td>
<td>5 days</td>
<td>English occasionally</td>
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<td></td>
<td></td>
<td>with siblings</td>
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<td>Ruby</td>
<td>Bay Preschool</td>
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<td>2 years 5 months</td>
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<td>3 years 4 months</td>
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<tr>
<td></td>
<td>5 days</td>
<td>English with older sister</td>
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<td>Jessica</td>
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<td>Jordan</td>
<td>North Road LC</td>
<td>Mandarin</td>
<td>3 years 8 months</td>
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<td>So Yeon</td>
<td>North Road LC</td>
<td>Korean</td>
<td>3 years 11 months</td>
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<td>Na Soon</td>
<td>North Road LC</td>
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<td>3 years 6 months</td>
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Teacher Participants

Thirteen teachers completed the teacher questionnaire (Appendix E) and participated in the study’s observations: three at Kowhai Kindergarten, five at Bay Preschool and five at North Road Learning Centre. The questionnaire asked participants to list languages in which they could hold a conversation about everyday activities. Five teachers identified themselves as being English speakers only, and seven reported that they could speak two or more languages including English. The participant teachers’ language learning experiences included natural acquisition at home, immersion at school and in the community, and formal language classes at school. All participants reported that they had taught children with home languages other than English in New Zealand, and eleven of the thirteen had worked alongside teachers with home or first languages other than English.

Kowhai Kindergarten

The three teachers at Kowhai Kindergarten each had more than ten years experience working in early childhood centres. Lauren and Sharon, were monolingual English speakers and Janice, a long term reliever, spoke Maori and French in addition to English. Janice learnt French at secondary school and Maori through adult classes and practice in the kindergarten. All three teachers had worked with a diverse range of children with home languages other than English including European, Asian, and Pacific Island languages. Lauren and Sharon had not experienced working with teachers with first or home languages other than English, however, Janice, when relieving at other centres, had worked alongside teachers with Mandarin, Malaysian, and Samoan as their home/first language.
Bay Preschool

The five teachers at Bay Preschool ranged in experience from more than ten years to less than three. June was a fluent sign language user and Lyn was a monolingual English user. The remaining three teachers were multilingual, able to converse in three languages. Tracey went to a bilingual English Afrikaans school whilst acquiring Dutch at home. Shirley was brought up in a multilingual home where she acquired English, Malay and Tamil; and Jan acquired English and Afrikaans from her bilingual parents and later learnt German through immersion when living in Austria. Bob, the cook, the husband of the head teacher was also bilingual in Afrikaans and English.

The five Bay Preschool teachers had taught children with a range of home languages including Mandarin, Afrikaans, Greek, and Russian. They had all worked alongside bilingual colleagues.

North Road Learning Centre

The five participating teachers at North Road Learning Centre; Jean, Veena and Nicky in Preschool Two and Vrinda and Dana in Preschool One, had more than five years teaching experience each. Nicky and Dana, were monolingual English speakers. Jean and Vrinda were bilingual. Jean acquired Mandarin as her first language from her parents and learnt English at school through formal classes. She was the only teacher participating in the study who used a language other than English predominantly at home. Vrinda learnt Afrikaans at school and acquired English at home. Veena was multilingual, having acquired English and Konkari from her bilingual parents and learnt Hindi at school.

The five teachers at North Road had experienced teaching children with a variety of home languages including Chinese (Mandarin and Cantonese), Korean, and African,
Indian and European languages. All of the participants had worked with bilingual colleagues.

3.3 Measures and procedures

Study part one – selection of participants

Part one of the study involved the selection of the centres and the child participants. The number of participating centres and child participants to be included in the study was considered carefully to ensure the optimal sample size. The nature of the study’s case study approach required detailed observations of interactions of the child participants with teachers, peers, and the centre environments. Therefore, a sample size of three centres and twelve children was considered appropriate for the purposes of this study (Cohen, Manion, & Morrison, 2000).

Selection of participant centres

The three centres invited to participate were selected to represent different types of programmes and practices. The philosophy statements of the three centres were used to identify their underlying philosophies and to support their selection.

Informed consent was gained from the centre managers or head teachers of the three centres in accordance with the University of Auckland Human Participants Ethics Committee procedures.

Each centre was provided with a Centre Participant Information Sheet and a head teacher/centre manager consent form (Appendix A). A discussion between the centres’ head teachers or managers and the researcher regarding the study’s requirements and participants’ commitments followed to ensure a clear understanding of the study. The head teachers/managers of the three centres discussed the study with their teaching staff.
to obtain their interest in participation and approval and then completed the centre manager/head teacher consent form.

Pseudonyms are used for the participant centres, teachers and children throughout this thesis in an effort to maintain participant anonymity and confidentiality of participant information. Parent helpers and student teachers were documented as PH (parent helper) or MH (mother helper) and ST (student teacher). Even with the use of pseudonyms and codes it may be possible for interested parties, especially those familiar with the early childhood sector in the geographical area to identify the centres, teachers, and child participants through their descriptions. Confidentiality cannot be certain or guaranteed (Christians, 2000). This information was made clear on the participant information sheets.

**Selection of child participants**

Possible child participants were firstly identified through discussion with the head teachers and the senior class teachers at the three centres and then through semi-structured interviews with their parents.

Participants were selected through the following criteria in an attempt to minimise other variables that could influence the study findings. The criteria for participation were firstly that the children should speak a language other than English at home with their parents, siblings and other family or community members, so that English was their second language. It was accepted that these children would be exposed to some English in their community or through television, but it was expected that they would primarily be speaking a language other than English at home. Secondly, it was preferred that the participants would be lone speakers of their home language or there be no more than two children, for example siblings, in the room or centre speaking the same home language.
These two criteria would enable the study to address the gap in the literature, as discussed earlier, on young children who are lone speakers of their home language in Early Childhood Education centres. The third criteria was that participants should be of a similar age. As previously discussed, three was considered as the optimal age for this study because children of three years of age have a basic grasp of their home language but may be considered as simultaneous bilinguals because the language centre of the brain is still being developed (Foster-Cohen, 2003).

Twelve potential participants were identified from the criteria; three at Kowhai Kindergarten, five at Bay Preschool and four at North Road Learning Centre. These children fulfilled the above criteria and were all attending their centres full time. For Kowhai Kindergarten children this meant attending five morning or three afternoon sessions, whereas those attending Bay Preschool and North Road Learning centre were required to attend for six or more hours five days a week. The potential participants attended only one centre, that is, they spent the time when they were not at their centre at home or with other family members speaking their home language. This was to rule out the effect of other programmes and experiences on their language acquisition.

In accordance with University of Auckland human participants ethical procedures for participants of less than 16 years of age it was necessary to gain informed consent from the parents of the participants. The parents of the twelve potential participants were provided with Parent Participant Information Sheets and Consent Forms (Appendix B). They were given the option of having these documents translated into their home language; none requested this, although, one mother at North Road Learning Centre asked for help in understanding the documents from the senior teacher who spoke the
same home language. The parents of the twelve children completed the consent form in English.

Interviews with the potential child participants’ parents were conducted to ensure that the children met the criteria of selection (see above) for participation in this study. The interviews were semi-structured, based on 12 questions (Appendix D) and lasted from 30 minutes to one hour. The interviews gained information on the families’ language usage at home and the people with whom the child interacted; the parents’ own language learning experiences and their beliefs around language learning, and their choice and expectations of the early childhood centre that their child was attending. The parents were then invited to ask questions regarding the research study.

The parents of the child participants were offered interpreters for the interviews, however none accepted this, and so all interviews were carried out in English by the researcher. The parents; one father and ten mothers, nominated the time and place of the interviews which took place at the centres, the participants’ homes, and cafés near to the participant’s work; during lunch breaks, afternoon pick up times, and in the evenings. One mother preferred to respond to the interview questions in writing due to home and work commitments.

Audio recordings were made of nine of the eleven interviews. Notes were made during the other two interviews. The recordings were transcribed and copies of the notes and transcriptions were sent to the parents for corrections. No corrections were received.

It was anticipated that the semi-structured interviews would identify any potential participants that did not fulfil the criteria for the study; however, all twelve were found to comply with the criteria and so were invited to continue onto Part Two of the study.
Following the interviews the parents of the child participants explained the study and the observation and testing process to their children. This meant that the children knew the reason for the researchers presence. On no occasion did a child demonstrate a reluctance to being observed. One participant refused to take part in the BPVS test and the researcher did not proceed with the test.

**Study part two – data collection**

Part Two of the study included teacher questionnaires, observations of the child participants’ interactions with their teachers and peers, and measurements of the child participants’ English language vocabulary acquisition using audio and written records of their expressive language and the British Picture Vocabulary Scale for their receptive language. At the end of the study the participants’ parents provided information, through a second interview or a questionnaire, on any changes in their children’s language experiences or practices in the home and local community observed during the observation period.

The following sections describe the Measures and the Procedures of Part Two of the study.

**Measures**

*Teacher questionnaires*

The teacher questionnaire (Appendix E) collected demographic data plus personal and professional experiences of language learning and teaching. The questionnaire requested participants to indicate the number of years worked in the early childhood education sector, and the extent of their experiences of teaching ESL children and working with colleagues with first languages other than English. It also asked participants to describe
their personal language learning experiences by asking them to list the language/s that they spoke well enough to hold a conversation about everyday activities (Ministry of Education, 2007) and how these languages were learnt.

**Child Observations**

Observations were used to take a series of ‘snap shots’ (Neale & Flowerdew, 2003) of the participants’ experiences at the centres. The main focus of these direct observations (Thomas, 2003) was the child participants’ interactions with their teachers and peers. Each observation lasted 90 minutes and focused on one child participant. The observations were conducted at different times during the session or day so that each participant was observed over the full range of their centre’s activities. These included structured times such as mat and meal times, teacher directed activities, and unstructured free play sessions.

Each observation was documented using an observation sheet (Appendix H) incorporating field notes and running records. At the beginning of each observation the time and date of the observation, the adults present, relevant information that may affect the participant’s behaviour, such as illness or home experiences reported by the teachers, and any changes in the centres’ physical or temporal environments were recorded. Running records were completed over the following 90 minutes of the observations. Running records are classified as objective reports (Pellegrini, Symons, & Hoch, 2004). In this study the records included data on the participants’ verbal and non verbal interactions with their teachers and peers including, where possible, the exact words spoken.

Audio recordings were made of six of the twelve participants’ verbal interactions during one or more observations. Recordings were made using a small MP3 recorder worn by
the participants. The MP3 recorders enabled the researcher to record not only the participants’ interactions with teachers and peers but also the participants’ private speech which may not be audible to the observer. The recordings were transcribed and combined with the running records onto the observation sheets (for example see Appendix H).

**British Picture Vocabulary Scale**

The British Picture Vocabulary Scale [BPVS], a revised version of the Peabody Picture Vocabulary Scale (Dunn, 1997), was used to measure the child participants’ receptive language, that is, their understanding of English vocabulary (Whetton, 1997). The scale is considered to have good validity and reliability (Dunn, 1997; Levy, Schaefer, & Phelps, 1986). It is administered by showing participants a series of plates of four pictures. For each plate the researcher gives a stimulus word orally and the participant is asked to select the picture that they considered to be the best fit for the stimulus word.

The BPVS was initially designed for use with monolingual English children, but was adapted for use with ESL learners through the addition of supplemental data and norms (Whetton, 1997). A technical supplement provides tables to convert raw scores to standardized scores and age equivalents relative to other ESL children. The adapted version has been used successfully with young ESL learners in an investigation into the language development of four to nine year olds in the UK, where 60% of the children were home speakers of languages other than English (Mahon & Crutchley, 2006).

**Parent Questionnaire**

The parent questionnaire (Appendix F) was administered at the end of the study. It provided data on the participants’ English and home language experiences at the end of the study. The questionnaire consisted of nine questions. Questions 1 to 4 asked parents
to identify the language that they chose to speak mostly at home to the child, and the language that their child chose to speak with them and other members of the family. Questions 5 to 7 invited parents to comment on the progress of their child’s home language and English language acquisition. The last two questions asked the parents to indicate where their children heard their home language and English in the community, for example, television, community groups, or language or sports lessons.

**Procedures**

**Observations procedure**

Ten of the child participants were observed six times by the researcher at regular intervals over the nine months. Due to their withdrawal during the study one participant was observed four times and another participant three times only.

The presence of a researcher in early childhood centres inevitably affected the behaviours of both the children and the teachers (Denzin & Lincoln, 2003; Pellegrini et al., 2004). However, the researcher adopted the role of participant observer at each centre; she became part of the centre but was slightly apart from the main group of children and teachers (Tabors, 2008). As found by Tabors (2008) in her study of a linguistically diverse preschool class in the USA, the participants appeared to accept the presence of the observer who had a definite role in the centre.

The observations were carried out in rounds which further minimised the children’s reactivity to the observer. The researcher was present in the centres continuously until the observations of all of the children at that centre were completed. At Kowhai Kindergarten this was three consecutive sessions either morning or afternoon depending on the participants’ attendance, and at Bay Preschool and North Road Learning Centre for three consecutive days. In addition to this arrangement the researcher spent one
session in the room or centre before each round of observations commenced to enable the children and teachers to become familiar with her presence.

A further issue was the children’s habituation to the researcher writing during the observations (Pellegrini et al., 2004). Writing learning stories (Ministry of Education, 2004) was a normal practice for teachers at all three centres as part of their planning cycles and involved teachers observing and writing notes on the children’s behaviour and learning. As the children were used to this practice they appeared to accept the researcher’s explanation that she was writing stories about the things that they (the children) did at the centre. They were used to not interrupting teachers who were writing learning stories and so did not attempt to interact with the observer whilst she was making notes. However, when the observer was not sitting making records the children approached her, which reinforces the notion that she successfully adopted the role of participant observer.

For the audio recordings the participants were asked by the researcher if they would look after the MP3 for her so that she could learn more about the kinds of things that they did at the centre. Recordings were made of the three children at Kowhai Kindergarten (Sita, Kamesh and James) and three of the five children at Bay Preschool (Georgia, Ian and Ruby). David and Melissa and the four participants at North Road Learning Centre were unwilling to wear the recorder.

The behaviour of the three children attending Kowhai Kindergarten appeared unaffected by the wearing of the MP3 recorder and they became easily habituated to its presence. Following an initial inspection of the recorder they allowed the researcher to place it in a suitable pocket or inside their clothing and resumed their play without further examination until the end of the session or observation. However, all three participants
at Bay Preschool who agreed to wear the recorder had difficulties with habituation. Georgia agreed to wear the recorder for her second observation but displayed non-typical behaviour for her whilst doing so. She sat alone reading and watching the researcher for 30 minutes after which she removed the recorder from her pocket and handed it back to the researcher, went outside, joined a friend and interacted verbally with the friend and teachers for the remaining of the observation period. Ian was very enthusiastic about wearing the recorder. He asked the researcher the name of the device and repeated ‘MP3’ slowly and distinctly for the first five minutes. He then appeared to become distracted by his play in the sand and did not mention it or handle it again. Ruby agreed to wear the recorder for two observations. The first time she proudly showed it to her friends and to her teachers. After approximately ten minutes she put it back under her clothing and appeared to forget it. On the second occasion she showed it to one teacher half way through the observation period and then returned it under her t shirt. Because of this problem with habituation with the recorder it was decided to complete the observations at Bay Preschool using field notes and running records alone as this method was considered to provide more reliable samples of their usual behaviour (Thomas, 2003).

The researcher’s observation reliability was checked through the use of a research assistant. The assistant was an experienced early childhood teacher. She was trained by the researcher to use the Observation Record Table designed for the inter-observer check (Appendix G). The table consisted of three sections. Section A required the observer to indicate the initiator of each interaction during the observation (focus child, teacher, or peer). Section B listed the possible recipients of the interaction (focus child, peer, teacher, small group, or large group) and Section C asked the observer to indicate whether the interaction was initiated by a statement, an attention gaining remark, a
direction, a question, or praise. The training session lasted one hour after which a trial observation resulted in 100% agreement calculated by dividing the number of agreements by the agreements plus disagreements then multiplied by 100 (Miller, 2007). A total of ten, ten minute observations were then completed on nine individual children attending Kowhai Kindergarten. Inter-observer agreement varied from 75% to 100% with an average of 86% and a mean of 84%. This is considered a high level of inter-rater reliability for observational studies conducted in educational settings (Hohepa, Williams, & Barber, 2006; Miller, 2007).

The researcher’s reliability for coding the observation transcripts was checked by two research assistants. These two experienced researchers were trained in the coding system by the researcher. The training sessions lasted one hour. Following training a trial coding of an observation resulted in 84% agreement between the researcher and assistants. This was calculated by dividing the number of agreements by the agreements plus disagreements then multiplied by 100 (McNaughton, Mac Donald, Barber, Farry, & Woodward, 2002). 20% of the observations were coded by the assistants to check for researcher coding reliability which resulted in an average of 87% agreement which is considered a high level of reliability (Miller, 2007).

**BPVS procedure**

The BPVS was used to provide an indicator of the children’s progress in English language acquisition in addition to the audio recordings and running records of their spoken, or productive, English.

The researcher was trained in the correct administration and scoring of the BPVS by her supervisor who has extensive experience in the use of the scale.
The child participants were tested at the beginning, after four months, and at the end of the nine months data collection period. The participants were withdrawn from mat times to complete the test with the researcher at a table in their centre or room. This ensured that the test would not be interrupted and that the participants remained in familiar surroundings. Eleven of the twelve children carried out the test willingly on each of the three rounds. Kamesh, James and Ian asked to repeat the test on a number of occasions. However, one child, David, was reluctant to participate. He refused in the first round of the test when the other children completed it, but agreed later, at the end of the first set of observations with his sister present. David agreed to complete the test for the second round with his mother present. However, during the test his mother prompted him by whispering to him in Chinese so his results may not have been valid. David’s sister Georgia’s second round results were also likely to be affected by the presence of their mother. Georgia appeared more nervous than usual, possibly because her mother was present in the centre and her raw score in the test remained the same as the first round.

**Teacher questionnaire procedure**

The teachers of the child participants were invited to participate in the study. They were asked to complete the questionnaire before the observations of part two of the study began so that the data collected was not affected by any discussion or reflection prompted by the observations. Teacher consent involved the completion of a teacher questionnaire and consent form. The head teachers of the three centres distributed the Teacher Participant Information Sheets and Teacher Consent forms (Appendix C) together with the Teacher Questionnaires (Appendix E) to the relevant teachers at their centres. Teachers at Kowhai Kindergarten and North Road Learning Centre teachers were asked by their head teacher to complete the questionnaire in their own time. Bay Preschool teachers discussed their centre’s participation during a staff meeting and
collectively agreed to allocate time for completion of the questionnaires during the meeting.

All teachers invited to participate consented and completed the questionnaire except one in preschool room one in North Road Learning Centre. She was provided with a duplicate set of documents and given verbal reminders by her senior teacher and the researcher. She eventually gave verbal consent to being observed whilst interacting with the child participants but did not complete the questionnaire using lack of time as a reason for not doing so.

Completed consent forms and questionnaires were returned to the researcher via the head teachers or managers of the centres.

**Parental Questionnaires procedure**

The data from the parental questionnaire was used to compare the children’s language experiences at home at the end of the study, with their experiences at the beginning, as identified at the initial semi-structured interviews.

Parents of the ten child participants remaining in the study for the sixth round of observations were invited to meet with the researcher for a brief discussion or to complete a questionnaire (Appendix F) to identify any changes that had occurred in the child participants’ home or community language experiences during the study that may have impacted on its findings. The mothers of two participants at Kowhai Kindergarten met with the researcher informally at the end of a kindergarten session and also completed the written questionnaire. The parents of the third participant at Kowhai Kindergarten did not respond. The parents of the five participants at Bay Preschool and the two remaining at North Road Learning Centre all returned completed questionnaires.
3.4 Chapter summary

This longitudinal mixed method comparison study was designed to examine the programmes and practices used by different types of English medium ECCs with a focus on the language acquisition opportunities for children who are lone speakers of home languages other than English.

Written and audio data from observations of participants’ interactions with teachers and peers enabled the frequency and quality of these interactions to be compared across centres and across individual participants.

Semi-structured interviews and questionnaires were used to gain insight into the child participants’ language experiences at home at the beginning and end of the study, and teacher questionnaires provided data on the qualifications and language learning and teaching experiences of the teachers at the three centres. The results of the BPVS were used to compare the participants’ receptive English progress individually and across the centres with their language experiences at the centres and home.

The data collected using these methods and measures is presented in the next four chapters: Participant interactions with teachers; Participant interactions with peers; Participants English language abilities and Differences in Temporal Environments.
This chapter identifies the similarities and differences in the frequency and nature of interactions between the child participants and their teachers. It compares the frequency of interactions initiated by the teachers and by the child participants across the three centres; compares the lengths of interactions between teachers and individual children; identifies the types of utterances used by the teachers to initiate and extend these interactions; and finally, identifies the strategies used by the child participants to gain the attention of their teachers.

All interactions between child participants and teachers referred to in this chapter were in English. Although eight of the teachers were bilingual or multilingual, the languages that they spoke did not generally reflect the home languages of the child participants. However, where the teacher’s languages did match those of the participants, the teachers did not speak those languages at the centres. The reasons for this were not identified.

### 4.1 Frequency of teacher-child participant interactions

**Teacher-child participant interactions - Individual children**

Table 2 shows the total number of interactions individual child participants had with their teachers during the observations. For participants who completed six observations, the total number of interactions with teachers varied from 83 for James at Kowhai Kindergarten to 26 for Georgia at Bay Preschool.

The interactions between the teachers and child participants were initiated by the teachers more frequently with six of the twelve child participants. Three of these attended Bay Preschool; David (teacher initiated interactions = 40/ total teacher-
participant interactions = 47), Georgia (19/26) and Ruby (47/78), and three attended North Road Learning Centre; Jessica (33/63), Na Soon (22/28) and Jordan (14/14). The other six child participants initiated a higher proportion of their interactions with teachers themselves. This group included the three that attended Kowhai Kindergarten, James (participant initiated interactions = 60 / total teacher-participant interactions = 83), Sita (32/55) and Kamesh (37/65); two of the five attending Bay Preschool, Ian (38/57) and Melissa (18/34) and So Yeon (14/19) at North Road Learning Centre.

**Teacher-child participant interactions across centres**

A comparison was made between the centres mean frequencies of interactions between the child participants and their teachers. Mean frequencies were calculated by dividing the sum of the interactions initiated by teachers at each centre by the number of participants at that centre. The two child participants that withdrew before the end of the study were not included in this calculation. The data, shown in Table 2, indicate that the teachers at the three centres initiated very similar numbers of interactions per child participant: 24.0 at Kowhai Kindergarten; 28.2 at Bay Preschool and 27.5 at North Road Learning Centre. However, the teachers at Kowhai Kindergarten initiated similar numbers of initiations with the three children at the kindergarten whereas the teachers at Bay Preschool and North Road Learning Centre initiated more interactions with some children than with others. This is shown in the differences in standard deviations (Table 2) which varied considerably from 6.24 at Kowhai to 14.57 at Bay Preschool and 11.9 at North Road.

A comparison was also made between the centres mean frequencies of interactions initiated by the child participants towards their teachers. Mean frequencies were calculated by dividing the sum of the child participant initiated interactions with teachers
by the number of child participants at each centre. These calculations were based on the number of children completing the study. The data in Table 2 shows that there was a difference in the frequency of interactions initiated by the child participants at the three centres. The child participants at Kowhai Kindergarten initiated an average of 43 interactions with their teachers which is more than twice as many as participants at Bay Preschool with 20.2 and North Road Learning Centre with 18. The standard deviations for these interactions indicated that there were similar variations in child interaction scores at each centre.
<table>
<thead>
<tr>
<th>Kindergarten/Learning Centre</th>
<th>Interactions initiated by the teachers</th>
<th>Interactions initiated by the participants</th>
<th>Total number of interactions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kowhai Kindergarten</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>James</td>
<td>23</td>
<td>60</td>
<td>83</td>
</tr>
<tr>
<td>Sita</td>
<td>23</td>
<td>32</td>
<td>55</td>
</tr>
<tr>
<td>Kamesh</td>
<td>27</td>
<td>37</td>
<td>65</td>
</tr>
<tr>
<td>Total</td>
<td>73</td>
<td>129</td>
<td>203</td>
</tr>
<tr>
<td>Mean (SD)</td>
<td>24.0 (6.24)</td>
<td>43.0 (14.93)</td>
<td>67.6</td>
</tr>
<tr>
<td>Bay Preschool</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>David</td>
<td>40</td>
<td>7</td>
<td>47</td>
</tr>
<tr>
<td>Georgia</td>
<td>19</td>
<td>7</td>
<td>26</td>
</tr>
<tr>
<td>Ian</td>
<td>19</td>
<td>38</td>
<td>57</td>
</tr>
<tr>
<td>Ruby</td>
<td>47</td>
<td>31</td>
<td>78</td>
</tr>
<tr>
<td>Melissa</td>
<td>16</td>
<td>18</td>
<td>34</td>
</tr>
<tr>
<td>Total</td>
<td>141</td>
<td>101</td>
<td>242</td>
</tr>
<tr>
<td>Mean (SD)</td>
<td>28.2 (14.57)</td>
<td>20.2 (14.02)</td>
<td>49</td>
</tr>
<tr>
<td>North Road Learning Centre</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jessica</td>
<td>33</td>
<td>30</td>
<td>63</td>
</tr>
<tr>
<td>Na Soon</td>
<td>22</td>
<td>6</td>
<td>28</td>
</tr>
<tr>
<td>Jordan*</td>
<td>14</td>
<td>0</td>
<td>14</td>
</tr>
<tr>
<td>So Yeon**</td>
<td>5</td>
<td>14</td>
<td>19</td>
</tr>
<tr>
<td>Total</td>
<td>74</td>
<td>50</td>
<td>124</td>
</tr>
<tr>
<td>Mean (SD)</td>
<td>27.5 (11.90)*</td>
<td>18 (13.00)*</td>
<td>45.5</td>
</tr>
</tbody>
</table>

*Note:* *mean based on the two participants who completed six observations
* 4 observations of the possible 6
** 3 observations of the possible 6
4.2 Initiators used by teachers to initiate interactions with child participants

Questions, directions and explanations

The interactions initiated by teachers with the child participants at the three centres were then compared for similarities and differences in the types of initiators used. The teachers’ interaction initiators were coded using NVivo8 under five level three (grandchild) nodes: question; direction, for example teachers asking child participants to complete a routine behaviour such as ‘wash your hands’ or to guide a child participants behaviour such as ‘Eat without talking please’; a combination of a direction and question; a combination of direction and explanation and lastly, ‘other’, which included greetings, praise and comments and observation statements. The categories were identified by the researcher through her knowledge of the data.

Teachers at all three centres used questions alone to initiate more than 30% of their interactions with the child participants. Kowhai Kindergarten teachers used questions to initiate 28 of their 73 interactions (39%); Bay Preschool teachers used them as 48 of their 141 initiators (34%) and North Road Learning Centre teachers asked questions to initiate 27 of their 74 interactions (37%).

Teachers at all three centres also used directions to initiate interactions with the child participants. However, unlike the similar proportions of questions across the three centres the frequencies of the use of directions varied between the three centres. The teachers at North Road Learning Centre used more directions to initiate interactions at 38 of 74 (52%) compared to the Bay Preschool teachers with 60 of 141 (42%) and Kowhai Kindergarten teachers with 20 of 73 (27%).

As shown in Table 3 the data for Bay Preschool were affected by the teachers’ high frequency of directions addressed to Ruby and David. Ruby was a challenging child
needing constant reminding of acceptable behaviour and routine behaviours such as putting shoes in the correct place. David was a very quiet child who needed encouragement to interact with the toys and other children in the room. Teachers initiated 27 interactions using directions with Ruby and 20 with David compared with two with Georgia, four with Melissa and seven with Ian.

The teacher use of combined questions and directions to initiate interactions varied across centres. Kowhai teachers used combinations of questions and directions to initiate interactions with two of their three participants; Bay Preschool teachers with three of their five child participants; and North Road Learning Centre teachers with just one of their four participants. These types of initiators were directed towards some children more than others. For example, the teachers at Kowhai used combinations of questions and directions once with James, twice with Sita and not at all with Kamesh. While, the teachers at Bay Preschool used question and direction combinations once with Georgia and Ian, and twice with Ruby, but not with David or Melissa; and the North Road learning Centre teachers used one question and direction combination with So Yeon and none with the other three participants.

These combinations of questions and directions varied in length and in complexity of language. Those used by the teachers at Kowhai Kindergarten consisted of 10 words (James), 17 and 6 words (Sita). The four combinations used by Bay Preschool teachers consisted of 12 words (Georgia), 15 words (Ian), and 10 and 21 words (Ruby); and the one occurrence at North Road Learning Centre with So Yeon comprised of seven words. As shown in the examples below, the longer combination of directions and questions were more complex than the shorter ones requiring the children to listen carefully, process the question and then respond in more depth.
Jan, a teacher at Bay Preschool saw Ruby changing her clothes. She used three directions and one question (21 words) to initiate her interaction:

**Jan:** Pick up your clothes please. Put your clothes into your bag please. Put your bag in your locker. Where’s your locker? (21 words)

And Kowhai teacher Lauren used a seventeen word direction and question combination to support Sita to complete an obstacle course:

**Lauren:** OK, now over the green box, over the bridge. Now can you climb up on the box? (17 words)

In contrast the shorter question and direction interaction initiators required less language processing to answer. These were used by Nicky at North Road learning centre who approached So Yeon working on a jigsaw.

**Nicky:** Can I help you? Try this one (7 words)

and Lauren at Kowhai Kindergarten when she supported Sita in making her birthday hat:

**Lauren:** You have to choose. What colour? (6 words)

Explanations were used in combinations with directions but were not used alone at any of the centres during the observations. Explanation combinations were used by Kowhai Kindergarten teachers to initiate three interactions with one participant (James) and by Bay Preschool teachers with three participants; two with David, one with Ian and four with Ruby. The teachers at North Road used no explanations to initiate interactions with their four participants.

The combinations of explanations and directions used by teachers to initiate interactions varied from 6 to 39 words at Bay Preschool and 17 to 33 words at Kowhai Kindergarten.
An example from Kowhai Kindergarten occurred when James banged on the side of the train in the outdoor play area.

**Lauren**: James, can you not do that please because we’re going to sing the wheels on the train (17 words)

An example from a Bay Preschool teacher occurred when Shirley spoke to Ian about him playing with a game that he was being careless with

**Shirley**: You asked me if you could play and I said it was fine and you would put it away when you had finished. I don’t like the way you are playing so I want you to put them away (39 words)

<table>
<thead>
<tr>
<th>Table 3: Teacher interaction initiators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher initiators</td>
</tr>
<tr>
<td>James</td>
</tr>
<tr>
<td>Sita</td>
</tr>
<tr>
<td>Kamesh</td>
</tr>
<tr>
<td>Questions</td>
</tr>
<tr>
<td>Directions</td>
</tr>
<tr>
<td>20</td>
</tr>
<tr>
<td>Combination of question and direction</td>
</tr>
<tr>
<td>Combination of direction and explanation</td>
</tr>
<tr>
<td>Other – (praise, greeting, comment or observation)</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

Note: * = participant withdrew after 4 observations of the possible 6
** = participant withdrew after 3 observations of the possible 6
The teachers’ use of closed and open ended questions to initiate interactions

The questions used by teachers to initiate interactions with the child participants were then categorised into two groups; closed and open ended. The closed questions were defined as either expecting yes or no answers or requiring the child to state an observation or recall a fact previously known to both the teacher and the child. Children were not necessarily required to give a verbal answer but could respond non verbally with a nod or gesture. Open ended questions were defined as those requiring thinking responses (Eliason & Jenkins, 2008) and promoting higher order thinking where the answers were not predetermined by the teacher (Siraj-Blatchford & Manni, 2008). Open questions generally began with words such as: how, why or what.

The overall trends of the teachers’ use of questions to initiate interactions with the participants at the three centres are shown in Table 4 (closed questions) and Table 5 (open questions).

Closed questions – teacher interaction initiators

The teachers at all three centres used more closed questions than open ended questions to initiate interactions with the child participants. Kowhai teachers used 28 questions, 25 (86%) of which were closed: Bay teachers used 48 questions 30 (62%) of which were closed and North Road teachers asked 27 questions all of which were closed.

To identify similarities or differences in the types of closed questions used by the teachers at the three centres the questions were further coded as: yes/no questions; questions used to encourage or discourage behaviour and questions used to ask children to recall vocabulary or information.
Yes/No questions

As shown in Table 4 the teachers at the three centres used yes/no questions to initiate interactions with the child participants. However, the proportion of yes/no questions to the total number of closed questions asked by the teachers at each of the three centres varied. Eighteen of the 25 closed questions used by Kowhai Kindergarten teachers to initiate interactions were yes/no, 17 of the 30 closed questions asked by the teachers at Bay Preschool were yes/no, and 23 of the 27 closed questions asked by teachers at North Road Learning Centre asked were yes/no questions.

The yes/no questions asked by the teachers at Kowhai Kindergarten were longer on average than those asked at Bay Preschool and North Road Learning Centre. The mean length of the yes/no questions asked by the teachers at Kowhai Kindergarten was 6.35 words with a median of 6 varying from 3 to 15. In comparison, at Bay Preschool there was a mean length of 5.6 words with a median of 4 and a range of 4 to 10 words, and at North Road Learning Centre the mean length of words was 4.27 with a median of 5 and a range of 2 to 7 words.

A greater proportion of the yes/no questions asked by teachers at Bay Preschool and North Road Learning Centre were related to care, for example, asking the children if they had washed their hands. Nine of the 17 (53%) yes/no questions asked by Bay teachers were concerned with care and eight (47%) with the activities. Eleven of the 23 (47%) yes/no questions asked by North Road teachers were related to care and 12 (53%) related to activities. In comparison, three of the 18 yes/no questions (16%) that the teachers at Kowhai Kindergarten asked were related to the care of the children and 15 (77%) were related to the activities such as asking children if they have finished the activity, and one question asked Sita about her younger sister.
The yes/no questions were further categorised into simple and complex. The simple yes/no questions required the child to respond to questions such as ‘Did I do (print) your hands?’ (Jessica at North Road Learning Centre Road) or when Shirley asked Melissa at Bay Preschool ‘Do you want to do a picture?’ when Melissa sat down at the art table. The complex category of yes/no questions included questions that required the child participant to process the question and consider their answer before answering yes or no. For example, when Ian had a disagreement with his friend Blake, Lyn asked Ian ‘Do you want to say something to Blake?’ This question required Ian to consider the meaning behind the question; decide whether he should be the one to apologise consider if he was willing to do so and then answer yes or no.

The proportions of simple and complex yes/no questions asked by the teachers to initiate interactions with the child participants varied between the three centres. A higher frequency of complex yes/no questions were asked by teachers at Kowhai Kindergarten and Bay Preschool. Eight of the 18 (42%) yes/no questions asked by teachers at Kowhai Kindergarten were complex. These were directed towards all three children, namely Kamesh, James and Sita. An example of these questions was when Sharon pointed to another girl’s art work where she had used dye to colour her drawing and asked Sita ‘Do you want to come and put some dye on (your drawing) just like that?’ This question required Sita to look at the example identified by the teacher, consider the technique and decide for herself whether she wanted to add dye to her work. Nine of the seventeen (53%) yes/no questions asked by the teachers at Bay Preschool to initiate interactions were complex. These were directed at all five participants; David, Georgia, Ian, Ruby, and Melissa. An example of a complex yes/no question asked by a Bay Preschool teacher was when Tracey observed Ian playing in the block area. Ian removed the blocks from the shelf and lay on the shelf. Tracey asked ‘You’ve become a block have you
Ian? Ian considered the question, realised that Tracey was making a joke, smiled and answered ‘Yes’. Four of the 23 (18%) yes/no questions asked by the teachers at North Road Learning Centre teachers were complex. These were directed at three of the four participants; Jessica, Na Soon and Jordan. For example, Jean asked Jordan ‘Are you going to help Robert? Jordan had to look to see what Robert was doing and decide whether he wanted to help. So Yeon was asked one yes/no question and this was categorised as simple.

Teachers at Kowhai Kindergarten and Bay Preschool also used yes/no questions as initiators of interactions to introduce new vocabulary. For example, Lauren asked Kamesh ‘Do you like the green playdough?’ She emphasised the word green so that Kamesh would hear the word more clearly than the rest of the question. Later, during the same observation Lauren asked ‘Are you cutting the paper Kamesh?’ to support Kamesh’s pronunciation of the word cut. At Bay Preschool, Bob the cook asked a complex yes/no question about mushrooms to introduce new English vocabulary to David. As he offered David some pizza Bob asked: ‘Do you like mushrooms?’ Bob pointed to the mushrooms on the pizza and emphasised the word as he asked the question. David had to decide whether he liked mushrooms and if he wanted pizza with mushrooms. In contrast to Kowhai Kindergarten and Bay Preschool the teachers at North Road Learning Centre did not use yes/no questions to introduce or support the learning of new vocabulary with any of the other child participants attending the centre.

There were also differences between the centres in the extent to which teachers used observation prior to initiating child interactions with closed questions. For example, Janice at Kowhai Kindergarten observed and listened carefully to Kamesh playing in the sandpit with a truck and talking to himself before intervening:
Kamesh: Oh the cake wo cake. Where’s my cake mix. Chocolate. Chocolate? OK. One more chocolate. I chocolate on my truck

Janice: Are you putting chocolate all over your truck?

Kamesh:Yep!

The teachers at Bay Preschool observed the children in a similar way to the teachers at Kowhai Kindergarten. The teachers’ initial questions were thus relevant to the child’s play and learning. For example, Jan observed David playing with some wooden blocks which he posted one by one behind the overhead projector that was set up against the wall. Jan asked ‘Are you hiding them David?’. The teachers at North Road Learning Centre appeared not to observe the children before initiating interactions using closed questions.

**Questions to encourage or discourage behaviour**

Questions were used as interaction initiators by teachers to encourage or discourage behaviour five times by the teachers at Kowhai Kindergarten; nine times by teachers at Bay Preschool; and three times by teachers at North Road Learning Centre. The teachers at Bay Preschool used this strategy with all five of their child participants; three times with David and Ruby and once each with Georgia, Ian and Melissa. For example, Bob, the cook at Bay Preschool reminded David about a lunch time routine. He asked David ‘Do you need a cup?’ David had collected a plate and spoon from the kitchen bench forgetting a cup. Another example at Bay Preschool that involved two questions was used by Lyn to remind Ruby of an expected behaviour. Lyn asked Ruby, ‘Are your boots dirty? Do you need to take them off?’ Veena at North Road Learning Centre asked Jordan ‘Are you going to help Richard?’ to encourage him to tidy up the toy cars that he had been playing with.
Recall questions

The teachers at Bay Preschool initiated three interactions with recall questions; two with Ian and one with Ruby. Shirley asked Ian ‘When is your party?’ and Tracey asked him ‘What have you been doing today?’ when she knew that he had been painting. In comparison the one recall question asked by Veena at North Road Learning Centre was related to recall of vocabulary; Veena pointed to a frying pan and said to Jessica ‘OK. What is this?’ The teachers at Kowhai Kindergarten did not use recall questions to initiate interactions with the child participants.

Table 4: Closed question initiators used by the teachers at the three centres

<table>
<thead>
<tr>
<th>Types of teacher closed question initiators:</th>
<th>Kowhai Kindergarten n=8</th>
<th>Bay Preschool n=30</th>
<th>North Road Learning Centre n=19</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total (%*)</td>
<td>Total(%*)</td>
<td>Total (%*)</td>
</tr>
<tr>
<td>Yes/no</td>
<td>18 (61)</td>
<td>17 (35)</td>
<td>23 (81)</td>
</tr>
<tr>
<td>Encourage or discourage behaviour</td>
<td>5 (18)</td>
<td>9 (19)</td>
<td>3 (11)</td>
</tr>
<tr>
<td>Check teacher child understanding</td>
<td>2 (7)</td>
<td>1 (2)</td>
<td>0</td>
</tr>
<tr>
<td>Recall questions</td>
<td>0</td>
<td>3 (6)</td>
<td>1 (8)</td>
</tr>
<tr>
<td>Total closed questions</td>
<td>25 (86)</td>
<td>30 (62)</td>
<td>27 (96)</td>
</tr>
<tr>
<td>Total all questions</td>
<td>28</td>
<td>48</td>
<td>27</td>
</tr>
</tbody>
</table>

Note: n= number of observations completed at each centre
*=percentage of total number of questions asked by teachers to initiate interactions

Open ended questions - teacher interaction initiators

Open ended questions were used less frequently than closed questions to initiate interactions with the child participants by the teachers at all three centres. As shown in Table 5, Kowhai Kindergarten teachers asked three open ended questions to initiate interactions, representing 11% of the total number of questions used, whereas the Bay
Preschool teachers asked 13 open ended questions, 27% of the total questions. The teachers at North Road Learning Centre used no open questions to initiate interactions.

All three of the open ended questions asked by teachers at Kowhai Kindergarten to initiate interactions with participants were related to the participants’ learning. For example Lauren asked Sita ‘What does it feel like?’ when Sita was playing with gloop. In comparison, seven of the thirteen open ended questions asked by teachers to initiate interactions with participants at Bay Preschool were related to care, for example, ‘Oh! How did that happen?’ (Georgia) when a partition board fell over near to Georgia making her jump out of the way; and when David began to cry for no apparent reason a relieving teacher asked ‘What is wrong?’ The remaining six open ended questions asked by teachers at Bay Preschool to initiate interactions were related to the child participants’ activities. Examples include ‘What did you draw Georgia?’ and Shirley asked Ian about his drawing of a sports car ‘Where’s the engine going?’

One combination of open and closed questions was asked at Kowhai Kindergarten during the child participant observations. This occurred when Kamesh sat down at a computer keyboard in the office socio-dramatic play area: Janice observed this and asked Kamesh ‘Are you going to do writing as well? What do you need?’

All five child participants at Bay Preschool were asked one open ended question in combination with a closed question. An example of one of these types of questions was when Therese noticed that Melissa’s sleeve was wet and asked her ‘What’s happening to your sleeve? Is it wet?’

The teachers at North Road Learning Centre did not use open questions either alone or in combination with closed questions to initiate interactions with the child participants during the observations.
Table 5: Open question initiators used by the teachers at the three centres

<table>
<thead>
<tr>
<th>Types of teacher open question initiators</th>
<th>Kowhai Kindergarten n=18</th>
<th>Bay Preschool n=30</th>
<th>North Road Learning Centre n=19</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total (%)</td>
<td>Total (%)</td>
<td>Total (%)</td>
</tr>
<tr>
<td>Open question</td>
<td>3 (11)</td>
<td>13 (27)</td>
<td>0</td>
</tr>
<tr>
<td>Open/closed question combinations</td>
<td>1 (4)</td>
<td>5 (10)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Total all questions</td>
<td>28</td>
<td>48</td>
<td>26</td>
</tr>
</tbody>
</table>

*Note: n= number of observations completed at each centre
* = percentage of total number of questions asked by teachers to initiate interactions

Summary of the interaction initiators used by the teachers at the three centres

The data showed that the teachers at the three centres initiated similar numbers of interactions with the child participants. However, whereas the teachers at Kowhai Kindergarten initiated a similar number of interactions with each of their three child participants, the teachers at Bay Preschool and North Road Learning Centre initiated more interactions with some children than with others. The data also showed that the Kowhai Kindergarten child participants initiated twice as many interactions, on average, with their teachers than the children at Bay Preschool and North Road Learning Centre. Moreover, the three Kowhai Kindergarten child participants plus Ian and Melissa at Bay Preschool and So Yeon at North Road Learning Centre initiated more interactions with their teachers than their teacher initiated with them.

The teachers at the two all day centres, Bay Preschool and North Road Learning Centre, used directions to initiate interactions more often than the teachers at Kowhai Kindergarten and they also used questions to encourage good behaviour.

The Kowhai Kindergarten and North Road Learning Centre teachers used a higher proportion of yes/no questions to initiate interactions. However, the yes/no questions
asked by the Kowhai Kindergarten and Bay Preschool teachers were more complex compared to the simple yes/no questions asked by the North Road Learning Centre Road Learning Centre teachers.

Bay Preschool teachers used open ended questions more than twice as often as the teachers at Kowhai Kindergarten to initiate interactions; however, the teachers at North Road Learning Centre did not use any open questions as initiators to interactions.

A greater proportion of the interaction initiators including open questions and directions at Bay and North Road Learning Centre were related to care whereas more of those used at Kowhai were related to the activities.

### 4.3 The length of interactions initiated by the teachers

Across the three centres there were differences in the length of interactions initiated by the teachers. Comparisons between centres were made by calculating the number of turns involved in each interaction. The initial turn was defined as the turn made by the teacher to initiate the interaction. Subsequent turns were defined as verbal contributions made by the teacher or the child participant during that discreet interaction. For example an Initiation Response and Evaluation [IRE] interaction (Siraj-Blatchford & Manni, 2008) consisting of a teacher initiation followed by a child response and then by the teacher’s evaluation of the child’s response would be considered three turns.

Table 6 provides a comparison of the frequencies of interactions initiated by the teachers consisting of three or less turns; four to nine turns; and ten or more turns across the centres. The table identifies the frequency of each category and the percentage this represents of the total number of interactions. The data shows that the majority of interactions at all three centres initiated by the teachers consisted of three or less turns. However, the teachers and child participants at Kowhai Kindergarten and Bay Preschool...
had a greater frequency of reciprocal interactions lasting four to nine turns; compared to the teachers and participants at North Road. Moreover, the teachers and participants at Kowhai Kindergarten had a higher proportion of extended reciprocal interactions lasting more than ten turns than those at Bay and North Road. The participants at Kowhai thus spoke more per observation on average with their teachers during interactions initiated by teachers than those at Bay Preschool or North Road Learning Centre.

Table 6: Lengths of interactions initiated by the teachers at the three centres

<table>
<thead>
<tr>
<th>Number of turns</th>
<th>Kowhai Kindergarten n=18</th>
<th>Bay Preschool n=30</th>
<th>North Road Learning Centre n=19</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total (%)</td>
<td>Total (%)</td>
<td>Total (%)</td>
</tr>
<tr>
<td>1-3</td>
<td>38 (52)</td>
<td>89 (61)</td>
<td>66 (87)</td>
</tr>
<tr>
<td>4-9</td>
<td>23 (31)</td>
<td>46 (33)</td>
<td>9 (12)</td>
</tr>
<tr>
<td>&gt;10</td>
<td>12 (16)</td>
<td>9 (6)</td>
<td>1 (1)</td>
</tr>
<tr>
<td>Total number of interactions</td>
<td>73</td>
<td>144</td>
<td>76</td>
</tr>
</tbody>
</table>

Note: n = number of observations completed at the centre

The frequency of extended reciprocal interactions, consisting of more than 10 turns for individual child participants was then compared. This identified the child participants who participated in these extended interactions and compared the frequency of longer interactions across centres. Table 7 shows that two participants at Kowhai Kindergarten, Kamesh and Sita participated in seven and five interactions respectively of more than ten turns; David at Bay Preschool had four long interactions; Georgia had two and the other three participants at Bay Preschool and Na Soon at North Road participated in one long interaction each and James at Kowhai Kindergarten and Na Soon, Jordan and So Yeon at North Road Learning Centre had no interactions of more than ten turns.
The interactions of more than ten turns were further examined to see if these longer interactions occurred more frequently at any particular period of the study. The results shown in Table 7 indicate that there was no relationship between the interactions of more than ten turns and the timing of the observation during the data collection period.

Table 7: Frequencies of interactions of >10 turns by child participant and observation

<table>
<thead>
<tr>
<th>Observation</th>
<th>Kowhai Kindergarten n=18</th>
<th>Bay Preschool n=30</th>
<th>North Road Learning Centre n=19</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>James  Sita  Kamesh</td>
<td>David  Georgia  Ian  Ruby  Melissa</td>
<td>Jessica  Na Soon  Jordan  So Yeon</td>
</tr>
<tr>
<td>1</td>
<td>0 2 0</td>
<td>2 1 0 1 0</td>
<td>0 0 0 0</td>
</tr>
<tr>
<td>2</td>
<td>0 1 0</td>
<td>1 1 0 0 0</td>
<td>0 0 0 0</td>
</tr>
<tr>
<td>3</td>
<td>0 0 1</td>
<td>0 0 1 0 1</td>
<td>0 0 0 0</td>
</tr>
<tr>
<td>4</td>
<td>0 0 3</td>
<td>0 0 0 0 0</td>
<td>0 0 0 0</td>
</tr>
<tr>
<td>5</td>
<td>0 1 2</td>
<td>1 0 0 0 0</td>
<td>0 0 0 0</td>
</tr>
<tr>
<td>6</td>
<td>0 1 1</td>
<td>0 0 0 0 0</td>
<td>0 1 0 0</td>
</tr>
</tbody>
</table>

Note: n = number of observations completed at the centre

4.4 Teacher strategies to extend interactions with child participants

As shown in the previous section the child participants at Kowhai Kindergarten and Bay Preschool were more likely to participate in interactions of four or more turns with their teachers than the children at North Road Learning Centre. To ascertain how the teachers at Kowhai Kindergarten and Bay Preschool were able to extend their interactions with the child participants and to see if they used different strategies to the teachers at North Road Learning Centre, the teachers' utterances at the three centres during their interactions were further investigated.
The teacher-child participant interactions were compared for similarities and differences in the types and frequency of utterances that the teachers used both as interaction initiators and during the interactions. The teachers’ utterances were coded into open questions; closed questions; explanations, for example ‘if you shake them (hands) you might get it (gloop) on people’; directions, for example, ‘put your stickers on here’; and other statements that included teachers ‘I’ statements, for example ‘I like tomatoes’; praise, for example ‘you’ve made awesome pictures already’; and statements that encouraged the children’s verbal or physical participation for example ‘Perhaps you could put more glitter on’.

**Teachers questions that extended interactions with child participants**

The frequencies of open and closed question used by the teachers at each centre were calculated as percentages of the total numbers of questions the teachers asked the child participants at each centre. These percentages are shown in Table 8. This calculation allowed the comparison of all of the child participants at the three centres including Jordan and So Yeon who were observed four and three times respectively compared to the six observations of the other participants.

Table 8 shows that the teachers at Kowhai Kindergarten asked more questions on average per observation with an average of 17.5 questions per observation compared to 9.4 at Bay and 6.5 at North Road. But the ratio of open ended questions to closed questions was greater at Bay Preschool than at Kowhai Kindergarten and North Road Learning Centre.
Table 8: Teacher questions used to initiate and extend interactions

<table>
<thead>
<tr>
<th>Type of Question</th>
<th>Kowhai Kindergarten n=18</th>
<th>Bay Preschool n=30</th>
<th>North Road Learning Centre n=19</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total (%)</td>
<td>Total (%)</td>
<td>Total (%)</td>
</tr>
<tr>
<td>Closed</td>
<td>272 (86)</td>
<td>211 (75)</td>
<td>112 (90)</td>
</tr>
<tr>
<td>Open</td>
<td>44 (14)</td>
<td>71 (25)</td>
<td>12 (10)</td>
</tr>
<tr>
<td>Total</td>
<td>316</td>
<td>282</td>
<td>124</td>
</tr>
<tr>
<td>Mean questions per observation **</td>
<td>17.5</td>
<td>9.4</td>
<td>6.5</td>
</tr>
</tbody>
</table>

Note:  
 n = total number of observations completed at each centre  
* = percentage of total number of questions asked by teachers at the centre  
** = mean calculated by dividing the total number of questions asked by the total number of observations completed at the centre

The total frequencies of closed questions used by the teachers to both initiate and during their interactions with the child participants were then categorised and compared to identify any similarities or differences between the three centres. Six categories were used. Four were the same as those to compare teachers’ closed questions to initiate interactions with the child participants. These were simple yes/no questions; questions used for behaviour guidance; questions to check the teachers understanding of the meaning or wants of the children, and recall questions. Two additional categories of closed questions were used by teachers during interactions. The first invited participants to select from options given by the teacher as part of the question, for example, ‘Which one (hoop) did you want? Big or small?’ The second new category consisted of questions that were generally addressed to a group of children including the child participant giving him/her the option to participate in an activity, for example, ‘Who wants to play a game on the grass with me?’
The frequencies of each type of closed question by centre are shown in Table 9. The teachers at all three centres used predominantly yes/no questions with participants. This was higher at North Road Learning Centre whose teachers used yes/no questions for 58 of their 112 (52%) closed questions compared to Bay Preschool with 84 of 211 (40%) and Kowhai Kindergarten at 94 of 272 (35%).

Kowhai teachers used 36 (13%) closed questions to check their understanding of the children’s utterances and wants compared with 16 (8%) at Bay Preschool and 7 (6%) at North Road Learning Centre. In comparison the teachers at Bay used a greater percentage of their closed questions to guide the children’s behaviour than Kowhai and North Road teachers.

Kowhai Kindergarten teachers and North Road Learning Centre teachers asked recall questions for 19% and 20% of their total closed questions compared to Bay Preschool teachers who asked 13% recall questions.
Table 9: Closed questions used by teachers to initiate and extend interactions

<table>
<thead>
<tr>
<th>Category of closed question</th>
<th>Kowhai Kindergarten n=3</th>
<th>Bay Preschool n=5</th>
<th>North Road Learning Centre n=4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total (%)</td>
<td>Total (%)</td>
<td>Total (%)</td>
</tr>
<tr>
<td>Yes/no</td>
<td>94 (35)</td>
<td>84 (40)</td>
<td>58 (52)</td>
</tr>
<tr>
<td>Encouraging or discouraging behaviour</td>
<td>69 (25)</td>
<td>67 (32)</td>
<td>10 (9)</td>
</tr>
<tr>
<td>Checking understanding</td>
<td>36 (13)</td>
<td>16 (8)</td>
<td>7 (6)</td>
</tr>
<tr>
<td>Recall</td>
<td>54 (20)</td>
<td>27 (13)</td>
<td>21 (19)</td>
</tr>
<tr>
<td>Children asked to respond to or make choices from options</td>
<td>14 (5)</td>
<td>3 (1)</td>
<td>2 (2)</td>
</tr>
<tr>
<td>General Invitations to participate</td>
<td>5 (2)</td>
<td>8 (4)</td>
<td>1 (1)</td>
</tr>
<tr>
<td>Total</td>
<td>272</td>
<td>211</td>
<td>112</td>
</tr>
</tbody>
</table>

Note: n = number of child participants at each centre
* = percentage of total number of closed questions

Teachers at all three centres used open questions to initiate and extend their interactions with the child participants. To compare the types of open questions used by the teachers at the three centres these open ended questions were categorised as what, where, how, why or other questions. The frequencies of the types of questions asked by teachers at the centres were calculated as percentages of the total number of open ended questions asked.

As shown in Table 10, teachers at all three centres used ‘what’ questions more frequently than the other categories. An example of a what question was when Janice at Kowhai asking Kamesh ‘What’s going to make it (the block) dry?’ when he was helping her to pile up the wooden blocks in the sun. North Road teachers used the greatest proportion of what questions compared with Kowhai Kindergarten teachers and Bay
Preschool teachers. ‘Why’ questions were also asked by teachers at all three centres although less frequently than ‘what’ questions. An example of a ‘why’ question was when Lyn at Bay Preschool asked Ruby ‘Why do you want to change your pants?’

In addition to ‘what’ and ‘why’ questions, Kowhai Kindergarten and Bay Preschool teachers also asked ‘where’ questions. Kowhai teachers asked the greater proportion compared to Bay Preschool teachers. The North Road teachers asked no ‘where’ questions. An example of a ‘where’ question from Bay Preschool was when a teacher observed Ian laying on the wooden block shelf and asked him ‘Where will we keep our blocks now?’

The teachers at Kowhai Kindergarten and Bay Preschool also asked ‘How’ questions. Kowhai Kindergarten teachers asked 2 (4.5%) and Bay Preschool teachers asked 11 (15%) ‘how’ questions compared to none asked by the teachers at North Road Learning Centre. An example of a ‘How’ questions at Bay occurred when Tracey observed Ruby and a group of girls playing with sand and bubble water. Tracey asked Ruby about her friend, ‘How did she get the bubbles in her hand?’

The ‘other’ category included nine questions at Bay Preschool and two at Kowhai Kindergarten two at North Road Learning Centres. These questions began with ‘Does’, ‘Can’, ‘I wonder’, ‘Are’ and ‘Perhaps’. For example Shirley asked Ian ‘Can you tell me about your car?’ when he was drawing a car at the art table.
Table 10: Open questions used by teachers to initiate and extend interactions

<table>
<thead>
<tr>
<th>Types of open ended questions</th>
<th>Kowhai Kindergarten (n=18)</th>
<th>Bay Preschool (n=30)</th>
<th>North Road Learning Centre (n=19)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total (%)</td>
<td>Total (%)</td>
<td>Total (%)</td>
<td></td>
</tr>
<tr>
<td>What</td>
<td>29 (66)</td>
<td>42 (59)</td>
<td>9 (75)</td>
</tr>
<tr>
<td>Where</td>
<td>8 (18)</td>
<td>8 (11)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>How</td>
<td>2 (4.5)</td>
<td>11 (15)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Why</td>
<td>3 (7)</td>
<td>2 (3)</td>
<td>1 (8)</td>
</tr>
<tr>
<td>Other</td>
<td>2 (4.5)</td>
<td>9 (13)</td>
<td>2 (17)</td>
</tr>
<tr>
<td>Total</td>
<td>44</td>
<td>71</td>
<td>12</td>
</tr>
</tbody>
</table>

Note: n = number of observations completed at the centre
* = percentage of total of all open ended questions

Teacher directions, explanations and comments to extend interactions with child participants

In addition to the open and closed questions asked by the teachers at the three centres both to initiate and during interactions with the child participants, the teachers gave directions, used explanations, and made other comments. These were categorised into the three types and compared for similarities and differences. Directions included the teachers asking children to carry out certain tasks or behaviours, for example, Veena told Na Soon to ‘lie down’ during an interaction that she initiated with her to try to settle her to sleep. Explanations were given by the teachers to accompany some directions and described or justified as to why that direction had been given, for example, Lyn at Bay Preschool directed Ruby to put on her pants and jumper and explained that this was because Ruby had a head cold with a runny nose and needed to keep warm. Comments included observations for example ‘Wow, look how many drops (gloop) Sita has got’ (Lauren to Sita); praise, for example ‘Well done So Yeon’ (Jean to So Yeon) and general statements such as ‘Oh we’ve already had that one’ (Janice to Kamesh).
As shown in Table 11 the teachers at all three centres used directions during interactions with the participants. The North Road Learning Centre teachers used a greater frequency of directions than the teachers at Bay Preschool and Kowhai Kindergarten (NR:74%; KK:30%; BP:54%).

Explanations were used with directions by teachers at all three centres. Table 11 shows that the teachers at Kowhai Kindergarten used 11 direction explanation combinations (10%) the Bay Preschool teachers used eight direction explanation combinations (9%), the North Road Learning Centre Teachers used two direction explanation combinations (3%). These frequencies of direction explanation combinations indicate that the teachers at Kowhai Kindergarten and Bay Preschool made three times more direction explanation utterances than the teachers at North Road Learning Centre. Moreover, as shown earlier, the teachers at Kowhai Kindergarten and Bay Preschool used explanations more frequently than North Road Learning Centre teachers to initiate interactions.

Comments were used more frequently by the teachers at Kowhai Kindergarten than teachers at Bay Preschool and North Road Learning Centre. These comments were used more frequently during interactions of more than 10 turns and appeared to be used to encourage the participants to take another turn and so extend the interaction. For example, Sharon used the comment ‘Oh I like the smell of those’ to Vikrant during an interaction in the sand pit when Vikrant was ‘cooking’. Sharon’s comment prompted Vikrant to respond ‘Mm. I make chocolate cake’.

The teachers at Kowhai Kindergarten and Bay Preschool used selections of questions, directions and comments during their extended interactions (>10 turn) with participants. For example a relief teacher at Bay Preschool used comments, directions and questions during an interaction of 43 turns with Georgia. Georgia was playing outside in the block
area on the deck. She was pretending to cook and had set up some pans and plates amongst the blocks. The teacher initiated the interaction with a question ‘What are you doing?’ Georgia responded by saying she was cooking and the conversation continued with the teacher using comments such as ‘yum that looks good; directions, for example, ‘Be careful it’s hot’; open questions such as ‘How do you cook?’ when Georgia explained that the oven was broken; and closed questions such as ‘Is that your oven?’ (Georgia).

Janice at Kowhai Kindergarten used a combination of questions, explanations and comments during an interaction with Kamesh. The comments were in the form of encouragement and praise. Kamesh approached Janice and watched her stacking wooden blocks to dry in the sun after they had been washed. Janice began the interaction by explaining what she was doing and then asked him to help. She praised him when he placed his first block on the pile to encourage him to continue and then asked ‘What’s going to make it dry?’ When Kamesh did not respond Janice realised that he had not understood and explained: ‘We’re putting them in the sun to dry’. She then encouraged Kamesh to speak by asking him where he was going to put the block and when he looked through a hole in the stack she asked ‘What can you see when you look through there?’ (Kamesh).
Table 11: Frequencies of directions, explanations and comments used by teachers to initiate and extend interactions

<table>
<thead>
<tr>
<th>Types of teacher utterances</th>
<th>Kowhai Kindergarten n=18</th>
<th>Bay Preschool n=30</th>
<th>North Road Learning Centre n=19</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total (%*)</td>
<td>Total (%*)</td>
<td>Total (%*)</td>
</tr>
<tr>
<td>Direction</td>
<td>37 (30)</td>
<td>87 (54)</td>
<td>52 (74)</td>
</tr>
<tr>
<td>Direction and Explanation</td>
<td>11 (10)</td>
<td>15 (9)</td>
<td>2 (3)</td>
</tr>
<tr>
<td>Comment</td>
<td>72 (60)</td>
<td>58 (37)</td>
<td>16 (23)</td>
</tr>
<tr>
<td>Total utterances</td>
<td>120</td>
<td>160</td>
<td>70</td>
</tr>
</tbody>
</table>

Note:  
*n* = number of observations completed at the centre  
* = percentage of directions plus explanations and comments

### 4.5 Child participant strategies to gain the attention of teachers

An attention gaining attempt was defined in this study as an attempt made by the participants to gain the attention of the teacher with the intention of initiating an interaction. These attempts involved the child approaching a teacher who was involved in another activity, possibly with another child. Attention gaining attempts did not include interactions where the teacher was working alongside, observing or aware of the participant’s intentions prior to the attempt. Each attention gaining attempt was categorised as successful or unsuccessful. Successful attempts were when the child received the attention that he/she sought, for example, praise for a drawing, or help with an activity. Unsuccessful attempts were those that received no response from the teacher.

Table 12 shows that all twelve participants were observed attempting to gain their teachers attention during the observations and that they were all more successful than unsuccessful in gaining the attention that they sought. The success rate at gaining the
attention they sought was similar across the centres (KK: 75%; BP: 73%; NR: 85%). However, the Kowhai Kindergarten participants made more than twice as many attempts to gain their teachers’ attention than the participants at the other centres.

The strategies used by the individual participants varied in type and success. James at Kowhai Kindergarten used the strategy of saying ‘look’ to a teacher seven times and gained the attention he sought each time he used this strategy. Ian at Bay Preschool also successfully used the word look: Ian got a car out of his pocket and held it out for teacher Shirley to see:

- **Ian:** Look at my car  
- **Shirley:** that’s a great car

Ian pointed to the car’s exhaust

- **Ian:** fire  
- **Shirley:** exhaust

By pointing to the exhaust pipe on the toy car and saying ‘fire’ he provoked Shirley into giving him the English word ‘exhaust’.

James at Kowhai Kindergarten also sought vocabulary from his teacher Sharon. He painted a picture at the easel inside and took it into the outside area to show Sharon.

James held his painting in front of Sharon:

- **James:** Look!  
- **Sharon:** James will you look at that. Let me look at your picture  
- **James:** that’s the black and the, and the orange one.  
- **Sharon:** orange one?  
- **James:** Yep and the black is that. This one is . . . black?  
- **Sharon:** It’s a kind of mustard yellow

James’ used the interaction with Sharon to provoke her into provided him with the colour name that he did not know.
Another successful strategy for James and also one used successfully by Ian at Bay Preschool was to describe his play to the teacher, for example he put on a fireman’s hat and approached Janice:

**James:** I fireman

**Janice:** A what

**James:** A firemen

**Janice:** You’d better go and do your job

**James:** Eh?

**Janice:** You’d better go and do your job if you’re a fireman

Kamesh used the strategy of calling out the teachers name seven times in all over the six observations and he was successful in gaining the teachers attention only three of these times. This strategy did not work for him but it did work well for Sita. Although Sita was in competition with the other children for the teachers’ attention at the kindergarten in the same environment as Kamesh, she did have more success in gaining their attention. Sita called teachers by name or ‘teacher’ eight times and was successful in receiving the attention she required all of these times.

Melissa at Bay Preschool successfully used non verbal strategies to gain teachers’ attention. Melissa made four nonverbal attempts and was successful with three of these. During lunch Melissa’s water cup was empty. She held it up to show the teacher with the water jug who poured her some more water. During a later observation Melissa went outside to the climbing frame. After climbing to the top and sitting down she looked around and waved at a teacher who waved back. Whilst these non-verbal strategies were successful in gaining the teachers attention they did not provoke the teacher into providing English language acquisition opportunities.
Ruby also used non verbal strategies to gain a teacher’s attention. For example, Ruby picked up her work and showed it to Lyn who was passing the table. Lyn responded by asking ‘Don’t you need your name? Ask Jan to write your name’. Ruby then turned to Jan who had heard Lyn’s direction and who then wrote Ruby’s name on her work without any prompting from Ruby.

David was most successful at using nonverbal strategies, for example, he carried his lego model to Jan and lifted it up to show it to her. Jan looked and praised David exclaiming how good it was. David made only one verbal attempt to gain a teacher’s attention. He held up a lego person and tried to attract Nan’s attention by saying ‘I got this! I got this! I got this!’ David’s verbal attention gaining strategy was unsuccessful and he did not try any further verbal strategies.

Participants at North Road Learning Centre attempted to gain their teachers attention more frequently for help with clothing or to alert teachers to other children’s behaviour. For example, Jessica approached teacher Jean and held out her cardigan saying ‘I can’t do it’. Jean made no verbal response but helped Jessica to put on her cardigan. On two occasions So Yeon gained a teacher’s attention by pointing out other children’s behaviour. For example, So Yeon saw another girl helping herself to a large quantity of food at morning tea. So Yeon called to Veena, ‘Jessica has lots of food’. Veena responded ‘She has lots of food on her plate has she? Well she knows the rules. She must finish it before she leaves (the table)’.
Table 12: Participants’ attempts to gain attention from their teachers

<table>
<thead>
<tr>
<th>Attempt at gaining teachers attention</th>
<th>Kowhai Kindergarten</th>
<th>Bay Preschool</th>
<th>North Road Learning Centre</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>James</td>
<td>Sita</td>
<td>Kamlesh</td>
</tr>
<tr>
<td>Successful attempts</td>
<td>21</td>
<td>20</td>
<td>18</td>
</tr>
<tr>
<td>Unsuccessful attempts</td>
<td>5</td>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td>Total</td>
<td>26</td>
<td>26</td>
<td>30</td>
</tr>
<tr>
<td>Mean attempts per observation</td>
<td>4.3</td>
<td>4.3</td>
<td>5.0</td>
</tr>
<tr>
<td>Successful attempts for centre</td>
<td>$59/82 = 72%$</td>
<td></td>
<td>$25/34 = 73%$</td>
</tr>
</tbody>
</table>

4.6 Chapter summary

This chapter has identified some similarities and differences between the child participants’ interactions with teachers. The data showed that on average the teachers at the three centres initiated similar numbers of interactions with the child participants. A difference was found between the types of interaction initiators used by the teachers across the three centres. Kowhai Kindergarten and Bay Preschool teachers used more complex initiators such as open questions and combinations of questions, directions and explanations; whereas the teachers at North Road Learning Centre used more directions and simple closed questions to initiate interactions.

During the interactions the teachers at all three centres were observed asking the child participants open and closed questions; however, twice as many questions were asked by the Kowhai Kindergarten teachers per observation compared to Bay Preschool and three times as many as North Road Learning Centre. Overall the questions asked by teachers
at Kowhai Kindergarten and Bay Preschool were seen to be more complex and have more variety than those at North Road Learning Centre.

All of the child participants attempted to gain the teachers’ attention during the observations but there were differences in the frequency, the success rate, and the reasons for attention. The participants at Kowhai made more than twice as many attempts on average per observation to gain their teachers’ attention compared to the child participants at the other centres, however, the success rate at the three centre was similar.
Chapter Five: Interpersonal environment: Child participant interactions with peers

This chapter identifies similarities and differences in the child participants interactions with peers both individually and across the three centres. It compares the frequencies of interactions initiated by the participants and interactions initiated by peers; compares the frequencies of the participants’ interactions with special friends and other peers; and then presents data on three specific types of language experiences identified through the coding: social (behaviour); problem solving; and playing with sounds and rhymes. Lastly the chapter identifies different types of strategies used by the participants to gain their peers’ attention and the success or otherwise of these strategies.

Transcripts of the child participants’ interactions with their peers were coded using NVivo initially under two nodes; interactions with peers initiated by participants, and interactions with peers initiated by peers. The contents of these nodes were further coded into interactions with special friends and interactions with other peers. The participants’ interactions with peers were also categorised into interactions that demonstrated social skills, problem solving, and playing with sounds and rhymes.

5.1 Frequencies of interactions between child participants and their peers

Table 13 shows the frequencies of interactions of the child participants with their peers, and provides a comparison of the interactions initiated by the participants and those initiated by participant’s peers. Table 13 also shows the participants’ frequencies of interactions with teachers for comparison with frequency of interactions with peers.
Five participants, all girls, Sita (KK), Melissa (BP), Georgia (BP), Na Soon (NR) and So Yeon (NR) interacted more frequently with their peers than they did with their teachers. The remaining seven participants, two girls and all five boys interacted more with their teachers than with their peers.

The total number of interactions between the child participants and their peers for those participants who completed six observations was between 73 and 23. James and Sita at Kowhai Kindergarten had the most interactions with their peers at 73 and 70 respectively, compared to David at Bay Preschool who had the least interactions (23) with his peers.

The average number of participant interactions with peers was then compared across centres. The mean number of interactions by observation at each centre was calculated by dividing the total number of interactions between participants and peers at the centre by the total number of observations at the centre. The calculation showed that the participants at Kowhai Kindergarten interacted with their peers on average 10.5 times per observation compared to participants at Bay Preschool and North Road Learning Centre who both averaged 6.8 interactions per observation.

The extent to which participants initiated interactions with peers themselves was then compared by centre. Nine of the twelve participants initiated more than half of their interactions with their peers themselves. These were all three participants at Kowhai Kindergarten, (James, Sita and Kamesh), four of the five participants at Bay Preschool, (Georgia, Ian, Ruby and Melissa), and two of the four participants at North Road Learning Centre (Na Soon and So Yeon). The remaining three participants David and Jessica and Jordan initiated 41% or less of their interactions with peers themselves.
Table 13: Frequencies of interactions between child participants and their peers

<table>
<thead>
<tr>
<th>Participant</th>
<th>Interactions initiated by child participant.</th>
<th>Interactions initiated by peer</th>
<th>Total interactions with peers</th>
<th>Total interactions with teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total (%a)</td>
<td>Total (%a)</td>
<td>Total (%b)</td>
<td>Total (%b)</td>
</tr>
<tr>
<td>Kowhai Kindergarten n=18</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>James</td>
<td>43 (59)</td>
<td>30 (41)</td>
<td>73 (47)</td>
<td>83</td>
</tr>
<tr>
<td>Sita</td>
<td>42 (60)</td>
<td>28 (40)</td>
<td>70 (56)</td>
<td>55</td>
</tr>
<tr>
<td>Kamesh</td>
<td>33 (70)</td>
<td>14 (30)</td>
<td>47 (42)</td>
<td>65</td>
</tr>
<tr>
<td>Mean interactions per obs</td>
<td>190/18=10.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bay Preschool n=30</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>David</td>
<td>7 (30)</td>
<td>16 (70)</td>
<td>23 (33)</td>
<td>47</td>
</tr>
<tr>
<td>Georgia</td>
<td>19 (55)</td>
<td>17 (45)</td>
<td>36 (59)</td>
<td>26</td>
</tr>
<tr>
<td>Ian</td>
<td>32 (60)</td>
<td>21 (40)</td>
<td>53 (48)</td>
<td>57</td>
</tr>
<tr>
<td>Ruby</td>
<td>39 (78)</td>
<td>11 (22)</td>
<td>50 (42)</td>
<td>79</td>
</tr>
<tr>
<td>Melissa</td>
<td>27 (60)</td>
<td>17 (40)</td>
<td>44 (56)</td>
<td>34</td>
</tr>
<tr>
<td>Mean interactions per obs</td>
<td>205/30=6.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>North Road Learning Centre n=19</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jessica</td>
<td>21 (41)</td>
<td>30 (59)</td>
<td>51 (45)</td>
<td>63</td>
</tr>
<tr>
<td>Na Soon</td>
<td>24 (58)</td>
<td>17 (42)</td>
<td>41 (59)</td>
<td>28</td>
</tr>
<tr>
<td>Jordan*</td>
<td>4 (31)</td>
<td>9 (69)</td>
<td>13 (48)</td>
<td>14</td>
</tr>
<tr>
<td>So Yeon**</td>
<td>19 (76)</td>
<td>6 (24)</td>
<td>25 (57)</td>
<td>19</td>
</tr>
<tr>
<td>Mean interactions per obs</td>
<td>130/19=6.8</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note:*  
- n = total number of observations at the centre  
- a = percentage of participant’s total interactions with peers  
- b = percentage of total interactions with peers and teachers  
- * = 4 observations completed  
- ** = 3 observations completed
5.2 Nature of child participant interactions with peers

To further compare the nature of the interactions of the child participants with their peers individually and across the three centres the interactions were coded under three categories: interactions with special friends; interactions with boys who were not special friends, and interactions with girls who were not special friends. Special friends were classified as peers whom the participant sought out and specifically chose to play with during two or more of the observations. Special friends were identified by the researcher or indicated by the participant’s teachers. As shown in Table 14, there were differences between the types of peers with whom the individual child participants interacted.

Interactions with special friends

Table 14 shows that six of the twelve participants had one or more special friends: the three participants attending Kowhai Kindergarten (James, Sita, Kamesh), one of the five participants at Bay Preschool (Ian), and two of the four participants at North Road (Na Soon, So Yeon). The special friends were all of the same gender as the participants.

David and Georgia were siblings and chose to interact together, which they did in Mandarin (their home language). Similarly, Na Soon and So Yeon had Korean speaking friends attending the class next to Preschool two. They played with these friends in the shared outdoor play area and interacted in Korean. Neither Na Soon or So Yeon had interactions with special friends in English.

Ian’s (BP) relationship with his friend Blake was the most active of all of the friendships of the study participants. They were friends throughout the study. They had shared interests in drawing and cars. Ian interacted with Blake during each of his six observations and initiated 26 interactions with him. The teachers at Bay Preschool
reported that Ian and Blake played together at weekends at each others’ homes as well as during the week at the centre.

Ian and Blake seemed to be aware of the role and responsibilities of friends. For example when playing in the sandpit Ian lost his ‘weenie’, a small toy that he had brought to the centre from home. Ian called out to Blake:

\[
\begin{align*}
\text{Ian:} & \quad \text{I can’t find my weenie. I can’t find my weenie. Oh I can’t find my weenie. I need help Oh I can’t find it I need help to find my weenie} \\
\text{Blake:} & \quad \text{I will help} \\
\text{Ian:} & \quad \text{I want the teacher for help} \\
\text{Blake:} & \quad \text{You got a friend to help. You got to come with me and find it} \\
\text{Ian:} & \quad \text{OK its down there in the sandpit}
\end{align*}
\]

Ian and Blake searched for the weenie together.

Ian and Blake had disagreements. However, they demonstrated social skills to maintain the friendship, for example during observation three the boys had a disagreement. They made friends again after Ian apologised.

Ian and Blake were sitting at an art table drawing. Blake pointed to his picture:

\[
\begin{align*}
\text{Blake:} & \quad \text{This is lollipop playland} \\
\text{Ian:} & \quad \text{I’m going to make a lollipop playland. My lollipop playland is better than yours!} \\
\text{Blake:} & \quad \text{I don’t like that. Yours is sucky} \\
\text{Ian:} & \quad \text{No} \\
\text{Blake:} & \quad \text{My one isn’t sucky} \\
\text{Ian:} & \quad \text{No you can’t do one like mine} \\
\text{Blake:} & \quad \text{No you can’t do one like mine} \\
\text{Ian:} & \quad \text{No you can’t do one like mine} \\
\text{Blake:} & \quad \text{No you can’t do one like mine} \\
\text{Ian:} & \quad \text{No you can’t do one like mine}
\end{align*}
\]
Blake stood up and left the table. He walked around the outdoor area and then returned to the table. Ian looked at Blake

**Ian:** Sorry

**Blake:** That’s ok

Ian and Blake carried on drawing

In comparison to Ian and Blake’s friendship, which was established before the beginning of the study (teacher’s communication), Sita (KK) was observed forming special friendships during the study. In observations one, two and three Sita played alone, or interacted with peers that were at the activities that she chose. From observation four however, she began interacting more frequently with two girls Lindsey and Dana. During observations four, five and six Sita initiated 13 interactions with these two girls.

When forming these friendships Sita faced a dilemma that was not observed in any of the other participants. Lindsey and Dana were close friends, and Dana resisted Sita’s attempts to enter into their friendship. However, Sita showed perseverance in trying to make friends even though she was frequently ignored. For example:

Sita held up a card badge she had made to show Lindsay and Dana

**Sita:** Hey I make

Lindsey and Dana looked and saw the badge. They continued talking to each other. Sita approached Lindsey and tried to give her the badge

**Sita:** Hey Lindsay it’s for you

Lindsay ignored Sita, made eye contact with Dana and they left Sita alone at the art table.

**Interactions with peers other than special friends**

Table 14 shows that all participants interacted with peers other than those who were special friends. The four participants that had no special friends or siblings interacted only with ‘other’ peers. These were Ruby and Melissa at Bay Preschool and Jessica and Jordan at North Road Learning Centre. As previously stated the participants’ special
friends were more frequently of the same gender as themselves. Similarly, the majority of the participants (9/12) interacted more frequently with non special friend peers of the same gender as themselves. The three exceptions were Sita who initiated more interactions with boys than girls; David who interacted with girls more than boys, and So Yeon who had more interactions with boys than girls.

Table 14: Participant initiated interactions with special friends, boys and girls

<table>
<thead>
<tr>
<th>Interactions with:</th>
<th>Kowhai Kindergarten n=18</th>
<th>Bay Preschool n=30</th>
<th>North Road Learning Centre n=19</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>James</td>
<td>Sita</td>
<td>Kamesh</td>
</tr>
<tr>
<td>Special friend</td>
<td>7</td>
<td>13</td>
<td>7</td>
</tr>
<tr>
<td>Boys other than special friends</td>
<td>30</td>
<td>19</td>
<td>21</td>
</tr>
<tr>
<td>Girls other than special friends</td>
<td>6</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>43</td>
<td>42</td>
<td>33</td>
</tr>
</tbody>
</table>

Note: n = total number of observations at the centre
* = 4 observations completed
** = 3 observations completed

5.3 Language experiences with peers

The following section describes selected participant-peer interactions that show differences in the individual participants’ social skills and behaviours and how these may have influenced the type of language experiences that they had with their peers. The types of interactions between the child participants and their peers varied in type and
content across the individual participants and no differences in patterns were observed between the three centres.

**Social skills - Behaviour**

As the following examples show, the social skills used by the participants to gain interactions with peers differed between individuals. The social skills used by the participants affected the amount of exposure that the individuals had to the English of their peers. Two participants, Ruby (Bay Preschool) and Kamesh (Kowhai Kindergarten) were observed displaying negative or aggressive behaviour. Six participants, Sita and James (Kowhai Kindergarten) Ian, Melissa and Georgia (Bay Preschool) and Jessica (North Road Learning Centre), displayed positive friendly behaviour. The remaining four participants David (Bay Preschool) and Jordan, Na Soon and So Yeon (North Road Learning Centre) were not observed displaying either positive or negative social skills with English speaking peers.

Ruby (Bay Preschool) spent time in both the two year olds’ room and the three to five year olds’ room. When interacting with the two year olds, Ruby instigated arguments over toys and displayed aggressive behaviour. For example, Ruby tried to gain a boy’s attention while he was playing with the wooden blocks by calling his name. When he did not respond Ruby knocked down his tower of blocks to gain his attention. The boy then ignored Ruby and rebuilt his tower. During the same observation Ruby hit a boy with her shoe for no apparent reason and also tried to take the wooden people shapes on the overhead projector [OHP] from a girl who was playing with them. When the girl resisted by holding onto the shapes Ruby moved the lens of the OHP so that the reflection was not on the wall thereby spoiling the girl’s game. Ruby did not participate in extended interactions with any of her peers in the two year olds’ room. Although Ruby was
exposed to the English language of her peers through listening to their conversations she
did not benefit from English language acquisition opportunities through interactions with
these children. However, in contrast, to her negative social behaviour in the two year
olds’ room, when in the older children’s outdoor area, Ruby used more acceptable social
skills to gain access to the toys. For example, Ruby approached a girl who was playing
with some dolls in the boat. Ruby asked permission to play with one of the dolls and
then checked that it was alright for her to play in the boat alongside the other girl before
getting into the boat and interacting with the girl while playing with the dolls.

Kamesh (Kowhai Kindergarten) was observed using body language and shouting to
show his displeasure when peers did not play with him the way that he thought they
should. When playing at the carpentry table a girl said something to him that he did not
like. Kamesh stamped his foot, stared and raised his hand to strike her and ran towards
her. Later in the study when Kamesh had acquired more language he was playing in the
water tray with John. The boys began by playing alongside each other taking turns to
verbally comment and monitor their play. Kamesh then tried to take control of the game
telling John what he should do:

    Kamesh: no more more Look at the big tower. No more water
              here no NO more. I put my one OK? I put my one OK?
              Look at my one. Look at my one here. HEY! More water. I
              WANT A MORE. THIS MY ONE. PUT MY ONE HERE
              PUT MY ONE

John looked at Kamesh shouting and said ‘I’m going’, and he went to play elsewhere.
Kamesh thus lost the opportunity to interact further with John.

During another observation Kamesh was playing in the sandpit filling the back of a large
truck with sand. David approached and Kamesh invited him to play
Kamesh: Hey want to do this?
David: Yes what’s that?

David started to dig. Kamesh looked at David’s digging.

Kamesh: NO NO. MAKING … Oh come on come and … me Err you finished doing? YOU … THIS ONE. Come see mine. Open this, covers this one. Oh what’s this one now?

David then moved to the other side of the sandpit and played alone.

On each of these occasions Kamesh behaved in a manner that made peers cease playing with him, limiting his exposure to peers’ English and thus his English language acquisition opportunities.

An example of social behaviour that provided the participant with prolonged exposure to peers’ English language was shown by Melissa (Bay Preschool). Melissa appeared to have developed strategies that gained her interactions with peers and to provoke them into providing her with appropriate language acquisition opportunities. Melissa spent all of her time in the older children’s area and displayed cooperative behaviour with peers during all of her observations. Melissa’s older sister Chantelle, attended the centre for the first four observations before she commenced primary school. During the observations when Chantelle was present Melissa participated in play initiated by Chantelle’s friends who were at least one year older than her. When Chantelle left the centre Melissa continued to interact with these older girls. Melissa invited peers to play, for example she was pretending to make candy floss in the sand pit, and invited Sandra to play with her by saying ‘Do you want to be by me?’ On another occasion Melissa approached a girl who was playing with a pack of wet wipes on the outdoor steps. Melissa asked ‘What you got?’ the girl responded ‘This!’ Melissa sat next to the girl
and they spent the following ten minutes laying the wet wipes on the steps and
discussing them. They talked about the wipes, what they felt like and where they should
be placed on the steps. On other occasions Melissa invited girls to accompany her to
more structured activities such as morning tea. For example Melissa said to Zeana ‘Let’s
go now’ and Zeana accompanied her inside for morning tea. After washing their hands
the girls sat down at a table. They were approached by Bob who served them jelly and
ice-cream, a special treat to celebrate a girl’s birthday. Melissa interacted with two other
girls at her table as well as Zeana and also with Bob. They discussed birthdays and
birthday food for fifteen minutes.

Problem Solving
Two participants Georgia (Bay Preschool) and James (Kowhai Kindergarten) were
observed using problem solving skills during the study. The other study participants
were not observed solving problems, but this does not imply that they were not involved
in such activities at times when the researcher was not present. On two occasions
Georgia solved problems involving resources. The first example involved Melissa, also a
study participant, and occurred during Melissa’s sixth observation. Georgia and Melissa
picked up a piece of shiny red foil at the same time. They both said that they had it first.
Georgia folded the piece of foil in half, cut it along the fold and gave one piece to
Melissa. In this second example, Georgia solved a problem for her peer Susan. Georgia
and Susan were drawing pictures using coloured pencils. They each had a set of pencils
in front of them. Susan looked at the end of the pencil she was using and said ‘This
(black) pencil needs sharpener’. There was no sharpener on the table. Georgia looked at
Susan’s pencil and then down at the crayons in front of her. She picked up a black pencil
and said, ‘I not using black’ and passed Susan her pencil. This suggested that Georgia
was able to solve Susan’s problem and that she was also willing to share equipment.
James (Kowhai Kindergarten) interacted with Ben and Simon to solve a problem with their tricycles. Simon and James were riding two tricycles around the outside path. Simon rode fast and came up behind James and pushed into James’ tricycle. James stopped and got off his tricycle and walked to the back of it. He helped put the front wheel of Simon’s tricycle in the tray behind his own (this meant that Simon could not use the pedals of his tricycle which were attached to the front wheel). The boys then got onto their tricycles and James tried to cycle and pull Simon. James could not turn the pedals because the second tricycle and Simon made it too heavy.

James: Oh I can’t push you
Simon: That one need two...
James: Hey?
Simon: That one need two... go go go.
James: I can’t you too heavy Errr let’s go back?
Simon: Ah
James: Lets go this way?’ and J tries to peddle again
Simon: go go go go

A third boy, Ben, who had been watching this scene approached. James got off his trike and began pushing. Ben helped and together they moved the two tricycles with Simon up the hill.

James: Thank you

Sound and rhyme play
Three participants, Ruby and Ian (BP) and Kamesh (KK) played vocally with sounds and/or words. The other study participants did not do this during their observations. Ruby and Kamesh vocalised language sounds to themselves during private speech. In contrast Ian played with words with his friend Blake.

Kamesh repeated and played with sounds and words that he heard and was learning. For example, he heard a teacher say the word celery when she was talking to another child.
Kamesh repeated the word ‘celery’ to himself very slowly a pronouncing the syllables carefully. Later, when he was searching for a playdough cutter he said ‘tar a ta cutaar mmm da cuttar’ to himself.

Ruby’s (BP) private speech was generally sung and included nonsense words. For example she sang the Happy Birthday song to a doll singing ‘Shagey laurey my sister . . . . . . . . . abey lorey Mummy’.

Ian (BP) was the only participant observed playing with words and rhyming sounds during interactions with his peers. He did this with Blake but not with other peers. For example Ian initiated an interaction using words that rhymed with Blake’s name:

**Ian:** Luckey I said not nuckey, I said hookey
**Blake:** hookey?
**Ian:** Yeh hookey hokey pookey Loockeeeyaaeeeee I coming to . . .

Ian chased Blake to the sandpit.

In observation three Ian and Blake also used nonsense words together. Ian and Blake were standing by the art table. Ian showed Blake a piece of paper.

**Ian:** Hey look . . . . . . . here
**Blake:** Ah bucky cuky . . . .
**Ian:** Look at that
**Blake:** Winky
**Ian:** Weenie? I’ll show you that

Ian went to his cubby. Blake followed and Ian showed Blake a painting in his cubby

**Ian:** I had but my brother took one
**Blake:** silly old tookey
**Ian:** silly old tookey
**Blake:** My Mum says its school time Sticky bird
**Ian:** sticky, sticky, sticky
**Blake:** this is sticky
Ian: Sticky old wider, Sticky old wider, Sticky old wider’

Ian and Blake then went to the book corner.

5.4 Child participants strategies to gain peers attention

Table 15 shows that there were differences in the frequencies and strategies used by the child participants across the three centres to gain the attention of their peers. Comparisons were made to identify the frequencies and strategies used by the child participants to gain the attention of their peers in a similar way to that used to compare those used by participants to gain the attention of their teachers. The content of the category, ‘Child participant initiated interactions with peers’, was further coded under four themes: using one word ‘look’ to draw the peers attention to their activity; calling the peer by name; making extended utterances that included descriptions, questions or comments on their play, and finally the use of non verbal strategies such as holding up a toy or activity to show the peer. Each attention gaining attempt was then categorised as successful or unsuccessful. Successful attempts were when the child received the attention that he/she sought through the peer responding verbally or non verbally. Unsuccessful attempts were those that received no response from the peer.

All of the participants attempted to gain the attention of their peers. However, the participants at Kowhai Kindergarten made more attempts than the participants at Bay Preschool and North Road Learning Centre. James made 11 attempts, Sita 22, and Kamesh 17, compared to the other participants who all made less than five attempts. In comparison to their high success rates in gaining their teachers attention, James, Sita and Kamesh (KK) were less successful in gaining their peers’ attention. In comparison, the Bay Preschool and North Road participants were more successful in gaining their peers’ attention.
Some strategies for gaining peers’ attention were more successful for some participants than others. The word ‘look’ was used successfully by seven participants. For example Kamesh pointed at his painting hanging on the dryer and said to John ‘Look at this’. Calling peers names to gain their attention was not as successful as using the word ‘look’. Six participants used this strategy a total of 13 times but gained a response in only four of these. For example in one attempt by Kamesh to attract the attention of Cody he repeated Cody’s name seven times before he achieved a response

Eleven of the twelve participants used combinations of directions, questions and comments to gain peers attention. These three were categorised together as the participants’ utterances tended to be extended and include comments plus questions or directions and so were difficult to categorise separately. The success of this strategy varied between the three centres. The four participants at North Road Learning centre used this strategy once each and were successful on each occasion. The participants at Bay Preschool used the strategy once or twice each and were successful in only 50% of their attempts whereas the participants at Kowhai Kindergarten made more attempts but were less successful (James 4/7, Sita 1/12, Kamesh 2/9). Sita was the least successful at gaining peers attention using this strategy. She used directions and a comment when she was on a swing in the outdoor area. She called to Louise

\[\text{Sita:} \quad \text{push me (direction) I need me a push (Comment). Louise come push me (direction), Louise push me. Louise, Louise, puuuussshhhhh me Loouuuuissee (direction)}\]

Louise did not acknowledge her.

In contrast James successfully used the question ‘You like?’ to gain help from Steve to push him up the slope on his trike. However, when Sita tried to use a similar approach to
James it did not work for her. Sita was playing in the climbing frame area. She ran to the
swing – and stood by two girls who were climbing the ladder

Sita: I watch you

Girls gave no response

Sita: I going your go what you going . . . . . ?

Girls gave no response

Sita: I going your go what you going . . . . . ?

Girls gave no response

Kamesh used extended utterances to successfully gain peers’ attention. For example
Kamesh was playing in the sandpit alongside two boys. He listened to the boys
conversation before attempting to gain their attention and initiating an interaction:

Kamesh: Look at me I’m diggit, I’m digit on my sandbit sandcastle. OK
I’m finished. Finished? Mmmm will you help with me. Will you
…me with this. I’m trying open this

The two boys stopped what they were doing and looked at Kamesh’s sandcastle.
Table 15: Successful attention gaining strategies with peers

<table>
<thead>
<tr>
<th>Attention gaining strategy</th>
<th>James</th>
<th>Sia</th>
<th>Kamesh</th>
<th>David</th>
<th>Georgia</th>
<th>Ian</th>
<th>Ruby</th>
<th>Melissa</th>
<th>Jessica</th>
<th>Na Soon</th>
<th>Jordan</th>
<th>So Yoon</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>x (n)</td>
<td>x (n)</td>
<td>x (n)</td>
<td>x (n)</td>
<td>x (n)</td>
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<td>x (n)</td>
<td>x (n)</td>
<td>x (n)</td>
<td>x (n)</td>
<td>x (n)</td>
</tr>
<tr>
<td>‘Look’</td>
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<td>4(5)</td>
<td>4(5)</td>
<td>0(0)</td>
<td>0(0)</td>
<td>0(0)</td>
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<tr>
<td>Peer’s name</td>
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<td>1(5)</td>
<td>1(1)</td>
<td>0(0)</td>
<td>0(0)</td>
<td>1(2)</td>
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<td>1(2)</td>
</tr>
<tr>
<td>Direction, question or comment</td>
<td>4(7)</td>
<td>1(12)</td>
<td>2(9)</td>
<td>1(2)</td>
<td>1(1)</td>
<td>1(2)</td>
<td>1(2)</td>
<td>2(2)</td>
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<td>Totals</td>
<td>5(11)</td>
<td>6(22)</td>
<td>8(17)</td>
<td>1(2)</td>
<td>1(1)</td>
<td>2(4)</td>
<td>3(4)</td>
<td>2(3)</td>
<td>2(3)</td>
<td>1(3)</td>
<td>3(4)</td>
<td>6(7)</td>
</tr>
</tbody>
</table>

Note:  x = successful attempts  
       n = total number of attempts

5.5 Chapter summary

This chapter presented data on the interactions of study participants’ with their peers. It showed that girls in the study were more likely to interact with peers than with teachers, in comparison to the boys who interacted more frequently with teachers than peers. The data also showed that the majority of participants (9/12), both boys and girls, interacted more frequently with peers of the same gender as themselves.

The frequency of interactions with peers varied between the participants at the three centres, however the participants at Kowhai Kindergarten interacted with peers more frequently (average of 10.5 interactions per observation), than the participants at Bay (average 6.8) and North Road (average 6.8). Nine of the twelve study participants initiated these interaction with their peers more frequently than their peers initiated interactions. The Kowhai Kindergarten participants made more attempts to gain peers’ attention but appeared to be less successful than the other participants.
Eight of the twelve participants had special friends or siblings. Four of these had special friends who were English native speakers and these friendships provided the participants with a greater exposure to peers’ English. In contrast, the two Korean participants and the two Mandarin speakers spoke their home languages at the centre with their special friends which meant that they spoke more of their first language than English with their peers.
Chapter Six: The ECCs temporal environments

Data from the field notes made during the observations of child participants was used to compare the temporal environments of the study participant centres. The data identified similarities and differences in daily timetables, the organisation of routines such as mat and meal times, and the transitions between these.

6.1 Teacher/centre organisation

Free play sessions

The organisation of the teachers and their responsibilities varied across the three centres. At Kowhai Kindergarten one teacher set up the outside area and stayed outside for the session; the second teacher did the same inside, whilst the third teacher ‘floated’ between the areas depending on where the majority of the children were playing. The teachers at North Road Learning Centre had a similar organisation with two teachers inside, one supervising the art activity, and the third teacher outside. However, the teachers at Bay Preschool had a different organisation; they moved between the inside and outside areas with the children with whom they were interacting. This gave the children continuity in their learning. The teachers at Bay Preschool were able to do this because of their high teacher to child ratio.

Free play activities at Kowhai Kindergarten were set up by the teachers before the children arrived for the session. In comparison, the activities at Bay Preschool and North Road Learning Centre were set up at the beginning of the morning and afternoon sessions whilst the children were present.
Meal times

The teachers’ roles during morning/afternoon tea and lunch times differed across the centres. Tea times at Kowhai Kindergarten consisted of fruit provided by the parents. The teachers served the children who sat on the mat or outside on the wall around the climbing area. The teachers encouraged the use of ‘Please’ and ‘Thank you’. For example Lauren praised Sita when she used the word please when asking for kiwi fruit. The teachers also used fruit time to encourage children to learn the names of fruit. For example

**Judith:** What would you like Kamesh?

Kamesh pointed to a mandarin

**Judith:** That’s mandarin

**Kamesh:** mandarin

Judith gave Kamesh a piece of mandarin

The cook and at least two of the Bay Preschool teachers were present in the dining area whilst the children were eating lunch, and morning and afternoon tea. The teachers did not sit with the children, but moved around the tables assisting the children in eating. The teachers participated in the childrens’ conversations. The teachers encouraged the children to participate in present and non-present talk. As well as discussing what they had been doing at the centre the children related stories of home. For example, Georgia told the people at her table about her father’s accident at work and another time she discussed her preferred style of birthday cake.

During lunch time at North Road Learning Centre the three teachers sat or stood around the tables watching the children eat. Whereas conversations were encouraged during mealtimes at Bay Preschool and at fruit time at Kowhai Kindergarten the participants at North Road were discouraged from speaking whilst they were eating lunch. The teachers
reminded the children of the no talking rule at every lunch time. The interactions that did take place involved present talk around the food, for example, teachers asked children if they wanted a second helping and children asked for more water.

**Transition times**

The three centres used different signals to notify the children of the end of sessions or time for transition between different activities or routines. The transition times in the three centres ran smoothly and the participants at the centres were observed following the signals for tidying up the play areas, washing hands, collecting and clearing plates, and settling for sleep or rest.

The Kowhai Kindergarten teachers used music to notify the children of mat time and clear up time. A recording of a train was played outside and inside so that all of the children and adults could hear this sign that the children should wash their hands and move to the indoor carpet area for mat time followed by fruit time. A song, ‘Its tidy up time’ was played to notify the children that it was the end of the play session and they should put away the toys and equipment that they were using.

In comparison, the Bay Preschool and North Road teachers used verbal prompts to notify the children of the end of the free play sessions. Mat times were announced by the teachers in English or in Maori at both centres. The language used depended on the teachers preference that day. The Bay Preschool teacher of the two year old group called or collected children individually. When these children were settled in their room the teacher taking mat time with the three and four year olds announced mat time and the children then went to their mat. Tidy up times were announced by the teachers. The children were directed to either put away what they had been playing with or were allocated an area to tidy.
The transition times at North Road, were times when the rooms were organised for the next activity. Mat times were used by the teachers to organise the tables for tea and lunch times and also the floor for sleep time.

6.2 Mat times

The programmes of the three centres all included mat times. However, their frequency and lengths varied. Kowhai held one mat time during each session. Bay Preschool and North Road held two mat times in the morning. North Road also held a mat time in the afternoon before afternoon tea.

The teachers and children at Kowhai kindergarten all attended the mat time. One teacher was responsible for planning and leading the mat times for the week. Mat time contents varied. They included stories read by the teacher, taped stories with accompanying big books, action songs and rhymes and movement/dance activities. Children were also encouraged to tell ‘news’ from home or discuss the activities that they had participated in at the centre.

The teachers and children at Bay Preschool attended all mat times. The cook also attended special meetings. The first morning mat time at Bay Preschool was called ‘meeting time’. The younger children including David and Ruby met in the two-year-olds’ room and the older children met in the three to five-year-olds’ room unless something involving all of the children was to be celebrated or discussed, for example Bert’s birthday, when all of the children and teachers met in the older children’s room.

The aim of this brief meeting was to allow teachers and children to greet each other, if they had not done so already, and to discuss the day ahead. Children were encouraged to relate news from home and discuss anything that they wished to do during the coming day. Teachers informed the children of activities that were planned for the day or
discussed any play themes or activities in which the children were currently interested. The second mat time at Bay Preschool was also held separately. The two-year-olds held theirs at 11.45 whereas the three to five-year-olds met later at 12.00 whilst the younger children ate lunch. The two-year-olds’ mat time included a story and songs linked to the interests of one or more of the children in the group. For example, David showed an interest in spiders around the time of observation six and the teacher read a nonfiction book on spiders and led the singing of the song ‘Incy wincy spider’. Another time the two-year-olds were following a theme based on houses. The stories for that week’s mat times were about houses, for example, ‘The house that Jack built’, and the song for the week was ‘This little house’. The mat times for the three to five-year-olds followed a similar format with a story and singing or a rhyme and also included a movement or dance session.

Mat times at North Road Learning Centre were held before morning tea, afternoon tea and lunch. In contrast to the teachers at Kowhai and North Road who all attended the mat times, the teachers at North Road Learning Centre had a different routine. During the mat times before tea times at North Road one teacher took the mat time whilst the second teacher finished clearing up the inside and outside areas and the third teacher prepared the tables for eating and served the food and drink. During the mat time before lunch one teacher took the mat time another prepared the tables and served the lunches into individual bowls and the third teacher organised the beds. Thus the teacher taking the mat time was responsible for teaching all of the children.

The North Road Learning Centre mat times were generally based around the theme being studied and included children and teachers favourite stories and songs. For example the three year olds were interested in firemen and doctors, so the teachers
planned mat times and activities based on people who help us. A recording of a song about a fire engine was used with the matching book at the mat times one week plus other books that were based on the topic. The teachers at North Road Learning Centre used more recorded stories and songs than the teachers at Kowhai Kindergarten and Bay Preschool.

6.3 Free play

The three centres all provided a variety of activities for the children to engage in during free play sessions. These included art activities, socio-dramatic play, construction toys, puzzles, pre-reading and writing materials, climbing frames, and outdoor ride on toys, sand and water play, playdough, and clay. This section describes differences between the nature of the art activities and the socio-dramatic play opportunities available to the participants at the three centres.

Activities

All three centres provided art activities for the children daily. The interactions of the participants with teachers and peers at these art activities varied with the organisation of the activity. Kowhai Kindergarten and Bay Preschool teachers provided two or more art activities each session/day. The participants at these centres engaged in the art activities according to their interest and the teachers moved to the activities with the children. In addition to this, Kowhai Kindergarten and Bay Preschool participants also had access to paper, pencils, crayons, felt pens, sticky tape, scissors and staplers at all times. In contrast, North Road had one art activity each session, and a transition to school writing activity each week.

The art activities at Kowhai Kindergarten were planned to provide the children with a variety of experiences and were implicit in nature. Each activity was planned to provide
a learning experience related to the children’s interests. For example, during the third round of the study observations, children were showing interest in the shapes of the construction toy pieces. The teachers planned a printing table using the pieces of construction toys. During the next round of observations the children were experimenting with glue and paint. The teachers set up a multi medium activity including coloured paper, glue, dye and glitter that enabled the children to experiment with the materials together. Teachers interacted with the participants at the art tables. They provided support and encouragement but did not direct the children’s activity.

The art activities at Bay Preschool focussed on encouraging the children to explore artefacts, materials and equipment. For example, a flower and some shells were arranged on a table with mirrors to encourage the children to see and draw them from different perspectives. Dye was placed in glass containers to allow the children to see the colour through the glass, and paper was provided for the children to paint using the dye. Ian and three other boys showed an interest in cars. The teachers bought a set of small toy cars for them to play with and provided magazines and books about cars. During one afternoon session the teachers displayed the cars on an art table with the magazines and provided paper and paints. The boys were attracted to the table and painted pictures of cars. Whilst they were drawing the following interactions took place:

Blake looked at Ian’s drawing

**Blake:** Is that a robosapian?

Leannne (teacher) looked at Ian’s painting

**Lyn:** Does he have special powers? How are you going to draw his legs?

**Ian:** I draws circles for legs.

**Lyn:** Going in circles? What? You have a great imagination

Ian and Blake carried on drawing. Lyn looked at Ian’s picture which also included a car
Lyn: and where’s the engine going?
Ian: Engine is on the outside!”
Lyn: Well done. That’s awesome. Tell me, what are those long bits

In a similar way to the teachers at Bay Preschool, the teachers at Kowhai Kindergarten did not direct the children in the art activities but provided support and encouragement and assisted the children in accessing the materials and equipment. The activities were child initiated and interactions between the teachers, participants and their peers followed the children’s interests.

In contrast, at North Road Learning Centre the activities were set up by one teacher who supervised and directed the children in that activity. These art activities were more explicit in nature than the art activities available to the participants at Kowhai Kindergarten and Bay Preschool. Each activity had a preconceived skill and vocabulary for the children to acquire through interaction with the supervising teacher. All of the children in the room were expected to complete the art activity and a selected group, which included Jessica, took part in the writing activity.

The interactions between the teacher and participants at North Road Learning Centre were centred on the activity. For example during Na Soon’s observation six, the teacher provided paper in the shape of Christmas boots, cotton wool and glue. During this activity the teacher’s interaction with Na Soon was on the activity. Na Soon observed the children carrying out the activity then sat at the art table and picked up a boot. The teacher took the boot and wrote Na Soon’s name on it. (No verbal interaction)

Na Soon stuck cotton wool on the boot and then turned to the teacher

Na Soon: Look at mine
Veena: Yes lovely, don’t waste it (cotton wool). Pick it up. That’s right now you can put the glitter on
Another activity at North Road Learning Centre involved painting candy canes. The boots and candy canes became part of the Christmas wall display.

North Road Learning Centre preschool two also provided a weekly writing activity based on the Letterland programme (Wakelin Education). Selected children, including Jessica were directed to participate in this activity. The teacher introduced an alphabet letter and its related sound, and demonstrated how to write the letter. The children were then expected to copy the letter shape into their workbooks and discuss words beginning with that letter sound. The teachers supported individual children in their attempts to copy the letter. Children were expected to concentrate on their ‘work’ and were discouraged from interacting with peers whilst they were completing the writing task.

Preschool one class at North Road Learning Centre held a table time. This occurred in the early afternoon after sleep time and lasted one hour. All the children in the room sat at the tables where teachers set out activities including constructions toys such as lego; pattern making tiles and pegs, and drawing materials and interacted quietly together. Jessica and So Yeon were both observed during table time when they moved into the room after their fourth birthdays. They participated in present talk with peers based on the table activities and also in non-present discussions on home and activities outside the centre. The teachers spent this time in planning and administrative duties and did not interact with the children except when the children required attention.

**Socio-dramatic play**

The three study participant centres each had a permanent home corner are set up for socio-dramatic play containing tables, chairs, and kitchen equipment. Kowhai Kindergarten also had an area permanently set up as an office with writing materials, a computer keyboard and a phone. Sita, David, Georgia and Ian were observed playing in
the socio-dramatic play areas of their centres. Sita played in the home corner and also the office socio-dramatic play area. In the office she used the phone to pretend to call the doctor about her sister who was ill. This extended play period included 33 turns and included interactions with a teacher, a father helper and a peer. David and Georgia played together five times in the home corner at Bay Preschool. Their interactions were in Mandarin and they appeared to take the same roles each time: Georgia was the mother cooking dinner and David was the child who sat patiently waiting and needed help feeding himself.

Kowhai Kindergarten and North Road teachers also set up temporary dramatic play areas related to the centres’ current theme. For example, the Kowhai teachers set up an area based on the centre’s topic of ‘space’. This area remained in place for one term. However, the study participants were not observed playing in this area. In comparison Jessica played in the temporary doctor’s surgery set up by the North Road Learning Centre teachers for one morning on the carpeted area. This area comprised of a sleeping pallet and sheets, some chairs for waiting patients, a stethoscope and a white coat. Jessica played in this area. She collected a doll from the home corner and sat on a chair pretending to wait to see the doctor, a role taken by a boy. She then became a nurse and tended to the two boy patients laying on the sleeping pallet. Although Jessica did not participate in extended interactions with peers during this time, her presence in the ‘doctor’s surgery’ exposed her to peers English.

In addition to these areas set up for socio-dramatic play, children at Bay Preschool and North Road were observed playing make-believe games using props from other areas of the centre or using the home centre equipment for other situations. At Bay Preschool Melissa played ‘Schoolies’; a game invented by her and a peer. The girls used their back
packs to carry books. They sat on the steps in the outdoor area and pretended to drive to school. They pretended to be children going to school. A further example took place at North Road Learning Centre. So Yeon, whose parents ran a lunch bar in the local mall used the cups, plates and kettle from the home corner to set up a café. She took orders from children playing in the construction toy area, made pretend coffee and served them. She even imitated a coffee machine by making a shhhsh noise.

The teachers at the three centres encouraged free play and the children’s choice of language in the socio-dramatic play areas. The teachers at the three participant centres did not teach preconceived vocabulary for the children to use in socio-dramatic play. Moreover, none of the teachers participated in the children’s socio-dramatic play at all during the observations.

6.4 Chapter summary

The temporal environments of the three participant centres provided the child participants with different experiences. The children attended programmes that ranged from two and a half to eight hours a day. Because of their longer attendance times the programmes at Bay Preschool and North Road Learning Centre included more care times such as sleep and meals. However, the participants at all three centres were engaged in free play activities for the majority of their time. This ranged from two hours for participants attending the afternoon session at Kowhai Kindergarten, to four hours for North Road Learning Centre participants, and six hours for Bay Preschool participants who attended these centres for eight hours a day. Children at Kowhai spent a higher proportion of their time at the centre in free play activities. In comparison the participants at North Road spent a greater proportion of their time involved in directed parts of the programme which included mat times, tea and lunch times, and sleep times.
The art activities at Kowhai Kindergarten and Bay Preschool were not teacher directed, and they encouraged children to investigate materials and equipment. In comparison the art activities at North Road were teacher directed and supervised.

The frequencies and lengths of mat times varied across the three centres. A comparison of time participants spent at mat times during a morning session showed that the children at Kowhai Kindergarten spent fifteen minutes a morning, compared with Bay Preschool with 25 minutes and North Road Learning Centre with 60 minutes.
Chapter Seven: Child participants’ abilities in English language

This chapter presents the results of the BPVS tests and identifies the participants productive English abilities. It compares the participants’ English abilities individually, across centres, and with the individual participant’s home language experiences.

The child participants’ productive and receptive English language abilities were compared individually and across the centres to find if there was a connection between their language acquisition and their attendance at the different centres. The child participants’ productive language was measured during the child observations. The transcripts of the child observations were coded for three categories: utterances to themselves (private speech); utterances to teachers; and utterances to peers. Receptive English language abilities were measured using the British Picture Vocabulary Scale (described in chapter 3). The participants were tested at the beginning of the study, after four months and then at the end of the study.

7.1 Child participants’ productive language

The children’s verbal interactions were analysed to find the number of utterances that the child participants made in English to themselves through private speech; to their peers and to their teachers. The children’s utterances were also compared across the six observations to identify any pattern in frequency throughout the period of the study. Whilst frequency of utterances does not provide a measure of the productive language abilities of the participants it does provide an indication of the amount of English that the participants spoke during the observations.
For this study, an utterance was defined as a turn taken by the participant during an interaction. The utterance consisted of one or more words. Sounds made during play such as brmm brmm and shhhh shhhh when playing with cars were not counted as utterances. The lengths of the utterances were not measured, as the emphasis was on the frequency of utterances rather than their quality or length. As seen in Table 16 the frequency of utterances varied considerably between the individual participants and between the participants attending each centre. For example Sita at Kowhai Park Kindergarten spoke the most with a total of 522 utterances, compared with David at Bay who spoke the least at just 29 utterances over the six observations.

It was expected that the participants would speak more during each successive observation as they became more skilled in English. However, Kamesh was the only participant to show an increase in utterances during the study period. He made no utterances to his peers and spoke only three times to teachers during the first observation. This increased to 83 utterances to his peers and 99 to the teachers during his fifth observation. For the other eleven participants the number of utterances to teachers and peers during each observation appeared to depend on the activities in which they were occupied and who they chose to play with. For example Ruby made more utterances during an observation when she was drawing and playing with clay alongside a teacher and peers (64 utterances to teachers; 20 to peers), than she did during an observation when she ate morning tea and played with dolls with three peers (10 to teachers; 34 to peers).

Ian’s frequency of utterances was affected by the presence or absence of his friend Blake. For example Ian made 39 utterances to Blake whilst they played together in the
sandpit during observation two, but made only five utterances during an observation when playing in a group of peers without Blake with the cars and a matching game.

Table 16: Participants’ utterances to self, peers and teachers

<table>
<thead>
<tr>
<th>To:</th>
<th>Kowhai Park Kindergarten n=18</th>
<th>Bay Preschool n=30</th>
<th>North Road Learning Centre n=19</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>James</td>
<td>Sita</td>
<td>Kamesh</td>
</tr>
<tr>
<td>Self</td>
<td>40</td>
<td>47</td>
<td>53</td>
</tr>
<tr>
<td>Peers</td>
<td>175</td>
<td>266</td>
<td>161</td>
</tr>
<tr>
<td>Tchr</td>
<td>162</td>
<td>209</td>
<td>168</td>
</tr>
<tr>
<td>Total</td>
<td>377</td>
<td>522</td>
<td>382</td>
</tr>
</tbody>
</table>

Note: n = total number of observations at the centre
*4 observations
** 3 observations
6 in English, 20 in Korean

The child participants at Kowhai Kindergarten made more utterances to themselves, to their peers and also to their teachers than the children at Bay Preschool and North Road Learning Centre. As shown in Table 17, the Kowhai Kindergarten participants made three times more utterances to themselves on average, per observation than the participants at Bay Preschool and six times more than participants at North Road Learning Centre. The Kowhai Kindergarten participants also made three times more utterances to their peers on average per observation than the participants at Bay Preschool and North Road Learning Centre. Moreover, the children at Kowhai Kindergarten spoke three times more frequently to their teachers compared to the participants at Bay Preschool and North Road Learning Centre.

A Kruskal-Wallis Test showed a statistically significant difference in the frequency of the child participant utterances between the three centres (Kowhai Kindergarten,
m=9.00: Bay Preschool, m=4.20; North Road m=3.5) x^2(2n=10) = 5.804, p=.006 (point probability). Post hoc tests were then conducted using Mann-Whitney U tests. A significant difference was identified between the frequency of participant utterances between Kowhai Kindergarten and North Road Learning Centre, (U =.000, Z = -2.236, p = .018), but no significant differences were found between the frequency of participants’ utterances at Kowhai Kindergarten and Bay Preschool (p =.100) or between Bay Preschool and North Road (p = .143)

Table 17: Child participant utterances to self, peers and teachers by centre

<table>
<thead>
<tr>
<th></th>
<th>Kowhai Kindergarten n=18</th>
<th>Bay Preschool n=30</th>
<th>North Road Learning Centre n=19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average number of utterances to self per observation</td>
<td>7.8</td>
<td>2.2</td>
<td>1.3</td>
</tr>
<tr>
<td>Average number of utterances to peers per observation</td>
<td>33</td>
<td>10.8</td>
<td>9.2</td>
</tr>
<tr>
<td>Average number of utterances to teachers per observation</td>
<td>30</td>
<td>9.6</td>
<td>7</td>
</tr>
</tbody>
</table>

Note: n = total number of observations at the centre

7.2 Child participants’ receptive language

Standardised scores based on the three BPVS tests administered to the child participants at the beginning, after four months and at the end of the study (nine months) were calculated using the tables provided in the BPVS Technical Supplement for children with English as an Additional Language. The difference in the participants’ first and third standardised scores was then calculated to identify whether there was an increase in scores. The raw scores and the standardised scores for the three tests for each of the child participants are shown in table 18 together with the calculated increases in scores from tests one to test three. The raw scores for David, aged 2 years two months, and
Ruby, two years and five months, could not be converted to standardised scores as the BPVS Conversion Table for EAL Standardised Scores has a minimum age of 3.00 years.

**BPVS Raw and Standardised scores**

Table 18 shows that all of the participants made an increase in their BPVS standardised and raw scores (David and Ruby= raw scores only). This indicates that all made progress in their English language understanding.

The average progress made by participants at each centre between BPVS tests one and three was calculated by dividing the sum of the standardised scores of the participants by the number of participants at that centre (Table 19). This calculation showed that the Kowhai Kindergarten participants made greater progress on average in receptive language than the participants at North Road Learning Centre and Bay Preschool. A Kruskal Wallis Point Probability test revealed that this difference was statistically significant (Kowhai Kindergarten, m=5.17; Bay Preschool Preschool, m=3.83; North Road Learning Centre, m=4.50) \(x^2(2n=8) = 0.450, p<.021\) point probability. Post hoc tests were then conducted using Mann-Whitney U tests. These results showed that when one centre was compared with another no significant difference could be detected between the participants receptive English progress.

However, the progress made by individual children varied considerably. This is shown in the standard deviations generated by the analysis (Table 19). The data shows that the three participants at Bay Preschool were more similar in their progress (SD = 3.51) compared to participants at Kowhai Park (SD = 9.16) and those at North Road (SD = 21.92).

A general trend was shown in that eight of the ten participants who completed the three tests made larger gains between the tests two and three than between tests one and two.
James (Kowhai Kindergarten) and Ian (Bay Preschool) were the only exceptions. They made more progress in receptive language skill between tests one and two than between test two and three. Georgia and David’s (Bay Preschool) test results are not reliable for reasons described in Chapter 3 regarding the presence of their mother. Both David and Georgia appeared to make all of their progress between tests two and three and none at all between tests one and two. Jessica (North Road Learning Centre) made only two points increase between tests one and two which when calculated as a standardised score showed she had a decrease in receptive language ability. However, between tests two and three she had an increase of 14 points in her raw scores, equal to 15 points in standardised score. Her increase in test score coincided with her move to the Preschool one classroom. In comparison Na Soon, who remained in the three year olds room at North Road Learning Centre made an overall increase of 23 points in her raw score (35 points standardised). Nineteen points of this difference was made between the second and third tests.

Pearson Correlations were used to compare the relationship between the participants’ ages and their increase in BPVS scores. Results showed that there was significant association between the children’s ages and their increase in BPVS scores ($r=.893$, $p<.01$). When looking at the trends for individual children the data showed that the two oldest participants, Sita and Jessica made less progress (14, 6 points respectively) than younger participants Melissa and Na Soon who had standardised score increases of 21 and 37.
### Table 18: British Picture Vocabulary Test Standardised Scores

<table>
<thead>
<tr>
<th>Centre</th>
<th>Participant</th>
<th>Test 1 Raw score</th>
<th>Test 1 Standardised score</th>
<th>Test 2 Raw score</th>
<th>Test 2 Standardised score</th>
<th>Test 3 Raw score</th>
<th>Test 3 Standardised score</th>
<th>Increase in Raw score</th>
<th>Increase in Standardised score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kowhai Kindergarten</td>
<td>James</td>
<td>20</td>
<td>90</td>
<td>37</td>
<td>113</td>
<td>46</td>
<td>122</td>
<td>26</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Sita</td>
<td>10</td>
<td>68</td>
<td>14</td>
<td>73</td>
<td>21</td>
<td>82</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Kamesh</td>
<td>8</td>
<td>66</td>
<td>12</td>
<td>75</td>
<td>24</td>
<td>92</td>
<td>16</td>
<td>14</td>
</tr>
<tr>
<td>Bay Preschool</td>
<td>David</td>
<td>10</td>
<td>* 93</td>
<td>9</td>
<td>* 93</td>
<td>16</td>
<td>107</td>
<td>6</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Georgia</td>
<td>23</td>
<td>114</td>
<td>23</td>
<td>127</td>
<td>36</td>
<td>131</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Jan</td>
<td>35</td>
<td>*</td>
<td>48</td>
<td>*</td>
<td>57</td>
<td>131</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ruby</td>
<td>13</td>
<td>* 114</td>
<td>15</td>
<td>93</td>
<td>19</td>
<td>93</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Melissa</td>
<td>30</td>
<td>110</td>
<td>35</td>
<td>114</td>
<td>54</td>
<td>131</td>
<td></td>
<td></td>
</tr>
<tr>
<td>North Road Learning Centre</td>
<td>Jessica</td>
<td>28</td>
<td>110</td>
<td>30</td>
<td>101</td>
<td>44</td>
<td>116</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N.Soon</td>
<td>10</td>
<td>80</td>
<td>14</td>
<td>80</td>
<td>33</td>
<td>109</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Jordan</td>
<td>14</td>
<td>83</td>
<td>18</td>
<td>83</td>
<td>44</td>
<td>109</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ka Yeong</td>
<td>21</td>
<td>88</td>
<td>29</td>
<td>97</td>
<td>**</td>
<td>**</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:**  
* = no standardised scores were calculated due to participants’ ages (under 3.00 years)  
**= no score as participants withdrawn from study  
ª = increase in scores between test one to test two only.

### Table 19: Comparison of increase in BPVS standardised scores of participants across centres

<table>
<thead>
<tr>
<th>Centre</th>
<th>Number of participants</th>
<th>Mean Score</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kowhai Kindergarten</td>
<td>3</td>
<td>24.00</td>
<td>9.16</td>
</tr>
<tr>
<td>Bay Preschool</td>
<td>3</td>
<td>17.30</td>
<td>3.51</td>
</tr>
<tr>
<td>North Road Learning Centre</td>
<td>2</td>
<td>21.50</td>
<td>21.92</td>
</tr>
</tbody>
</table>

#### 7.3 The participants’ home language experiences at the end of the study

The parents of the ten participants who remained in the study for the full nine months completed a questionnaire to identify any changes that had occurred in their children’s home language use or language experiences. The data collected from the questionnaires
is summarised in Table 20. At the end of the study Kamesh (Hindi), Na Soon (Korean), Georgia and David (Mandarin) and Jessica (Mandarin) continued to use their home languages predominantly at home. In comparison, Ruby (Afrikaans), Melissa (Afrikaans), James (Thai and Cambodian), Sita (Tongan) and Ian (Greek) were reported to speak more English with their parents.

Nine of the ten participants’ parents reported that they generally spoke to their children in their home language and reported that this had not changed since the beginning of the study. The exception to this was Ian’s mother who reported that she used more English to initiate interactions with him at the end of the study compared to the beginning. Six of the ten participants continued to respond in their home language to interactions initiated by their parents in their home language. In contrast to the beginning of the study when Ian spoke Greek to his parents when they spoke to him in Greek, at the end of the study he responded to his parents’ Greek interactions half of the time in Greek and half in English. The remaining three participants, Ruby, Melissa and James, usually responded to their parents’ home language interactions in English. Ruby and Melissa’s parents stated that this did not concern them as their children would have little opportunity to speak Afrikaans outside of the family or South Africa, and felt that fluency in Afrikaans was not as important as English. James’ mother stated that she was concerned that James would lose his Cambodian and planned for him to spend holidays with his Cambodian speaking grandparents to immerse him in the language and culture.

David and Georgia were the only two participants who responded to interactions in English from their parents by speaking their home language. The remaining eight participants generally responded in English. Georgia was also observed speaking only Mandarin with David at Bay Preschool. When asked why she did not use English with
David at preschool she stated that her mother had asked her to speak to family members only in Mandarin and she had interpreted this as meaning at preschool as well.

With the exception of Ian, the participants were reported to hear their home language from extended family and/or friends, and five participants, Sita, David, Georgia, Ruby and Melissa, regularly attended church services in their home languages.

All of the participants were reported to watch English television and DVDs and all except Sita, Jessica and Na Soon had English speaking family friends. David and Georgia attended a music class in English and Melissa attended swimming classes in English. David was the only participant who attended formal English language classes.
Table 20: Child participants’ home language practices at the end of the study:

<table>
<thead>
<tr>
<th>Participant</th>
<th>Language/s used at home</th>
<th>Further home language opportunities</th>
<th>Other English language opportunities?</th>
<th>Language response when addressed in English</th>
<th>Language response when addressed in home language</th>
</tr>
</thead>
<tbody>
<tr>
<td>James</td>
<td>Thai, Cambodian, English</td>
<td>Family friends, Extended family</td>
<td>TV/DVD, Family friends</td>
<td>English</td>
<td>English</td>
</tr>
<tr>
<td>Sita</td>
<td>Tongan and a little English</td>
<td>Church, Family, friends</td>
<td>TV/DVD, Church</td>
<td>English</td>
<td>Tongan</td>
</tr>
<tr>
<td>Kamesh</td>
<td>Hindi</td>
<td>TV/DVD, Family, friends</td>
<td>TV/DVD, Family, friends</td>
<td>English</td>
<td>Hindi</td>
</tr>
<tr>
<td>David</td>
<td>Chinese</td>
<td>TV/DVD, Church, Family, friends, Music class</td>
<td>TV/DVD, English language classes, Church, Family, friends, Music class</td>
<td>Chinese</td>
<td>Chinese</td>
</tr>
<tr>
<td>Georgia</td>
<td>Chinese</td>
<td>TV/DVD, Church, Family, friends, Music class</td>
<td>TV/DVD, Church, Family, friends, Music class</td>
<td>Chinese</td>
<td>Chinese</td>
</tr>
<tr>
<td>Ian</td>
<td>Greek and English</td>
<td>none</td>
<td>TV/DVD, Family friends</td>
<td>English</td>
<td>Greek or English 50/50</td>
</tr>
<tr>
<td>Ruby</td>
<td>Afrikaans and English</td>
<td>Church, Family friends</td>
<td>TV/DVD, Family friends</td>
<td>English</td>
<td>English</td>
</tr>
<tr>
<td>Melissa</td>
<td>Afrikaans and English</td>
<td>TV/DVD, Church, Family friends</td>
<td>TV/DVD, Family friends, Swimming class</td>
<td>English</td>
<td>English</td>
</tr>
<tr>
<td>Jessica</td>
<td>Chinese</td>
<td>Family friends</td>
<td>TV/DVD</td>
<td>English</td>
<td>Chinese</td>
</tr>
<tr>
<td>Na Soon</td>
<td>Korean</td>
<td>TV/DVD, Family, friends, Swimming class</td>
<td>TV/DVD</td>
<td>English</td>
<td>Korean</td>
</tr>
</tbody>
</table>

7.4 A comparison of the child participants’ home language experiences and their English language abilities

The participants were categorised into two groups. Firstly, those whose parents reported that a language other than English was spoken exclusively at home by child participants and by all family members, and secondly those child participants who spoke English as
well as their home language in the home with one or more family members. The productive language (total number of utterances) and receptive language (BPVS raw scores) of the individual participants in each category were then compared across and between these groups.

Of the ten participants who completed the six observations, five used English as well as their home language at home and five used their home language exclusively. Table 21 shows that the participants who spoke English at home made twice as many utterances on average at the centres than those who spoke only their home language at home.

The participants receptive language BPVS raw scores were then compared with the child participants’ home language experiences. The raw BPVS scores for participants who spoke some English at home increased on average by 17.8 points compared to 14.8 for those who spoke only their home language at home. This trend was identified through mean scores, however, there were some individual differences that are important to note. Na Soon, spoke Korean exclusively at home but made greater progress in receptive language than seven of the ten participants. In comparison Ruby and Sita spoke some English at home but made the least progress in receptive English. These results suggest that there is no clear relationship between the participants use of English at home and their receptive English language abilities as measured by the BPVS.
Table 21: Comparison of participants’ use of language in the home and their expressive and receptive English abilities

<table>
<thead>
<tr>
<th></th>
<th>Participants used English and home language at home</th>
<th>Participants used a language other than English exclusively at home</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>James</td>
<td>Sita</td>
</tr>
<tr>
<td>Productive Language:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>utterances</td>
<td>377</td>
<td>522</td>
</tr>
<tr>
<td>Mean utterances</td>
<td>1456/5=291</td>
<td></td>
</tr>
<tr>
<td>Receptive language:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase in BPVS raw score</td>
<td>26</td>
<td>11</td>
</tr>
<tr>
<td>Mean increase in BPVS raw scores</td>
<td>89/5=17.8</td>
<td></td>
</tr>
</tbody>
</table>

*Note:* *= four observations
** *= three observations
*** = calculation on 5 participants who completed 6 observations

7.5 Chapter summary

The results of the BPVS and the participants productive English language abilities compared across centres, and across participants language experiences at home were presented in this chapter. Although the differences in the participants productive English abilities and receptive English progress were not statistically significant the results do suggest differences across the centres in participants’ English language understanding and production.

The participants at Kowhai Kindergarten spoke more than the participants at the other two centres. They made more utterances on average to their teachers and peers than the participants at Bay Preschool and North Road Learning Centre.
The participants at all three centres made progress in their receptive English language abilities. Although not statistically significant, the difference in test results between Kowhai Kindergarten and the other centres indicates that the Kowhai Kindergarten participants made greater progress in receptive language on average than Bay Preschool and North Road Learning Centre participants.

A comparison of the participants’ use of home language and English at home with their productive language abilities suggested that the participants who spoke English at home made more English utterances, on average, than the participants who spoke languages other than English at home.

In the next chapter the differences in English productive language abilities, the results of the BPVS and the differences in home language use identified in this chapter are discussed in relation to the interpersonal and temporal experiences of the children identified in chapters four, five and six.
Chapter Eight: Discussion

The aim of this thesis was to identify how lone ESL learners are supported in their English language acquisition at English medium Early Childhood Centres. The study investigated the experiences of 12 lone speakers of home languages other than English attending three different centres with a focus on the centres’ interpersonal and temporal environments.

The study findings show that the interpersonal experiences of the child participants differed in frequency and type, both individually and across the three centres. The temporal environments of the three centres also differed and these differences appeared to influence the nature of the interpersonal interactions between the child participants and their teachers and their peers. The study found a relationship between the interpersonal and temporal environments of the centres and the participants’ English productive language frequencies. However, the study showed no clear relationship between the differences in the centres’ interpersonal and temporal environments and the progress made by the children in receptive English abilities as measured through the British Picture Vocabulary Scale.

This chapter discusses the study’s findings in relation to theoretical perspectives on young children’s acquisition of English as a second language and previous research in Early Childhood Centres, Kindergartens, and Preschools and addresses the research question:

How are different types of English medium Early Childhood Centres supporting lone children speaking home languages other than English?

The first section addresses the differences in the interpersonal environments of the three participant centres; firstly through teacher-participant interactions, and then through
participant-peer interactions. The second section discusses the differences in the three centres’ temporal environments. Section three discusses the participants’ productive language abilities and progress in receptive language in relation to the individual participant home language experiences, and aspects of the centres’ interpersonal and temporal environments. This chapter finishes by suggesting aspects of an optimal language learning environment for lone speakers of home languages other than English that emerged from the study findings and discussion.

8.1 Differences between the interpersonal environments of ECCs

Frequencies of teacher initiated interactions

The frequencies of teacher initiated interactions with child participants were similar across the centres. This similarity was unexpected as the teacher-child ratios varied considerably across the centres from one teacher to fifteen children (Kowhai Kindergarten) to one teacher to five children (Bay Preschool). The finding is in contrast to the findings of Smith et al’s (1989) investigation into the effect of an extra teacher on teacher-child interactions at four New Zealand kindergartens. Based on Smith et al’s findings it could be expected that, a greater frequency of teacher-child interactions would have been observed in the centres with higher teacher-child ratios. However, there are likely to be other factors in the present study that account for the similar frequency of interactions between teachers and children across the three centres.

One explanation for why the Kowhai Kindergarten teachers interacted with the child participants as frequently as the teachers at Bay Preschool and North Road Learning Centre, despite the high child to teacher ratio at Kowhai Kindergarten, is the proportion of time that the teachers spent with the children as opposed to other responsibilities. The teachers at Kowhai Kindergarten interacted with the children during the entire session.
Cleaning and setting up of activities were done before or after the session when the children were not present. In contrast, the teachers at North Road Learning Centre spent time cleaning the room, setting up for activities, and meal and sleep times during the sessions, whilst the children were present. This happened to a lesser extent at Bay Preschool because cleaners were employed to do the major cleaning, and the full time cook organised the lunch and snack tables. This difference in teacher roles meant that the teachers at Kowhai Kindergarten were more available to interact with the study participants and this might explain the similar frequencies of teacher-child interactions across the three centres. This finding is consistent with two previous research studies (McCartney, 1984; Tizard et al., 1972) which both found a correlation between centre/nursery organisation and the frequency of adult-child interactions.

A further explanation for why the teachers at Kowhai Kindergarten interacted with the child participants as frequently as the teachers at the other centres, despite the differences in teacher-child ratio, is that the Kowhai Kindergarten programme consisted of longer periods of free play than the programmes at Bay Preschool and North Road Learning Centre. A larger proportion of the session spent in free play means that teachers spend more time with individual children, or small groups, than teachers in a programme that has more teacher directed group activities such as mat times, lunch and snack times. This point is discussed further in the next section.

While there were similarities in the frequencies of teacher-initiated interactions across the centres, the frequency of interactions initiated by teachers with the individual child participants differed considerably. The teachers at Kowhai Kindergarten interacted with each participant a similar number of times each whereas teachers at Bay Preschool interacted with two of the child participants far more than the other three participants.
This suggests that these three Bay Preschool participants may not have been exposed to the same language learning opportunities with teachers as the other two children.

Although the influence of child characteristics on teacher interactions was not a focus of this study, it is of interest to note that the two children at Bay Preschool, with whom the teachers initiated more interactions, were those who required more direction in acceptable social behaviour (Ruby); or those who played alone and did not interact with peers as frequently (David). This finding is consistent with that of Coplan and Prakash (2003) who in a study of the relationship between preschool children’s socio-emotional characteristics and the nature of their interactions with teachers, found that children who were rated as more anxious or socially withdrawn than their peers participated in a higher frequency of interactions initiated by their teachers than their peers.

**The nature of teacher-ESL child interactions**

The study findings showed that more than half (60%) of teacher initiated initiations across the three centres resulted in interactions that lasted three or less turns. These interactions consisted of a teacher initiation [I], for example, a question or direction followed by a child response [R], for example a yes/no answer or a physical action followed by a teacher evaluation [E] for example, repetition of the child’s utterance. IRE interactions do not expect the child to respond to the teacher’s evaluation, so this type of interaction can inhibit conversations (Siraj-Blatchford & Manni, 2008). Furthermore, IRE interactions lack the quality of teacher input that longer interactions can provide and are therefore of limited value in regards to English language acquisition for ESL learners.

A third of the teacher initiated interactions across the three centres consisted of four to nine turns, and ten percent lasted more than ten turns. These reciprocal and extended
reciprocal interactions were initiated by Initiation Response Feedback [IRF] interactions (Cazden, 1972b; Siraj-Blatchford & Manni, 2008). IRF interactions encourage children to participate by responding to the teachers feedback [F] (Nassaji & Wells, 2000) and result in reciprocal or extended reciprocal interactions. Reciprocal and extended reciprocal interactions that result from IRF interactions enable teachers to scaffold the participants in their language learning (Jordan, 2004). Kowhai Kindergarten and Bay Preschool participants participated in higher proportions of reciprocal and extended reciprocal interactions with teachers than the participants at North Road Learning Centre and this provided the Kowhai Kindergarten and the Bay Preschool participants with more input from the teachers, and potentially greater English language learning opportunities (Barnes et al., 1983).

The extended reciprocal interactions between the teachers and participants provided greater language acquisition opportunities for the participants because they include explanations, questions and comments whereas the shorter IRE type interactions generally included one question or direction. Teachers who used IRF interactions that initiated extended interactions thus became a language resource for the participants which scaffolded the ESL learner in his/her English language acquisition (Cazden et al., 1972). This notion is likely to explain how participants at Kowhai Kindergarten showed greater ability in English productive language and made more progress in receptive English language than participants at the other centres. This is discussed further in section 8.3.
Teacher utterances to initiate and extend interactions

Teachers at all three centres used questions, directions and explanations to initiate and extend interactions with the child participants. However, the types and frequencies of these utterances differed across the centres.

The teachers at all three centres used directions and questions to initiate and to extend interactions. The proportions of teacher directions and questions differed between the centres. The teachers at the two day care centres used a greater frequency of directives than the kindergarten teachers. Day care centres play a greater role in the care of the children so this may explain why these teachers used more directions. Whilst it is necessary for teachers to direct children to perform certain behaviours for safety reasons or to develop social or behavioural skills, the use of a high proportion of directions may provide fewer language learning opportunities (Hoff, 2006). Further support for this notion is provided by Barnes et al’s study (1983) which suggested a negative relation between a mother’s use of directions and their children’s language development. Although Barnes et al’s study focused on children developing their first language, their findings suggest that the use of directives alone would not support ESL children in their English language acquisition as effectively as the use of open or closed questions.

A further finding from this present study is that the teachers at the three centres used combinations of questions and directions to initiate interactions with ESL children. Teachers at Kowhai Kindergarten and Bay Preschool combined directions and questions more frequently than the teachers at North Road. These combinations of up to 21 words in length provided the child participants with further exposure to their teachers English language.
Explanations were also combined with directions by teachers at Kowhai Kindergarten and Bay Preschool. These direction/explanation combinations consisted of up to 39 words and so provided the participants with a greater exposure to the teachers’ English than directions alone. Krashen and Terrell’s (1983) ‘input hypothesis’ would suggest that the greater exposure to teachers’ English experienced by participants at Kowhai Kindergarten and Bay Preschool through these longer utterances, might give participants an advantage in their ESL acquisition compared to the North Road Learning Centre participants.

Frequencies of teacher open and closed questions

Open questions encourage the learner to develop and use a larger vocabulary than when responding to closed questions (Siraj-Blatchford & Manni, 2008). This would suggest that children acquiring English as a second language would make greater progress in English in an environment where the teachers use a greater proportion of open questions. However, a similarity across the centres was that the teachers asked more closed than open questions. This finding is consistent with other research such as the UK Effective Pedagogy in the Early Years study [EPEY] (Siraj-Blatchford et al., 2002). Eighty four percent of all questions asked by the teachers across the three centres in this study were closed; 16% were open compared to 95% closed and 5% open across the 14 centres in the EPEY study (Siraj-Blatchford et al., 2002). Closed questions were defined in both studies as those that require the child to state an observation, recall a fact or to answer yes or no (Siraj-Blatchford & Manni, 2008). Open questions were defined as those that require thinking responses (Eliason & Jenkins, 2008) and promote higher order thinking (Siraj-Blatchford & Manni, 2008). An explanation for the higher proportion of open questions in this study compared to the EPEY study may be the different sample sizes of the two studies. It could also be due to differences in the focus of the two studies. The
REPEY study included the teacher questions addressed to all children; native English speakers as well as those acquiring English as a second language. In comparison the present study included only the questions asked of the study participants who were all lone speakers of home languages other than English. A further explanation may be differences in philosophy, practices or programmes of the participant centres in the two studies.

**Types of teacher open and closed questions**

The types of closed questions asked by the teachers varied across the centres. The North Road Learning Centre teachers used closed questions in care situations and when interacting with participants involved in play activities. In comparison, the teachers at Kowhai Kindergarten and Bay Preschool also used closed questions in care situations but they also used them to encourage the child participants to recall facts and to extend their English vocabulary, and to encourage and discourage behaviour. Complex closed questions require children to think and analyse the questions and then respond at a higher level. The complex closed teacher questions at Kowhai Kindergarten and Bay Preschool were thus more likely to support the children in their English language acquisition than the simple closed questions used by the teachers at North Road Learning Centre (Siraj-Blatchford & Manni, 2008).

The types of open questions asked by the teachers at the three centres differed. Open questions asked by teachers at Kowhai Kindergarten and Bay Preschool were found to be more diverse than those used by the North Road Learning Centre teachers. Kowhai Kindergarten and Bay Preschool teachers asked questions beginning with ‘What’, ‘Where’, ‘How’ and ‘Why’, compared to teachers at North Road who asked only ‘What’ and ‘Why’ questions. This suggests that the participants at Kowhai Kindergarten and
Bay Preschool had more opportunities to think and respond at a higher level than the participants at North Road Learning Centre.

**Lone ESL children's initiated interactions with teachers**

The child participants at Kowhai Kindergarten initiated twice as many interactions with their teachers on average than the participants at Bay Preschool and North Road. This was an unexpected finding as the ratio of children to teachers was higher at Kowhai Kindergarten which meant that participants had to compete with more children for their teachers’ attention. This greater frequency of interactions for the children at Kowhai Kindergarten meant that they gained more exposure to the English spoken by their teachers and thus had greater language acquisition opportunities than the participants at Bay Preschool and North Road Learning Centre. Social Interactionist theory would suggest that by initiating more interactions with teachers, the children at Kowhai Kindergarten prompted the teachers to provide them with the type of language experiences likely to be appropriate to their English acquisition (Berk, 2009; Chapman, 2000). So it is argued that this more specific teacher English input for participants at Kowhai Kindergarten probably gave them an advantage in their English acquisition over the participants at Bay Preschool and North Road Learning Centre.

The difference in the participants’ frequency of attempts and their abilities to gain the attention of their teachers is also likely to have affected the participants’ language acquisition opportunities. The participants at Kowhai Kindergarten made more unsuccessful attempts at gaining their teachers attention but made more attempts overall and this resulted in them interacting more frequently with teachers than the participants at Bay Preschool and North Road Learning Centre. The higher child-teacher ratio at Kowhai Kindergarten and the way in which the teachers concentrated on giving attention
to the children with whom they were working is likely to have affected these findings. The kindergarten teachers did not allow children to interrupt their interactions with other children. This made it harder for the study participants to gain their teachers’ attention. However, once the Kowhai Kindergarten participants had gained the attention of their teachers their interactions were longer, more varied and complex than the interactions experienced by the participants at North Road Learning Centre. Findings from Schwanenflugel et al (2005) and Girolametto and Weitman’s (2002) research suggest that the extended reciprocal participant-teacher interactions resulting from the participant initiations at Kowhai Kindergarten were likely to give participants an advantage in their English language acquisition.

The Kowhai Kindergarten participants’ attempts to gain the attention of their teachers were more frequently for help with their activities, whereas the participants at the two day care centres turned to teachers for help with personal care, for example, help with clothing, or dealing with other children’s behaviour. This difference in reasons for child initiations might be explained by the difference in the centres, programmes. The children at all-day centres spent up to eight hours a day with the teachers. With this prolonged time spent at the centre comes a greater responsibility for the care of the children. In comparison, the kindergarten sessional approach catered for children for shorter time periods and because the expectation was that the children should be independent in personal care (as outlined in centre documentation) the kindergarten teachers’ role had less of a focus on caring for children. For example, children at all day care tend to change clothes if they become dirty through messy activities such as painting, whereas children at sessional kindergartens do not tend to change their clothes unless wet. The difference in the focus (activities/personal care) of the children’s attempts to gain teachers attention between the two day care centres and Kowhai Kindergarten also
suggests that the children at Kowhai Kindergarten might have opportunities for a wider range of cognitive and language learning opportunities. In comparison the learning opportunities for participants at Bay Preschool and North Road Learning Centre were centred more on development of social skills and personal care.

This finding can be further explained by examining the way in which the children gained their teachers attention and the apparent reasons for these interactions. A strategy successful for participants at all three centres was to show the teacher either an item such as a painting that they had completed or a toy with which they were playing. Gaining a teacher's attention in this way gives the child control over the topic and the nature of the interaction. In turn, these child initiations are more likely to lead to the type of teacher input that supports the child’s specific level of learning (Facella et al., 2005). For example in Ian’s interaction with Shirley about car exhausts (page 113), Ian gained Shirley’s attention by showing her his car and saying ‘Look at my car’. When she responded with a comment about the car Ian then pointed at the car’s exhaust and Shirley gave him the word ‘exhaust’. Ian controlled the interaction which resulted in him acquiring the word ‘exhaust’. Similarly, in James interaction with Sharon about his painting (page 113), James showed Sharon his painting and pointed to the colours he had used. He pointed to and named the black and orange. James then pointed to a mustard yellow and asked Sharon if it was black. Sharon was thus provoked into providing the correct name for the colour. These appear to be examples of co-construction in that the teachers supported the children’s learning in response to the children’s clues. This is in contrast to teacher scaffolding when the teacher decides what the child is going to learn through her support (Jordan, 2004). Co-construction enables children to take control of their own learning and research has found that children who participate in co-construction are more confident learners (Payler, 2009). This finding, that children
initiate interactions with teachers to provide opportunities for co-construction, supports current suggestions that children play an active role in their own learning (see Drury, 2007; Tabors, 2008) and suggests ways they might do this.

**ESL child-peer interactions**

The majority of the participants in this study used only English as the medium for interaction with peers. By attending English medium centres the majority of the study participants’ peers were English native speakers. This meant that the participants were immersed in the English language of their peers. Providing that peers’ input is comprehensible and at a developmental level (n+1) that will enable learning (Krashen & Terrell, 1983) attendance at English medium centres potentially increases English language learning opportunities for ESL children.

**Frequency of ESL children interactions with peers**

All of the participants in this study interacted with peers. The concept of the Omega child, that is, a child who does not succeed in becoming part of the peer social group (Garnica, 1983) was not evident. However, the frequencies of participant-peer interactions differed between and across centres.

Interactions with peers in reciprocal partnerships are considered vital for ESL children to acquire English (Girolametto et al., 2004). Although the Kowhai Kindergarten participants were less successful in gaining their peers’ attention, they interacted more with peers, on average, and produced twice as many utterances individually, than the other participants. This suggests that participants at Kowhai Kindergarten may have acquired more of their English from their peers than from their teachers. However, although the Kowhai Kindergarten participants had more successful attempts at gaining their peers attention they made more attempts overall than the participants at Bay
Preschool and North Road Learning Centre which suggests that they had to work harder to gain these language learning opportunities from peers.

A major finding of this study is that nine of the twelve participants initiated the greater proportion of their interactions with peers themselves. By doing this it could be argued that the participants played an active role in their own learning (Drury, 2007; Tabors, 2008) by provoking their peers into providing them with relevant language experiences to support them in their acquisition of English.

Half of the participants in this study interacted with specific children who were defined as friends. Having a friend provides a child with access to the social group (Hruska, 2007) and to his/her peers’ English. Having a friend thus provided the study participants with potentially more English language learning opportunities. The friendships formed by the study participants were with peers with similar interests, for example Ian and Blake who both had a particular interest in cars and drawing. Friendships enabled participants to provoke interactions that provided them with more learning opportunities (Tabors, 1998). Furthermore, because of the shared interests, these interactions were relevant to the participant’s interests and current learning. For example, Ian’s interactions with Blake, an English native speaking boy at Bay Preschool, included playing with words and rhyming sounds. This provided Ian with opportunities to explore English letter sounds and morphemes.

Participants used different strategies to gain their peers attention and to initiate interactions such as inviting peers to play with them using the English words that they knew (Lily Wong Fillmore, 1979). For example, James used the question ‘You like?’ to invite a boy to play with him (p. 132). Other participants played alongside peers so that they had exposure to language associated with the activity before initiating interactions.
(Corsaro, 2001). For example Kamesh played alongside two boys in the sandpit listening to their interaction before successfully gaining their attention by saying ‘Look at me I’m diggit’ (page 133). These strategies were successful for these participants and formed part of their ‘learning stances’ (Pollard & Flier, 1996). Furthermore, these strategies enabled the participants to gain the attention of their peers and the language learning opportunities that these interactions provided. This supports Drury’s (2007) suggestion that children play a major role in controlling their own learning.

8.2 Differences between centre temporal environments

The study findings appear to support Tizard et al.’s (1972) findings that centre organisation affects the frequency and the quality of the teacher-child interactions. This section suggests that aspects of centres temporal environments can possibly increase the quality of teacher-child and child-peer interactions and thus language acquisition potential.

Differences in the centres temporal environments including the daily timetables and the organisation of the mat times, activity times and teacher organisation were dependant on the centres’ philosophies. These practices may have been in contradiction to some of the participating teacher’s own philosophies and ‘teaching self(ves)’ (Tang, 2004). However, the teachers at Kowhai Kindergarten and Bay Preschool own philosophies matched those of the centres. The teachers at these centres, especially Bay Preschool played an active role in the daily organisation of the centre. Staff meetings enabled all staff to influence the temporal environment of their centre. In addition to this, teachers at Kowhai Kindergarten and Bay Preschool attended professional development sessions organised through professional bodies and education providers and were encouraged to attend professional conferences both in New Zealand and in Australia. The teachers...
incorporated practices acquired at initial teacher training and professional development into their centre practices. In contrast, the temporal environment at North Road Learning Centre was directed by the philosophy and beliefs of the owners of that group of centres. Teachers at North Road Learning Centre Road were thus unable to influence the temporal environment of the centre with practices incorporated into their ‘teaching selves’ during initial teacher training. All centres in the group operated in the same way with the same temporal environment. Professional development was provided internally by the centre owners and only centre managers were given opportunities to attend conferences in New Zealand. Teachers at North Road Learning Centre were thus limited in the development of their teaching philosophies and practices.

The temporal environments of the three centres differed in respect to the lengths of time spent in free play and teacher directed activities, for example, mat times; the types of activities available to the participants, and the organisation of lunch times. These different aspects of the centres temporal environments and the different language learning opportunities they provide are now discussed, beginning with free play.

The participants at Kowhai Kindergarten and Bay Preschool spent the majority of their time at the centres participating in free play activities. In comparison, the children at North Road Learning Centre spent a greater proportion of their time at the centre involved in teacher directed activities. Free play is defined, in this study, as when children are allowed to select activities to play with rather than be directed by the teachers (Dickinson, 2001). It was observed in this study that teachers interacted with small groups or individual children during free play. Working with small groups of individual children provides opportunities for the teacher to adapt his/her speech to make it comprehensible for the group or individual child (Chapman, 2000). Therefore, it is
argued that the greater proportion of free play in a centre’s programme, the greater the children’s opportunity to interact individually or in small groups with teachers and peers and the more language learning opportunities they have. Whilst the proportion of time spent in free play is important it is the quality of the teacher support during the free play that appears to be the critical factor. Although North Road Learning Centre participants spent four hours a day in free play they did not have the quality extended interactions with teachers or the frequency of interactions with peers experienced by the Kowhai Kindergarten and Bay Preschool participants.

The way teachers were organised during the free play sessions gave the participant children different access to the teachers across the three centres. At North Road Learning Centre and Kowhai Kindergarten the teachers were responsible for certain areas during free play sessions. For example, one teacher inside, one outside and one on float. In contrast, the teachers at Bay Preschool moved between areas accompanying the children whom they were supporting. By moving with the children and following their interests, the teachers at Bay Preschool maintained and extended their interactions with the children. This enabled the teachers to reinforce and extend the children’s English vocabulary acquisition through the use of different activities. For example, as previously mentioned (page 113) Ian acquired the word ‘exhaust’ from an interaction with Shirley when inside on the mat. The teacher organisation at Bay Preschool enabled Shirley to then accompany Ian outside to the art table where he painted a picture of a car. Shirley reinforced Ian’s previous learning by discussing car exhausts and Ian added one to his car painting. If Ian had gone to the painting table alone or alongside another teacher this other teacher would not have been aware of Ian and Shirley’s interaction about exhausts and would not have reinforced this addition to his vocabulary. Thus Ian may not have retained this addition to his vocabulary.
**Explicit and Implicit activities**

As reported in chapter seven, the activities available to the children and the organisation of these activities differed across the three centres. Implicit activities focus on the activity where the content of the teacher-child verbal interaction emerges from the child’s interest in the activity and is linked to their level of development. In contrast, teacher-child interactions during explicit activities focus on a preconceived vocabulary that the teacher intends the children to ‘learn’ (Schwanenflugel et al., 2005). Implicit activities were used at all three centres. In contrast, explicit activities were used at North Road Learning Centre and not at the other two centres.

Schwanenflugel et. al’s PAVEd for success study (2005) found that teachers and ESL learners interacted more frequently during implicit activities. In the present study the language learning opportunities provided by implicit and explicit activities were coded together so it is not known whether one type of activity provided a greater frequency of teacher interactions. However, the frequencies of teacher initiated interactions were similar across the three centres which suggests that types of activities (implicit or explicit) did not affect the frequency of teacher-child interactions.

Implicit activities are more likely to provide teacher input that is developmentally appropriate to the individual ESL child than explicit activities where the teacher input is planned for the group and may not be appropriate to the ESL child. Ian and James’ interactions, discussed earlier (page 171), suggest that children involved in implicit activities can provoke teachers into providing appropriate input and give them more control over their own learning.

The explicit transition to school writing activity and the teacher directed art activities at North Road Learning Centre provided the participants with individual interactions with
the teachers. Based on the findings of McCartney’s (1984) study which suggested that children from centres that provided structured activities aimed at preparing children for school attained higher language abilities, it could be expected that participants at North Road Learning Centre would benefit from these sessions. However, the transition to school activity occurred only once a week so the benefits would possibly be of limited value. In comparison the implicit activities were available to the participants every day.

The longer and more complex teacher-child interactions and the greater frequency of participant-peer interactions at Kowhai Kindergarten, where only implicit activities were provided, would suggest that implicit activities provided the participants with a higher frequency and higher quality of interactions. So it is argued that implicit activities may be more beneficial to ESL learners’ English language acquisition than explicit activities, as implicit activities are more likely to provoke teacher-child interactions that are more relevant to the children’s interests and their level of development (Schwanenflugel et al., 2005).

A disadvantage identified in this study in the use of explicit activities at North Road Learning Centre was that they appeared to restrict the frequency of the participants interactions with peers. This was especially the case in the transition to school writing activity. During this activity the participants were discouraged from interacting with peers. In contrast the nature of implicit activities encouraged the ESL children to interact with their peers. During implicit activities the children play alongside peers with similar interests and interactions are prompted by the play. The ESL child is able to initiate interactions and provoke his/her peers into providing him/her with appropriate English acquisition opportunities relevant to their play and interests.
A further finding of this study is that the three participant centres did not provide activities or withdrawal support specifically for the ESL child participants; a practice that proved successful for ESL learners language acquisition in other research. For example Clarke’s longitudinal study of four Vietnamese 4 year olds attending a bilingual preschool in Australia (1996) and the UK Box Hill Nursery Project (Thompson, 2000). In contrast to these studies, the ESL child participants in this study had the same support and experiences as English native speakers attending the centres. The present study did not identify any strategies or practices used specifically with ESL children. Moreover, the three participant centres in this study did not have policies or guidelines for teaching ESL children. This may be related to allocation of resources by centre owners or managers or to the teachers’ beliefs that ESL children naturally acquire English (Krashen & Terrell, 1983) and therefore do not require extra support. The lack of strategies, practices, policies and guidelines may also have been due to lack of teachers’ knowledge from initial teacher training or lack of professional development about practices to support ESL children’s English language development.

**Mat times**

The three centres held regular mat times, however the organisation, timing, frequency, length and content of the mat times at the three centres were different. Mat times involving large groups were regularly held at the three centres. Mat times at the three centres did not encourage the ESL children to interact with their peers but concentrated on interactions between the teachers and groups of children.

As one on one interactions are more beneficial to the ESL children’s English language acquisition (Parke & Drury, 2001) large group mat times may not positively support an ESL learner. In contrast to small group or individual activities during free play where the
teacher can ‘fine tune’ his/her input to suit the individual child’s specific levels of comprehension (Chapman, 2000), teachers’ input during large group activities, such as mat times is more often aimed at the native English speakers and may not be comprehensible to ESL children. Moreover, during large group mat times teachers have been shown to make less demands on individual children and children who are unable or unwilling to contribute verbally to the mat times are not generally compelled to do so (Aukrust, 2007). The present study identified an approach used by teachers at Bay Preschool that made mat times more developmentally accessible and relevant to the ESL children. Separate mat times were held for the two year old children and for the three to five-year-old children. The two-year-olds’ group comprised of less than ten children and the three to fives mat time was attended by 20 children. These numbers were small compared to 28 at North Road Learning Centre and 45 at Kowhai Kindergarten. The content of the mat times at Bay Preschool were planned according to the childrens’ current interests. David was observed at his most vocal and animated during these times especially at the mat time that was planned around his interest in spiders and included his favourite picture book about spiders. This suggestion of separate mat times is supported by McCartney (1984). In her study children at day care centres McCartney found a relationship between the amount and type of comprehensible language experienced by individual children at large group times and their rate of language development.

**Meal times**

The organisation of lunch times at Bay Preschool and North Road Learning Centre was very different. Child participants at Bay Preschool were encouraged to interact with the teachers and the cook and with their peers during lunch times whereas the participants at North Road Learning Centre were expected to eat without speaking. This study found
that the lunch time interactions between the Bay Preschool participants and their teachers and with their peers included more non-present talk such as narratives and discussions about past and future events and experiences, which potentially provided a rich language learning environment (Cote, 2001) and greater English language acquisition opportunities. In contrast, the interactions of participants at North Road Learning Centre with teachers and peers included more present talk about the food and behaviour. Presumably this was due to the ‘no talking whilst eating’ rule. The North Road Learning Centre lunch time findings are consistent with Gest et al’s (2006) study which also found a reduced quantity of teacher talk in the classrooms that had what they referred to as the social etiquette rule of ‘not talking while eating’.

The findings suggest that sitting with the children or moving around the tables whilst the children are eating may also affect the type of teacher-child interactions. The teachers at North Road Learning Centre sat at the lunch tables observing and generally assisted the children whilst the children ate; whilst the teachers and the cook at Bay Preschool moved around the tables helping individual children. In contrast to Cote’s findings (2001) the participants and teachers at Bay Preschool participated in more non-present talk during lunch time whilst the teacher moved around and thus had greater language acquisition opportunities than the participants at North Road Learning Centre.

The different physical arrangement of the tables and the ways food was served at the two day centres were likely to affect the ESL children’s interactions with peers. The smaller tables, seating four, at Bay Preschool appeared to encourage children to interact. Moreover, the act of serving themselves from the shared serving plate required the participants to interact with their peers, for example, asking peers to pass the platter or
spoon. In comparison the children at North Road Learning Centre were served by the teachers and so there was no requirement for them to interact with their peers.

8.3 ESL children’s abilities and progress in English language acquisition at different types of ECCs

All of the ESL child participants progressed in their English language abilities during the study. However, although the differences between centres in child language acquisition progress were not statistically significant the data suggests that on average the participants at Kowhai Kindergarten had greater productive English abilities and made more progress in receptive English.

The quality of teacher-child participant interactions was greater at Kowhai Kindergarten and may explain the faster rate of English language acquisition made by the Kowhai Kindergarten participants. Given that the quality of ESL learners’ interactions with teachers predicts success in language acquisition (Krashen, 1985) the greater use of open questions, explanations and extended reciprocal interactions might have provided the Kowhai Kindergarten participants with greater English language learning opportunities.

Moreover, the greater frequency of extended reciprocal interactions with teachers that resulted from their use of open questions and explanations appears to have provoked the participants at Kowhai Kindergarten into making more utterances. The Kowhai Kindergarten participants made three times more utterances to their teachers as the participants at Bay Preschool and North Road Learning Centre. Based on the findings of Nassaji and Wells (2000) it is likely that the greater frequency of participant utterances in this study, was related to the greater frequency of IRF interactions, and the types of utterances made by teachers during these interactions.
The Kowhai Kindergarten participants also interacted more frequently with peers and made more utterances to peers. So, it seems likely, that interactions with peers was a contributor to the receptive language abilities of participants at Kowhai Kindergarten. However, greater frequency of interactions with peers over teachers is not necessarily an advantage. This study found that the three participants who interacted in English more frequently with their peers than with their teachers were amongst the lowest achievers in the BPVS tests of English receptive language ability. This latter finding is consistent with Dickinson (2001) who found that children’s language development may be inversely proportional to the amount of time spent interacting with peers. This is likely to be because the time spent interacting with peers replaces the time spent interacting with teachers and because the quality of peers’ language is not necessarily that of a more able speaker and so may provide less language learning opportunities for the ESL learner.

A comparison of individual participants abilities in productive language and progress in receptive language showed that some children had high levels of productive language but made slower progress in their receptive language. One participant, Sita, initiated the second highest number of interactions with peers and made the most utterances (productive language) to peers of all the participants. However, her BPVS results suggested that she made less progress in receptive language than participants who made less utterances. Sita used strategies such as using the phrase ‘We’re friends right?’ a strategy identified by Cosaro (1985) as successful in establishing friendships, however, Sita found these strategies unsuccessful in provoking peers to engage in extended interactions. Thus her high frequency of utterances did not result in a similar frequency of responses from peers. It seems likely that Sita’s poor English progress was linked to her lack of successful strategies to provoke language learning opportunities from her
peers. This lack of exposure to English is likely to be a contributing factor in her slower progress in English.

An alternative explanation for Sita’s slower progress in English acquisition may be explained by her age. Results showed that there was significant difference between the children’s ages and their increase in BPVS scores. It appeared that the two oldest participants made less progress than the youngest participants. This finding would appear to support the argument that the optimal age for acquiring a second language is before the age of three while the child can be considered a simultaneous bilingual (Foster-Cohen, 2003). However the comparison between English progress and age in this study does not allow for variables such as the length of time the participants had been attending the centres or the ages at which they began attending the centres. Sita was the oldest participant in the study and had been attending the centre for just three months when the study began.

Home and English language experiences may have affected some children’s progress in English. These differences are now discussed in an attempt to explain why some ESL children made greater progress in English than other ESL children at the same centre.

The teachers at the three centres in this study were diverse linguistically with more than half of the teachers being bilingual, but the languages spoken by the teachers did not generally match those of the children attending the centres, and so in most cases the teachers could not interact with the children in their home languages. However, in this study, where teachers did speak the same language as the child participants, the teachers did not speak these languages with the ESL children, but used English for all of their interactions with the children. The three centres thus practiced a submersion type model (Smidt, 2008), that is, they used only English and did not support the children’s home
language development. According to Cummins’ Developmental Interdependence Hypothesis [DIH] (1979) a child who maintains his/her home language at school may make greater progress in English acquisition than a child who is unable to maintain his/her home language at school. Cummins’ DIH thus suggests that children in this study who were unable to speak their home language at the centres were disadvantaged by this immersion strategy. Furthermore, the lack of support for the participant’s home languages also put the children at risk of losing their home languages through subtractive bilingualism (Lightbrown & Spada, 1999).

The participants attending the kindergarten sessional model spent half of the day at the centre in the English environment and the rest of the day immersed in their home language. They may have benefitted from the more balanced time immersed in the two languages. Their continued home language development may have made them less vulnerable to subtractive bilingualism (Lightbrown & Spada, 1999) and thus enabled them to acquire English at a higher level (Cummins, 1979).

In contrast to the lack of opportunities for ESL participants to speak their home languages with teachers, three of the study participants spoke their home languages with peers or siblings at the centres. In a similar way to the use of home languages with teachers, Cummins’ DIH (1979) suggests that participants who spoke their home languages with peers would make greater English language progress. One explanation for this is that peers can support each other in their understanding of the teachers’ English. This notion was highlighted in Meyer et al’s (1994) investigation into mat times with a group of Korean girls attending an English medium centre. Meyer observed that the girls could not comprehend the teachers input individually but worked together to support each other in their understanding of the mat time activities.
As reported by the parents, five of the participants used English at home alongside their home language and the remaining seven spoke their home language exclusively at home. The study participants who spoke their home language exclusively at home might have developed these languages at a higher level. According to Cummins DIH participants who spoke home languages other than English exclusively at home would have been expected to be more successful in English when acquiring it at a centre (Cummins, 1979). However, the study found no statistically significant difference in the receptive or productive English language abilities between the participants who spoke home languages other than English exclusively at home and those who spoke some English at home.

James at Kowhai Kindergarten and Na Soon at North Road Learning Centre made the greatest progress in receptive English language according to their BPVS standardised scores. However, James had almost three times more interactions with teachers and made more than ten times more utterances than Na Soon. James interacted more frequently with his teachers than the other participants in the study and he initiated two thirds of his interactions with teachers himself. Moreover, James demonstrated great persistence in making himself understood when interacting with teachers which meant that he made a great number of utterances to his teachers. He also made the second highest number of utterances to his peers. James’ high frequency of interactions and utterances made to teachers and peers might explain his progress in receptive English language given that frequency of teacher-child interactions is a predictor of children’s language development (McCartney, 1984). However, this would not explain the rate of Na Soon’s receptive English language acquisition. Some other factors are likely to be related to Na Soon’s English progress.
Na Soon’s rate of English language acquisition may be related to her use of her home language at the centre. Na Soon used her home language (Korean) exclusively at home. She spoke Korean at the centre with her Korean peers and used very little English with English native speaking peers and none at all with Korean speaking peers. Despite this lack of interaction with peers in English Na Soon made the greatest progress in receptive English language acquisition of all the participants, as measured by the British Vocabulary Scale (Dunn, 1997). One explanation for this is that Na Soon’s home language development was supported through her interactions with peers so she was able to continue to develop her home language while also acquiring English. This explanation ties in with the research and theory of Cummins DIH (1979) which states that if a child’s first language is maintained then he/she will acquire a second language at a high level.

In comparison to Na Soon, David and Georgia the Mandarin speaking siblings, made less progress in English than the majority of the study participants. David and Georgia spoke Mandarin exclusively at home and were the only other participants, in addition to Na Soon, who were able to interact with a speaker of their home language at their centre. Whereas Na Soon spent extended free play sessions speaking in Korean with her peers David and Georgia spoke together in Mandarin and used English to interact with peers. This switching from home language to English whilst playing may explain why David and Georgia made less progress in their receptive English acquisition relative to Na Soon.

Gardner’s multiple intelligence theory may also be used to explain why Na Soon made greater progress in receptive English language than David and Georgia even though she talked less English and had less interactions than many of the participants. Na Soon may have a strength or aptitude for languages (Lightbrown & Spada, 1999). In his Theory of
Multiple Intelligences, Gardiner [TMI] (1983) suggested that some learners have a higher level of linguistic intelligence. In comparison to Na Soon, David and Georgia may not have an aptitude for languages and be what Gardner terms ‘at risk’ of not being as able as others in acquiring new languages. Gardiner’s TMI might also explain the difference in progress made in English language acquisition across the study participants.

8.4 Discussion summary: Aspects of the optimal English language environment for lone speakers of languages other than English

The aim of this chapter was to discuss the major findings of the study in relation to language acquisition theories and previous research into ESL acquisition in early childhood. The study’s main question ‘How are different types of English medium Early Childhood Centres supporting lone children speaking home languages other than English?’ was addressed. The chapter has discussed the differences in the interpersonal and temporal environments of the three centres in relation to existing theories and research. The differences in interpersonal and temporal environments were then discussed in relation to the children’s productive and receptive English language abilities. This section draws the chapter to a conclusion by identifying aspects of the findings of the different centres that may provide an optimal ECC English language learning environment for lone speakers of home languages other than English.

This study found that the nature of ECCs temporal environments appears to influence their interpersonal environments. Aspects of a temporal environment that provide optimal language learning opportunities may include: extended free play sessions; implicit activities that enable children to provoke teachers to provide input that is related to the individual child’s language ability; opportunities for frequent teacher-ESL child
and ESL child-peer interactions and continuity of teacher-child interactions, both through organisation of staff; organisation of mat times that are relevant to the ESL child’s abilities and finally organisation of group times such as lunch time that encourage higher quality interactions.

A further finding of the study was that the types of utterances that teachers use to initiate and extend interactions may affect the quality of the English learning opportunities. Aspects of teacher-ESL child interactions that may provide an optimal language learning environment for ESL children include extended reciprocal interactions, where teachers ask open questions and give explanations rather than closed questions and directions.

In the next, concluding chapter of this thesis implications for practice and policy are presented, followed by a discussion the limitations of the study and suggestions for further research. The thesis culminates by identifying the contributions that it makes to the field of ESL in ECCs.
Chapter Nine: Conclusions

9.1 Implications for practice and policy

The findings of this study are based on a small sample of twelve participants attending three ECCs which limits the extent to which generalisations can be made across the Early Childhood Sector (Anderson, 1990). However, on the basis of these findings some tentative recommendations for practice and policy are made.

Implications for practice

*Frequency and quality of teacher-child interactions*

As the frequency and quality of teacher-child interactions are linked to English language acquisition for ESL learners (Girolametto & Weitzman, 2002; McCartney, 1984) it is recommended that teachers examine their programmes to identify how they can increase the frequency and the quality of their interactions with ESL children.

The frequency of teacher-child interactions may be increased by teachers minimising the time they spend in cleaning, setting up activities or administrative tasks that prohibit them from interacting with the children. A suggestion is that these tasks be completed by others, for example a cook who also organises the lunch area or paid cleaners who work after the children’s session/day. Given the financial restraints around employing additional staff, a suggestion is that centres could encourage non working parents, extended family members, or members of the community to volunteer time to help with activities such as washing up the paint pots or preparing morning tea. This practice is common in public kindergartens. Another suggestion is to involve the children in some of these activities and make them part of the learning, for example, setting up and cleaning tables for lunch. This teaches social skills and responsibilities as well as providing language learning opportunities through interactions with teachers.
Extended reciprocal interactions with teachers provide ESL children with more exposure to the teachers’ English (Barnes et al., 1983) and provide opportunities for scaffolding and co-construction of ESL children’s English language (Jordan, 2004). It is therefore recommended that teachers optimise the quality of the children’s English acquisition opportunities by facilitating a greater frequency of extended teacher-ESL child reciprocal interactions. This may be more easily done during implicit type activities when the content of the interaction may be more easily adjusted to suit the language ability of the learner.

Whilst closed questions are recommended for children in the early stages of ESL acquisition, open questions and explanations promote more thinking and require the English language learner think and develop their productive language (Siraj-Blatchford & Manni, 2008). It is recommended that teachers look for opportunities to ask more open questions and provide more explanations during free play activities and lunch times.

**ESL child-peer interactions**

Interactions with peers are not thought to provide such successful language learning opportunities for children as interactions with teachers (McCartney, 1984). However, interactions with English speaking peers still play a vital role in English language acquisition of lone ESL children.

Given the role that children play in their own learning by initiating interactions with peers it is recommended that teachers examine their programmes for ways to optimise the opportunities for ESL children to initiate interactions with peers. This could be done by maximising the amount of free play during the session; providing activities and equipment that encourage children to participate in shared or collaborative play or art
activities, and providing activities/equipment based on the children’s interests. A further suggestion is that ESL children be assisted in forming friendships by pairing ESL children with English native speaking children when they first attend the centre and encouraging the parents of ESL children to invite native English speaking children to play outside the centre.

**Temporal environment**

The study findings suggest that the nature of a centre’s temporal environment influences the frequencies and types of teacher-child and child-peer interactions. Furthermore, the success of the language learners’ progress is dependent on their teachers’ skills in providing an environment that enables productive interactions (Mashburn, Justice, Downer, & Pianta, 2009). Therefore it is recommended that teachers examine their centre’s temporal environment and consider ways of optimising English language learning opportunities for ESL children.

The study findings suggest that free play provides ESL children with more appropriate English language acquisition opportunities than teacher directed group activities. Research suggests that teachers can make interactions with ESL children during free play more comprehensible and relevant to the individual child’s interests and cognitive development than group interactions during mat times (Chapman, 2000). Mat times, when used, can provide relevant learning opportunities if they are organised around the children’s language abilities. This organisation enables teachers to provide more developmentally appropriate input to the children. Moreover, this practice can provide support for ESL children in a similar way to the withdrawal sessions found successful in some bilingual settings.
Based on the literature (Schwanenflugel et al., 2005) and observations of this study it is recommended that centres consider making greater use of implicit activities as they provide more relevant English language acquisition opportunities for ESL children than explicit activities. Explicit activities can restrict the English language acquisition of the ESL child whereas teacher-child interactions during implicit activities can extend the child’s language acquisition along with their cognitive learning.

**Home language support**

ESL children who are the lone speakers of their home language attending English medium centres do not have the opportunity to develop their home language at the centre. Tabors (2008) and Wong (1976) warn us that by not supporting the children’s home languages and providing an English medium environment, children are at risk of losing their home languages. This loss of home language may also affect the child’s English language acquisition. Cummins in his ‘Developmental Interdependence Hypothesis’[DIH] (1979) argues that children need to continue to use their first language at the same time as acquiring English. He states that children who do not continue to develop their first language, make slower progress in ESL acquisition than those who continue to use their home language. This implies, that where possible, centres should examine their programmes to find ways of supporting the lone ESL children’s first languages. For example, centres could employ bilingual teachers who speak the same languages as the children attending. Alternatively, they could encourage parents or community members speaking the same language as the child to visit the centre on a regular basis and tell stories or provide activities relevant to the child’s culture. A further suggestion is that parents be encouraged to enrol their children at centres where the the child’s home language is spoken by teachers or other children. This would provide their
child with a bilingual environment which would support both their home language and
English.

**Implications for policy**

**Teacher-child Ratio**

The study findings suggest that the higher child to teacher ratio of the participating
kindergarten compared to two all day care centres did not affect the English learning
opportunities for ESL children. The ratio of children to teachers at the kindergarten in
this study was twice that of the all day centres. However, as the discussion states, the
nature of the kindergarten programme enables the teachers to interact with the children
throughout the time that the children are present at the centre. This practice is only
possible because kindergarten teachers are able to organise the centre environment and
carry out administrative duties before, after and between the sessions. This model is
therefore successful in supporting ESL children and a change in this model may impact
the current nature of teacher-ESL child interactions.

**Support for home languages**

One issue that emerged from the discussion on support for children’s home languages at
different early childhood centres was that ESL children attending sessional centres such
as government kindergartens have a greater exposure to their home language than
children attending all day care. Children risk losing their first language if is not
maintained (Tabors, 1997) and children attending English medium all day care centres
spend more time in an English language environment and less time in the home
language. The risk of subtractive bilingualism (Lightbrown & Spada, 1999) is not such
an issue for children attending kindergartens for half days.
An imbalance of languages may also affect a child’s successful English language acquisition. In his Developmental Interdependence Hypothesis [DIH] Cummins’ (1979) suggests that if a child’s first language is learnt and maintained at home and supported in the community, a second language learnt in school is likely to be at a high level and the child’s first language is not compromised. This implies that ESL children attending sessional ECCs may have greater success in their English language acquisition because of the maintenance of their home language than the participants at all day care who are unable to use their home languages during the day at the centre.

A further issue is the link of language with culture. Language is an important aspect of culture (Metge, 2006). Children who attend all day care are immersed not only in the language but also in the culture of the centre. This implies that children who attend all day care spend less time in their home culture than children who attend sessional kindergartens and are therefore at risk of losing their cultural identity.

Although the cognitive development of the children was not a specific focus of this research, cognitive development and the vocabulary that accompanies this is a concern for ESL children attending English medium centres. Bilingual children attending English medium ECCs may be at a disadvantage cognitively. The use of a child’s home language alongside English at the ECC would enable him/her to develop Basic Intercommunications Skills [BICS] and Cognitive Academic Language Proficiency [CALP] in both languages as they will acquire the vocabulary in both languages as they develop the concepts. If a child develops a concept using only one language then he/she will not be able to verbalise that concept in the other language. This poses a strong argument for bilingual early childhood education.
The implications from this study are that the Early Childhood sector should examine provision of Early Childhood Education for children speaking home languages other than English and look for ways that it can be made more relevant to the needs of these children. It is suggested that more bilingual teachers speaking the languages of the children should be trained. An interim solution could be the use of itinerant teachers to provide support for clusters of centres with ESL children with the same home languages.

9.2 Limitations of the study and suggestions for further research

The theory and research cited in this thesis suggest that the three centres provided positive language learning support for ESL children. However, overall, Kowhai Kindergarten provided a greater range of language learning opportunities than Bay Preschool and North Road Learning Centre. The sample size in this study was too small to enable a statistically significant difference to be detected between the three centres in the English receptive language progress of participants. The study was further compromised by the withdrawal of two of the four participants at North Road Learning Centre. This resulted in less observations at North Road Learning Centre which is likely to have further influenced the comparisons that could be made between the three centres. Thus the study could not provide a definitive answer to the study’s third question. ‘What is the relationship between the lone ESL children’s progress in English language acquisition and the English language learning opportunities provided by the interpersonal and temporal environments of different types of ECCs?’ The researcher thus suggests that future research in this field should include investigations with a larger sample of ESL children and centres. It is also recommended that future research incorporate additional measures of English language ability. For example, the Preschool Language Assessment Instrument [PLAI] (Blank & Berlin, 1978), which measures
language development used by McCartney (1984). A measure of the children’s mean length utterances [MLU] as outlined by Brown (1973) may be used in conjunction with PLAI to compare children’s productive English language abilities. If used together the BPVS, PLAI and MLU would provide a clearer picture of participants progress in productive and receptive English language to compare with the language learning opportunities at different ECCs.

One methodological issue that may have affected the findings of the study was the use of the MP3 recorder. Whereas the majority of the participants wore the recorder for one or more observations, some children refused to do so. The private speech of participants not wearing the MP3 recorder was not always audible to the researcher. This is likely to have influenced data on participants’ strategies of rehearsing, repeating and experimenting with sounds. A further issue in the use of the recording device was a problem with habituation with the recorder for some participants. The behavior of some participants became atypical (for them) when they were wearing the recorder, one became mute and others discussed the recorder with peers and teachers during the observation. These problems with the recordings during observations inevitably led to differences in observational data which are likely to have influenced the comparisons made across centres and children.

A further limitation of the study was that of the differences in participants exposure to and developmental levels of their home languages. Home language practices were reported by parents. However, these changed during the nine months of the study and it is not known if the children who used English at home continued to develop their home languages. This is likely to have influenced their English language progress. It is recommended that future research might consider measurement of participants’ home
language abilities. This would identify the developmental levels of the participants in their home languages for comparison with their English language progress. The BPVS could be used for this as it has been translated into a number of languages (Dunn, 1997).

The child’s temperament has been identified as a predictor of success in gaining input from teachers and peers (Tabors, 1998; Lily Wong Fillmore, 1979). A recommendation from this study is that the temperaments of ESL children be measured to identify the influence of different children’s temperaments on the rate of success in English acquisition. A teacher rating scale for example the Children’s Behaviour Questionnaire (Rothbart, Ahadi, Hersey, & Fisher, 2001) could be used to provide information on the children’s typical behavior at the centre.

Issues with the use of the BPVS affected the reliability of the test results for two participants. As explained earlier (page 82) one participant, David, at Bay Preschool refused to participate in the first round of the BPVS. Moreover, his and his sibling’s second round of BPVS results were compromised by the presence of their mother. However, results of the third round of tests for these two participants were reliable as the test was completed with the children alone. The results of the less reliable test results may have had some bearing on the pattern of BPVS results obtained across the centres.

A final recommendation is that further research could focus on the types of activities used by different centres. For example, a study could investigate the affect of implicit compared to explicit activities, or teacher directed compared to child initiated activities on the English language acquisition of ESL children.

9.3 Contributions made by the study to the field of ESL in ECCs
This study contributes to the research on supporting young children in English language acquisition by investigating the interpersonal and temporal experiences of lone speakers.
of home languages attending different types of English medium ECCs. Previous studies investigating young ESL children attending ECCs have occurred in single centres or kindergartens (for example Fassler, 1998); involved a larger number of centres with similar philosophies and practices (for example Siraj-Blatchford et al., 2002) or involved groups of children with the same language attending the same centre (for example Haworth et al., 2006a). This study provides some insight into different ECC environments and identifies some examples of optimal practice for providing English language acquisition experiences for ESL children who are lone speakers of home languages other than English.

This study also extends the body of research on teacher-child interactions (for example: McCartney, 1984; Siraj-Blatchford & Manni, 2008; Smith et al., 1989; Tizard et al., 1972) in that it investigated teacher-child interactions from two perspectives; interactions initiated by teachers; and interactions initiated by child participants using a sample of ESL learners who were lone speakers of their language at the English medium centres. Previous studies that focused on teacher initiated and child initiated teacher-child interactions (see: Coplan & Prakash, 2003; Scroufe, Fox, & Pancake, 1983) investigated English native speaking children and not ESL learners.

In addition to the above, the study’s focus on the affect of ECCs temporal environments on the interpersonal environments, made a small contribution to extending the knowledge of explicit and implicit activities first identified by Schwanenflugel et al (2005) in their PAVEd investigation.

9.4 Concluding comments

This research study examined the programmes and practices of three English medium ECCs to support lone speakers of home language other than English. The study design
provided a series of snapshots into the language learning opportunities provided by the centres for 12 ESL children who were lone speakers of home languages other than English.

From previous research we know that the frequency and quality of interactions between young children acquiring English as a second language and their teachers and peers are critical to English acquisition. The findings from this study suggest that ECCs’ temporal environments influence the frequency and quality of these interactions and thus the language acquisition opportunities for the ESL children.

The kindergarten model together with aspects of the other centre environments were brought together to identify aspects of an optimal learning environment for lone ESL children. Implications for practice and policy were drawn from the discussion of the study findings and related theories and previous research. The findings from this study will thus provide the early childhood sector with some strategies to better support children who are lone speakers of home languages other than English attending ECCs.
Appendices
Appendix A: Documents for centres

1. Participant Information Sheet: Centre manager or owner
2. Consent Form: Centre Manager or owner
Research title: **ESL@ECC: Supporting children with home languages other than English, attending early childhood centres in New Zealand.**

Researcher: **Anne Schofield EdD candidate**

I am studying for a Doctor in Education (EdD) at The University of Auckland, School of Teaching and Learning Development.

The key research questions I will be addressing are:

- How do teachers support the English language acquisition of young children with home languages other than English attending early childhood centres?
- How effective are different approaches and practices used?

It is anticipated that the findings will contribute to research knowledge in the professional field of Early Childhood Teacher Education.

Your centre is invited to participate as you have a high proportion of English as a second language [ESL] learners enrolled, and a stable teaching and learning community.

I would like to invite you to identify potential child participants and ask the parents’ permission to contact them at the centre.
I would also like permission to invite the teachers at your centre to be surveyed with a questionnaire.

The data collection at your centre will involve:

- An analysis of your centre documentation to identify the teaching learning and developmental theories underpinning your practice.
- A questionnaire to investigate the teachers’ experiences, attitudes and teaching practices related to working with ESL children. These are expected to take 30-40 minutes to complete and participants will be asked to do this at home or at the centre during breaks.
- Case studies of a small group (4-6) of ESL children. These case studies will take nine months to complete and will include: semi-structured interviews with the parents of proposed child participants, monthly observations lasting two hours of the children involving running records and audio taping, and the measurement of the children’s receptive language development using the British Picture Vocabulary Scale, at the beginning, after five months and at the end of the nine months.

During the observations and audio recording of the participating children it is possible that conversations between non-participating teachers and children may also be recorded. However, it is unlikely that this will occur as the participants will be wearing personal microphones.

If the information provided during the research is reported or published, it will be done in a way that does not identify the centre, the teachers or the parent and child participants. However, due to the nature of the early childhood sector, it may be possible for interested parties to identify your centre from descriptions that will appear in reports or published material.

The data collected during the research will be stored securely at the university for six years. All documents related to the research will then be destroyed.

Participation in the research is entirely voluntary. You have the right to withdraw from the project at any time and you also have the right to withdraw your information or data up to 24th December 2007. I seek your assurance that teachers, parents and children who are invited to participate will be free to choose to participate or not and that their decision will not affect their relationship with the centre.

A summary report of the findings of this research will be distributed to all participants on completion of the project, and the thesis required by the University of Auckland for the Doctor of Education degree will be available for reading in the university library on completion.

If you consent to your centre being involved in this study then I invite you to complete the attached consent form.

I would appreciate your involvement and am willing to answer any questions that you may have. You are under no obligation to participate in this research, but I am most interested in your centre’s perspective, and it will form an important aspect of my research.

Thank you very much for your time.

If you have any queries or wish to know more please phone me on 0211029065, or write to me at
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Private Bag 92601, Symonds Street
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Tel. 09-4701000 ext47012

For any queries regarding ethical concerns please contact:
The Chair, The University of Auckland Human Participants Ethics Committee,
The University of Auckland, Office of the Vice Chancellor, Private Bag 92019
Auckland. Tel. 3737599 ext 87830

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE: Reference Number 2007/18
Centre Name:
Address1
Address2
Address 3

CENTRE OWNER/MANAGER CONSENT FORM

Date:
Data collection for research: **ESL@ECC: supporting children with home languages other than English attending early childhood centres in New Zealand**

Researcher: **Anne Schofield**

I, the centre owner/manager have read and understand the participant information sheet explaining this project. I have had the opportunity to ask questions and have them answered.

- I give permission for the researcher to invite the teachers employed by the centre and up to six children and their parents to participate in the research.
- I agree that the teachers and parents are free to choose to participate or not participate and that their relationship with the centre will not be affected by their decision.

I understand that I may withdraw the consent of the centre at any time and I may withdraw any data collected up to 24th December 2007.
I understand that this consent form and all data collected during the research will be stored securely at the university and destroyed after six years.

Signed:

Name:

Date:

Centre:

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE: Reference Number 2007/18
Appendix B: 
Documents for participant’s parents

1. Participant Information Sheet
2. Consent Form
Name
Address 1
Address 2
Address 3

PARENT/GUARDIAN AND CHILD PARTICIPANT INFORMATION SHEET

Date:
Research Title: ESL@ECC: Supporting children with home languages other than English attending early childhood centres in New Zealand

Researcher: Anne Schofield EdD candidate. Faculty of Education, University of Auckland

I am conducting the above research for my doctor in education [EdD] studies. My aims are to:

- Investigate the support given to children learning English as a second language by a range of different early childhood centres
- To measure the effectiveness of the different kinds of support available to ESL children

You are invited to participate in this project as your family speaks a home language other than English and your child is learning to speak English at an early childhood centre.

Agreement to participate will involve:

1. a short interview lasting 30-40 minutes, to discuss your family’s language experiences, practices and beliefs; your child’s language ability in his/her home language and your expectations of the centre. You may request this interview to be in your home language or in English.
   - It is preferable that the interview be audio taped so that the information you give can be translated, where necessary, and transcribed for analysis. However, taping is optional and even if you agree to be taped, you may choose to have the recorder turned off at any time.
   - A translator will attend the interview if you prefer to use your home language. He/she will transcribe and translate any tape of the interview not in English. The translator will be required to sign a confidentiality agreement.
• You will be given a copy of the transcription of the interview and asked to confirm that the information that it contains is correct. You will be invited to make any changes necessary and return the transcript to the researcher via the centre within two weeks.

2. Consent to your child’s participation in the project. This will involve:
• Monthly observations, over one year, of him/her at the early childhood centre interacting with teachers and peers. This will include audio taping of conversations that involve your son/daughter. These observations are expected to take approximately two hours.
• A measurement of your child’s receptive language ability using the British Picture Vocabulary Scale [BPVS] at the commencement of the data collection year, after four months and again at the end

I would appreciate your consent for you and your child to participate. Your choice to participate or not will not affect your relationship with the early childhood centre or your child’s involvement in the centres programme and activities.

You have the right to withdraw yourself or your child from the project at any time and you also have the right to withdraw your information or data up to December 24th 2007.

The information provided by you and the findings from the research will be included in the thesis required for the EdD, and may also be submitted for publication in professional academic journals. This will be done in a way that does not identify the centre or you or your child as its source.

The results of the British Picture Vocabulary Scale will be given to you each time it is used, together with a brief summary of the observations completed during that period.

A summary report of the findings of this research will be distributed to all participants on completion of the project, this will be provided in your home language if you prefer. The thesis required by the University of Auckland for the Doctor of Education degree will be available for reading in the university library on completion.

The data, including written observations, BPVS results, audio tapes and transcriptions of parent interviews and child observations will be stored securely at the university for six years. All forms of data, including printed, electronic and taped will then be destroyed.

If you consent to you and your child participating in this research then please complete the attached consent form and return it to me in the stamped addressed envelope.

I would appreciate your involvement and am willing to answer any questions that you may have. You are under no obligation to participate in this research, but I am most interested in your perspective as a parent of a child learning English as a second language, and your involvement will form an important aspect of this research.

If you have any queries or wish to know more please phone me on 0211029065 or write to me at Room H211
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Tel. 09 470-1000 ext 47012

For any queries regarding ethical concerns please contact:
The Chair, The University of Auckland Human Participants Ethics Committee,
The University of Auckland, Office of the Vice Chancellor, Private Bag 92019
Auckland. Tel. 3737599 ext 87830

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE: Reference Number 2007/18
PARENT/GUARDIAN AND CHILD PARTICIPANT CONSENT FORM

Date
Research: ESL@ECC: Supporting children with home languages other than English attending early childhood centres in New Zealand

Researcher: Anne Schofield

I have received an explanation of this research project in either English or my preferred language as requested. I have had an opportunity to ask questions and have them answered, in English or through an interpreter as preferred by me.

- I agree to attend an interview with the researcher to discuss my family’s language beliefs and practices; and my child’s language experiences and abilities. I understand that I will be asked to read and confirm the content of a written transcript of the interview.
- I agree to my child being observed monthly throughout 2007 at the early childhood centre. I understand that this will include the audio taping of his interactions with his teachers and peers.
- I also agree to the measurement of my child’s receptive language ability using the British Picture Vocabulary Scale, at the beginning, end and at 3-4 monthly intervals during the year.

I understand that I may withdraw this consent at any time and I may withdraw any data collected up to 24th December 2007.

I understand that my choice to participate or not will not affect my relationship with the early childhood centre or my child’s involvement in the centres programme and activities.
I understand that any research findings submitted for publication will be written in a way that does not identify the centre, me or my child as its source.

I understand that this consent form and all data collected during the research will be stored securely at the university and destroyed after six years.

I agree to participate in this research.

Signed Parent/Guardian  Date

Name

I consent to the participation of my child . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . , a minor, in the research as described.

Signed Parent/Guardian  Date

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE: Reference Number 2007/18
Appendix C:
Documents for teachers

1. Information Sheet
2. Consent form
Research title: ESL@ECC: Supporting children with home languages other than English attending early childhood centres in New Zealand

Researcher: Anne Schofield, EdD candidate

This research is the main data collection of my doctoral studies. The key questions that I will be addressing are:

- How do teachers support the English language acquisition of young children with home languages other than English attending early childhood centres in New Zealand?
- How effective are the approaches and practices used?

You are invited to participate in the research in two ways:

1. complete a questionnaire that seeks to obtain data related to your language teaching and learning experiences and your attitudes and practices to teaching children learning English as a second language [ESL]. The questionnaire will take 30-40 minutes to complete.

2. consent to the recording of any interactions you have during my observations of ESL children selected for case studies. The focus of the observations will be on the case study children and will be carried out during activities that regularly occur at your centre, for example free play, teacher directed activities, morning tea, mat times etc. The observations will be completed by the researcher and involve running records and audio recordings of the children’s verbal and non-verbal interactions with teachers, peers and the centre environment. The observations will be completed at monthly intervals with each child over one year. Each observation will last approximately two hours.
The information provided in the questionnaire, and from the observations will be analysed and included in the thesis required for the EdD, and may also be submitted for publication in professional academic journals. This will be done in a way that does not identify the centre, you, or the parent and child participants. However, due to the nature of the early childhood sector, it may be possible for interested parties to identify participants from descriptions that will appear in reports or published material.

A summary report of the findings of this research will be distributed to all participants on completion of the project, and the thesis required by the University of Auckland for the Doctor of Education degree will be available for reading in the university library on completion.

The data collected during the research will be stored securely at the university for six years when all documents related to the research, including audio tapes, will be destroyed.

Participation in this research is entirely voluntary. You have the right to withdraw from the project at any time and you also have the right to withdraw your information or data up to 24th December 2007. If you choose not to take part in this research then your relationship with the centre will not be affected.

You are invited to complete the attached consent form. Please sign and return the form to me in the stamped addressed envelope provided.

I would appreciate your involvement and am willing to answer any questions that you may have. You are under no obligation to participate in this research, but I am most interested in your perspective as a teacher, and your involvement will form an important aspect of this research.

Thank you very much for your time.

If you have any queries or wish to know more please phone me on 0211029065 or write to me at
Room H211
School of Teaching, Learning & Development
Faculty of Education
University of Auckland
Private Bag 92601
Symonds Street
Auckland 1035
e-mail: a.schofield@auckland.ac.nz

My supervisors are:

Dr Louise Keown
School of Teaching, Learning & Development
Faculty of Education
University of Auckland
Private Bag 92601
Symonds Street
Auckland 1035

Dr Margie Hohepa
Te Puna Wānanga School of Māori Education
Te Tai Tokerau Campus, Faculty of Education
PO Box 1326
Whangarei, 0140
For any queries regarding ethical concerns please contact:

The Chair, The University of Auckland Human Subjects Ethics Committee, The University of Auckland, Office of the Vice Chancellor, Private Bag 92019, Auckland Tel. 3737999

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN SUBJECTS ETHICS COMMITTEE: on . . . . . . . . for . . . . . . . years from . . . . . . . (date) to . . . . . . . (date). Reference Number . . . . . . / . . . . . .
Data collection for research: **ESL@ECC: Supporting children with home languages other than English attending early childhood centres in New Zealand.**

Researcher: **Anne Schofield**

I agree to participate in this research.

I am willing to:

- complete the questionnaire and
- be observed whilst working with the child case study participants.

I understand that

- all data collected during the research will be held in a secure cupboard for six years when all documents related to the research, including audio tapes, will be destroyed.
- I may withdraw this consent at any time and I may withdraw any data collected up to 24th December 2007.
- my choice to participate or not will not affect my relationship with the early childhood centre.
- any research findings submitted for publication will be written in a way that does not identify the centre, me or the child participants as its source.
- I understand that this consent form and all data collected during the research will be stored securely at the university and destroyed after six years.

Signed ..................................  Date ..................

Full name

Position and name of centre ..............................
APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN SUBJECTS ETHICS COMMITTEE: on ...............for ..........years from......(date) to ......(date). Reference Number...../.....
Appendix D:
Parental Semi structured interview questions
Semi structured interview questions for parents/guardians

1. Who lives in your home? (parents, grandparents, brother and sisters, cousins, aunts and uncles etc)
2. Which people does your child spend most of his/her time with at home?
3. What languages are spoken in your home?
4. Which language do you speak mostly to your child? Why?
5. How did you learn English?
6. How do you think children learn English?
7. What are your expectations regarding your child’s learning of English?
8. Please tell me why you have enrolled your child in child care. Why now? Why this centre?
9. What are your expectations of early childhood education?
10. Is the child care centre very different from what you expected? In what way?
11. How do the practices and organisation of the centre fit with your beliefs regarding child rearing?
12. Do you have any questions regarding the study?
Appendix E:
Teacher questionnaire
Questionnaire for early childhood teachers

Participants Name . . . . . . . . . . . . . . . . . . . . . . . . . . .
Centre . . . . . . . . . . . . . . . . . . . . . . . . . . .

1. How many years have you been teaching in Early Childhood Centres in New Zealand?
   □ 0-3 years
   □ 3-5 years
   □ 5-10 years
   □ More than 10 years

2. What languages do you speak well enough to hold a conversation about everyday activities? Please list these in order of ability. If you speak two languages equally then place them both together on the same line,

   Language 1____________________________
   Language 2____________________________
   Language 3____________________________

3. When and how did you learn to speak these languages?

<table>
<thead>
<tr>
<th>Language</th>
<th>When</th>
<th>How you learnt the language. Please give details</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Please give the approximate age at which you began to learn the language.</td>
<td>For example, this may be:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• naturally at home from monolingual or bilingual parents, or</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• immersion at school, or</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• through formal lessons at mainstream school or</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• classes at a language school</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Language</th>
<th>When</th>
<th>How you learnt the language. Please give details</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td></td>
<td>For example, this may be:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• naturally at home from monolingual or bilingual parents, or</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• immersion at school, or</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• through formal lessons at mainstream school or</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• classes at a language school</td>
</tr>
</tbody>
</table>
4. Which language do you currently use most at home? If you use two languages equally then place them both on the same line.

____________________________________

5. Do you have experience of working with children from other countries or cultures:
   □ Yes
   □ No - Go to question 7

6. Please list the countries or cultures of children that you have taught:

<table>
<thead>
<tr>
<th>Children’s country of origin: Also include children born in New Zealand with families who speak a language in addition to English at home or practice the traditions of their country or culture of origin at home.</th>
<th>Approximate Number of children</th>
<th>Approximate ages of children</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
7. Have you ever taught children who speak home languages other than English?
   ☐ Yes – go to question 8
   ☐ No – go to question 10

8. What languages did/do they speak at home

   _______________________
   _______________________
   _______________________
   _______________________

9. Have you experienced working with children learning English as a second language who: (tick yes or no)

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>are complete beginners with no English understanding at all</td>
</tr>
<tr>
<td></td>
<td>use their home language when talking to staff and peers</td>
</tr>
<tr>
<td></td>
<td>are in a silent phase; do not communicate at all either verbally or through body language</td>
</tr>
<tr>
<td></td>
<td>are in a silent phase but use body language such as miming or pointing to make their needs known</td>
</tr>
<tr>
<td></td>
<td>use single words e.g. toilet, drink to make their needs known to you</td>
</tr>
<tr>
<td></td>
<td>use some common greetings and phrases in English that they have ‘learnt’ from their teachers or peers for example ‘packing up time’ or ‘wash your hands’</td>
</tr>
<tr>
<td></td>
<td>make up their own English phrases and sentences e.g. want milk, I no like him</td>
</tr>
<tr>
<td></td>
<td>are able to communicate verbally in English with English speaking children</td>
</tr>
<tr>
<td></td>
<td>are able to converse sufficiently in English to participate in mat time discussions</td>
</tr>
</tbody>
</table>
10. Have you worked alongside teachers from countries other than New Zealand?
   ☐ Yes
   ☐ No

Which countries are/were they from?

__________________________
__________________________
__________________________
__________________________
__________________________

11. Have you worked with teachers who speak languages in addition to English?
   ☐ Yes
   ☐ No

Please list the languages that they speak/spoke:

__________________________
__________________________
__________________________
__________________________
__________________________
Appendix F:
End of study parental questionnaire

1. Letter
2. Questionnaire
Name

Date:

Research Title: **ESL@ECC: Supporting children with home languages other than English attending early childhood centres in New Zealand**

Researcher: **Anne Schofield EdD candidate. Faculty of Education, University of Auckland**

Thank you for participating in this research project.

Since it began in March you have received a transcript of our interview and reports of observations that I have completed of your child at his/her early childhood centre.

In order to finish the project you are invited to meet with me again to discuss your child’s language development and his/her experiences at home and at the centre. This is to see if there have been any changes since we last met.

The meeting should take no longer than 20 minutes and can be held at the centre or a place suggested by you.

If you are unable to meet with me then I can arrange for you to receive a questionnaire to complete.

Please contact me by phone or e.mail to arrange a convenient time and place to meet or to request a questionnaire.

Regards

Anne Schofield

Tel: 0211029065

e-mail: a.schofield@auckland.ac.nz
End of data collection parents questionnaire:

Child’s Name  

Interview with or questionnaire completed by  

Which languages are spoken in your home?  

Which language do you speak mostly with your child?  

When you talk to your child in your home language: (please tick the most relevant)

he/she usually answers you in your home language  

he/she usually answers you in English  

3a. When you talk to your child in English:

he/she usually answers you in English  

he/she usually answers you in your home language  

What language does your child choose to use when talking to people at home?

Mother  

Father  

Grandparents  

Brother/Sisters  

Family friends  

Family Members overseas on the phone  

Has your child progressed as well as you would like in his/her home language?

Yes  No  

Please explain why you think this  

________________________________________________________________________________________________________________________________________________________
Has your child progressed as well as you would like in English?
Yes ☐ No ☐

Please explain why you think this

Has the centre met your expectations regarding your child’s English language learning?
Yes ☐ No ☐

Please explain why you think this

Where else does your child hear or learn English? (please ✓ and give details if relevant)

TV or DVD in English ☐ How many hours a day?......

English language classes ☐ (please give details about these such as when he/she began attending and for how often. For example: weekly, monthly, several times a week)

Church ☐ (how often and for how long? For example: weekly, monthly, several times a week)

Family friends and/or social groups ☐ (please describe and indicate how often?)
Hobby groups (Please list e.g. gym, music, sports and indicate how often. For example: weekly, monthly, several times a week)

………………………………………………………………………………………………
………………………………………………………………………………………………

Where else does your child hear or learn your home language? (please check and give details if relevant)

TV or DVD in your home language □ How many hours a day? ............

Language classes □ (please give details about these such as when he/she began attending and how often. For example: weekly, monthly, several times a week)

………………………………………………………………………………………………
………………………………………………………………………………………………

Church □ (how often and for how long? For example: weekly, monthly, several times a week)

………………………………………………………………………………………………
………………………………………………………………………………………………

Family friends and/or social groups □ (please describe and indicate how often?)

………………………………………………………………………………………………
………………………………………………………………………………………………

Hobby groups □ (Please list e.g. gym, music, sports and indicate how often. (For example: weekly, monthly, several times a week)

………………………………………………………………………………………………
………………………………………………………………………………………………

Thank you for agreeing to be interviewed or to complete this questionnaire. If you have any queries please contact me on 0211029065.

The results of this research will be written up as part of a dissertation for an EdD at The University of Auckland. On successful completion a copy of which will be available in the university library

This project has been approved by the University of Auckland human participants ethics committee: Reference Number 2007/18
Appendix G: Research Assistant documents

1. Confidentiality Agreement
2. Inter-rater record sheet and directions for use
RESEARCH ASSISTANT CONFIDENTIALITY AGREEMENT

Research title: **ESL@ECC: Supporting children with home languages other than English attending early childhood centres in New Zealand**

Researcher: **Anne Schofield**

I am willing to assist in this research.

I agree to:

- Observe child participants at an ECC.
- Complete running record sheets for each of the observations
- Discuss my observations with the principal researcher for observer reliability purposes. Complete further observations, as necessary, if discussions show researchers observations are found to be unreliable.

I agree not to discuss the observations with anyone, or allow access to the running record sheets or any other written material to anyone other than Anne Schofield.

Signed ____________________________ Date ____________________________

Name ____________________________

APPROVED BY THE UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE: on . . . . . . . . . . for . . . . . . . years from . . . . . . . (date) to . . . . . . . (date).

Reference Number 2007/18
# Inter-rater observation form

Observation Record Sheet – No T 1 2 3 4 5 6 7 8

<table>
<thead>
<tr>
<th>A. Interaction was initiated by:</th>
<th>B. Aimed at:</th>
<th>C. The initiation consisted of:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus</td>
<td>Peer</td>
<td>Teacher</td>
</tr>
<tr>
<td>Child only</td>
<td>2-6 children</td>
<td>7+ children</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

237
Definitions of Categories:

- **Statement or Comment** – include comments or statements that give information on the initiators activity or intention such as ‘I am going outside’ or ‘I like playing with the dough’.
- **Gaining Attention** – an initiator tries to gain the attention of an individual or group by calling their name or using the word ‘look’ or the phrase ‘look at this’.
- **Giving Direction** – include positive and negative behaviour child guidance statements or and directions such as ‘go and wash your hands now’ or ‘remember to walk inside’ or ‘don’t run’ or ‘be careful not to spill it’. A child may give a direction to another child for example ‘put that there’ or ‘stop!’.
- **Teaching, Extending, Explaining** – this category includes teachers explaining why, or how something comes about or works; listing colours, numbers, letters; helping a child write his/her name and/or explaining why an observed behaviour is not acceptable. It can involve physical, cognitive, emotional, social and language domains.
- **Question** – this includes open ended and closed questions. Questions are often related to other categories such as directions, for example ‘Do you remember what we said about walking inside?’ or teaching, for example ‘what do you think will happen if we put that in there?’. In cases such as these then tick both relevant categories.
- **Praise** – This includes straightforward praise such as ‘Well done’ and also congratulatory phrases such as ‘Wow that’s awesome’ or ‘I like the colours that you have used’.

Directions for the observations:

- Training in the use of the record sheet will be given until an agreement of 80% or above has been met between the researcher and the research assistant.
- After the training there will be observations of 6 children.
- Observations will last 10 minutes each.
- The researcher and the research assistant will observe the same child (the focus child) at the same time.
- The start and finish of each observation and the focus child for each observation will be identified by the researcher.
- An interaction for this exercise is defined as: a verbal communication between two or more individuals that involves: giving, requesting or sharing information; praising behaviour; directing behaviour or gaining attention. The interaction may take many turns between the initiator and the recipient and will be deemed to continue until either the initiator or the recipient begins a subsequent interaction with another person.
- The focus of these observations are the initiation of each interaction.

Directions for use of the record sheet:

- Use one sheet for each observation
- Complete a separate line for each interaction initiation that occurs during the observation.
- Only the details of the initiation of each interaction are to be documented. Responses from the recipient of the interaction and further turns by the initiator are not required.
- To record the individual that initiated the interaction: Tick one box in section A
- Then tick one box in section B to identify the individual or group that the interaction is aimed at
- Finally tick as many boxes in Section C that describe the contents of the initial turn of the interaction.
Appendix H: Observation transcription format
Participant dress/mood etc: I was off sick last week and still has a runny nose. At the end of the previous week there was a big storm and Bay had a power cut.

Background/Setting: All of the tables are set up with activities as the weather is very wet and the children cannot go outside. The tables are set up with: Table 1 – crayons, vivids, scissors, white paper; Table 2 – coloured paper and crayons; Table 3 – white paper, coloured dyes and cotton buds; Table 4 playdough; Table 5-White board and markers. Book corner has a drape over to make a den with jigsaws, books and a toy garage on the floor.

<table>
<thead>
<tr>
<th>Time</th>
<th>Observed behaviour</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td><strong>Meeting Time</strong> with T3. All of the whales are sitting in a circle on the mat with T3. T3 sings song ‘Hello (name) how are you?’ I listens</td>
</tr>
<tr>
<td>9.20</td>
<td>T3 talks to each child in turn. When it is Iasonas’ turn: T3 ‘Iasonas’ I ‘When it was dark all light went off and we had candles and then window and then they putting’ T3 ‘Wow so you had candles too. After mat time I will give you a big piece of paper and you can draw’ T3 to general ‘Do you think its raining or sunny outside?’ Ch and I answer ‘raining’ T3 ‘So today we are all going to be inside. Can you tell me all of the things we can do inside’. Ch call out some things T3 ‘But there are some things we cannot do inside’ I ‘running’ T3 ‘yes’ T3 lists the things on the tables and the activities that the children can do today. T3 ‘OK so you can go now’ I and L go to table 1 with paper, crayons and vivids</td>
</tr>
<tr>
<td>3.2</td>
<td>I to L ‘I’ve got a blue one’ (scissors) L ‘Ah pa peg peg pa’</td>
</tr>
<tr>
<td>3.3</td>
<td>I draws and sings to himself – no words.</td>
</tr>
<tr>
<td>3.4</td>
<td>I points to his drawing to Luke and laughs. L laughs</td>
</tr>
<tr>
<td>3.5</td>
<td>I draws hair on his drawing of a dog and sings to himself la la la la, laa la la la, la la la la laaaaaaaaa</td>
</tr>
<tr>
<td>3.6</td>
<td>L puts the top on his pen and pokes I. I does the same to Luke I and L talk nonsense Lah Lah Lah De Dee Wow Weow woo woo wee I picks up another pen I to L ‘I got new one!’ L ‘I don’t need that one’</td>
</tr>
<tr>
<td>3.7</td>
<td>I points to his picture and says to Observer ‘Look at my sun’ Ob ‘Oh your sun has a smiley face’ I ‘Look at this sun’</td>
</tr>
<tr>
<td>3.8</td>
<td>I looks at L’s drawing I to L ‘Oh what’s that?’ No response</td>
</tr>
<tr>
<td>3.9</td>
<td>T1 passes and looks at I drawing with the pen. T1 to I ‘Oh I think you need a new pen’</td>
</tr>
</tbody>
</table>
She gets a new pen out of the cupboard.
T1 gives it to I and takes the old one.
T1 to I ‘It’s no good working with a pen that doesn’t want to write’
I ‘Thank You’
T1 ‘Where’s your name?’
I ‘Look at this’
T1 ‘you’ve made some awesome pictures already’

3.10
I and L continue to draw with no interaction for 10 minutes
I then looks at L’s picture ‘Is that superman?’
L ‘Yes’
I ‘That looks like it’
L leaves the table and looks around the room. He then comes back.

3.11
L to I ‘I was gone for a moment’
I carries on drawing

3.12
T3 approaches ‘Have you got a paper Iasonas?’
I nods
T3 ‘Did you get it yourself?’
I points to the pile of paper where he got his.
T3 ‘Oh good’

3.13
L points at his picture to gain I’s attention
L to I ‘Look at my other picture. Its lollipop warehouse’
I ‘What?’
L ‘Its lollipop warehouse’
I nods understanding

3.14
V approaches. Ob moves and offers her seat.
I to Obs ‘I will get you a seat’
I gets a seat and places it at the table for the Obs.

3.15
I looks over to the mat corner where T2 has put a drape over the mat/book corner to make a den)
I says to L and V ‘Look what Sharmini done’
I ‘I wish we could move this table over there’

3.16
I to RT ‘Jeanette!’
No response

3.17
I to L ‘You know my brother is a terror’
No response

3.18
I points to his picture and says to I ‘This is lollipop playland’
I ‘I’m going to make a lollipop playland. My lollipop playland is better than yours!’
L ‘I don’t like that. Yours is sucky’
I ‘No’
L ‘My one isn’t sucky’
I ‘No you can’t do one like mine’
L ‘No you can’t do one like mine’
I ‘No you can’t do one like mine’
L ‘No you can’t do one like mine’
I ‘No you can’t do one like mine’
L leaves the table and runs outside visibly upset

3.19
I to Obs ‘Look at my lollipop playland’

3.20
Luke comes back
I to L ‘Sorry’
L ‘That’s ok’
I and L carry on drawing
3.21 I says to L ‘Hey look . . . . . . . . . . . . here’
I shows L a piece of paper in his hand.
L ‘Ah bucky cuky . . . . . .’ Nonsense words
I ‘Look at that’
L ‘Winky’
I ‘Weenie? I’ll show you that’
I goes to his cubby. Luke follows. I shows L a painting in his cubby.
I ‘I had but my brother took one’
L ‘silly old tookey’
I ‘silly old tookey’
L ‘My Mum says its school time Sticky bird’
I ‘sticky, sticky, sticky’
L ‘this is sticky’
I ‘Sticky old wider, Sticky old wider, Sticky old wider’
I and L go to the book corner.

3.22 T3 approaches and asks I ‘When is your party?’
I shrugs
T3 ‘Let’s look at the birthday chart. Oh its August
I L and T3 then sit together in the book corner and read the Dr Seaus book.
T3 ‘Hey that’s Seaus. Do you like donuts? I like donuts. What colour . . . . . ?
What are they doing in there? It says. . . . . . . . . ’
T3 reads and inserts I’s name in the title.
I ‘Nah!’
T3 reads the book aloud.
T3 to I ‘Will you go and get a tissue’
I runs to get a tissue and blows his nose.
T3 ‘Will you read it to me now Iasonas’
I runs to a chair
T3 to I and L ‘You don’t want to hear the story any more?’
I shakes his head

3.23 I and L sit down on the mat by the garage and play with the cars briefly.
They then go to the home corner and join B1
B1 to group ‘. . . . . . . puppy’
I to B1 ‘Yucky puppy’

3.24 I returns to book corner and T3.
I reads the title of the book she is reading with Gr.
T3 to I ‘How did you know?’
I shrugs
T3 ‘You’re very clever’

3.25 I returns to the home corner with B1 and L
I to group ‘Happy Puppy Luppy’
B1 shows I an egg cup.
B1 to I ‘I said’

3.26 I calls to T3 ‘Look . . . . . . . . Eggs in . . . . . . . . . . . . . I shows T3 the eggs in the teapot ‘I’ll take it out.’
I L and B1 play at the home corner table. They get things out of the cupboard and put them on the table.

3.27 L gets out the honey pot.
L to group ‘Honey’
I to L ‘Honey needs to be in middle (of table)’

3.28 I pretends to make a drink.
I to L ‘this is the one you don’t like but I like it’
L carries on playing and starts to make a cake.
I joins L making a cake.
References


McNaughton, S., Mac Donald, S., Barber, J., Farry, S., & Woodward, H. (2002). *Nga Taumatua: Research on literacy practices and language development (Te Reo) in*


