

Copyright is owned by the Author of the thesis. Permission is given for a copy to be downloaded by an individual for the purpose of research and private study only. The thesis may not be reproduced elsewhere without the permission of the Author.

**A Case Study of Children's and Adults'  
Perceptions of 'Being Outside' in One Early  
Childhood Centre**

**A thesis presented in partial fulfillment of the requirements  
for the degree of**

**Masters of Education**

**Massey University, Palmerston North**

**New Zealand**

**Cheryl Faye Greenfield**

2007

## ABSTRACT

This research was a qualitative semi-participatory case study carried out over 14 weeks, in one early childhood centre. Increasingly many young children in this country only get outside on adult terms and these terms stem from the values, beliefs and attitudes of the teachers as well as centre management practices. Therefore this study explored: (1) fourteen young children's views on their outdoor experiences in an early childhood education setting; (2) parents', teachers' and the centre owner's views on the value and role of the outdoors in young children's lives; (3) participants' views on the role of the teacher in the outdoor environment. Procedures used included cameras, photo elicitation, drawing, touring, observations, and focus groups. The discussion centres on the importance of 'playing', the 'elements of opportunity' that being outside at the centre offered and the teacher's role. An interesting outcome was that the views and feelings of the participants overwhelmingly demonstrated what a significant role the outdoors had in all their lives and how much they valued an outdoor environment at their centre. Parents and teachers indicated that the outdoors offers more for children than the indoors – more health and holistic development, exploration, active movement, hiding, imaginative, learning, risk taking and problem solving opportunities. It is argued that there was a strong interrelationship between the adults' beliefs and values, in particular the centre owner's, and the provision for outdoor play. It is also argued that young children do notice, appreciate and value the natural world if they are given the opportunity to experience it everyday for long periods of time, with adults who share in the joy, wonder and awe of it. This study argues that children need to be in optimal outdoor spaces that contain as many rich sensory experiences and natural elements as possible. The central claim of this thesis is that children are motivated to be outside so they can play. For the children in this study 'play' included: being physically active and moving in increasingly complex ways; exploring their place, their world; and engaging with nature, humans and non-humans, and the natural world. It is argued that when the adults in the child's life know this and value these elements of the outdoors, and hold a 'critical pedagogy of place', then comes mutuality, joint participation, shared wonder, holistic growth, and learning environments are developed that mirror the learning they are to support; a sense of harmony is created. It is about all interrelationships between people, places, thing and events.

## **ACKNOWLEDGEMENTS**

I would like to acknowledge the following people who made this thesis possible:

### **The participants**

My most sincere thanks to the children- Alexia, Chantelle, Eilish, Hamish, Jack, Joshua G, Joshua K, Joshua Mc, Krissy, Mikayla, Paloma, Sam, Taran, and Wei-Bin – who I was privileged to spend many hours with in the outdoors. Thank you for welcoming me into your lives and for sharing with me your views on what being outside meant to you in so many ways. I will treasure those memories for ever. Many thanks to the families, who gave so willingly of their time to share openly and enthusiastically their values and beliefs about the role of outdoor in their own and their children's lives. Thank you especially to Suzanne for allowing me to undertake this project in your centre. Thank you to Maya and Louise for your continual support, trust, flexibility, enthusiasm and commitment was very much appreciated.

### **Massey University College of Education**

To my supervisors, Joy Cullen and Kimberly Powell, thank you for your enthusiasm, support, and constructive feedback through all the stages. The Distance Library Service provided amazing prompt service for which I am grateful. Gaining approval through the Massey University Human Ethics Committee, PN 05/43 ensured this thesis does no harm.

### **Manukau Institute of Technology**

Thank you to the Manukau Institute of Technology Research and Ethics Committee Fund for granting me the sum of \$400.00 (application R05/3/20) that covered the cost involved in purchasing the cameras and the development of the photographs.

### **Family and friends**

To my colleagues, thank your interest and encouragement, and for the discussions we had over lunch about the challenges, processes and the findings. I especially want to thank my Head of Department and colleagues who supported me in so many ways. Gill Franklin and Chris Bayes for awesome proof reading, I will be forever grateful. Bob, you just being there meant the world and your proof reading was invaluable. Thank you to Mum and Don, who made space for me, cooked my meals and enabled me to get through the beginning months of the write up process and to my children and grandchildren who, through their love of being outside, inspired this investigation.

# TABLE OF CONTENTS

<b>CHAPTER ONE: INTRODUCTION</b> .....	<b>7</b>
RATIONALE FOR THIS STUDY.....	9
THEORETICAL BACKGROUND.....	11
RESEARCH AIMS .....	13
OUTLINE OF THESIS.....	13
<b>CHAPTER TWO: LITERATURE REVIEW</b> .....	<b>15</b>
CURRENT PERSPECTIVES ON THE VALUE OF OUTDOOR PLAY .....	15
<i>Current educational views</i> .....	15
<i>The importance of optimal outdoor environments and access</i> .....	17
<i>The importance of physical activity for children's development</i> .....	20
<i>Importance of 'place' and the natural world</i> .....	22
YOUNG CHILDREN'S PERSPECTIVES ON 'BEING OUTSIDE' .....	23
<i>Playing outside is most important to children</i> .....	25
<i>Children's views of the teacher's role in the outdoors</i> .....	30
ADULTS' PERSPECTIVES ON OUTDOOR PLAY AND ITS PROVISION.....	31
<i>Teachers' values and beliefs about the outdoors impacts on what happens for children</i> .....	31
<i>Parents' perspectives on children being outside</i> .....	36
<i>Attitudes towards risk taking</i> .....	36
CURRENT APPROACHES TO CONDUCTING RESEARCH WITH YOUNG CHILDREN .....	38
<i>Using photography</i> .....	39
SUMMARY AND RATIONALE FOR STUDY .....	41
<b>CHAPTER THREE: METHODOLOGY</b> .....	<b>45</b>
RESEARCH APPROACH .....	45
RESEARCH DESIGN.....	48
SETTING AND PARTICIPANTS.....	48
<i>Accessing participants</i> .....	48
<i>Centre context</i> .....	49
<i>Adult participants</i> .....	51
<i>Centre outdoor setting</i> .....	51
<i>Introducing the participant children</i> .....	53
OVERVIEW OF TIME FRAME FOR INVESTIGATION.....	54
RESEARCH TOOLS AND PROCEDURES.....	55
<i>Observations</i> .....	57
<i>Photo novella</i> .....	58
<i>Photo elicitation</i> .....	58
<i>Collaborative drawings</i> .....	59
<i>Child conferencing conversations</i> .....	59
<i>Touring</i> .....	60
<i>Interviews with staff and parents</i> .....	60
<i>Journals</i> .....	62
<i>Audio-recording</i> .....	63
<i>Bookmaking and disengaging</i> .....	63
TRUSTWORTHINESS, TRANSPARENCY, TRANSFERABILITY .....	64
ETHICAL CONSIDERATIONS .....	65
<i>Children as permission granters</i> .....	65
<i>Establishing rapport, positive relationships and trust</i> .....	66
<i>Privacy and confidentiality</i> .....	67
<i>Ethics and photography</i> .....	67
ROLE OF RESEARCHER .....	68
DATA ANALYSIS .....	69
<i>Cataloguing the data and transcribing</i> .....	69
<i>Steps in the analysis process</i> .....	71
SUMMARY .....	73
<b>CHAPTER FOUR: THE FINDINGS: CHILDREN'S PERSPECTIVES ON BEING OUTSIDE</b> .....	<b>75</b>
OUTDOORS IS WHERE WE PLAY, HAVE FUN AND LIKE TO BE .....	75

<i>Being physically active in a variety of ways</i> .....	76
<i>Playing with friends, playing chasing games, hiding and imagining</i> .....	90
EXPERIENCING NATURE, THE AESTHETIC, NATURAL AND WIDER WORLD .....	93
<i>Sand</i> .....	93
<i>The water feature</i> .....	96
<i>Natural world and nature</i> .....	97
<i>Situated preferences</i> .....	103
TEACHERS 'LOOK AFTER US' AND THEY SHOULD 'PLAY WITH US' .....	104
SUMMARY .....	105
<b>CHAPTER FIVE: THE ADULTS' PERSPECTIVE</b> .....	<b>107</b>
MORE OPPORTUNITIES FOR HOLISTIC DEVELOPMENT OUTSIDE .....	107
<i>The optimal environment</i> .....	109
<i>Commonsense approach to weather and safety</i> .....	113
<i>Continuity between home, centre and wider world</i> .....	114
PROVISION RELATED TO TEACHERS' AND CENTRE OWNER'S BELIEFS, INTERESTS AND PASSION .....	117
<i>Level of teacher involvement</i> .....	118
SUMMARY .....	121
<b>CHAPTER SIX: DISCUSSION OF FINDINGS</b> .....	<b>123</b>
ELEMENTS OF OPPORTUNITY .....	124
<i>Health and holistic development</i> .....	125
<i>Playing, learning, imagining</i> .....	127
<i>Vigorous active movement and developing physical skill</i> .....	130
<i>Rearranging and transporting</i> .....	132
<i>Experience and explore nature and the natural, aesthetic and wider world</i> .....	133
TEACHER'S ROLE: PROVIDE SAFE FUN CHALLENGES AND 'PLAY' .....	136
<i>Passion and interest of teachers and the need for ongoing professional development</i> .....	137
THE INTERRELATIONSHIPS BETWEEN VALUES, PERSPECTIVES AND PROVISION .....	138
SUMMARY .....	140
<b>CHAPTER SEVEN: CONCLUSION</b> .....	<b>141</b>
SUMMARY OF FINDINGS .....	141
CONTRIBUTIONS OF THE RESEARCH .....	143
IMPLICATIONS FOR EARLY CHILDHOOD EDUCATION OUTDOOR PROVISION .....	144
REFLECTION ON RESEARCH TOOLS: EFFECTIVENESS, HIGHLIGHTS AND CHALLENGES .....	146
LIMITATIONS .....	149
FUTURE RESEARCH .....	150
FINAL COMMENTS .....	151
<b>REFERENCE LIST</b> .....	<b>153</b>
<b>APPENDICES</b> .....	<b>168</b>

## LIST OF TABLES

Table 3.1 Other features and equipment included .....	52
Table 3.2 Overview of investigation.....	54
Table 3.3 Methodological 'pieces' used adapted from the Mosaic Approach.....	55
Table 4.1 Summary of what children wanted to add .....	85
Table 4.2 A summary of categories from 371 children's photographs.....	97
Table 4.3 Views on teacher's role .....	104
Table 4.4 Themes that emerged from children's perspectives on being outside .....	105
Table 5.1 Emerging themes of the values of being outside for children .....	108
Table 5.2 Summary of aspects the adults valued about the centre outdoor setting .....	117
Table 5.3 Themes emerging from adult's perspectives on the value of outdoors for children .....	122
Table 6.1 Elements of Opportunity.....	124

## LIST OF FIGURES

Figure 3.1 Participant children.....	53
Figure 4.1 Sample of children's photos of the large climbing area and monkey bars .....	78
Figure 4.2 Samples of observation notes and photo of Wei-Bin and Mikayla using monkey bars .....	79
Figure 4.3 Sample of Mikayla's photos of monkey bars.....	80
Figure 4.4 Mikayla's drawing of the monkey bars.....	80
Figure 4.5 Wei-Bin drawing monkey bars.....	81
Figure 4.6 Wei-Bin's photos of monkey bars.....	81
Figure 4.7 Rope bridge and monkey bar configuration .....	82
Figure 4.8 Photo essay of Alexia on monkey bars.....	84
Figure 4.9 Photo essay of Krissy rearranging .....	88
Figure 4.10 Children transporting.....	89
Figure 4.11 Hiding places taken by children .....	92
Figure 4.12 Joshua K, Taran and another child in bushes taken by myself.....	92
Figure 4.13 Photo Essay 3: Chantelle in the Sandpit.....	94
Figure 4.14 Chantelle's photo: I like the sandpit.....	94
Figure 4.15 Sample of children's perspectives of the sandpit .....	95
Figure 4.16 Water feature photos taken by children.....	96
Figure 4.17 Photographs of natural and aesthetic elements.....	98
Figure 4.18 Drawing by JoshuaG, Joshua Mc, Hamish, Taran, Alexia and Eilish.....	99
Figure 4.19 Jack's, Chantelle's and Krissy's drawing .....	100
Figure 4.20 Hamish's photo of the bird.....	100
Figure 4.21 Over the fence taken by Jack.....	102

## APPENDICES

Appendix 1: Massey University Human Ethics Committee (MUHEC reviewed and approved the proposed research (PN Application-05/43)

Appendix 2: Teachers' and parents' information sheet

Appendix 3: Teachers' and parents' participation consent forms

Appendix 4: Child consent form

Appendix 5: Sketch of centre outdoor setting

Appendix 6: November 10<sup>th</sup> Combined Observation using written notes, tape and camera

Appendix 7: MIT Research and Ethics Committee funding approval

Appendix 8: Descriptors of assorted pictures used for photo elicitation

Appendix 9: Steps in the analysis of children's photographs

Appendix 10: Table mosaics of each child's preferences

Appendix 11: December 1<sup>st</sup> observation



## Chapter One: INTRODUCTION

The outdoors has long been seen as a significant and important aspect of children's lives within New Zealand. Early childhood educators often recognise the benefits of being outside, and being physically active, echoing what respected educationalists have said over the centuries. Being able to go outside is seen as a fundamental human right, across societies and cultures. Increasingly though many young children in this country only get outside on adult terms and these terms stem from the values, beliefs and attitudes of the teachers as well as centre management practices. I overheard recently an early childhood teacher justify to a parent why children do not need to spend much time outside. Restricting or removing access to the outdoors and exposure to natural elements could be seen as punishment.

So why should early childhood education and care centres treat our youngest citizens like prisoners? Why withhold the right they have to be outside if they want to be? It has been argued that legislation, in early childhood particularly, has increasingly emphasised children's vulnerability and negated their physical capability, resulting in a surveillance system (Penn, 2005) where children find it hard to escape from the gaze of adults both at their early childhood centre and at home. Further:

*...children are disappearing from the outdoors at a rate that would make them top of any conservationist's list of endangered species if they were any other member of the animal kingdom. So does it matter that kids aren't playing outside as much these days? (Gill, 2005, para 1)*

The question of whether being and playing outside really matters to children and their families is an important one to examine. This thesis argues that being outdoors for young children does matter. In the 21<sup>st</sup> Century there is a sudden awakening that "children's access to the outdoors is evaporating like water in sunshine" (Rivkin, 1995, p.2) and that, in many urban areas, the early childhood centre and school playgrounds have become the substitute for the large backyards of previous generations (Herrington, 2005). Early childhood centre outdoor environments are becoming too small, are often artificially grassed (a growing trend in New Zealand) and "in some centres, a living weed or insect dare not raise its head for fear of being trampled to death. If it does survive, it may well end up as a curiosity on the 'science

table' ...that place where living things go to die'(Davis, 1998, p. 121). Many city council requirements for 'off street' parking mean that cars are better catered for than children. Economic viability and profit making result in reductionist thinking about outdoor play provision (Davis, 1998; Frost, 2006).

In a Manukau Courier article on November 8<sup>th</sup> 2006, Kidz First Paediatrician Teulia Percival raises concern at the resurfacing of 'rickets' in this country, and around the world, which is a direct result of children not spending enough time outdoors and in the sunshine (Buckley, 2006). It is estimated that one third of New Zealand children are deficient in vitamin D.

The serious concerns raised in the literature review regarding the physical, cognitive, social, ecological, emotional, spiritual and moral consequences of the loss of outdoors time makes this study necessary and timely. The context of this study is one where the significance of the outdoor environment in early childhood settings for the young child's (children aged between two years and five years) holistic development has rarely been investigated. Though there is a long history of educational and parental wisdom acknowledging that most children prefer to be in the outdoors, there is a dearth of qualitative research that has investigated the young child's perspective of what it is about being outside that they find so compelling.

This study contributes to our understanding of what children value about being outside, and what aspects of the outdoors are vital to advocate for and hold on to when we have reached a time in history where there are more children institutionalised (spending their waking hours in early childhood settings) from a young age.

This study argues that children need to be in 'optimal early childhood outdoor environments'; outdoor spaces that contain as many rich sensory experiences and natural elements as possible. An optimal environment encourages interaction with plants and animals, and is a place where children can safely: engage in active physical play; be creative; pretend; dig; enjoy water; experience changes of scale; loose parts; illusions of risk; mystery and novelty; and connection to other times and other places (Frost, 2006; Greenman, 2005).

## **Rationale for this Study**

This study was motivated from my 53 years of experiencing the benefits of being outside and the 34 years that I have spent with young children, as a teacher, mother, grandmother and tertiary educator in a field based programme. Over these years, I have been constantly reminded by the children of the pleasure they appear to get from being outside, particularly in rich stimulating natural environments where adults are interested and enthusiastic about being outside as well.

In 2002 I undertook a small qualitative study observing complete play episodes of children in one early childhood centre setting (Greenfield, 2002). Many of these observations took place in the outdoors and not only affirmed my growing belief that many children love to be outside but how important it is to observe children in their natural setting and groupings. This study also exposed a complexity of reasoning and influences behind the children's actions and behaviours, highlighting the importance of context.

Seeking the child's perspective on what being outside meant to them led to a small scale pilot study in which my aim was to explore what a small group of six, four year old children in full day childcare thought about being outside, what they liked to do outside and what else they would like to have outside (Greenfield, 2004). The children shared their feelings and views about their outdoor playground through the medium of photography. This was stepping into unknown territory as I sought to use new research tools that empowered the child within the research process. The voice of children is beginning to be heard in academic research (Brooker, 2001; Robbins, 2002). One of the weaknesses of my (2004) study was that I had overlooked the importance of seeking the views of the children's teachers and their families. The child is part of a wider context, not just a child with isolated views and behaviour unconnected to anything else.

This study builds on my pilot project, the research of Cullen (1993), and the qualitative research project on children's outdoor experiences undertaken in New Zealand, by Stephenson (1998; 1999a,b; 2003). In spite of the current wave of academic literature on the value of the outdoors and being in natural environments

there is still a paucity of outdoors research in early childhood, especially in New Zealand. Eight years have passed since Stephenson's study, which occurred when *Te Whāriki, he whāriki matauranga mo nga mokopuna o Aotearoa: early childhood curriculum* (Ministry of Education, 1996) and other new legislation for early childhood had just been implemented. With the current early childhood regulations again under review this study is timely.

At the time of writing this thesis the '*Draft Criteria for the licensing or certification of ECE Services*' (Ministry of Education, 2006) was under discussion and there was evidence of a subtle push to ensure children get the access to the outdoors they should have, due to the current concerns regarding access. Criteria 2.17 reads "Outdoor activity space is: directly connected to the indoor activity space so that children attending have safe and independent access... not unduly restricted by Resource consent..." (p. 20). It is stated that the "underpinning belief is that opportunity for outdoor play is an important feature of education and care of young children in NZ" (p. 20).

The early childhood curriculum *Te Whāriki*, which is the guiding and principal document that underpins early childhood education practices in New Zealand, is founded upon the following aspiration for children: "To grow up as competent and confident learners and communicators, healthy in mind, body, and spirit, secure in their sense of belonging and in the knowledge that they make a valued contribution to society" (Ministry of Education, 1996, p.9). The implication of this aspiration means we have to think how the 'now' influences the 'future'. This study makes visible some of the underpinning beliefs about the importance of children getting outside that are embedded within *Te Whāriki*.

A 'critical pedagogy of place' (Gruenewald, 2003) challenges all educators to reflect on the relationships between the kind of education they pursue and the kind of places we inhabit and leave behind for future generations. We have a responsibility to provide experiences and create outdoor spaces where children can build relationships of care for each other, other living beings, for the place itself and for spaces in the wider community. This thesis contributes to our understanding of what these 'places'

should be like from the perspective of those who inhabited a particular outdoor setting.

Today there is acknowledgment within education that the care and protection of the natural environment has a place in curriculum. The importance of environmental education in early childhood, of children developing a relationship with the natural environment, is upheld within principles of *Te Whāriki* and evident in the learning outcomes. For example, children develop: “respect for rules about harming others and the environment and an understanding of the reasons for such rules” (p.52); “a relationship with the natural environment and a knowledge of their own place in the environment....working theories about the living world and knowledge of how to care for it” (p.90).

There is a realisation that environmental awareness and action stem from many hours spent in wild or semi wild places during childhood, along with an adult who teaches respect for nature. As Sobel states “what is important is that children have opportunity to bond with the natural world, to learn to love it before being asked to heal its wounds” (cited in Gruenewald, 2004, p. 5).

Children have important things to tell us if only we take the time to find appropriate ways to listen. Yet there are very few research studies on children that have sought children’s perspectives on being outside, and this is surprising as in a very real sense children are the experts on what happens in the playground. This study will help begin to fill that gap in early childhood research.

## **Theoretical Background**

In the 21<sup>st</sup> century, philosophy of education is now situated within an ecological and sociocultural context. Children’s values and behaviour, are seen as a part of a larger system that includes the physical environment. Place-based theory, with its roots in the writing of Dewey, the ecological model of Bronfenbrenner, along with the sociocultural theories of Rogoff and Vygotsky, emphasise the term ‘participants’. We are participants, living and learning within a range of contexts. These theories, which underpin *Te Whāriki* have embraced the broader contexts within which children, teachers and families live and learn, and these contexts can include the wider

community, and the cultures, values and resources within that community (Rogoff, 2003; Surman, Ridgway & Edwards, 2006). The ‘pedagogy of relationships’ is about the conceptual link between teaching, learning and people, between teaching and learning, people and the physical environment. My underlying belief is that what happens for children in the centre setting is strongly connected to the beliefs, values, and attitudes of the adults around them and the wider social structures.

A ‘critical pedagogy of place’, arose out of Gruenewald’s synthesis of these development and learning theories, ecology (place-based education) and sociocultural (critical pedagogy), and is particularly pertinent to this thesis. He sought to ground place-based education in a pedagogy that is socially and ecologically critical. A place-based approach to education is necessary so that the education of children, our future citizens, might have some direct bearing on the well-being of the social and ecological places people actually inhabit. “Critical pedagogy is needed to challenge the assumptions, practices and outcomes taken for granted by the dominant culture in conventional education” (Gruenewald, 2003, p.1). The convergence of critical pedagogy and place-based education, according to Gruenewald, is a much needed framework for educational theory, research, policy and practice. A critical pedagogy of place is embedded within *Te Whāriki* principles, strands and learning outcomes.

This thesis uses a qualitative case study, using ethnographic procedures underpinned by the Mosaic Approach (Clark & Moss, 2001). The Mosaic Approach provides a multi-method framework for listening to young children. The Mosaic Approach was first developed by Clark and Moss, in England, in 1999. This approach was influenced by the theoretical framework of the Reggio Emilia Approach and *Te Whāriki*, and is a strengths- based model for listening to young children and starts with the view of children as competent, active meaning makers and explorers of the environment (Clark & Moss, 2005, Clark, 2005c). Listening to children, in this study, was an active process that involved not only hearing but a means of enhancing children’s participation, and of interpreting and constructing meaning and was not limited to the spoken word (Clark, 2005 a).

The work in Reggio Emilia, a northern Italian city, has led to the theory of the ‘hundred languages of children’ which is requiring educators and researchers to

revalue and relearn the other languages of children; it is a responsibility and a principle of practice (Clark, 2005c). The Reggio Emilia approach empowers children to share and discuss their perspectives using a range of media and influenced the multi-methods used in the Mosaic Approach (Clark & Moss, 2001). The Mosaic Approach combines traditional research tools with participatory methods in order to listen to young children.

## **Research Aims**

The aims of this research were to:

- explore young children's perspectives on being outside in their early childhood centre;
- investigate the views of the adults on the role of the outdoors in young children's lives and its provision within the early childhood setting.

## **Outline of Thesis**

The thesis is divided into 7 chapters. In Chapter 2 the literature related to outdoor provision and outdoor play and current qualitative participatory approaches to research with young children are reviewed within four frameworks. How the literature review informed the formulation of the research questions and research design is summarised. Chapter 3 describes the case study approach, research design, the centre's context, and introduces the setting and the participants. The research tools used and procedures are explained, and ethical considerations and issues discussed. My role as researcher and the data analysis are justified with reference to the literature.

The findings are presented in Chapters 4 and 5. Chapter 4 is situated within the framework of children's perspectives. Chapter 5 is situated within the framework of the adult perspectives on the outdoors. The sixth chapter discusses the functions of 'play' in the outdoors and the 'elements of opportunity' that emerged from the analysis of the data findings and uses the literature as a way of honing, refining, clarifying and explaining the findings. The teacher's role is discussed and the finding that the significance of 'harmony' of perceptions, and the principle of relationships on the importance of the outdoors in children's lives, is examined. Chapter 7 is the

concluding chapter of the thesis where I draw conclusions and make recommendations for future research.

## **Chapter Two: LITERATURE REVIEW**

This review of the literature covers empirical research, academic papers, and reports that were relevant to investigating young children's outdoor experiences in an early childhood education setting. One of the main findings from the review of the literature was convincing evidence that being outside in as natural a setting as possible is important to young children's holistic development.

The literature review is situated within four frameworks that inform all aspects of the study. The first frame is the current educational views on the role and value that outdoor experiences have on young children's holistic development. The second frame explores young children's perspectives regarding being outside in early childhood outdoor settings. A review of research on teachers, parents and centre managements views on outdoor play is situated within the third frame. Current qualitative participatory approaches to researching with young children comprise the fourth frame.

### **Current Perspectives on the Value of Outdoor Play**

In spite of the wisdom of some educational 'experts' that all learning occurs more naturally in the outdoors, the belief that children only need to go outside to run around, using up their energy so they can return to the classroom better able to concentrate, still permeates pedagogical practices (Zimmer, 2005). The 'surplus energy theory' arose in the 1930s and in spite of being an exceptionally limited view on the importance of children being outside it has become difficult to negate over the years (Hutt, Tyler Hutt, Christopherson, 1979; Towers, 1997).

#### ***Current educational views***

As we enter the 21<sup>st</sup> century, many more experts and researchers from a variety of health, psychology, neuroscience, environmental and education fields now posit strong arguments that play in outdoor settings is very different to play that occurs indoors, and has a unique role in the holistic (intellectual, social, emotional, physical and spiritual) development of children (Bilton, 2005; Burdette & Whittaker, 2005;

Cosco & Moore, 2001; Davies, 1996; De Bord, Hestnes, Moore, Cosco & McGinnis, 2002; Frost, 2006; Greenman, 2005; Gruenewald, 2003; Herrington, 2005; Pica, 2006; Rivkin, 1998, 2000; Wilson, 1996; Zimmer, 2005).

The unique role of the outdoors on the young child's holistic development include extensive therapeutic qualities (Frost, 2006) and when children play in natural optimal environments they are more likely to have positive feelings about each other and their surroundings (White & Stoecklin, 1999). In outdoor play the risks and challenges provide rich opportunities for learning, problem solving and creativity, developing social competence, independence and autonomy (Chawla, 2002; Frost, 2006, Greenman, 2005).

There is absolute agreement across the literature, that there are physical benefits from being outside, like improving fitness, and children have an innate drive to be playing outside (Pelligrini & Smith 1988; Smith, 2005). However, some experts are hesitant to endorse the notion that active movement and being outside have direct benefits for cognitive, spiritual, moral and socio-emotional development (Burrows, 2002; Pelligrini & Smith, 1988). Though Pelligrini and Smith (1988) do acknowledge indirect intellectual benefits from physical activity, such as giving the brain an opportunity to 'unload it self' and therefore improve concentration.

Advanced technology has enabled scientists to now realise that play, especially play in the outdoors with lots of physical movement, is essential for brain development (Frost, 2006; Hannaford, 1995; Pica, 2006; Savelsbergh, Davids, van der Kamp, & Bennet, 2003; Zimmer 2005) and exposure to natural outdoor environments seems to enhance neurological function (Cosco & Moore, 2001; Frost, 2006). Children's early experiences in exploring large outdoor spaces may be "critical to the development of spatial abilities" (Baldock, 2001 cited in Garrick, 2004, p.12).

A natural outdoor setting provides children with opportunities to experience wonder, awe, and mystery (Dighe, 1993; Greenman, 2005). The outdoors is a place where children can run, climb, balance, jump, throw, swing, chase, and thus develop their fundamental motor skills (Pica, 2006). The outdoors provides a greater sense of freedom to play and not only relieves stress but satisfies the natural need for adventure (Clements, 2004). Rivkin (2000) states that when outside "children

experience the infinite and diverse sensory qualities of the world” (p.3) and the knowledge children gain from being outside is foundational to all future learning.

Children learn to appreciate and value the natural world and ‘ecology’ through having regular time out-of-doors, building long term relationships with familiar everyday places (Gruenewald, 2003). Without opportunities to explore the outdoors and neighbourhood, as Dewey advocated, children and adults feel “lamentable rootlessness that provides no ‘sense of place’ in their earthly home” (Rivkin, 1998, p. 201) A ‘critical pedagogy of place’ encourages teachers and children to “re-inhabit their places, to pursue social action that improves the social and ecological life of places” (Gruenewald, 2003, p.5).

### ***The importance of optimal outdoor environments and access***

In spite of all this wisdom of the past and present, and justification for children to be outside in optimal environments, the reality is that children today are less likely to play outside than in any other time in the history of the world (Frost, 2006; Rivkin, 1998). The amount of time and space available for children to spend in quality outdoor settings is also threatened by the decisions many centre owners, planners, city councils and regulatory bodies make (Davis, 1998). These decisions, made by the dominant culture (the adults), stem from ‘minimalist’ principles and values, that are at odds with what is best for children (the minority) (Gruenewald, 2003).

Opportunities for children to engage in natural settings are diminishing due to urbanisation, rising land values, landscaping trends, safety fears and risk-averse culture, and the over scheduled lives of children (Bilton, 2002; Davis, 1998; Friedman, 2006; Frost, 2006; Herrington, 2005; Stine, 1997; Thomas & Hocking, 2003) and an expanse of bare asphalt or grass is neither safe nor educative (Rivkin, 1998). Poorly designed and maintained environments can be detrimental to children’s development. It is not just a matter of being outside, as dull and easily forgotten environments can delay or block development whereas stimulating and memorable optimal outdoor environments advance children’s development significantly (Moore, 1986).

It is now well established that the environment we place children in strongly influences the behaviour and learning that occurs there, and the child’s sense of self

(Greenman, 2005), yet this is still not well understood in practice or in policy (Farquhar, 2003) and is only just beginning to be understood by those who design the early childhood environment. Although a 'critical pedagogy of place' approach to learning is still in its infancy, it challenges all educators to reflect on the relationships between the kind of education they pursue and the kind of places we inhabit and leave behind for future generations (Gruenewald, 2003).

Spaces speak to us and load our bodies with sensory information, so the environment is crucial to what occurs within it (Greenman, 2005). That is why every *Te Whāriki* goal starts with the words *children experience an environment where...* In the *Quality Teaching Early Foundations: Best Evidence Synthesis*, Farquhar (2003) notes that "pedagogy is concerned with ensuring that the organisation of space, activities and density is optimal for children... and that the organisation and co-location of play activity areas provides potential for shaping and enhancing children's thinking and learning" (p. 39).

The play behaviour of young children, in settings where they have very restricted access to the outdoors, is quite different to the play of children who have free indoor outdoor access as Hutt, et al. (1989) found in their study of four differing types of British early childhood settings. Play deprivation can result in more aggressive behaviour and lower levels of meaningful complex play (Frost, 1996). For example, Smith and Hagan (1980, cited in Pellegrini & Smith, 1998) found, on the days when the 3 and 4 year olds in an English preschool were deprived of opportunities to engage in long periods of physical activity outside, their play was far more vigorous immediately after the post deprivation period, and similar results are found in other American deprivation studies.

Therefore the amount of time children have outside, along with the physical setting itself, become significant influences on research investigating what children do outside and what children value. In many of the studies reviewed (Barbour, 1999; Cullen, 1993; Wiltz & Klein, 2001) the main limitation has been that the researcher only observed children a maximum of 40 minutes at a time during their 'play' break'.

From the few studies undertaken on how the physical outdoor space influences children's behaviour, 10 factors have been identified: (1) space; (2) delineation of space; (3) presence or absence of enclosed areas; (4) type of equipment; (5) degree of challenge, novelty and complexity; (6) availability of loose parts; (7) heredity; (8) experiential background; (9) opportunities for instruction, practice and encouragement; and (10) teachers' attitudes, competence, confidence and presence (Barbour, 1999, Brown, Sutterby & Thornton, 2005; Fisman, 2001; Frost, 1992; Gallahue, 1993; Hart & Sheehan, 1988; Ihn, 2002; Temple & O'Connor, 2003).

One project that powerfully demonstrates the impact of place on children's behaviour and learning, is one where researchers studied the infant play yard at the Child and Family Study Centre, University of California, prior to the construction of a new infant 'garden' and then for four weeks after construction (Herrington, 2005). The new infant garden had, for example, extensive planting, a new sand area, trails of stepping stones and a maze of edible plants. The researchers in the 'garden' designed by Herrington found that the extent of spatial exploration increased, and hence more cognitive and physical growth was occurring and the amount of times the children used loose parts increased. This in turn meant the types of motor manipulations were more complex and varied, indicating greater challenges were being provided. This was a similar finding to that of Harding (2005) where a 'pedagogic garden' in a British Early Excellence centre, had been created. The researchers also found that the educators' interactions became more intense and involved with the children than in the previous layout, so there was greater social and emotional enhancement happening for the children (Herrington, 2005). Similarly, Harding (2005) described how the new environment influenced not only children's play, but supported the holistic development of the children, and teachers' pedagogical practices.

The nature of early childhood education environments and policies and practices that underpin the setting also have a strong influence on the provision for children's learning and development and the quality of that provision (Bayes, 2005; Dowda, Pate, Trost, Almeida & Sirard, 2004; Hutt, et al., 1989) which is why the centre owner's perspective was sought in this study. Dowda et al. (2004) found in their study of American preschool facilities that it was the policies and practices of the preschool rather than the actual setting that were significant regarding children's outdoor

experiences. Bayes' (2005) findings were that knowledgeable, committed and experienced centre managers provided effective professional leadership to educators, and supported the development and implementation of the curriculum.

Therefore some published evidence exists that playground environments do impact on children's behaviour and development. However our understanding of this relationship needs much more extensive investigation.

### ***The importance of physical activity for children's development***

Physical activity (for example running, jumping, climbing, crawling, swinging, balancing) is recognised as an important component of the holistic education and development of children in the early years and it is assumed that children during the preschool/primary years engage in substantial amounts of exercise play, as part of their everyday activity (Pelligrini & Smith, 1988). However there is not a lot of empirical data to verify this (Kolt, et al., 2005). This vigorous physical aspect of children's play has immediate beneficial consequences for children in relation to their motor skill development, and additional incidental benefits of fat reduction and thermoregulation (Pelligrini & Smith, 1998). Children need to have lots of opportunity to engage in physically active play and ethological preschool studies referred to by Pelligrini and Smith (1998) indicate that 20% of children's behaviour during free-play periods, where children did have long periods of access, was classified as vigorous.

The increasing attention being paid to physical activity stems partly from the obesity epidemic spreading through the western world. Physical activity is a crucial factor in combating this problem and early childhood teachers, according to Pica (2006) and Frost (2006), have a key role to play. Children need opportunities to engage in regular vigorous play in outdoor settings that are challenging and as William Dietz, a U.S. government expert on physical activity stated play may be the only requirement that young children need to increase their physical activity (Dietz, 2006).

Not only are there health benefits, being outside can equally have cognitive, social emotional, and spiritual benefits as well. This view is strongly supported by pediatricians Burdette and Whittaker (2005), who argue that if we want to

successfully increase physical activity in young children we need to advocate for the holistic benefits of being outside and playing. They validate the importance of gross motor play in children's lives from a medical perspective, and posit a strong argument that educators in early childhood centres need to emphasise, and provide more time for unstructured gross motor play, as it is optimal for brain development.

However, recent research indicates that teachers and parents should not assume that by playing outside children get the physical activity and skills they need. Studies where movement programmes have been introduced show a clear improvement in children's motor skills (Deli, Bakle & Zachopoulou, 2006; Hands & Martin, 2001). An Australian action research study by Hands and Martin (2001) found that introducing a fundamental movement skills programme, increased activity levels and the confidence of children, along with an increase in the teachers' knowledge about fundamental movement skills. This need for teachers to have greater content knowledge of fundamental movement skills was also found to be important by Temple and O'Connor (2003) in their Australian study on physical activity and fundamental movement skills conducted in three early childhood centres. Kolt et al.'s (2005) extensive review of the literature on physical activity in early childhood supports this position.

Movement and being in the outdoors not only promotes physical development, it also supports the mind, fosters concentration and allows children to gain experiences of themselves and their material and social world (Zimmer, 2005). Mobility stimulates the brain's information highway, supports new nerve cells and provides much needed oxygen to the brain (Hannaford, 1995), which in turn influences the activity of the neurotransmitters, and induces hormonal processes, which lead to decreased stress and an increase in psychological and mental wellbeing (Zimmer, 2005).

Through physical activity children learn that they are capable of accomplishing something and that their actions can be meaningful. The link between physical movement and learning is clearly outlined by Sanders (2002) in the 'Movement Concept. is learning what his/her body does (action awareness), how it moves (effort awareness), where it moves (spatial awareness) and ways his/her body relates to self, other movers and objects (body relationship awareness). This holistic view of

physical activity fits Bronfenbrenner's ecological model (Pence, 1988) and the interactionist perspective that our development is a cooperative effort of the nature/nurture team (Berk, 2004; Doherty & Bailey, 2003).

Kolt et al. (2005) identified gaps in their review of the research on physical play that included: what is the value of physical activity play; the need to validate methods of assessing the environment and the influence on physical activity; and the measurement of the effectiveness of *Te Whāriki* in promoting activity in early childhood. This study makes a small contribution to filling those gaps.

### ***Importance of 'place' and the natural world***

Cosco and Moore (2001), Frost (2006), Greenman (2005), MacPherson (2002), Penn (2005), Rivkin, (1998), and Wilson (2003) argue that young children need, on a day to day basis in their early childhood centre setting, to experience natural garden habitats, wild areas, small animals, garden plots and beauty. Small animals have a place in the early childhood curriculum and an important role in young children's lives, in developing empathy and care for other living things. Children's treatment of animals is significantly related to their later treatment of and relations with their environments, their bodies and other human beings (Ascione, 2005, MacPherson, 2002). Ascione (2005) provides empirical evidence that the roots of kindness and cruelty start in early childhood and start to become evident at three and four years of age.

To date there is minimal qualitative research that has looked at young children's perspectives on nature and the natural world. Holcomb (1997, cited in Mergen, 2003) showed 15 four-year-olds pictures of woods and mountains, "natural" scenes, and pictures of buildings and streets. Rather than selecting images of nature over urban environments, the children preferred places they associated with pleasurable activities and friendly people. Holcomb (1997) plays the devil's advocate, and suggests that perhaps children do not need to experience natural environments as much as we adults think. Holcomb asks could it be that we adults are imposing our tastes and preferences on children. This view contradicts Edward Wilson's *Biophilia* hypothesis (White & Stoecklin, 1998), and *ecopsychology* theory (Phenice & Griffore, 2003), the belief that humans have an "innate, hereditary emotional attraction to nature and other organisms" (White & Stoecklin, 1998, p.2). Both these concepts suggest that

“children reared apart from nature are necessarily limited” (Rivkin, 1995, p. 6) and if this human attraction to nature is not given opportunity to be exercised and to flourish then *biophobia* – an aversion to nature will result. Holcomb’s (1997) research demonstrates the sad reality, that if children never get to experience natural environments then they will never appreciate it, instead developing unfounded fears, phobias and prejudices about nature (Wilson, Kilmer & Knauerhase, 1996). Holcomb (1997 cited in Mergen, 2003) identifies the need to explore further the environmental perceptions, preferences and needs of preschool children.

In spite of limited early childhood research on the role of nature in the child’s development, there is a growing abundance of other academic literature on the subject. Mankind appears to be scrambling to hold onto something we value, but are in danger of losing, especially as neurological science is verifying the tragic psychological consequences of not spending long periods of time engaged in places of natural beauty (Frost, 2006; Greenman, 2005; Rivkin, 1995). Therefore the newly emerging field of early childhood environmental and nature education reflects an increasing awareness that positive interactions with the natural environment are an important part of healthy child development fostering wonder, awe, and joy; and this study adds to this understanding.

The literature reviewed highlights how topical and relevant this study is today, given the current realisation how the outdoors plays a significant role in children’s physical, emotional, spiritual, ecological, moral, cognitive and social development. There is evidence that by encouraging respect and the development of a sense of responsibility for the well-being of both the living and the non-living environment, educators are also nurturing children’s sense of identity that aligns self with, rather than against non humans, the development of empathy (Ascione, 2004; MacPherson, 2002). As Davis (1998) states we need to strengthen what has been in the past a well established commitment to outdoor play, especially in New Zealand and Australia, by ensuring that environmental aspects are included in the value of being outside. This thesis aims to make a contribution to that ‘ideal’.

## **Young Children’s Perspectives on ‘Being Outside’**

Very few studies have investigated children’s perspectives on the outdoors per se. Most studies into young children’s perspectives have focused on curricular areas

(Robbins, 2005) or their overall experiences in the early childhood setting. In this section I review those studies which have specifically investigated young children's outdoor experiences in early childhood settings, as well as studies where the findings were directly relevant as in Hart's (1979) ethnographic, geographical study, on children's outdoor experiences in a small American town. This study was one of the first to be published that attempted to provide the child's perspective and use of their immediate and wider outdoor environments. Hart observed the children's use of outdoor space and their feelings about it and used a range of research tools including what he called 'place expeditions', photography, and mapping which gave him much more authentic data than did formal interviews.

Hart's (1979) findings regarding the youngest children are relevant to this study. The children, Hart noted, spent a lot of time quietly resting, watching or dabbling in sand or water; and building places. In particular the children valued and favoured places for the use they could put them to and their social qualities. He found that children valued: many small places; hidden places that they had created for fantasy and invention of their own worlds; and lookouts to see over the world. This aspect of children's outdoor play of seeking out or creating hidden spaces has been observed in other qualitative studies (Harding, 2005; Stephenson, 1998). Though the literature is scarce on this aspect of children's outdoor play it is significant for the findings of this study. Hart's methods of expedition and using preferences and fears to describe children's feelings and values influenced this study's design.

Stephenson's (1998) study of young children's experiences in the outdoors of a New Zealand full day early childhood centre, catering for twenty five children aged 0-5 years, was the first study of its kind in the history of New Zealand early childhood qualitative research. Using an open-ended ethnographic approach Stephenson was left in no doubt that access to the outdoors was extremely important to children, though she did not actually ask them directly what they thought. What stood out for Stephenson, from all her observations, was that all the children consistently chose to be outside. She identified eight categories of motivations (aspects they valued) for the 2-5 year old children, which included: physical activity, the social dynamic, exploring the material world, contact with nature, contact with wider world, the emotional dimension, and constructing spaces. The findings from Stephenson's study are unique

as they have emerged from research in a New Zealand early childhood context where children had free access to the outdoors most of the time, which was very different to most of the other qualitative research carried out in early childhood settings that I have reviewed.

Stephenson (1998) and Hart (1979) found that the outdoors was empowering for children. Stephenson identified this happening in three ways. First, outdoor play provided more opportunities for children to develop and master their physical skills which are closely linked to the child's overall feelings of competence. Secondly, long uninterrupted periods of access to open-ended materials, like sand and water, along with adult support provided a satisfying time of exploration. Finally, outdoor settings provided opportunities for children to express a range of competencies, and are less associated with adult restrictions and routines. A limitation of Stephenson's (1998) study was that the children were not asked what they liked about being outside but some had voluntarily told her they liked the playground (swings, gym, fort) and the bikes, best. This study sought to explore children's perspectives more directly by involving them in the research process and seeking their opinions directly.

Prior to Stephenson's study, most New Zealand early childhood research that included the outdoors, were gender focussed quantitative studies (Halliday & McNaughton, 1982; Smith, 1983). One interesting finding from these studies was that girls had slightly higher use of the climbing equipment than boys and the girls ranked climbing as the second preference out of all activities, the boys ranking climbing third. There is an underlying assumption across these studies that frequency of use of space and equipment by children equates with level of preference, so there is a need to explore this assumption by using multiple and appropriate data gathering tools, in particular tools that enable children's voices to be heard, like child conferencing conversations, photography, drawing and touring.

### ***Playing outside is most important to children***

Playing outside was the recurring theme that emerges from research into children's preferences in their early childhood centre (Clark & Moss, 2005; Einarsdotiir, 2005; Hands & Martin, 2001; Rothlein & Brett, 1987; Sheridan & Pramling-Samuelsson, 2001; Wiltz & Klein, 2001; Wolfgang & Phelps, 1982).

One of the earliest studies on children's preferences in an early childhood setting was by Wolfgang and Philips (1982) who explored the play material preferences of 35 children aged between 3 and 5 and a half years, using a quantitative inventory system. The researchers used 40 pictures, taken from play materials catalogue that covered a wide range of equipment and experiences, and made them into a book. This was significant in that it provided another way of investigating preference, rather than just frequency of use from observing. Wolfgang and Phelps (1982) noted that the children seemed comfortable, and enjoyed this type of research tool, and were usually quite certain about their choices. One of the limitations of the study was the children having to choose between two items each time and the children's responses were analysed using developmental Piagetian play categories. The children preferred sensori-motor outdoor play (including slides, water, clay, rocking boats, bikes, climbing frames, balance beams) to all other activities. Variation on this research tool has since been used in other studies, and I adapted it for this study into a much more open-ended tool and used it in a more child-friendly manner. This technique is known in visual theory as photo-elicitation (Prosser & Schwartz, 1998).

In Rothlein and Brett's (1987) study they interviewed 103 children, aged between 2 and 6 years, to find out what they most liked about being in their childcare centre and found that outdoor play and dramatic play were by far the children's favourite play activity. Children were also asked "what do you think of when I say the word play"? Statistical analysis of the data revealed that 31% (the largest number of responses) included something to do with the outdoors, such as running, riding bikes, swinging and sliding. Some children responded that when they thought about play, they thought of having fun, being happy, and doing what they liked. Due to the data being presented statistically the reader gets very little sense of the participants' views. What is useful for my study is that it makes a small contribution to my argument that children associate being outside with playing and for many children, playing and being outside is their preferred activity, therefore worthy of researching.

Similarly in the Hands and Martin (2003) study that explored 5-year-old children's attitudes towards physical activity and their perceived motor competence, children were asked simple questions like: "When it is time for outdoor play I am ...; and when

we run, I am ...". The children selected a happy, neutral or sad face to indicate their response. They found that 94% of the preschool children were positive towards outdoor playtime and playing games. This method could be viewed as a rather top down approach that doesn't sit well within the sociology of childhood framework (Clark, 2005b) as it underestimates children's capabilities to express their opinions.

A variety of data gathering methods including participant observation, structured and informal interviews, drawings, and storytelling with photographs, were used as multiple means of accessing children's views by Wiltz and Klein (2001). They interviewed 122 children, aged between 4-6 years, from two high quality and two low quality centres in the United States of America, about their likes and dislikes of preschool and what made them happy and unhappy. Children's most common answer in regards to what they most liked to do was 'play'. Play was mentioned 5 times more often than any other item, and 8 more times than the next most common liked activity, dramatic play. 98% of the children when asked what they liked best said "play". This was consistent with the findings of Rothlein and Brett (1987).

Cullen (1993) studied the outdoor play of 40 children, aged approximately 5-years-old, in Western Australia. In this study the more traditional method of time sampling, and recording children's behaviour according to activity categories like Hutt et al. (1998) was used. Today there is a move away from categorising children's play as it seen as limiting our perceptions of play and making it a 'child' thing instead of an essential part of the human condition (Hill, 2006). However Cullen's (1993) study was a genuine attempt to find out what children liked to do outside from not only the adult's perspective but also from the child's.

Cullen (1993) questioned the children individually about what they liked to do best outdoors; what equipment they used; what they thought they were good at and whether or not the teacher helped. From the children's interviews Cullen found they could all identify activities they enjoyed and often the ones they perceived themselves as being best at were the same as the activities they preferred. These activities were physical play: fixed equipment (climbing frame, slides etc), trikes, swings, and the sandpit. Cullen's (1993) study, like Stephenson's, was in many ways the forerunner of this study, as they focused on the outdoors, with the difference that I have used a

wider range of research tools that give greater voice to the child and provide greater ability to triangulate the data. The questions Cullen (1993) asked of the children helped me shape my research questions as did Clark and Moss (2001, 2005).

Clark and Moss (2001) involved 20 children across two settings, together with three teachers from each centre, and five parents. The Mosaic Approach developed during this project combined child interviews with children's photos, mapping, touring and other tools. In this first study by Clark and Moss (2001) outside places were mentioned most frequently as the places the children preferred to be, echoing the other studies reviewed. The children's preference in the outdoors included the environment in general, including large trees that overlooked the play area, their photographs capturing an awareness of the natural features of the space.

A subsequent study by Clark and Moss (2005) adapted the Mosaic Approach in order to listen to young children's views about their preschool outdoor setting and "to demonstrate how children under five can contribute to the decision making processes with changes to outdoor provision" (Clark & Moss, 2005, p. 20). There were 28 children involved, aged 3-4 years. Significant to this study was the finding that the children's photographs showed a strong correlation with findings from all the other various data collecting tools used. For this study the most noteworthy finding, as in all the other studies reviewed, was that above all, children wanted more opportunities to play outside. Clark and Moss also noted that disposable cameras were the most straightforward type of camera for young children to use, as I had found. The children in Clark and Moss's (2005) study wanted to alter places, like change the fence or add places like new seating and a new digging area. The children made perceptive suggestions endorsing that children are well able to not only express what they like about a setting but also what could be done to improve it.

Cremin and Slatter's (2004) study used an adaptation of Mosaic Approach. They undertook a small case study of six, 4 year olds, in a nursery setting. The research enabled a comparison to be made between what the children said their favourite areas of nursery life and their preferences as noted by adults. The two most commonly occurring themes of preferred places or things to do at the centre were other children and being outside. In five out of six cases, adult perspectives were the same as the

child's perspective. The children's preferences did vary slightly according to the medium to elicit the children's views, as Hart (1979) had found, but the findings overall showed a consistency in what they liked to do and places they liked to be. When asked what they would like to do more of outside the children said "play". This study, though only a very small sample and not large enough to make generalisations from, did contribute further to the research literature regarding the reliability of children's opinions if sought using appropriate research tools, and that 'play' consistently is being voiced by children as what they most prefer to do.

Sheridan and Pramling Samuelsson (2001) received exactly the same response from 30, 5 year old Swedish children when they were asked "what would you like to do in pre-school if you could decide by yourself"? Most of the children answered without hesitation "play". Some were more specific like "I want to play with my friends". Many of them emphasised that they preferred to play outside, as it was fun to be outside and play. Outdoor activities they liked included: cycling, playing hide and seek, swinging on the swings and playing in the sandpit.

Similar to Cremin and Slatter's (2004) study, Kylin (1999) sought to discover if there was a commonality between children's outdoor preferences and adults' perceptions of children's preferences on being outside. This study focussed on the views of the planners from the Department of Landscape Planning, teachers and 8 children aged 11 years old in the Swedish town of EsInvn (Kylin, 1999). Though these children were much older than those in this study what was interesting was that the researcher had 'show and tell' walks, like Hart's (1979) expedition walks, and Clark and Moss's (2005) touring, with pairs of children which worked extremely well. Kylin (1999) found that the teacher and planners shared some of the children's perceptions but the biggest difference between adult and child perspectives was how they talked about qualities and characteristics of outdoor places. The adults used descriptive terms and the children referred to places in terms of what they could do there, just as Hart (1979) found. This is an important finding as associating 'place' with 'action' is typical of younger children as well.

The children in Kylin's (1999) study attached importance to places in relation to how the places were connected to social activity or early memories. Their descriptions

showed how children can transform a place into something else. The children were able to point out places that were not only meaningful now, but had been in the past, going right back to early childhood, as in Hart's (1979) study. For example some children identified as significant a small space, a bush, a tree, a hidey place or a grassy area. Only one pair of children pointed out a fixed play structure. This study by Kylin influenced how I recorded children's use of space and analysed data, noting action, what children did in the spaces and ensuring I recorded how they described the space. It also highlights children's awareness and valuing of their relationship with the natural world.

### ***Children's views of the teacher's role in the outdoors***

Children's views on the teacher's role have been researched but studies undertaken in early childhood are limited in number. In the Sheridan and Pramling-Samuelsson (2001) study an interesting finding was that "when the teacher and the children did something together, such as playing games, the children feel they are on equal grounds and that turn taking is part of decision making and a means to influence what is going on" (p.184). Teachers who have a philosophy of non-involvement in children's games may be surprised by this finding.

There were few studies that specifically explored children's views on the teacher's role in the outdoors. Cullen (1993) had asked children if being outside was something they needed adult help with and found the majority perceived outdoor play as something they did by themselves without adult assistance. 37.5% referred to some specific forms of help the adults gave, like getting resources and helping if a child was hurt. Harding (2005) and Kitson (2005) describe children having conflicting views on the role of adults in the outdoors. Harding (2005) had asked children attending a British Nursery school in her study what they thought the adults should do in the early childhood centre garden and got responses like: "Look at me on the slide", which is what Stephenson (1998) described as the 'look at me' dimension of the outdoor, and which indicated that the children, as in Cullen's (1993) study, enjoyed being on their own.

The literature reviewed in this section on children's perspectives indisputably identifies that *playing outside* is important to children. That very few studies have

investigated young children's perspectives on their outdoor experiences situates this study in the realm of profound importance in contributing to what young children think and feel about being outside.

## **Adults' Perspectives on Outdoor Play and its Provision**

There is some empirical data on early childhood teachers, parents and centre management's thinking about outdoor play provision, though no studies investigated multiple perspectives. A common theme that emerged from the studies by Cullen (1993), Davies (1996), Temple and O'Connor (2003) and in the study by Hutt et al. (1989) was that early childhood teachers generally place a lower value on the outdoors than the indoors as a learning environment.

### ***Teachers' values and beliefs about the outdoors impacts on what happens for children***

Cullen (1993), Davies (1996), Temple and O'Connor (2003) and Hutt et al. (1989) found that most of the teachers interviewed saw the outdoors as: providing opportunities for physical, social and emotional development; a place for children to learn about their own abilities; a place to get rid of aggression; a place to enjoy themselves; and a place free from adult direction and structured activities. Teachers seldom realised the potential of physical activity and the potential of the outdoors for inculcating cognitive skills, and seemed largely unaware of the other unique features that the outdoors can provide.

The teachers in Davies (1996) study did not value the outdoors as an opportunity for children to interact with nature and natural materials. Davies (1996) concluded that there was little evidence that teachers consciously set out to develop in children an understanding and appreciation of nature. By observing the teachers Davies (1996) found that the teachers' conceptions of the purpose of the outdoors and the value they attributed to it were reflected in the environments they provided, as Cullen (1993) and Hutt et al. (1989) had found. If children's play is only perceived as opportunity for physical development or letting off steam then it follows that teachers see their role as supervisory (Hutt et al., 1989).

Cullen (1993) also noted that the greater amount of time children spent outside in a setting the more effort the staff put into planning and setting it up. Cullen, like Hutt et

al. (1998), found there was limited interaction with children or involvement by the teachers in the outdoors, a lack of extension of children's play and skills by teachers and most of the play, for example, in the sandpit was low level in terms of cognitive, physical, creative and social dimensions. Cullen (1993, 1998) advocates for sensitive intervention on the part of adults that promotes cognitive development.

A subsequent small qualitative study by Cullen and Allsop (1999) in New Zealand, suggested that teachers have an important role in helping children explore and extend their ideas during play. This was best done through sharing children's play interests and talking with them (Cullen & Allsop, 1999) and feeling confident with the subject knowledge relating to children's interests (Cullen, 1998). Cullen and Allsop found that children's outdoor play always contained elements of being about something, such as an idea, a skill or simply something that attracts the child's interest. These elements "comprise the knowledge base of children's play and it is through the interactions with the physical setting and resources, peers and adults that content is recalled, practised, shared and extended" (Cullen & Allsop, 1999, p. 70). This is further advocated in the work undertaken by Williams (1994) that showed how large apparatus is able to provide a structured learning environment by providing for both child and teacher initiated problem solving.

Cullen's (1993) study found that teachers tend to describe general physical skills and she argued that there needs to be a greater knowledge of how to systematically evaluate children's motor skills. That early childhood teachers did not see that it was their role to teach motor skills is a concern to some fundamental skill experts as practice, encouragement and instruction have been proven to be crucial and effective (Davies, 2003; Deli et al., 2006; Doherty & Bailey, 2003; Gallahue, 1989; Hands & Martin, 2003; Sanders, 2002).

Three New Zealand studies (Lockie & Wright, 2002; Smith, 1983; Stephenson, 1998), confirmed the conclusions of these other studies, that the attitudes and values held by the adults in early childhood settings have an enormous impact on how accessible the outdoors is to children. Smith's (1983) quantitative research in 6 early childhood centres in Dunedin, examined the participation by boys and girls, aged 2-5 years, in free choice activities and teacher participation. The least favoured activities by teachers, in this study were trolleys, bikes, sandpit and water – outdoor activities.

Teachers across all 6 centres had lower participation in outdoor activities and their involvement tended to be supervisory.

However Stephenson (1998) found that the teachers' attitudes and perceptions of their role in the outdoors were contrary to the 'supervisory' view evident in the literature she reviewed. Stephenson described the teachers as being exceptional in regards to scaffolding children's learning and development outdoors. She found the teachers played an active role in the outdoors, were responsive, enthusiastic and were well aware of the impact that the environment they created, had on children's play. She concluded that this difference reflected the New Zealand context.

Lockie and Wright (2002) set out to test Stephenson's (1999) thesis that early childhood centres in New Zealand provided a wide range of learning experiences allowing access to the outdoors for a long period of time with staff taking an active role. Lockie and Wright's (2002) surveyed early childhood centres, in the greater Christchurch area, using a comprehensive questionnaire on access to the outdoors, time spent outside and significant factors that either hindered or supported children getting outside. The results certainly did not paint such a rosy picture of New Zealand teachers' attitudes towards the outdoors, as did Stephenson (1998). The survey revealed that the most significant contributing factors to children getting outside or not, was foremost staff and centre philosophy and attitudes, followed by staffing, weather, routines and environmental features (Lockie & Wright, 2002).

Likewise, another recent survey on Active Movement, across a wide range of stakeholders in New Zealand, by Kolt et al. (2005) identified very similar barriers to children engaging in vigorous physical activity. Similar findings were reported in Temple and O'Connor's (2003) Australian study, in three full day centres, that included focus group interviews with teachers and administrators exploring their feelings towards physical activity (qualitative) and a quantitative analysis of the environment. The environment analysis revealed that opportunities for movement are influenced by availability of: equipment; time spent outside; weather; rules and regulations; length of stay; and available outdoor space, just as Lockie and Wright (2002) had found. Temple and O'Connor (2003) found that physical activity was valued by early childhood teachers and administrators for social, health, coordination

and gross motor skill development reasons. However the staff also described social, personal, and environmental barriers, to appropriate physical exercise, with some teachers concerned about their ability to promote physical exercise (Temple & O'Connor, 2003).

Similarly, Taylor and Morris (1996) described major concerns they had regarding outdoor play provision in American early childhood settings, including a lack of knowledge about the value of and planning for outdoor play; teachers intervening in children's outdoor play from a distance and inappropriately; and teachers receiving no training in playground leadership or playground safety. From a 'critical pedagogy of place' perspective these concerns are highly important. Lockie and Wright (2002) concluded, as had Davies (1996), Cullen (1993) and Hutt et al. (1986) that too many teachers overlook the powerful positive outcomes of free access to the outdoors. As Bilton (2002, p.80) states when the outdoors is "viewed as a peripheral activity which may or may not be provided, then outdoor play will only have a peripheral effect on children's learning ...the adults' role should be bringing the children, the environment and the curriculum together".

Early childhood teachers lacking the amount of knowledge they need about physical development, outdoor play, the natural world, and outdoor setting provision is also mentioned by others (Bilton, 2002; Cullen, 1998; Davies, 1996; Davis, 1998). For example, Davis (1998) found that in Australia there was no "engagement and concern for environmental perspectives in early childhood teacher education" (p.121). One reason given for this lack is that teachers themselves have not spent regular time in the outdoors as children (Frost, 2006). To develop ecological understanding and informed political action teachers and children must spend regular time out of doors building long term relationships with familiar everyday places (Gruenewald, 2003).

The literature strongly argues that teachers' understating the value of the outdoors in children's learning and development is due to early childhood teacher education and primary courses' failure to give adequate coverage of the benefits of outdoor play and environmental education. However Clarke (2003), who investigated how the childhood school experiences of 225 Australian primary pre-service teachers affected their subsequent willingness and their teaching of physical education, found that

negative beliefs about physical education may be so deeply held that they disregard the input from teacher education preparation and that teachers rely on their own experiences to assist them. Clarke found that the students held a deep seated assumption that the indoors is more important than the outdoors in children's learning. To counter this it could be suggested that teachers need ongoing professional support. Hands and Martin (2003), referred to earlier, investigated the influence of a new teaching resource designed to support teachers in implementing a fundamental movement skill programme. They found that this programme increased teacher confidence and knowledge about fundamental skills.

Some of the research suggests that the undervaluing of outdoor play, teachers perceiving their role as supervisory and choosing what aspects of the outdoor curriculum they get involved with is a result of the field being female dominated (Bilton, 2002; Clarke, 2003; Hutt et al., 1989; Sandberg & Pramling-Samuelsson, 2005; Smith, 1983). Sandberg and Pramling-Samuelsson (2005) found that there were differences in the ways male and female teachers conceive, understand and experience play. Though only a small sample of ten female and ten male Swedish early childhood teachers were interviewed, this study provides a unique look into the gendered perspectives on the outdoors. All teachers in the study emphasised that it is important to create an inspiring environment for play and outdoor play. What was significant in relation to this study was the strong indication that Swedish female teachers showed no play willingness, whereas the men did. One of the reasons given by female teachers for non participation was that the children's play changes when an adult becomes involved (Sandberg & Pramling-Samuelsson, 2005).

The literature reviewed shows an interesting correlation between teachers' values and what happens for children. The main influence on the amount of time children spend outside in centre settings, and the provision and quality of those experiences when outside, appears to be teachers' attitudes and beliefs. What aspects of the outdoors teachers become involved in appears to depend on gender, personal interest and beliefs about their own competence and knowledge.

### ***Parents' perspectives on children being outside***

Hart (1979) commented that parents were a source of valuable insight into children's activities and preferences in the outdoors. However I was only able to find one study that specifically sought parents' perspective on outdoor play. Clements (2004) surveyed the opinions of 830 North American mothers of children aged between 3-12 years, using an electronic questionnaire, about their own and their children's outdoor play experiences. One finding of Clements, most relevant to this study, was that nearly all the mothers recognised the benefits of outdoor active play. Around 90% believed that: outdoor play positively contributed to children's: physical and motor development; imagination and creativity; stress relief; and the development of communication skills. 75% believed it impacted on children's social skills and around 80% thought being outside developed self confidence and provided lots of informal learning.

Clements (2004) found the mothers reported that their children spent less time outside than they had as children, due to television and other electronic media, and that they had concerns regarding crime and safety. Another finding was the children appear to engage in less chasing and fleeing games, much less imaginary games, and much less street/pavement games across the two generations. Children spending less hours freely roaming in the outdoors and playing street games is also cited by Olds (2001) and Penn (2005) as a possible reason why the labels 'hyperactivity' or 'ADHD' are being used to describe children whose levels of physical activity would once have been deemed normal.

### ***Attitudes towards risk taking***

Frost (2006) believes that aggressive play is due to boys especially not having enough access to vigorous outdoor unstructured play in playspaces where they can take reasonable risks, and instead being given technology toys as substitutes. Greenman (2005) states that many teachers have trouble allowing children to test and explore their physical powers, and therefore restrict what children are allowed to do. Safe environments, according to Hart (1979), "deny children the right to negotiate and develop as resourceful, environmentally competent individuals" (p.339)...

Parents' safety concerns were cited as a reason for children not being outside as much as previous generations in Clements' (2004) study. Negative attitudes towards risk taking were identified by Kolt et al. (2005) in their review of the literature as a barrier to children engaging in active movement. There is growing concern we are being too protective of children and that early childhood education may have contributed to this (Penn, 2005). Increased fear of litigation, regarding playground accidents is certainly a reality in Australia and United States of America (Frost, 2006).

Thomas and Hocking (2003) state that perhaps because things have become so safe, our perceptions and standards have changed, our general understanding of risk is skewed and therefore out of step with reality. Thomas and Hocking point out it is not children who are frightened to take risks but the conflict that exists for adults between a guardian mentality and the desire to give children freedom. Davis (1998) states that we need to resist the application of adult fears and constraints to children's outdoor experiences.

Frost (2006) argues that risk taking, within children's outdoor games, is linked to basic kinds of knowledge such as learning about survival and coming to understand one's place in the world. Learning how to handle risk is essential for growth and development, so part of the adult's role is to help children handle risks and the playground is a unique place for this to happen (Frost, 2006). Stephenson (1999) observed that 'taking a risk' was something children chose to do frequently and the significant elements that contributed to 'scary' were: attempting to do something they had not done before; feeling on the borderline of being out of control most often due to speed, height or overcoming a fear.

The most 'overwhelming impression' Stephenson (1999) gained from observing the four year olds was the hunger for physical challenge and how this was satisfied more through the attitudes of the teachers than the equipment itself. Stephenson noted that the "teachers enjoyed being outdoors, were interested in physical play, and took a sensitive and liberal approach to supervision that allowed children to find challenges that were experienced as risky but did not put them in position of hazard" ( p.38).

Harding (2005) describes how the teachers in her centre have made a real effort to ensure that restrictions in the 'pedagogic garden' are from "observed risk rather than perceived risk" (p.152).

A 'critical pedagogy of place' (Gruenewald, 2003) requires examination of the adults' view, as they are the ultimate decision makers regarding what children experience in the outdoors. The dominant values, beliefs and attitudes are those of the adults and therefore that place they create and provide, needs to be considered in relation to experiences children have, and to what degree the adults uphold the notion of habitation. If the adults' values are crucial to young children's experiences in early childhood, as the literature in this section suggests, then this raises the question do the values that the adults hold about the outdoors, promote a sense of place, of belonging, of caring for human and non-human?

## **Current Approaches to Conducting Research with Young Children**

As evident in the research reviewed there is a paradigm shift from the research 'of' and 'on' children as subjects to research 'with' children as active participants who have some control of the process (Alderson, 2000; Christensen & James, 2000; O'Kane, 2000; Woodhead & Faulkner, 2000). The United Nations Convention on Human Rights (United Nations, 1989), sociocultural theories, ecological theory, the sociology of childhood, social cognition theory and the use of ethnography in social science research, have all provided a major change to research practice with children in the last fifteen years (Brooker, 2001; Clark, 2005, a, b, c; Edwards, 2001; Robbins, 2005). These theories, practices and conventions have changed researcher thinking about children's competence, seeing children as embedded within a complex context of social relationships with people, places, things and events (Brooker, 2001; Ministry of Education, 1996). This view of children as competent is upheld within the Reggio Emilia approach and *Te Whāriki* and both have influenced the Mosaic Approach (Clark & Moss, 2001).

I agree with Mayall's (2000) position that research with children is about seeking to enter the child's world even if just in some small way. This is about establishing relationships and breaking down the power barriers and being committed to listening

to children; children need to know that you will listen and take their views seriously, that you are interested in conversations about other things (Christenson & James, 2000; Gollop, 2000; Hedges, 2002; Merriam & Simpson, 2000; Robbins, 2002). This intent is pivotal to this research thesis. Giving voice requires more than just interpreting what you hear, it requires as Warming (2005) states ‘loyal facilitation and representation, making a common cause with the children’ (p. 53).

Current perspectives of childhood and children have seen an increasing diversity and creativity in research methods. These methods include child conferencing, making tapes, drawing, touring, photo elicitation, role plays, puppets, bookmaking and mapping, and require constant improvisation (Clark, 2005a; Graue & Walsh, 1998). The studies reviewed here have used some of these innovative methods, though very few with children aged under five years.

### ***Using photography***

Of particular relevance to this study is the use of photography as it was one of the media I used to capture the children’s perspectives. Handing over the camera to the child has many benefits. First it gives the child control over the process and is an attempt to empower the child within the research process (Clark, 2005a,c; Einarsdottir, 2005; Hart, 1979). Empowering children, through them having their own cameras to photograph things they think are important, also means the researcher does not have control of what is photographed; the children are providing the data.

Secondly it has proven to be an effective way for even quite young children to express themselves, not only through the photos themselves but also through the discussion of the photos during the interview process (Clark, 2005; Einarsdottir, 2005; Fasoli, 2003; Gollop, 2001; Greenfield, 2004, 2006; Hart, 1979). This process is referred to in visual theory as photo novella (Prosser & Schwartz, 1998).

Thirdly, it offers another language for children to use apart from verbal communication (Clark, 2005 a,b,c; Christensen & James, 2000; Einarsdottir, 2005; Fasloi, 2003) as young children in particular may become bored with exclusively verbal interactions (Gollop, 2000). Carr (2006) points out that photographs, along with drawings, are a visual language that children use to register and develop their

interest, in particular for those young children who are more taciturn. Also most children enjoy taking pictures and their interest is maintained, providing them at the end with a concrete product (Greenfield, 2004; Clark, 2005a).

Einarsdottir's (2005) tested two different approaches to using photography as a method of listening to children's views on their early childhood experiences. Twenty two Icelandic children were given a digital camera and took the researcher on a guided tour of their playschool telling her about what was important to them. Twelve other children were given disposable cameras, told they could photograph whatever they wanted and could keep their cameras until the film was finished. Einarsdottir found that the group using the digital cameras took photograph of things important to them, and the most photographed space was the outside playground, almost twice the number of photographs, followed by photographs of their friends. Einarsdottir's (2005) conclusion, that using cameras and children's photos is a child -friendly, child centered method of gathering data that invites children to use other modes of communication than oral language, is important for this study.

I found restrictions on camera use in most of other studies where children were given a camera (Clark & Moss, 2001, 2005; Cremin & Slater, 2004; Docket & Perry, 2003). In Dockett & Perry's (2003) Australian study, where children who had just started school took photographs of important places in order to make a book for other new children starting school, each child could only take two photos. In Clark and Moss's (2005) study it appears only 15 of the 28 children got to take photos with disposable and reusable cameras, working with one camera between two children. Cremin and Slater's (2004) justification for the children only being able to take eight photos, was that it required an element of choice. Though Clark and Moss (2005) give no explanation as to why only some children got to take photos, they did justify having one camera between two as giving the researcher opportunity to listen and watch the children select and take their photographs.

Therefore in this study I decided it was important for children to have a camera each and take as many photos as the film allowed, 28 frames in all. When asking children to photograph their favourite places, and things they like to do, it is inappropriate to then place a small number limit on what they can photograph.

## Summary and Rationale for Study

Analysing the literature and research on the value of the outdoors, it appears that the contribution that 'being outside' has on the development of children has been neglected and overlooked in research until very recently (Towers, 1997). Teachers have historically placed little educative value on physical play (Hutt et al., 1989).

From the current educational research on the role and value that outdoor experiences have on children's holistic development, and the small body of research which has explored young children's, teachers', parents' and centre management's views on outdoor play, key themes emerged. These themes are: providing optimal outdoor environments have a unique role to play in children's holistic development; outdoor environments influence children's and teachers' behaviour; the vitalness of physical activity; the importance of place and the natural world; young children place importance on playing outside; teachers tend to 'supervise' children outside, seldom realising the potential of the outdoors; adults' values and beliefs about outdoor play impact on what happens for children, as does attitudes to risk taking – perceived or observed. These themes are significant to this study in the research design and the analysis.

Since Stephenson's (1998) study there have been many changes in the early childhood sector in New Zealand and therefore my research is timely and significant, as it presents a representation of the voice of the children about what they value about being outside, that has implications at all levels of policy making, as well as implications for teachers and teacher educators, education policy makers, outdoor playground designers and manufacturers.

Across the literature there are calls for more research on children's outdoor play behaviours (Clements, 2004, Kolt et al, 2005; Pellegrini & Smith, 1998). This is especially pertinent as there appears to be a significant decrease in the amount of time children are spending outdoors in industrialised nations, which in turn is possibly impairing perceptual abilities, appreciation for the environment and natural world, problem solving skills and creativity (Frost, 2006; Wilson, 2003).

I discovered that much of the earlier research on young children's experiences in early childhood centre playgrounds was quantitative and focussed on gathering data

on usage and choices made about the equipment available to children with a focus on gender differences. There is an underlying assumption across all of the studies that frequency of use of space and equipment by children equates with level of preference. There is a need to explore this assumption by using multiple and appropriate data gathering tools.

Considering that we now know how much environments affect children's learning and development, and with increasing numbers of children in child care, and spending longer hours, research seeking children's perspectives is of paramount importance.

Young children have voiced key themes across the studies by Clark and Moss (2005), Cremin and Slatter (2004), Einarsdotiir (2005), Rothlein and Brett (1987), Sheridan and Pramling Samuelsson (2001), and Wiltz and Klein (2001) regarding outdoor play spaces and equipment, friends, and natural elements. The most significant from all these studies was the emerging theme that children, above all else, when asked what they liked most to do in their early childhood centre replied 'play' and 'play outside'. These findings situate this study, investigating New Zealand children's perspectives, in the realm of being highly significant from research, practice and policy positions.

There appears to be a dearth of qualitative research that has specifically looked at young children's perceptions of the natural world. This would suggest that a qualitative approach using ethnographic procedures is imperative to begin to explore this nature-child connection.

The main area of contention within the literature appears to be about the role of the teacher in the outdoors. To what degree should teachers be involved in children's outdoor play and should they be teaching fundamental movement skills? Only two small studies specifically set out to explore children's perceptions of the teacher role. This gap in the literature has led to the inclusion of a research question, in this study, on the teacher role in the outdoors.

The literature has strongly indicated that the main factor relating to children getting outside and being able to participate in physical activity and engage with the natural environment are the values, attitudes, and beliefs of the adults. The lack of literature

currently available suggests that a research study that looks at children's, parents', teachers' and centre owner's perspectives on outdoor play is critical.

The findings in some of the studies reviewed highlighted the need to use multiple methods that empower children in the process. Studies reviewed have shown how useful cameras and photographs are in empowering children to express their views (Clark & Moss, 2001, 2005). This study can contribute to that research knowledge by using photography and photo elicitation as data collecting tools.

The contribution of the academic and research literature, and my own personal interests, knowledge and experience of the outdoors and of young children provided pieces of the 'mosaic of understanding' that shaped all aspects of the design of this research project. The foci of this study is children's perspectives of their experiences in the outdoor setting of their early childhood centre and teachers, parents and the centre owner's perspectives on outdoor experiences for children and their provision at the centre. The following chapter details suitable methodology which was selected to address these questions.



## Chapter Three: METHODOLOGY

In this chapter I provide a rationale for the methodological approach and research design underpinning this investigation and explain the methods and procedures used to answer the research questions:

- What are children's perspectives of their experiences in the outdoor setting of their early childhood centre?
  - What are children's views on the role of the teacher outside?
- What are teachers', parents' and the centre owner's perspectives on outdoor experiences for children and its provision at the centre?

In this chapter my role as researcher and the ethical issues related to this study are discussed and how the data were analysed is explained.

### Research Approach

Qualitative research, according to Auerbach and Silverstein (2003) has several defining features. For example: qualitative research directly investigates subjective experience; incorporates meaningful stories; allows for naturalistic observation and description; uses the research participants as expert informants; and involves reflexivity. I understand that I was and am part of the context I was investigating and that I bring to this research my own prior knowledge and assumptions (Bryman, 2004; Siraj-Blatchford & Siraj-Blatchford, 2001).

This qualitative case study draws upon ethnographic procedures. This single case study is a bounded one, carried out, within a set time frame, on a particular aspect (Bassegy, 1999; Bryman, 2004; Merriam, 1988); that is children's lived experiences in the outdoors of one early childhood setting. Ethnographic methods aim to describe some aspect of the sociocultural understandings and practices of a group of people (Hart, 1979; Siraj-Blatchford & Siraj-Blatchford, 2001).

The investigation in this study was done using multiple methods, from multiple sources of information, as is characteristic when undertaking a case study and using ethnographic approaches (Cohen, Manion & Morrison, 2000; Hammersley &

Atkinson, 1993). Using an ethnographic approach was about the research being inherently participatory and interpretative as I sought to understand the subjective world of the participants. In this study it was about seeking to understand what 'being outside' meant to the children, teachers and parents.

To understand the children's perspectives I needed to be in the outdoors experiencing that particular context, using all my senses to listen, acknowledging that children have many voices, many ways of communicating. I also acknowledge that children's perspectives must be approached as multiple and changing; as well as being contextualised (Warming, 2005).

The Mosaic Approach underpinned the research process and tools used. The six key elements of the Mosaic Approach outlined by Clark and Moss (2005, p. 30) are:

- *multi-method*: recognising the different voices or languages of children;
- *participatory*: treats children as experts and agents in their own lives;
- *reflexive*: includes children, practitioners and parents in reflecting on meanings and addresses the question of participation;
- *adaptable*: can be applied in a variety of early childhood institutions;
- *focused on children's lived experiences*: can be used for a variety of purposes including looking at lives rather than knowledge gained or care received;
- *embedded into practice*: a framework for listening that has the potential to be both used as an evaluative tool and to become embedded into early years practice.

The Mosaic Approach relies on children being given the time and opportunity to express themselves in different ways. This acknowledges the 'Hundred Languages' (Edwards, Gandini & Foreman, 1988) that children may use to explore their experiences. This includes giving the child the space to take the lead, or role reversal, in the research. As Langstead (1994 cited in Clark & Moss, 2005, p. 83) describes it is about re-establishing children as "experts in their own lives".

The Mosaic Approach comprised originally of two stages. Stage one is the gathering of the data, and the second stage the piecing together of the information for discussion, interpretation and reflection with participants. A third stage was added in

Clark and Moss (2005) where findings were used for decision making and action. So this approach informs all stages of the research process, including the analysis.

I was aware throughout the data collection phase that the research should not be too tightly constrained. The ability to reflect on strategies between phases and to be responsive to what was important for the children at the time was imperative (Hatch 1990). This required a continual reconsideration of what strategies were needed to enable the children to remain in control of the photography, drawing, their participation in the other research activities, and when and where they talked to me. I respected and acknowledged that small children like to engage in conversations about all manner of things, which are often not related to what you, the adult, want to talk about (Robbins, 2002). Malaguzzi calls this aspect of children's conversation 'making sudden detours' (Rankin, 2004) and these detours or conversations about other things need to be respected.

Establishing and maintaining relationships with all participants was essential (Hatch, 1990). Underpinning this study is the belief that children need to be listened to; that they have ideas, feelings and opinions worth listening to (Bruner, 1990; Dahlberg Moss & Pence, 1999). This study is situated in the belief that children seek to understand and make sense of their world and that knowledge is constructed little by little through the child's interaction with the environment and with others in a variety of sociocultural contexts (Rogoff, 2003; Wilson & Meyers, 1999).

The perceptions, views and knowledge of individuals evolve through activity in authentic situations, and depend somewhat on the artifacts and tools which a situation affords (Wilson & Myers, 1999). Therefore all thinking, learning and cognition are situated within particular contexts and are a dynamic interplay between individuals, social levels and the physical context (Wilson & Myers, 1999).

Underpinning the analysis was the premise that sociocultural and ecological research is primarily interested in understanding how the "processes of human development are influenced by the interrelationships of the developing person and the multiple contexts within which he or she lives "as these contexts are experienced by that person" (Glossop, 1998, p.10). All aspects of the context are connected, "all people

develop as participants in cultural communities” (Rogoff, 1988, p.688). Therefore the analysis was about discovering the relationships between people, places, things and events in the outdoor setting. What did the outdoors and being outside mean to the participants? It was not only about analysing the data from the human participants but situating their views within the environment that also had a voice. Discovering how this place, the outdoors in one early childhood centre, was sensed and perceived drove the analysis process. What was significant about this ‘place’ for the participants?

## **Research Design**

This study is an exemplifying case (Bryman, 2004) which allows the researcher to examine key social process and provides an appropriate context in relation to research questions. One early childhood centre outdoor setting provided me with a suitable context in which to investigate the views of young children, their teachers and parents about the outdoor environment.

A case study design was the most appropriate for answering my research questions. As Merriam (1988, p.1) states case study research focuses on “discovery, insight, and an understanding from the perspectives of those being studied and offers the greatest promise of making significant contributions to the knowledge base and practice of education”. Case study design also fitted my intent as I was researching in a single location, one early childhood centre outdoor environment, and over a predetermined timeframe.

## **Setting and Participants**

### ***Accessing participants***

The centre in which this study was carried out was chosen and selected without visiting it. I knew of the centre’s existence, had heard favourable comments from colleagues and was aware that their philosophy was influenced by Reggio Emilia approach (Edwards et al., 1998). The criteria I had for selection were that:

- the centre had to be local
- a full day centre
- have a free indoor outdoor flow policy

- provide a variety of outdoor experiences for children
- have children attending aged between two years and five years
- and agree to participate in the research project

Massey University Human Ethics Committee (MUHEC reviewed and approved the proposed research (PN Application-05/43, Appendix 1) and the centre was approached. Once approval from centre management and teachers was given, I provided the teachers and parents with the information sheet (Appendix 2) and held a meeting with parents and teachers to answer any questions or concerns. Seven parents and four teachers (two of whom were also parents of possible participant children) attended; others were contacted by email and phone. Parents and teachers were given a participation consent forms (Appendix 3) and a copy of the child consent forms (Appendix 4) so they could discuss these with their children. All parties were enthusiastic and consented to participate.

Selection of participants was based on the following criteria:

- Attending the centre on a full time basis and intend to be attending the centre until the end of 2005
- An even mixture of boys and girls aged three and four
- Initial parent consent and agreement to be part of the project themselves.

Fourteen children; eight boys and six girls consented to participate and all signed child consent forms.

### **Centre context**

This centre was situated in a park like setting on the fringes of a large city set on two acres of land and into its third year of operation. The centre philosophy stated that “indoor and outdoor settings play a very important role in providing top quality early childhood education”. The centre’s philosophy and programme was influenced by the Reggio Emilia approach. For example, the environment was seen as the third teacher (Edwards et al., 1998) and children were seen as:

*having the preparedness, potential, curiosity, and interest in engaging in social interaction, establishing relationships, constructing their learning and negotiating with everything the environment brings them... .. children have many more capabilities than adults give them credit for.* (Centre Brochure)

Parents were welcome at any time, and able to work alongside children and participate in the programme if they wanted or were able to. Centre staff stayed in daily contact with parents. This was evident in the interactions with parents and also by the newsletters, notice boards, and conversations I had with parents. Children's portfolios were freely available for children, teachers and parents to look at. The centre also had a website where information was available. Excursions were part of the centre curriculum and during my research time I accompanied them to the local garden centre to buy plants for the vegetable garden. Meals were cooked on the premises by a cook and included in the menu vegetables grown by the children.

The centre was licensed for up to 50 children and open from 7:30 am to 5:30 pm Monday to Friday. Children could attend for the full day or from 9am to 3pm. The centre encouraged parents to have their child/children attend at least two days for continuity. The children came mainly from the local area and most families were of European descent and in the middle to high income bracket. Six of the participant children had younger siblings in the centre.

The centre had three main rooms – an infant room (birth to 18 months) in a wing of its own; a toddler room (Fantails - 18 months to approximately 3 years) and the young children's room (Pukekos- 3 years approximately to 5 years). The children in this study were all in the Pukeko room. During the time I was in the centre there were 18 children ranging between 2 years 10 months and 4 years 11 months in this group. The Fantails and Pukekos both used the larger outdoor area, though there were short periods of time during the day when each room had the space to themselves. At times the older children were also allowed to play over on the infant side of the outdoor setting. In the Pukeko room there were also educational support workers for two children, plus one staff member in training. The centre had 7 teachers full time and also had a cook who came every day, and a handyman. The responsibility for planning and being outside was a joint one, shared across all teachers from both rooms. So the teachers on outside duty took responsibility for all the children who were outside at the time. There were times when only the Pukeko children were outside and then it was either Maya or Louise's responsibility regardless of rostering.

### **Adult participants**

The centre owner was Suzanne, who held a Bachelor of Early Childhood Teaching degree, and was parent of two children in the centre, one of whom was a participant. Suzanne acted as a float teacher, usually working with children, mainly on the infant side. There were two qualified teachers, in charge of the Pukeko room, Maya who held a New Zealand Diploma of Teaching (ECE) and Louise, a qualified early childhood teacher from Sweden. Another teacher, in the fantail room, was the parent of one of the participant children and is therefore included in this study hereafter as a parent only.

Mostly the children's mothers attended the focus group's discussions; and wrote in the parent journals. Over the two parent focus group meetings nine parents attended, three parents came to both. The five parents, who could not attend either spoke to me as they were picking up their child, emailed me or phoned me. Thirteen out of the fourteen parents kept a journal during the research period. The list below is how I have referred to the adults who participated within this study.

- Two teachers: Louise and Maya
- Suzanne: centre owner and mother of Joshua K
- 13 other sets of parents: are referred to using their child's first name. For example, Alexia's parents (journal) or Alexia's mother (focus groups).

### **Centre outdoor setting**

There was rural land on two sides of the centre playground, and apartments were being constructed on the east side. The site was elevated and landscaped with plants and trees. The outdoor area was divided into two sides, a smaller area for infants and a larger area for the toddlers and young children, separated by a low wooden partition that had planter boxes and some seating along it. There was a flat paved area adjacent to the building and then the land sloped up to a second flat area, which stepped down on one side to another lower grassy area. A detailed sketch of the outdoor area can be found in Appendix 5. The beliefs and values underpinning the provision of the outdoor setting are described in this excerpt from the centre brochure.

*Children don't always need equipment, they need opportunity and an area that is engaging, exciting and meaningful ...they will learn about growing plants and vegetables and develop an understanding of Eco awareness.*

The outdoor setting contained an aviary which housing birds and guinea pigs; a sandpit with tank water access; wilderness areas; a rustic storage shed; vegetable garden; low moveable equipment; and a three level water feature. Native wildlife mosaics were set into winding pathways. There were places to gather - wooden benches in unexpected places, nooks for one or for two, raised edges made of wood, boulders, and benches. Many topographical changes including planted slopes with pathways through them. There was large moveable flexible climbing equipment, which included: various sized boxes, bridges, planks, slide, tunnels, attachable climbing walls and monkey bars, on a flat bark area against the back fence line. There was space to walk behind planting along fence lines, higher places from which to view the world from and smaller more intimate quieter places where one can be more hidden. Tall pine trees in the property behind towered over the landscape at the back. There were lots of other items and loose parts as listed in Table 3.2.

**Table 3.1 Other features and equipment included**

Boat	Tyres	Hoops, moon hopper
Rustic wooden shed	Large kidney shaped Sandpit with a wide assortment of tools and equipment	Variety of loose parts both man made and natural
Balls, bats, cones	Umbrellas and 1 large one that covers courtyard	Trucks
Water trough	Outside tables	Trolleys
Carpentry table	Picnic set	Ride on bikes (for younger ones)

### ***Introducing the participant children***

The fourteen children (Figure 3.1) comprised of 8 boys and 6 girls were aged in range from 2 years 9 months to 4 years 10 months and their ages listed are as at October 1, 2005.



Alexia, female, 4yrs 5mths



Chantelle, female 2yrs 11mths



Eilish, female, 3yrs 7mths



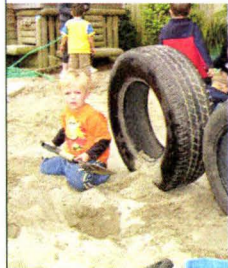
Hamish, male, 2yrs 9mths



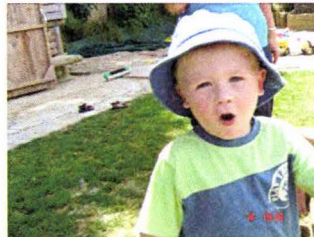
Jack, male, 4yrs 6mths



Joshua G, male, 3yrs 10mths



Joshua K, male, 3yrs 11mths



Joshua Mc, male, 3yrs 11mths



Mikayla, female, 4yrs



Krissy, female, 3yrs 8mths



Paloma, female, 4yrs 10mths



Sam, male, 4yrs 9mths



Taran, male, 3yrs 10mths



Wei-Bin, male, 3yrs

**Figure 3.1** Participant children

## Overview of Time Frame for Investigation

Initial contact was made in early August, 2005, and the investigation ended on December 16, 2005. The familiarisation period was two hours, for two days over two weeks and data collection time varied between 90 minutes and three hours two days a week for 10 weeks, with one whole day in week seven, detailed more in Table 3.2.

**Table 3.2 Overview of investigation**

WEEKS 1 & 2 - Familiarisation	
Week 3	<ul style="list-style-type: none"> <li>▪ One hour running record observation of children in outdoor playground</li> <li>▪ Met with selected children, explained research and asked their permission</li> <li>▪ Trial use of one disposable camera – shared amongst children.</li> <li>▪ Photo-elicitation - Showing some of the participant children the photos/pictures of outdoor play equipment and spaces</li> </ul>
Week 4	<ul style="list-style-type: none"> <li>▪ One hour for time sampling of where participant children were outside</li> <li>▪ Photo observations on individual children</li> <li>▪ Photo-elicitation/conversations/child conferencing using questions</li> <li>▪ Finished working with children trialling camera</li> </ul>
Week 5	<ul style="list-style-type: none"> <li>▪ Photo novella – conversations while looking at photos children had taken with trial disposable camera</li> <li>▪ Photographic essay</li> <li>▪ Photo-elicitation/ conversations /child conferencing using questions</li> <li>▪ Parent focus groups followed by teachers focus group</li> </ul>
Week 6	<ul style="list-style-type: none"> <li>▪ Photo essay observation</li> <li>▪ Photo novella – children using their own disposable cameras</li> <li>▪ Child conferencing conversations</li> <li>▪ Photo elicitation using assorted pictures</li> <li>▪ Touring</li> </ul>
Week 7	<ul style="list-style-type: none"> <li>▪ Photo novella – children took photos with disposable cameras, others discussing the photos they had taken</li> <li>▪ Spontaneous observations</li> <li>▪ Photo-elicitation</li> <li>▪ Child conferencing conversations</li> <li>▪ Touring</li> </ul>
Week 8	<ul style="list-style-type: none"> <li>▪ Whole day in centre</li> <li>▪ Photo novella</li> <li>▪ Photo elicitation</li> <li>▪ Observations –spontaneous</li> <li>▪ Child conferencing conversations</li> <li>▪ Participating with children in their play</li> <li>▪ Garden centre visit</li> </ul>
Week 9	<ul style="list-style-type: none"> <li>▪ Child conferencing conversations</li> <li>▪ Photo essay and spontaneous observations</li> <li>▪ Photo novella</li> <li>▪ Photo-elicitation</li> <li>▪ Photo essay - documentation of bike day</li> <li>▪ Interview with centre owner</li> </ul>
Week 10	<ul style="list-style-type: none"> <li>▪ Photo novella</li> <li>▪ Photo elicitation</li> <li>▪ Child conferencing</li> <li>▪ Children drawing things they liked outside.</li> <li>▪ 2<sup>nd</sup> Parent focus group</li> </ul>
Week 11 - Final one hour observation – taped running record and whole morning photographic observation	
Week 12- Final session with children – book making with children	

## Research Tools and Procedures

As my intent was to investigate the perspectives (views and feelings) of young children in particular, their parents and teachers, I used an eclectic variety of ethnographic type tools and procedures to gather data. The Mosaic Approach uses multiple research tools for gathering the data as described in Table 3.3 and I have drawn the methods used in this study mainly from this approach (Clark & Moss, 2001, 2005), my preliminary study (Greenfield, 2004), and other research with children that used participatory methods, for example: Hart (1979); Kylin (1999); Stephenson (1998); Wiltz & Klein (2001); Wolfgang & Phelps (1983).

**Table 3.3 Methodological 'pieces' used adapted from the Mosaic Approach**

<b>Method</b>	<b>Comments</b>
Observation	Qualitative participant observation narrative accounts, photographic observations and time sampling participation charts (both scheduled and spontaneous)
Child conferencing/ conversations	Semi-structured interviews conducted one on one or in small groups, as well as conversations children initiated
Photography and photo novella	Digital (researcher and children) and disposable cameras (children) used to photograph important people, places, events and things
Drawing	Collaborative drawings of what they like outside
Focus groups	Semi-formal discussion with parents and teachers
Interview	Semi-formal with Centre Owner
Photo-elicitation	Looking at pre-selected pictures of familiar and different outdoor places and equipment
Journals	Parents, teacher and researcher kept during data collection
Touring	Tours of the outdoor setting led by children
Book making	Children selecting photos and creating their own pages
Documentation	Centre brochure and website

A range of processes and tools was used, enabling me to discover the participants' perceptions of the outdoors rather than as it may exist in "objective reality" (Glossop, 1998, p. 10). The elements within the environment that were influencing the development of each participant are those, according to Bronfenbrenner, that "have meaning to the person" (Bronfenbrenner, 1979, cited in Glossop, 1998, p. 10). The research tools used with the adult participants were drawn from studies that sought the parents' or teachers' perspectives on children's experiences in early childhood settings, or on outdoor play (Stephenson, 1998; Temple & O'Connor, 2003), namely focus groups and from my own idea of journals.

The research approach highlighted 3 principles derived from Brooker (2001). First, I used developmentally appropriate activities for eliciting the children's views to enhance the validity of the findings as well as to avoid stress on participants; second, I became a familiar and trusted adult within the child's setting before attempting to elicit information; and third, I trusted that the children could offer information, in combination with other evidence, that would enable me to see and discover aspects of their lives. From this stance I was positioning myself, not as the expert, but as the 'authentic novice' (Clark & Moss, 2005).

In addition, to more novel approaches like photography, I used some traditional yet well proven observation methods, such as time sampling and running records. Field notes were taken that included reflecting on my own intuition and responsiveness to the participant children. I also examined the centre brochure and website to gain an understanding of the philosophy and values underpinning the centre's environment, policies and practices. This enabled me to further triangulate the centre owner's interview data with written evidence alongside parents' voices, children's voices and my own observations.

The Overview of Investigation, on page 54 indicates that some research tools were used only at specific stages while many of the research tools shown in Table 3.3 were used throughout as the metaphor of 'tools' implies.

## **Observations**

Observations were the least obtrusive way of collecting evidence (Edwards, 2001) and I chose to use a narrative format on most occasions, enabling me to record open-ended descriptions of children's play episodes. Both planned and spontaneous observations enabled me to record the physical setting, the human and interactional setting (children's actions, language and behaviour), the programme setting and specific events as they happened (Arthur, Beecher, Death, Dockett, & Farmer, 2005; Edwards, 2001; Kervin, Vaile, Herrington & Okley, 2006). At other times audio-taped narratives were used combined with note taking and a photographic essay (Prosser & Schwartz, 1998), as in Appendix 6. Some observations were carried out from the position of detached observer and other times as participant-observer.

Time sampling or time sequenced observations using visual participation charts were used at the start of the data collection and towards the end. Two, one hour observations, sampling every five minutes, were carried out. I noted where the children were and what types of activities they were engaging in outside. They had the advantage of quickly and effectively recording the children's engagement in outdoor experiences during a specific time period providing insight into the children's patterns of participation (Arthur et al., 2005).

Targeted time sequenced photographic observations of all the participant children were done using the digital camera – capturing a few minutes of their engagement with a particular piece of equipment or area by taking a photograph every 20 seconds or so. These were useful as they allowed me to collect evidence and then analyse it inductively (Edwards, 2001). Photographs also supported the written observations carried out (Kervin et al., 2006) and the notion of a photographic essay was an idea that came from the literature on using photography in research (Banks, 2001; Prosser & Schwartz, 1998).

By photographing sequences of play or actions, I obtained natural (as opposed to staged photos) photographs that provided me with the stages of an action or an experience. The photographic essays, when placed alongside the transcripts and my comments, contributed to my ongoing understanding of a child or group of children, beyond that moment in time (Banks, 2001; Prosser & Schwartz, 1998). The vast

amount of photographic data the children and I gathered using the digital camera also provided lots of meaningful material for the book making.

### ***Photo novella***

The 'photo novella' process included the participants taking, showing and talking about their own photographs and engaging in dialogue about their significance and meaning (Banks, 2001). Photo novella was not only a data collecting method but also provided a meaningful way for the children to have control over the situation and to express their views about what was significant and meaningful to them, in their own way (Banks, 2001; Brooker, 2001; Einarsdottir, 2005). This grounding of the images in real experience was the key and makes the photographs infinitely more valuable than a set of images created by outsiders (Banks, 2001).

Each child was given their own labelled, disposable camera (costs covered by Manukau Institute of Technology Research and Ethics Committee funding, R05/SS/20, Appendix 7) so there was no possibility of mix up, as they were developed into prints (for the child to keep) and CD Rom, for myself. The use of disposable cameras is supported by Clark and Moss (2001, 2005) and Einarsdottir (2005) as they are relatively easy for children to use, and produce a good quality photographs. Another benefit of using disposable cameras was that they enabled the child to take control of the camera without concerns about damaging expensive equipment (Clark & Moss, 2001).

I ensured that each child's name was on their CD Rom and on the thumbnails to avoid mix up. The children were given a set of their own photographs to keep. Most of the conversations I had with the children when looking at their photos were tape recorded. The photographic data provided aide –memoirs that facilitated a deeper reading, revisiting and analysis (Clark, 2005 c, 2006).

### ***Photo elicitation***

Using preselected photos/pictures in interviews has been proven to be a useful way of interviewing young children (Clark & Moss, 2005; Wiltz & Klein, 2001, Wolfgang & Phelps, 1983.). This research tool is known as photo-elicitation (Prosser & Schwartz, 1998). I used 'photo-elicitation' to open up opportunities for the children to talk about

other types of outdoor spaces, playground and equipment not necessarily found in their centre playground.

I used 50 pictures (descriptors in Appendix 8) covering a broad range of outdoor play equipment and structures both in public and early childhood centre outdoor settings, as well as some natural environments such as the bush and beach. I compiled a spreadsheet, numbered 1 – 50 down the side with each child's name across the top, which remained accessible along with each child's conferencing questions throughout the duration of the data collection. I invited children individually or in small groups to look at the pictures and tell me which equipment, places or experiences they liked or did not like. I was respectful of their wishes if they did not want to do this at that point in time. For some children looking at the assorted pictures became a favourite activity requested several times. Using photographs reduced the abstractness of the interview (Hatch, 1990) and using visual aids, props and pictures stimulated participation (Browning & Hatch, 1995).

### ***Collaborative drawings***

Asking the children to draw their favourite areas outside was inspired by the mapping method described by Clark and Moss (2001, 2005) and by other studies that involved children drawing as a research tool (Wiltz & Klein, 2001). Through drawing with their friends, onto large pieces of quality paper and using new felts and paints, the children had another medium through which to represent what they valued about the centre outdoor space. The drawing session was tape recorded and this verbal record enabled me to clarify in some instances what they had drawn. Conversations recorded while children draw can provide useful insight into children's thinking (Arthur et al., 2005).

### ***Child conferencing conversations***

'Conferencing conversations' or as Patton (2002) calls them 'conversational interviews' were ideal for the intent of this research providing a semi-formal structure for talking to young children, about their lives in an early childhood centre that was open-ended, in a familiar setting, flexible, and sensitive. These conferencing conversations took place without withdrawing them at any stage. I went to where they were or just positioned myself within the open play space and allowed them to come to me. Allowing the children to decide whether they wanted to be interviewed with a

friend or on their own was important and enabled them to take control of the interview process (Clark & Moss, 2001, 2005; Warming, 2005).

The framework for child conferencing used by Clark and Moss (2001, 2005) provided the basis for the semi-structured interviews/child conferencing conversation. After some initial refining the following statements and questions were used:

- Tell me about the places outside that you like the best
- Tell me about the parts of the outdoors that you do not like
- Why do you like to go outside?
- Tell me about your most favourite place outside?
- What would you like to see changed or added to the outdoor space?
- Tell me about what teachers do outside
- What do you think teachers should do outside?

The child conferencing framework was a reflexive tool, and the questions revisited when appropriate, providing children with an opportunity to reflect upon what they have said. Interviewing of children particularly requires a great degree of sensitivity, therefore the ‘conversations’ allowed me to ask the key questions when the opportunity arises most naturally; and to be flexible and responsive (Gillham, 2000).

### ***Touring***

Touring or ‘walking interviews’ have been used successfully in several of the studies mentioned (for example Clark & Moss, 2001, 2005; Dockett & Perry, 2005; Hart, 1979; Kylin, 2001) and I found this method particularly useful with the younger children. As we walked, I could assist with winding the film, while having conversations about what was capturing their interest and about other things. The physical nature of this process is in line with our knowledge that children like to physically go to where they are talking about.

### ***Interviews with staff and parents***

I used focus groups as they provided an informal way of interviewing the parents and teachers (Bryman, 2004; Finch & Lewis, 2003). The views of the significant adults in the children’s lives contributed to the understanding of the children’s behaviour in the outdoor setting and of the connections between home and centre. I found the parent

focus groups, in particular, to be extremely dynamic, as the interactions amongst group members stimulated discussion, resulting in “a joint construction of meaning” (Bryman, 2004, p. 346) and becoming a rich source of data (Gillham, 2000). All sessions were intended to be taped but the first parent focus group due to malfunction of the record button, was not. Though devastating at the time it highlighted the importance of taking notes, though much rich discussion was lost.

The parent and teacher focus group questions I used as a baseline had four themes: a) their own feelings, beliefs and values about being outside, b) the benefits for children in being outside; aspects of the outdoor space that children seem to prefer; c) views on the centre outdoor setting; and d) the teacher’s role in the outdoors. By having a similar set of questions across all participants it enabled me to compare responses while also providing the particular focus of each group to come through as well. All participants were asked what they thought could be done to enhance the centre’s outdoor environment. The teachers were also asked about how they plan for the outdoors. Other questions discussed with the parents were:

- What aspects of the centre outdoor environment do you think your child prefers?
- Are there any specific outdoor activities you do or places you enjoy going to with your child?
- What influence did this centre’s outdoor area have when you chose to bring your child here?
- Do you have an expectation that your child should never get hurt when outside here?

A semi-formal interview process was used when talking with Suzanne, the centre owner about her views on the role and value of the outdoors for young children was appropriate. Suzanne wore three hats: as a centre owner; as an early childhood teacher; and as a parent of one of the participant children. These three ‘hats’ provided the framework for responding to the open-ended questions and using a semi-structured interview method it allowed me to seek additional information and respond with new questions in response to answers given (Kervin et al., 2006). The questions centred on:

- values and beliefs that underpin the centre’s outdoor setting

- things to add to the environment
- how the outdoors and its role in children's development was perceived
- any negative aspects to the outdoor environment
- views on the teacher's role and planning for the outdoors

A summary of the first parent focus group meeting and the transcripts of all the other focus group discussions and the interview with Suzanne were made available for comment and verification. I received no feedback that what was documented was inaccurate or needed changing.

### ***Journals***

Keeping a research journal is vital in qualitative participatory research (Altrichter, Posch & Somekh, 1993; Gillham, 2000; Glesne, 1999). Mine became the place where I wrote down feelings and impressions, questions, and ideas; speculated about what was going on, made notes for the days to come. I wrote in it while in the centre and immediately afterwards, reviewing my notes before returning to the centre the next day. Reviewing and summarising is an essential discipline for a case study researcher as with the amount and complexity of the data it can easily "lose shape" (Gillham, 2000).

I selected a purple journal that had glittery green and pink butterflies over it so that it would not seem threatening to the children. From the first day the children were drawn to it, commenting on it and asking what it was for. This provided a good way to explain what I was going to be doing, providing an initial non-threatening focal point of discussion.

The parents and teachers were each given small pocket sized journals to write in, so that adult participants would not feel the task was daunting or required lots of time. The focus group questions were pasted inside the front cover; this was especially helpful for parents who could not make the focus meetings. The parent journal entries provided insight into the children's views especially of those children who talked much more at home than in the centre. I explained to parents via meetings, email and phone calls that they could record anything the children said about being outside and any thoughts they had about the outdoors. All parent journals were returned to me

except for one and I returned them to the parents once I had put the contents onto the computer. The parent journals also provided valuable supporting and additional evidence regarding the children's experiences in the outdoors, both at the centre and as a family.

### ***Audio-recording***

Audio-recording was exceptionally valuable research tool in relation to its complementary use with other tools. I transcribed the 15 hours of tape recorded conversations. The children appeared very comfortable with the tape recorder and either ignored it or specifically asked me to interview them so their voices could be played back to them. The audio-recorder became just another appendage like the camera and my journal- they came to expect me to have them.

### ***Bookmaking and disengaging***

Bookmaking has a long tradition in early childhood education practice in New Zealand, and is becoming a recognised as a useful tool when researching with young children (Clarke & Moss, 2005; Dockett and Perry, 2005). This tool was not part of my original design but, as the study was drawing to a close, its use seemed a very appropriate way of further listening to children, triangulating the data and to signify that the time we had spent together was nearly over. Disengaging should be considered as important an aspect of the research design as any other (Berg, 2004; Bryman, 2004). Bookmaking provided a tangible way of disengaging from that phase of the study. This documentation also seemed to be in keeping with philosophy and practice of the centre and in particular their commitment to the pedagogy of Reggio Emilia.

I took in many sheets of black paper, magic dots and adhesive photo spots, and nearly one hundred photos we had all taken with the digital and my 35mm camera. I explained that I had an idea that they could make a book about being outside over the last few months using lots of the photos we had taken. I explained they could do several pages each to put into the book and that they could choose any photos they wanted to put on their pages. Each child ended up making between 2 and 4 pages of the book, and those present made pages for those away. The original book was gifted

to the centre and Paloma's comment "can I take mine home" inspired me to give each child a black and white copy. The result was entitled 'Pukeko's in the Garden'.

## **Trustworthiness, Transparency, Transferability**

Trustworthiness and transparency can be made visible in several ways and Dingwall (1992, cited in Silverman, 2001) suggests the provision of sufficient raw data to allow the reader to separate data from analysis. Trustworthiness and transparency of this study comes from providing enough detail, in the findings and discussion chapters, to show that my conclusions make sense (Auerbach & Silverstein, 2003 Merriam, 1998) and are justifiable. The notion of trustworthiness or validity stems from the researcher ensuring that the perceptions of the inhabitants rather than those of the researcher take precedence (Siraj-Blatchford & Siraj- Blatchford, 2001). By combining visual media with participant observations, I have been able to formulate an in-depth exploration of what 'being outside' meant to the participants and provide triangulation. This in turn enabled me to assess and justify the extent to which the children in this study shared a particular attitude or opinion (Christensen & James, 2000).

The interweaving of the different languages (written, verbal, visual), of both researcher and all participants, in this study have resulted in documentation that expresses the co-construction of what 'being outside' meant. That is, this study seeks to give meaning, to render significance to what each author (*participant*) has contributed; that is the ethic of listening (Warming, 2005). The findings and discussion chapters aim to present deep understanding communicated with clarity through written word and photographs (Clark, 2006; Rinaldi, 2006).

The use of visual documentation has also made the competence and the feelings of the children more visible, trustworthy and transparent, in ways that are sometimes more powerful than the written word (Alcock, 1999; Warming, 2005). Further, the Mosaic Approach provided a platform that gave greater visibility to the children's voices (Clark & Moss, 2005), and provided 'situated validity' (Lather, 1997, cited in Denzin & Lincoln, 2003). The findings of this study privilege the participants' voices through speech, photography and drawing, bringing authenticity (Lincoln & Guba, 1985) to the findings.

Even though the findings from this study are strongly contextualised there is a degree of transferability in terms of design framework and methods of data collecting. Rich, thick descriptions should enable a reader of the study to “determine how closely their situation matches the research situation and hence, whether the finding can be transferred” (Merriam, 1998, p.211). Through clearly explaining the steps I have taken in this research project, and having endeavoured to present and discuss the findings in a way that I trust the participants will recognise themselves and their views very clearly, I have aimed to produce a trustworthy, transparent and transferable and fair thesis (Denzin & Lincoln, 2003).

## **Ethical Considerations**

Ethics is about every aspect of the research process (Dahlberg, Moss & Pence, 1999). In ensuring that this research was conducted thoroughly and ethically I abided by the Massey University’s Code of Ethical Conduct for Teaching and Involving Human Subjects (Massey University, 2000).

### ***Children as permission granters***

In response to a growing call for researchers to acknowledge the children as the permission granters (Eide & Winger, 2006; Graue & Walsh, 1998; Maguire, 2004) I sought the children’s consent using the MUHEC approved the child consent form. Hedges (2001) argues eloquently that “adult consent should support children’s consent, not replace it” (p.6) and I had found in the preliminary project, that the use of child consent forms is justified and empowering for young children and that they were competent and capable regarding giving consent (Hedges, 2002). The responsibility lay with me, as researcher, to ensure that all the children understood as much as possible the purpose and implications of their participation in the project so that they were able to give informed consent. I realised that for children, as young as two years nine months, the concepts of voluntary consent and freedom to withdraw were difficult ones to grasp, but as Hughes and Helling (1991, p.92) state “ethical research practice requires that researchers in early childhood should find developmentally appropriate ways to obtain informed consent from young children”.

In this study children as young as 34 months, gave their consent, but their parents had also explained to them what I wanted to do and had gone over the forms with the

children prior to me asking them to sign. All parents/ guardians of child participants in this study did speak and read English; one family was Chinese and spoke and read English at a level that the teachers assured me did not require translation. Subsequent conversations with Wei-Bin's mother verified this.

Throughout my time in the centre I endeavoured to use practices which I felt would fit with children's own interests, concerns and routines. This meant knowing what questions to ask and the way in which to ask them as well as knowing which questions not to ask. By doing this I believe I have recognised one of the keys to a successful research project with children (Christensen & James, 2000; Tammivaara & Enright, 1986).

From the outset I explained to the children that if they did not want to talk to me at a particular point of time that was fine. Several children on occasion told me that they were busy right now and would look at my pictures or talk to me later and I always responded in a way that respected their choice. Parker (1984, cited in Browning & Hatch, 1995) warns against using adult status to coerce children to participate or respond as the way the interviews are structured could have powerful effects on children's responses.

### ***Establishing rapport, positive relationships and trust***

Establishing and maintaining positive professional relationships, with everyone I came into contact with during my time in the centre, was crucial. I do not consider that the relationship between researcher and participants ends at the completion of data collection, but continues afterwards in terms of ethical responsibility towards participants in relation to publication of findings. Negotiating entry into the early childhood settings was an important stage, in this process and I was mindful at all times that it was a privilege to be able to undertake research in that setting and it was vital that all participants benefit from the study.

I endeavoured at all times to show respect, openness and sincerity towards everyone in the centre whether they were the youngest child, the cook, the centre owner or a visiting paraprofessional. Disengaging was also handled as sensitively as possible, as already described by informing the children when my time at the centre was drawing to a close and by undertaking the bookmaking project.

As I have already noted the ‘handing over of the camera’ to children was a significant aspect of building trust and helped diminish the power difference between us.

Children can become research partners if we allow them the time and the tools to be involved (Fasoli, 2003) and I believe I successfully accomplished this. I acknowledge that very young children may not always have the judgment to know the consequences of exploring their feelings and views (Gollop, 2000; Hedges, 2001, 2002) and that is where my moral and ethical responsibility to each child became and remains paramount.

### ***Privacy and confidentiality***

The issue of privacy and confidentiality has traditionally meant that it is standard procedure for participants to either be anonymous or be given a pseudonym.

Authentic sociocultural and ecological research cannot study the individual(s) in isolation and participants should not be portrayed in the data as anonymous, unidentified, decontextualised individuals either (Robbins, 2005). I believed it was important for the children to retain ownership of their photos and of their perspectives by using their real first names, in this study, as I had done in previous research (Greenfield, 2004). Ownership of photographic images resides technically with the people who took them (Banks, 2001). Using the children’s real first names acknowledges this.

Teachers have been referred to by their first names as requested. The centre owner agreed to be referred to as Suzanne. All other adults are referred to as staff and a non-participant child just ‘a child’. The parents were consulted as to whether they agreed to their child’s first name being used or a pseudonym. However the need for pseudonyms never eventuated. In this study there was the unanticipated situation of there being three Joshuas. In order to differentiate them the first letter of their surname is used; because the boys referred to each other this way.

### ***Ethics and photography***

My responsibility was and is to ensure that photographs in this study and those made available for public scrutiny, as far as I am able to ascertain, ‘will do no harm’. In today’s digital world where images can be manipulated it was essential to ensure that

the only changes I made to photographs were to enlarge or reduce the size, crop out a non-participant's face if situated on the edges of the photograph, or alter brightness levels to make the photo clearer. To safeguard the children, any use of the photographs for journal or conference papers, requiring electronic transfer must be in a format that cannot be copied and used by others.

The photographs themselves are part of primary data that need to be presented to support findings but I have, out of necessity, had to make choices about which ones to include and which ones to leave out. I have tried to ensure that all of the children's photos are represented equally, representative of their perspectives.

During familiarisation I just took photos of the environment, mapping the physical surroundings, as it allowed me to settle into the centre community, opened opportunities for interaction and provided a useful catalogue of the physical setting in which the fieldwork took place (Prosser & Schwartz, 1998).

## **Role of Researcher**

I saw my role overall in several ways. First as one who "participates... but is only partially involved so that he can function as a researcher" (Merriam, 1998, p. 102). This was about staying sufficiently detached in order to observe and analyse but needing to build trusting effective relationships in order to engage in meaningful conversation with children, teachers and parents (Merriam, 1998).

Second, Gold's (1958, cited in Bryman, 2004) well known classification of 'observer as participant' also fitted my role. For instance, everyone at the centre was aware of why I was there, and the level of information gathered was controlled by the participants. Third, as time went on I had an increasingly active role while maintaining distance, but trying to be helpful rather than a hindrance. This is described as active membership (Merriam (1998).

Fourth, my role also included being a 'reactive participant' (Corsaro, 1986) when approached by non-participant children. I responded to them listening to their views, letting them take a photo with the digital camera, but not recording their views or retaining their photos. I only directly intervened in a situation if there was physical

danger but engaged in little tasks at children's requests like holding a toy for a child or taking off a jumper.

I acknowledged that my level of involvement with the children brought with it a subjectivity that permeated the study and I needed to identify where possible how this may have affected my interpretation of the data, for example what, where, and who I chose to photograph at any point in time (MacNaughton & Rolfe, 2001).

Along with my personal belief that most children would rather be outside than inside I held like many other researchers, the assumption that children will choose to play with equipment and engage in experiences that they prefer, and the more often they engage with that experience the more they must prefer it. I was keen to explore the validity of this assumption. Reflexivity is a way of emphasising the importance of self-awareness, political and cultural consciousness and ownership of one's own perspective (Patton 2002). Using multiple data collecting methods was another way to challenge these assumptions or to at least appraise their trustworthiness.

## **Data Analysis**

The analysis in this case study was an holistic one that combined the study of the individuals and groups with the study of the outdoor environment itself (both spaces and equipment), and which together formed a large study of the whole (Patton, 2002). I used inductive analysis which involved discovering patterns, themes, and categories within the data and from this the findings emerged (Bryman, 2004; Patton, 2002).

Ongoing analysis during data collection included checking out my interpretations of the photographs and their comments with the children, which also adds to the reliability of the data and strengthens external validity (Bryman, 2004; Delamont, 2002). I also kept reading other research, reflecting in my research journal and continuing to listen and interpret what participants were saying and making links across the data.

### ***Cataloguing the data and transcribing***

Data analysis began formally with the transcribing of the tape recordings, immediately after each time in the centre, where possible, and was completed within 5 weeks of finishing up at the centre. Transcribing became part of the iterative

analysis process, as listening and re listening deepened my familiarity with it (Merriam, 1998). Transcriptions were filed chronologically. I then re-read the transcripts while listening again to the tape recordings, making changes as required. All participant journal entries as well as my own were entered into a Word file.

Identifying which things, experiences and outdoor places the children had said they did or did not like during our photo elicitation conversations and child conferencing conversations was relatively easy, as I had just one master response sheet for each to work from. I did check that I had marked these down correctly by re-reading the conversation transcripts, as most of these sessions with the children had been taped recorded and were part of our conversations.

The children's photographs were transferred from CD to individual files and thumbnails of children's photographs were printed off and labelled. The specific steps I used in analysing their photographs can be found in Appendix 9. The digital photos were catalogued, according to date taken, and put into Power-point as time permitted, one slide show for each day. There is little in the literature about analysis of qualitative visual data though Pink (2001) suggests an approach which I have used, that begins with the premise that "the purpose of analysis is not to translate 'visual evidence' into verbal knowledge, but to explore the relationship between the visual and other knowledge" (p.96).

Each child had been asked to take photos, using the disposable camera, of the things they liked and so that was the premise I worked from when analysing their photographs. These were photos of things that were important to them. The children's photographs and my own were looked at, over and over again. Indeed as Fasoli (2003) states the potential for re-reading is a major strength of photographs, enabling multiple reflections. But with that comes the danger of misinterpreting or reading into the photos things that aren't there and that was where having multiple sources of data to triangulate the findings was imperative.

## ***Steps in the analysis process***

Auerbach and Silverstein (2003) present a very logical procedure for analysing data used in ‘grounded theory’ research and I found the procedure worked exceptionally well for analysing the various components in this study.

**Step One** was about making the text manageable through identifying relevant text using the conferencing and focus group research questions as an initial framework. The relevant text was underlined, and colour coded. Data from the time sample and running record written observations were summarised and analysed according to patterns of what was actually happening in the outdoors. First, both the individual and collective actions of the children, the equipment used, what they said and the places they played in outside, were identified for each observation and then from across all the observation data

**Step two** involved hearing what was said – reading the transcripts, viewing the photographs and drawings, looking for repeating ideas within participant groups, using the underlining and highlighting functions on the computer. The repeating ideas for each participant group were further reduced, tabled and also placed on large sheets of card, using stickies. I had one piece of cardboard for each main category of analysis and for each child. Visual representation of the data facilitated a breaking down of the data into smaller components and supported me in making sense of what I had collected (Kervin et al, 2006). I began to note patterns that were arising, noting my interpretations, making initial connections and ‘playing’ with explanations as repeating ideas emerged within each set of data.

In **step three** I created master lists, using tables, and visual displays on cardboard of repeating ideas related to the research questions and other interesting emerging themes.

Analysing my observation data and my journal enabled me to draw both recurrent patterns and instances that ran contrary to those patterns (Delamont, 2002; Hammersley & Atkinson 1993). The digital photographs I had taken were viewed and reviewed looking for ones relevant to the themes emerging or that stood out as exceptionally interesting. In this stage of analysis the written and visual data were juxtaposed and the emerging patterns for both individual children and the children

collectively were noted. The observation data were analysed for emerging patterns of behaviour, actions, equipment, and places used.

**Step four** was the combining of groups of repeating ideas, into themes. I created a summary mosaic of preferences that emerged for each child, from across: (1) all data gathered from children; and (2) all data sources (researcher observation, parents and teachers) (samples in Appendix 10). A visual profile, including written and photographic data, was created on large sheets of cardboard for each child and in a word document. The children's individual preferences and views that emerged from the photo elicitation were compared with their responses to the conferencing questions, other conversation data and what I had observed and key themes identified. I compared and contrasted the data from across all participant groups, and the emerging themes were placed in a new table. Out of the themes came the categories and the research questions revisited. At this stage, key themes were identified and all other data sources, like relevant text from focus groups and parents journals about individual children were revisited, along with the literature as explanations and a greater understanding of the meaning for these themes were sought.

In **Step five** the categories that emerged were examined in relation to the literature as I considered explanations and explored the connections between the categories that emerged from the adults and children. I went back through the raw data using an open interpretive approach advocated by Hammersley and Atkinson (1993). Categories were developed from the identification of elements of the outdoor environment that were meaningful and valued by the children. The categories that emerged from across all the data were examined in relation to their association with 'place'; an ontological analysis. Analysing the data from an ontological stance meant considering what was it about the place that was significant for all participants (Gruenewald, 2003; Feld & Basso, 1996), with specific quotes, and examples from transcripts noted. The findings were examined using a critical pedagogy of place (Gruenewald, 2003) exploring the interrelationships between the participants' attitudes and values and what happened for children in the outdoor setting. I looked at the data for the contradictions within it, the data that told another story, the surprising things and the interesting and miscellaneous aspects. The literature and centre brochure and website also became helpful as I explored the possible explanations for the categories that had emerged

from the data in relation to not only the research questions but the other interesting findings.

Further reading of relevant literature, discussion with colleagues, drawing upon my own experience and anecdotal observations in other places at other times followed in **step six**. The interpretation of the data became more “freewheeling, casual, unbounded, generative and impassioned” (Wolcott, 1994, p. 36) and the analysis process was not only inductive but now became artful (Guba & Lincoln, 1981) and playful (Goetz & LeCompte, 1984). This qualitative data analysis was an interpretative process that began with data collection and continued until the conclusion of the research. Denzin and Lincoln (2003, p.6) describe this process of trying to blend together and “make sense of the various images, sounds, and understandings”.

## **Summary**

This chapter has explained the methods used to explore the participants’ perspectives on the outdoors, the centre outdoor environment and the teachers’ role. The study was carried out in one full day early childhood centre with fourteen children, their parents, teachers and the centre owner. Data collection and the interpretation of the data were informed by the Mosaic Approach (Clark & Moss, 2001; 2005).

Analysis was an iterative interpretive process that started at the same time as the data collection. I used inductive analysis which involved discovering patterns, themes, and categories within the data and from this the findings emerged. The findings were examined using an ontological stance and ‘critical pedagogy of place’ that brings together ecological and sociocultural theories, to explore the interrelationships between the participants’ attitudes and values and what happens in the outdoor setting. Explanations were sought for findings that emerged from the data. I have set out, in this thesis, to convey to the readers the reality of the events and the plausibility of my interpretations of them (Bryman, 2004). The next chapter will present the findings of this research.



## **Chapter Four: THE FINDINGS: CHILDREN'S PERSPECTIVES ON BEING OUTSIDE**

The themes that emerged provide the structure for this chapter. Only the three main themes and their sub themes are presented due to word constraints. The first theme was that children are motivated to be outside so they can play and have fun with friends. Children in this study 'play' included: being physically active and moving in increasingly complex ways, in particular using the large climbing area and the monkey bars, transporting and rearranging; playing games, hiding and imagining. The second key theme was that children attached importance to the aesthetic, natural and wider world, engaging with nature, humans and non-humans and exploring sand and water. Third theme was that the children saw teachers as having a helping and supervisory role but they thought teachers should 'play' with them as well. The discovery that even young children situate their preferences is briefly discussed.

The data gathered and analysed provided a way to understand their perspectives on outdoor play and its many functions. Observation data assisted the interpretation of the children's photographs, drawings, words and actions, which provided a window of understanding into: why they wanted to be outside; what it was about the outdoor environment they liked and did not like; their concerns and delights; what other things they would like to have outside; and what they thought teachers did and should do.

Case studies, along with other examples, are used to present evidence of these themes and demonstrate how using the Mosaic Approach brings together the data from multiple sources.

### **Outdoors is Where We Play, Have Fun and Like to Be**

The most dominant theme was "we go outside to play" and they used the word play to describe in a global way what 'being outside' was all about. Outside was where they could play with friends, balls, water, sand, chasey games, run, slide, swing, jump, transport, rearrange and have fun. They had varying reasons for why they liked being outside, but being outside was definitely highly important to every child.

The children's responses to direct questions about the outdoors, like "why do you like to go outside", tended to describe what they did outdoors, as found in other studies exploring children's perspectives, regardless of age (Kylin, 2001; Sheridan & Samuelsson, 2001; Wiltz & Klein, 2001). For example, Jack said that he liked to be outside because he could go "swinging on monkey bars, jumping on the tramp, can do jumping, carpentry and run". Joshua G liked to be outside "cause I can play with Joshua Mc", his best friend, and "climbing on the boxes. I like playing on the boxes too ...I just like playing in the sandpit". Mikayla liked to be outside to "play, do running, playing tigger and Winnie the pooh" and for Sam "just cause I do...being with friends, being able to run".

For the children 'playing' was definitely synonymous with being outside, as the recurring refrain when asked 'why do you think there is a playground at the centre' was so they could 'play'. Paloma, Joshua G, Alexia, Krissy, Joshua Mc and Mikayla were adamant that there had to be a playground "so we can play". Mikayla said "if we don't have anything to play on, and we won't see anything outside, no people, nothing" and Jack strongly stated that the centre had a playground "because children like to play". Sam said the playground was there so "we can climb ...ummmm because we can go on the slide".

The strong connection between 'playing' and 'being outside,' and 'playing outside' being seen as a 'right', by children has been found in all other studies reviewed (e.g., Rothlein & Brett, 1987; Sheridan & Samuelsson, 2001; Wiltz & Klein, 2001). In Sheridan and Samuelsson's (2001) study the children not only preferred to play, they emphasised that they preferred to play outside.

### ***Being physically active in a variety of ways***

From the analysis of all the child data and my own observations it became apparent that they preferred spaces where they had the opportunity to: be physically active, learn, try out and practise new skills, take risks and increasingly move their whole bodies in more complex ways; in particular the large flexible climbing area.

The children expressed through their words, actions, drawings and photographs that the most preferred space was the large moveable/flexible equipment situated in the bark area, especially the monkey bars (sometimes called horizontal ladders) and the slide. They moved all over the outdoor setting but it was the equipment in this area that seemed to provide the most opportunities for physical movement at the varying levels of complexity that the children required.

Observation data showed the large climbing area and the monkey bars in particular had the highest usage and in response to the child conferencing questions all of the 14 children verbally mentioned that the large flexible, moveable equipment was one of their preferred areas to play and 12 out of the 14 identified the monkey bars as a particular favourite. The slide was also mentioned as a favourite for 9 of the children. In their collaborative drawings the slide was the most drawn item ( $n = 8$ ), followed by the water feature (7) and monkey bars (7) across the 3 maps.

A total of 371 photos were taken by the 14 children using the disposable cameras. The most photographed feature was the large moveable equipment on the bark area and all of its components, with 51 photos taken by 13 children. Though the whole climbing area was well utilised the significant focus for 12 out of the 14 children was the monkey bars. Eleven of these photographs were specifically of the monkey bars and 4 of the slide. The photos the children took of the large flexible climbing equipment and their comments (samples of which are on the next page, Figure 4.1) reflect how important the monkey bars were to the children, which is why I have chosen to focus on this element of the outdoor setting, in the next subsection.

**The monkey bars: The possibilities of moving in increasingly complex ways**  
The findings indicate that the children actively sought out, on a daily basis, the equipment that enabled them to hang upside down, swing their bodies and engage their body in more complex configurations. The monkey bars appeared to provide a combination of benefits and factors that no other equipment in the centre setting did. One explanation for this appears to be that the monkey bars facilitate the integration of the three main areas of movement - locomotion, balance and manipulation (Sanders, 2002) and their use requires agility and involves a range of flow responses (Davies, 2003).



**Krissy:** I like the slide best and the monkey bars and bridge. I like all of it



**Joshua K:** the climbing boxes...all of it



**Jack:** like the monkey bars, I am really good



**Alexia:** I like playing with water and the sandpit and the monkey bars



**Paloma:** The monkey bars



**Sam:** That's the monkey bars



**Eilish:** Yeah...monkey bars

**Figure 4.1** Sample of children's photos of the large climbing area and monkey bars

The children's photographs reinforced what they had shared verbally with me, in the conferencing conversations, photo elicitation and through their drawings; that this area was important to them, as shown in the Case Study 1 of Mikayla and Wei-Bin and in the children's mosaic tables of preferences (Appendix 10). This consistency of view, across all data sources echoes findings from other studies (Clark & Moss, 2005; Cremin & Slater, 2004; Dockett & Perry, 2005).

*Case Study 1 – Mikayla and Wei-Bin*

I had informally observed Mikayla and Wei-Bin on the monkey bars many times and formally as part of my initial time sampling and photographic observations I had noted their agility, confidence, creativity and competence in using the equipment.

<p>6/10 Wei-Bin - on monkey bars, drops off monkey bars and climbs up the rope webbing to top of box ... walking across rope bridge- large moveable climbing area;</p> <p>13/10 Wei-Bin - ... using monkey bars, walking, sliding down slide with no hands</p> <p>20/10 Wei-Bin - Swinging across monkey bars using rungs. Climbing over tyre and going plank using hands and feet.</p>	<p>6/10 Mikayla and Krissy on climbing area - swinging on monkey bars by hands and by feet.</p> <p>13/10 Mikayla on moveable climbing area on bark using monkey bars</p> <p>24/11 Mikayla crawling through tunnel and across monkey bars using hands, swinging. Hanging from monkey bars by legs. Swinging on monkey bars by arms</p>
	
<p>26/10 Wei-Bin - standing on top of large box on bark area photographing the monkey bars. Feet over top rail hanging onto rungs with both hands.</p> <p>9/11 Wei-Bin -walking across rope bridge...</p> <p>1/12 Wei-Bin on large moveable equipment using monkey bars, crossing over and hanging off them in a variety of ways.</p>	<p>1/12 Mikayla swinging on the monkey bars by arms</p>

Figure 4.2 Samples of observation notes and photo of Wei-Bin and Mikayla using monkey bars

They had both taken photographs of the large climbing area. Mikayla had taken 2 general shots of the large flexible climbing area; 3 close up shots of the monkey bars, in Figure 4.3; 1 each of the slide, a plank, the rope bridge and the tunnel; 3 of the large climbing boxes with attachments; almost half of her total number of photos.

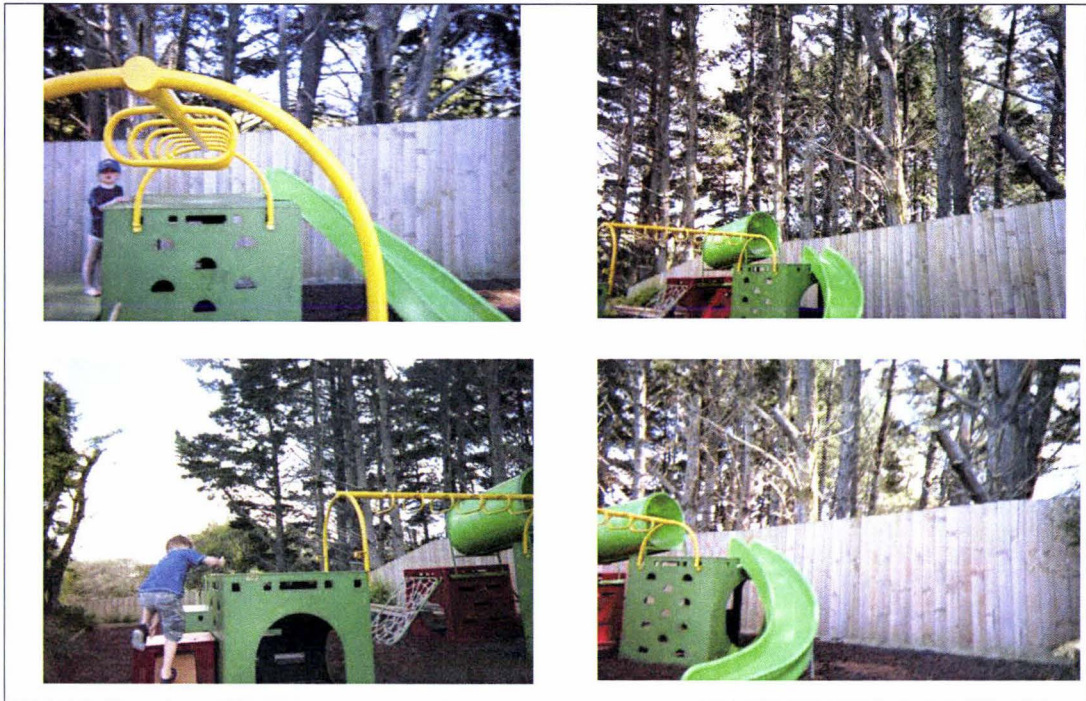


Figure 4.3 Sample of Mikayla's photos of monkey bars

Mikayla told me: “I like the slide and I love the monkey bars”; and her mother had recorded that Mikayla often mentioned that she had played on the monkey bars with her friends. Mikayla had stuck several photos of herself on the monkey bars into her pages during bookmaking and drew monkey bars in the collaborative drawings (Figure 4.4) as did Wei-Bin (Figure 4.5).

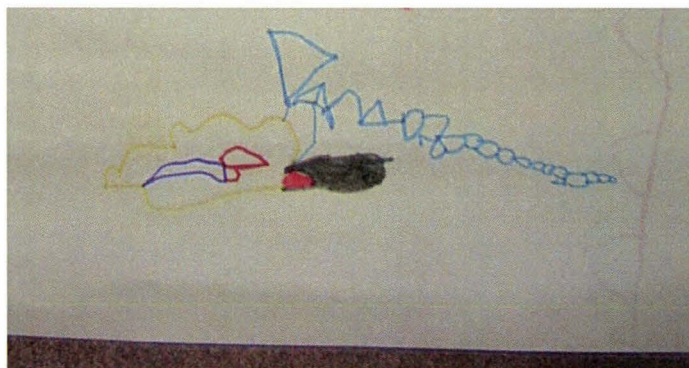


Figure 4.4 Mikayla's drawing of the monkey bars

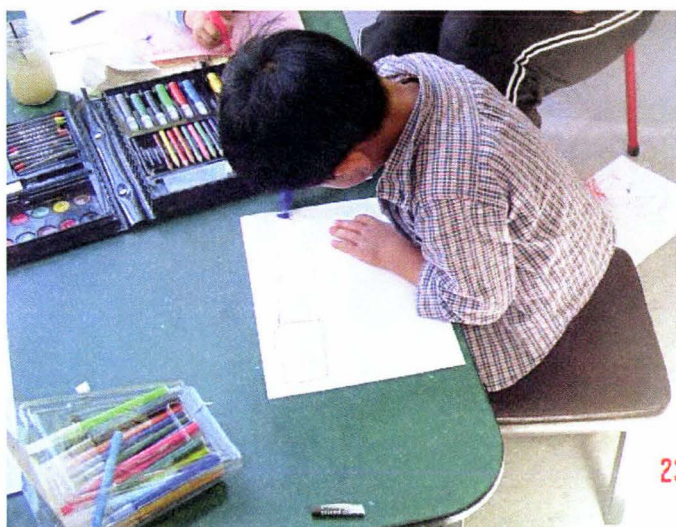


Figure 4.5 Wei-Bin drawing monkey bars

Wei-Bin told me with his limited English and gestures that the monkey bars and the sandpit were two of his favourite places and he had taken photos of the monkey bars from above (Figure 4.6).



Figure 4.6 Wei-Bin's photos of monkey bars

*Cheryl: "That's a good picture of the monkey bars"*

*Wei-Bin: "Got no"*

*Cheryl: "There's no one on the monkeys bars is there. You like going across there don't you"*

*Wei-Bin: 'Yeah...I like dat one. Longa. Longa, go that (starts moving his hands as if using monkey bars)... "Monkey" looking at monkey bar picture ".I like the monkey bars. Go along".*

*Cheryl: "Yes you do go along the monkey bars... what else do you like doing outside?"*

*Wei-Bin: " d,d,d,d,d,d using hand movements as if using monkey bars"*

Wei-Bin's parents wrote in their journal that they thought he feels happy and excited outside and that what he enjoys most is being "able to try on different things at the nursery playground, it's a challenge to go on the monkey bar".

I had observed that the children, like Mikayla and Wei-Bin, who were competent on the monkey bars, used the rope ladder/bridge in a similar way, when it was suspended between two boxes at a higher level, as in Figure 4.7.



Figure 4.7 Rope bridge and monkey bar configuration

On the 10<sup>th</sup> of November Mikayla had invited me to watch her on the monkey bars and rope bridge, later joined by Wei-Bin. Mikayla immediately began to give me a running commentary on what she was doing, describing her actions using words that accurately described what she was doing with her body, as the observation excerpts shows.

*She went quickly across the rope ladder and then stated "Now I have stopped". Mikayla drops through hole in rope ladder, swings on the ropes with her hands and then tucks her legs over the ropes just like they do with the monkey bars. She gets back up. "I can even walk slowly" (as she crosses on the rope ladder on the middle running rope). She takes her body weight with her arms as she swings across holding onto rails. "I can jump". She jumps up onto the box.*

Mikayla was aware of what her body did, how it moved and where it moved and the relationship between her body and the objects. Sanders (2002) describes this as evidence of 'action awareness', 'effort awareness', 'space awareness', and 'body awareness'. She began to complicate her actions and started to use the words like "I'll show you what I can do" as she sat on the middle rope of the rope bridge and swayed from side to side and "I'm going to show you something" as she stood up and swung along the ladder bridge on the outside of it, hanging on to the top rail, calling out "look, look!".

*Mikayla: "I can put one leg up here" and she sits on the rope ladder with one leg hanging down, the other leg bent and up on the rope, no hands.*

*Mikayla: "Look I can sit on here" (now has legs crossed)...I can put one leg here and that leg there (missing out one whole rung of the rope ladder)...I can do..." (lifts one leg up).*

Mikayla was self imposing body restrictions (no hands, sitting with legs crossed) in order to increase the level of difficulty, emphasising or restricting the use of one part or several parts of her body at will, and "no hands is a special favourite" (Davies, 2003, p. 9). In the excerpt below Wei-Bin had joined us and hung upside down from the ropes. Hanging upside down (inverted zoning) also appears to not only be a need but also has 'fun' and 'excitement' elements which according to Davies (2003), children naturally seek. Wei-bin crossed the ladder bridge hanging from his arms and then he copied an idea of Mikayla's idea but extended it, making the movements more complicated, as he walked across on the outside of the rope ladder holding onto the top rail twisting his body from front to back as he moved along. Mikayla takes up the challenge.

*Mikayla: "I can do that". They are both on one side of the rope bridge twisting front to back.*

*Wei-Bin: "Me go like that" and steps normally across the rope ladder.*

*Mikayla: "Now doing this way, I can drop down like that" as she drops between the ropes to the ground. She hangs upside down from ropes "I got a different way look".*

*Wei-Bin: "I got across" and then he hangs upside down on the monkey bars.*

*Mikayla hangs off monkey bars and keeps one hand on her hat so it does not fall off when she goes upside down.*

*Wei-Bin: "look, look, look" and he puts foot up over next monkey bar while hanging from the previous one*

*Mikayla: "I have another clever thing I can do... I'll show you" and holds onto top rail of monkey bars and swings her body backwards and forwards. Drops down, landing on both feet. Observation ends.*

The observation data and my interpretation is an example of the complexity of the knowledge and skills the children demonstrated in their use of these two pieces of equipment; and how they thought up new challenges and creative ways to use the equipment, increasing the level of complexity themselves. In using monkey bars children need to be able to move their bodies using free flow as they move across the monkey bars but also need restraint when they want to stop or come to the end, just like Mikayla and Wei-Bin demonstrated.

### Other factors that drew the children to the monkey bars

The data indicated that the monkey bars and rope bridge offered vital opportunities for physical, emotional and cognitive challenge that seemed to draw the children. As can be seen in the photo essay (Figure 4.8) of Alexia using the monkey bars they provided opportunities for: risk taking, the need to move in ever increasingly complex ways, pure enjoyment, creativity, stretching, and the ‘look what I can do factor’.



**Figure 4.8** Photo essay of Alexia on monkey bars

Alexia’s twisting of her upper and lower body into various shapes shows the sinuous ways in which young bodies can twist and turn. Alexia was learning about what her body does, how it moves, where it moves and the relationships her body creates (Sanders, 2002). The skills and concepts required to use the monkey bars and the possible challenges they presented to children of varying skill ability, go some way to assuage what Stephenson (2003) described as ‘the hunger for physical challenge’.

Alexia took a risk by sitting on top of the monkey bar rail. Louise, Maya and Suzanne like the teachers in Stephenson’s (2003) study, took a “liberal approach to supervision that allowed children to find challenges that were experienced as risky but did not put them in position of hazard”(p.38). These accomplishments, for Alexia, were significant, as during my time in the centre I observed and her mother noted Alexia’s

growing confidence and competence in her use of the monkey bars, to the point where her increased skill and versatility was coming from her bodily inventiveness, rather than her response to the apparatus itself (Davies, 2003). I observed this inventiveness in all the other children who used the monkey bars frequently.

These examples provide further evidence of a definite, but not absolute, link between competence, use and preference as all the children that said the monkey bars were their favourite, could also use them confidently and used them often. The children of course utilised the entire setting for physically active play and engaged in other vigorous physical actions, like running, balancing, and jumping. Their ideas regarding what could be added to the outdoor setting mainly centred on equipment that would provide more physical challenge.

**Providing more physical challenges and opportunities for imagining**  
 When asked what else they would like to have outside, the children suggested things they had experienced outside of the centre, at home or seen in the assorted pictures (see Table 4.1). What was significant was that they identified things that would provide movement opportunities not currently available, for example, crawling through tunnels and swinging. There were some things they wanted more of, for example more boxes, monkey bars and slides.

**Table 4.1 Summary of what children wanted to add**

<b>'Things' to add to setting</b>	<b>Emerging theme</b>
Swings Caterpillar tunnel Zoom slide Wobble boards Portable steering wheel Climbing tree More: boxes, monkey bars, ladders, slides Tennis rackets Bubble lasers	Swings and things that offered more challenges or opportunity for imagining

Eight children expressed a strong interest in having swings at the centre. The children had varying opinions as to which swings they liked and some children definitely did not like swings or want them in the centre or only particular ones. Alexia liked the barrel one, Sam and Joshua K really liked the idea of a rope swing “Ohhhhhh I like doing this” (Joshua, very enthusiastically as he looks at picture of barrel and rope

swing). Sam, as did the other children, made links between the pictures and swings they had experienced. Sam: “I go to the swings at the park”. When I asked Jack if he liked swings, he said “Yes I like the tyre swing, but when I go higher and higher I will fall off out and I will hurt myself”.

Four children specifically mentioned that they wanted a caterpillar tunnel and Alexia linked this to her previous experiences of it at gym “I like doing this, I do this at gym...it is the same kind”. All of the children chose it as something they would like to play with when they looked at the assorted pictures. Their choices also reflected their ability to consider the possibility of enjoying an item that they had never used or seen before as every child got very excited when they saw the picture of the portable steering wheel while looking through the assorted pictures. None of them had used one but all definitely wanted one, I suggest perhaps for its potential to extend pretend play. Taran’s wide eyed response, “oooooh I love this”, was typical.

Children’s growing confidence in using a piece of equipment also influenced their suggestions, as in Joshua Mc and Joshua G’s case, who both wanted a wobbly ladder or board both stating in unison: “A wobbly ladder ...like jelly”, added Joshua G, and they both demonstrated by wobbling as they walked. Joshua Mc’s mum had said it had taken him a long time to get used to the wobbly bridge at the park and now that he was more confident he was obviously happy to suggest one for the centre. Both Maya and Louise (teachers) also suggested a wobble board as it would provide a balancing challenge.

Climbing trees, like the swings, had some cautionary tales embedded within the children’s responses as Chantelle indicated “I fall down”. Or they confidently stated that they like climbing trees like Wei-Bin: “I can climb up high ....climb tree”; and when I asked Taran if he liked climbing trees and would he like to have one he said “yep”.

#### Transporting and rearranging

The children valued the opportunities provided for being able to ‘effect change’ by rearranging and being able to engage in ‘transporting’. I had recorded that the low and high flexible climbing equipment was moved around frequently by the teachers, with children’s involvement, so that new combinations continued to spark interest.

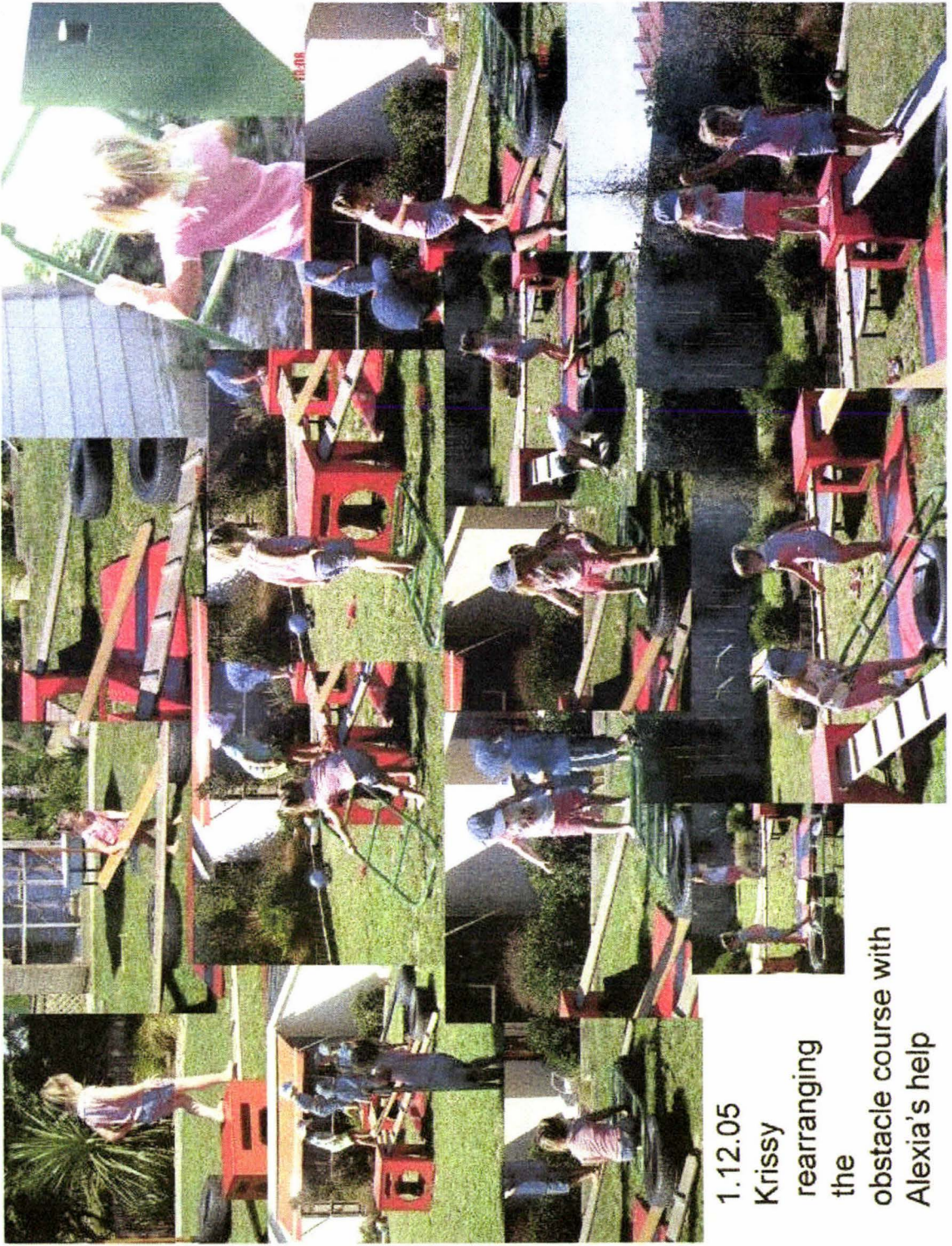
The children were also able to rearrange some of the lighter items and add other things, like tyres, wood rounds and planks. Most of the rearranging by the children happened on the middle grass area where the low moveable equipment was usually placed. I observed that some of the children became increasingly more involved in setting up and rearranging the low moveable obstacle course, especially Krissy as shown in the example below.

*Case study 2: Krissy rearranges the obstacle course*

Krissy never said very much, but like Paloma, delighted in demonstrating what she could do in the outdoors especially on the monkey bars, rope-bridge and with the low moveable obstacle course equipment. Krissy's interest in the outdoors and confidence in taking charge of rearranging was noted by the teachers and had only occurred since I had been in the centre, a possible researcher effect. Louise noted in her journal

*Krissy, I've noticed that she likes rearranging the outdoor environments. Not sure if it started while Cheryl's project was going or if I have just become more aware of it. She particularly likes to rearrange the boxes/climbing area.*

The first time I observed Krissy moving tyres and adding them to the equipment on the bark area, was in October. She rolled the tyres all the way up from the lower grass area and then placed planks on top and lifted wooden rounds placing them inside the tyres. She continued to experiment with altering and adding to the moveable equipment and the photo essay (Figure 4.9) was taken in early December and shows how much more elaborate these rearrangements were.



1.12.05  
 Krissy  
 rearranging  
 the  
 obstacle course with  
 Alexia's help

Figure 4.9 Photo essay of Krissy rearranging

Krissy did not appear to mind others helping but she rarely spoke and just concentrated on the task, testing out what she had done, along with others, smiling and showing a great deal of satisfaction in the end result. For me these images in Figure 4.9 capture what I could never put into words and ‘demonstrating’ was her language, her voice. The photographs communicate the connection between Krissy’s actions, thoughts and emotions as she engaged with the environment and her interactions with others, providing a degree of tangible detail, a sense of being there and a way of knowing that may not readily translate into other symbolic modes of communication (Prosser & Schwartz, 1998).

*Transporting*

Krissy, not only manoeuvred planks, tyres, and wooden rounds in order to rearrange, but also transported the dolls and on occasions other children, in a pram. The children seemed to transport for the share enjoyment of it and the physical challenge of moving a variety of vehicles with a variety of loads across many surfaces and slopes, unlike the children in Stephenson’s (1998) study who appeared to engage in transporting but always with a goal in mind, constructing a place. Transporting is a recognised schema that young children engage in and in this setting involved the use of trucks, wheelbarrows, trailers, strollers and prams to transport all manner of things including themselves and others, as evident in the photographs (Figure 4.10).



**Joshua K transporting tennis balls**



**Taran transporting cars**



**Joshua K and Taran transporting weeds**



**Krissy transporting Chantelle**



**Jack transporting and manoeuvring a tyre**



**Shoes waiting to be transported**

**Figure 4.10 Children transporting**

## Bikes

Having bikes was not part of the everyday experience as the older children were not meant to ride the little 'ride-on' bikes.. Bike day in the car park, which happens a few times a year, was mentioned by most of the children as a special favourite event, and during photo elicitation the picture of bikes facilitated comment about their bikes at home. I was at the centre on a bike day and thirteen of the children fully participated in bike day and many choose a photo of themselves riding their bike to put on their pages for the book.

## **Playing with friends, playing chasing games, hiding and imagining**

The children clearly expressed that being outside provided the opportunity to play chasing games and to play with friends. Many of the children took photographs of other children who were their friends or they found important. This was a common theme in other studies where children have taken photographs (Einsardottir, 2005). Friends were the feature in 32 of the children's photographs; the third highest number.

There were several close friendships amongst the participant children that I became aware of very quickly and those close friendships remained throughout the 12 weeks I was at the centre. These friendships were not exclusive though and all participant children played with each other at varying times. In particular it was when a 'chasey' game began that all the children usually got involved. Running, the physical aspect of the games, and playing 'chasey' with friends was something the children said they really liked about being outside, as Mikayla's mother recorded:

*7/11/05: Played the Lion game with Eilish and Krissy – chase each other with their claws – we had lots of fun.*

*9/11/05: Cheryl came today. We played the lion game outside with Josh (Mc) and Josh (G) and x (Josh Mc's brother)....*

*10/11: Cheryl came again. I played what's the time Mr Wolf with Suzanne, Alexia and Joshua K.*

*16/11: I played with Krissy and x today – we went on the monkey bars and played the Lion Game*

The chasing games were the main observable pretend play apart from things like: making a volcano in the sandpit and using bark for lava. I had noted the occurrence of these spontaneous games in several of my narrative observations:

*... turns into a chasey game about crocodiles that the children have obviously played before. They then all run back to muddy alcove area ....Eilish making a*

*snapping motion with their arms as they walk around. One of the boys (Joshua K) says "crocodile water" as they jump from half round to half round laid into the path – not stepping on the gravel. He calls out "crocodile" again.  
...Mikayla: "I can catch you". Joshua K: "No you can't". You can't catch the crocodile catcher".*

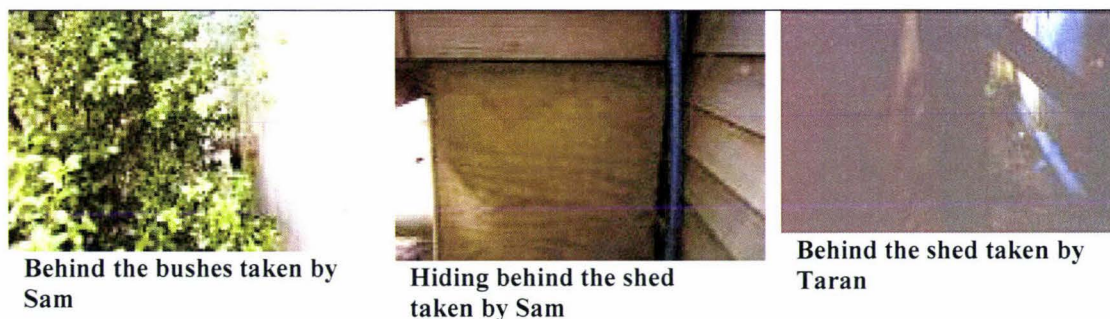
*Alexia, Taran, Chantelle, Jack, Mikayla, Eilish, Paloma, Joshua G and Joshua Mc are all running around growling and yelling which started when someone yelled monsters. They run around back of sandpit, behind the shed, across middle grass and grass area beside fence and up behind sandpit by the fence again. Monsters are coming" "Monsters are coming" they yell as they run after each other. "Pow, pow, pow, pow".Joshua K: "Catch that monster ...Pow, pow, pow, pow..."*

This game culture is evidence of an implicit shared understanding, or intersubjectivity, between the children and was certainly part of the centre's play culture, which was maintained by the children and allowed by the adults, but with some rules. Similar 'chasey' games have been reported in other studies (Corsaro, 1986; Stephenson, 1998) where children just launch into a 'chasey game' with no discussion, using non verbal actions of children and their shared meanings. Though Suzanne did teach the children new games like 'What's the time Mr Wolf', I never observed Louise or Maya initiating or being involved in or extending the children's games or dramatic play, though they did redirect at times.

The analysis of the data revealed that the children in this setting, engaged in very little dramatic play, and 'chasey' games appeared to be the bulk of their pretend play. Stephenson (1998) noted that very few sustained dramatic play episodes occurred or went to a higher level without adult facilitation. On rare occasions I recorded a child identifying with a superhero role, such as Taran swinging across Monkey Bars, and calling out "superman" but this superhero play never went any further. Though Joshua G was very much into Batman in his clothing, and even his birthday cake had Batman on it, he did not engage in batman play. I did note that sometimes when Joshua K, Joshua G and Joshua Mc were up on top of a large box in the flexible climbing area they pretended to be 'driving a car', 'train' or 'space ship'. This pretending to drive was very much something only the boys did but both boys and girls became very involved in the 'chasey games' and hiding behind bushes.

### Away from public gaze

What the children in this study were able to do fairly easily was to hide ‘away from public gaze’. Sometimes children hid during the games behind bushes and around by the shed, but more often the hiding was not part of ‘hide and seek’ instead very small groups or pairs of children were observed standing behind the bushes by the fence line, in an imaginary world of their own. Taran and Sam both stated they ‘loved’ hiding and had taken photographs of where they liked to hide (Figure 4.11).



**Figure 4.11** Hiding places taken by children

When amongst the bushes and trees, away from direct view of the adults, they were often talking quietly, fingering leaves (Figure 4.12). They also liked to go behind the shed or in tucked away places, but their favourite hidey place was behind the sandpit along the fence line.



**Figure 4.12** Joshua K, Taran and another child in bushes taken by myself

This preference for playing in wild overgrown uneven places, amongst clusters of trees and shrubs was noted by Hart (1979), Harding (2005) and White (1997) comments that these places providing opportunity for adventure, mystery or hiding.

## **Experiencing Nature, the Aesthetic, Natural and Wider World**

Children's awareness and appreciation of nature, the natural and aesthetic world emerged mainly from the photographs they had taken with the disposable cameras, through their drawings and through the photo elicitation conversations. The sandpit and the water feature were the two other areas of the outdoor setting that the children had verbally identified as favourites.

### ***Sand***

There were 18 photographs of the sandpit, taken by 9 of the children, just slightly more than the water feature and 6 children identified the sandpit was their favourite place. For example Joshua G said: "I just like playing in the sandpit ....Hah I like that ...I do really like playing in the sandpit" and Joshua Mc told me: " I like playing digging in the sandpit, digging with spades". I had observed just one or two children engrossed in digging, filling, transporting the sand and pouring, as Joshua G and Joshua Mc had been doing on several occasions when I was observing and at other times there was no one in it at all.

Some children preferred to have the place to themselves like Jack, Mikayla and Chantelle. The sandpit and its materials simply provided the opportunity to be alone, to have space to become engrossed in play, exploring and working with the sand as in the Chantelle's case (and in photo essay below, figure 4.13).

### ***Case study 3: Chantelle***

I had observed that Chantelle was often quite happy with her own company, particularly in the sandpit, valuing the pleasure the dry sand offered. She dug, poured, patted, tipped and ran the fingers through her hands, apparently very content to just be enjoying the place to herself. This appeared to capture the emotional dimension referred to by Stephenson (1998). During this particular observation she stayed in the sandpit for well over 30 minutes.



**Figure 4.13 Photo Essay 3: Chantelle in the Sandpit**

Chantelle told me on several occasions that she liked the sandpit and had taken two photos of the sandpit (Figure 4.14). Her parents commented that "Chantelle loves the outdoors...is transformed, a different child" and that "she loves the sandpit, trampoline, and helping in the garden".



**Figure 4.14 Chantelle's photo: I like the sandpit**

### A hive of activity

Other times it was a hive of activity where larger groups of children would be busy digging, filling containers, making mountains, holes, and swimming pools. The children appeared to freely bring additional equipment into the sandpit as needed, including tyres, planks, pipes and boxes and Taran, Sam, Joshua K, Wei-Bin and Alexia were often to be found in the sandpit using the large metal spades, the pipes and the water, constructing swimming pools, mountains and other creations. They had all photographed the sandpit but Taran and Joshua K's photos were different to the others in that they had focussed on what they were constructing (Figure 4.15).



Taran's photo of a pipe in the sand



Joshua K's photo: " ...of the pipe and digging a hole".

**Figure 4.15** Sample of children's perspectives of the sandpit

On one occasion I documented a play episode, using photographs, tape recorder and noting of actions where Taran, Sam, Joshua K along with Alexia's help at times, spent 90 minutes constructing the swimming pool and trying to solve the problem of getting it to fill up with water (Appendix 6). There was very low water pressure into the hose from the water tank on top of the shed. This resulted in lots physical effort, problem solving, creative thinking and perseverance. One of the ways Joshua K stayed positive about solving a problem when outside was through singing the 'Bob the Builder' refrain, altering the words to suit the situation, "Bob the builder can we hose it, yes we can...".

Maya's (teacher) presence also helped sustain the play as she: encouraged them to think through the problem, complicated the situation and supported them as they tried out their ideas. The observation data demonstrates how the materials both man-made and natural provided opportunity for collaboration, creativity, imagination, physical strength, and problem solving, very similar to what Cullen and Allsop (1999) had

observed in the sandpit. As evident in the final photo (see Appendix 6), the children accomplished their goal after a lot of hard work and perseverance. When children are interested and engaged with an experience they have a great capacity to stay involved for long periods of time, as evident in both these examples.

### ***The water feature***

This very aesthetic part of the setting was photographed 17 times in spite of the fact that when the children took their photos they had not used it, with water in it, for 6 months. The water feature was one of the most drawn features of the outdoors, 7 times perhaps because when they did their drawings the water feature had been in operation on a regular basis for the past week.

Due to its layout it was used as another pathway and a place to explore and play, when dry and when in operation provided a place for children to transport water, pour, water plants and splash, as in examples of children's photographs (Figures 4.16). The water feature had attributes that Greenman (2005) describes as the optimal watery place in an early childhood centre. A place that "reflects shadows, faces and flashes rainbows", where "water moves" and "gurgles and burbles and drips and splats" (p.208).



Taken by Paloma



Taken by Joshua G



Taken by Sam

Figure 4.16 Water feature photos taken by children

I observed that the water feature provided endless opportunity for children to: splash, cool down, stamp in puddles, get wet, and most of fill buckets and containers with water, transport, pour and tip it out.

### **Natural world and nature**

That the natural world was the most photographed aspect of the outdoors, provides evidence that the natural world surrounding them was significant enough in their lives to be photographed. Combining all aspects of the natural world that they had photographed (plants, trees, grass, bark, ground, sky and clouds and animals) totalled a staggering 63 photos taken by the 14 participant children (Table 4.1).

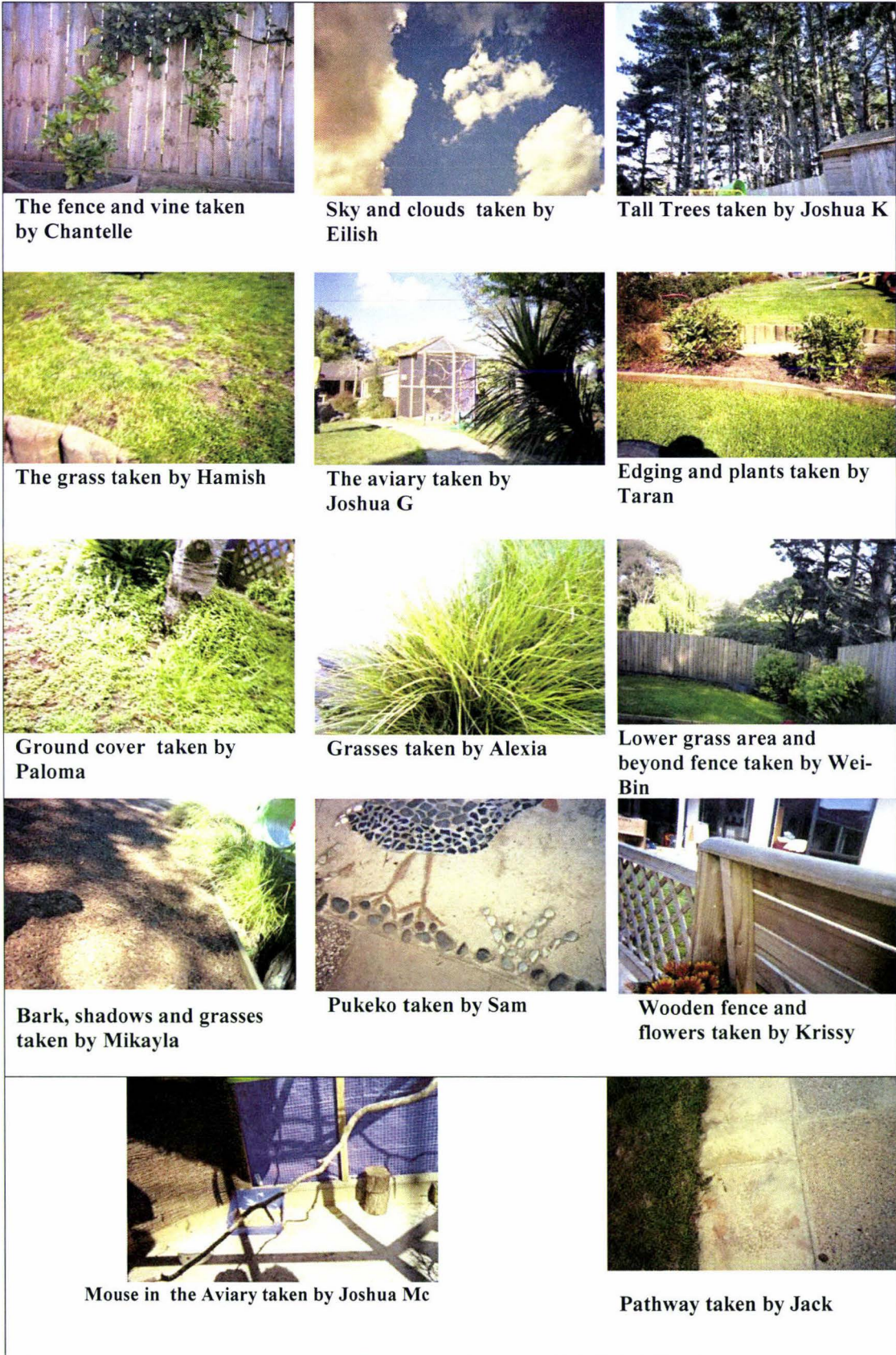
**Table 4.2 A summary of categories from 371 children’s photographs**

<b>Categories</b>	<b>Occurrences</b>
Natural features/natural world	63
Large flexible climbing area	51
Other children	32
Low moveable obstacle course	28
Adults	27
Sandpit	19
Water feature	17

One third of their photographs were of the sky, clouds and tall trees. Half of the children took several pictures of the tall pine trees. They photographed animals, sky, clouds, trees, grass, plants, gardening, vines and insects; and the steps, fences, sloping terrain and pathways. The grass was mentioned and photographed 10 times by eight of the children and Eilish told me she had photographed the grass because she liked to eat it.

The tall trees dominated the rear of the property and were photographed by seven of the children. Wei-Bin described them as the “dark forest”. In Clark and Moss’s first study in 2001, the whole outdoor environment, including large trees that overlooked the play area, were also preferences of the children, and featured in their photographs. Similarly, Hart (1979) found children showed strong affection for trees and saw them as important resources in their play.

A representation of the range aesthetic and natural elements photographed by the children can be seen in Figure 4.17.



**Figure 4.17 Photographs of natural and aesthetic elements**

The upper area of the outdoor space was exposed to the wind and the wind was drawn by Joshua G. by going round and round making circles with a black felt pen, in their group drawing, and they discussed the effects of the wind as they drew.

*Joshua G: Here's the wind, it blows everything away... sometimes it gets cold*

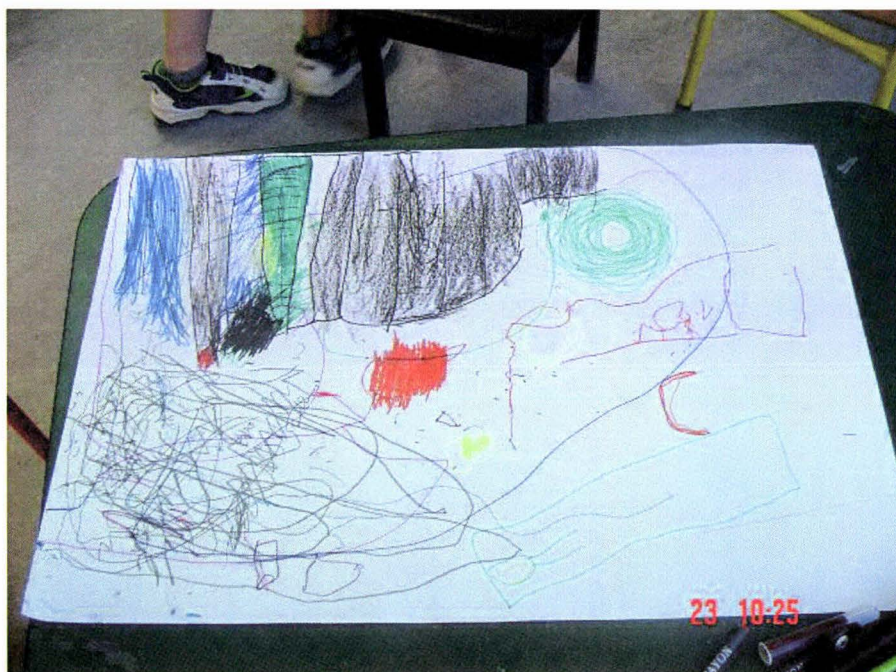
*Joshua M: Sometimes it blows your hat off*

*Joshua G: It could blow our heads off*

*Joshua Mc: Tonight was cold*

*Joshua G: There's some more wind*

The children's drawings were evidence that they noticed and appreciated the natural world represented by wind, sun, clouds, vines, bark, a duck and grass. Hamish, Taran, Alexia and Eilish worked on the drawing with the two Joshua's, and once finished, it contained a large painted fence that had vines, children and a ladder on it, three slides, and a set of monkey bars, with bark and the wind blowing (Fig. 4.18).



**Figure 4.18** Drawing by JoshuaG, Joshua Mc, Hamish, Taran, Alexia and Eilish

Another group consisting of Jack, Chantelle and Krissy drew two water features, a slide with a ladder, another slide, the aviary, grass, the sun, and clouds (Fig.4.19).



Figure 4.19 Jack's, Chantelle's and Krissy's drawing

The aviary containing birds and guinea pigs was of interest to the children as they walked by but they showed a high level of interest in the guinea pigs when on one occasion, when I was there, Maya (teacher) placed them on the grass where they could pat them. Hamish, the youngest, had taken three very good photos of the birds in the aviary (Figure 4.20) commenting when he looked at his photo “ooh look ...the birds ...”.



Figure 4.20 Hamish's photo of the bird

The number of photos of the aviary was 23 but most likely a higher number than would have normally occurred, due to Alexia, Joshua K, Joshua Mc and Joshua G, when they were photographing the birds spotting a mouse entering the aviary.

Children's interest in the natural and aesthetic world around them was also evident in their bookmaking. For example Mikayla had included a photo of the trees and one of herself and others looking at the earwig in her pages. Sam chose the picture of the bird nest he had found several weeks earlier along with a photo he had taken of the mosaic pukeko set into the path, and one of him helping Joshua K fix up the wind machine in the vegetable garden. The vegetable gardens featured in children's conversation both at the centre, and at home and were noted by parents in their journals. For example Paloma told her parents: "We planted strawberries today and I ate some lettuce from daycare, me and Alexia did...daycare's garden is much bigger than ours mummy".

There is evidence that the semi-rural aspect of the outdoor setting contributed to this awareness of the natural elements. They had a large expanse of sky to observe and the local wild life, like Pukekos and Ducks, were frequent visitors and very much part of the outdoor experience for these children. As Mikayla had told her mum "We looked at our garden today. The plants are really growing lots. I saw a pukeko and some ducks".

I had observed some of the children stamping in puddles on occasions when heavy rainfall provided the opportunity and when the water feature was in use. Some parents had commented that stamping in puddles was a favourite "The kids enjoy the rain, when there is puddles they want to stamp in them" (Joshua Mc's mother). However it was only from the analysis of photo-elicitation conversations that a strong preference by all the children for stamping in puddles was evident.

#### Contact with wider world

From analysis of the data it was evident that the children endeavoured to see what was happening outside the centre grounds, especially over the fence and enjoyed contact with people who came into the outdoor setting, like the handyman. The children frequently climbed up on the large boxes to see beyond the fence and across

the horizon. The high elevation of the site meant that when they climbed up onto the large boxes they could see for a considerable distance. Several children chose to take photos from this higher perspective a total of 15 photos that captured the centre setting and out to the horizon, as in Jack's photo (Figure 4.21).



Figure 4.21 Over the fence taken by Jack

The children showed curiosity about what was amongst and beyond the tall trees, and about the construction work happening on land on one boundary. The children who could hear it and could observe the trucks and workmen if they climbed up onto the boxes. My conversation with Hamish is an example of the children seeking contact with the outside world.

*Hamish going up the slide, goes down, then climbs up the side of the box*

*Hamish: "Very far"*

*Cheryl: "Yes Hamish is up high"*

*Hamish: "Far way"...*

*Hamish, looking over the back fence from on top of the box:- "Deres, deres a truck"*

*Cheryl: "A truck"*

*Hamish: Dere"*

*Cheryl: "I will have to have a look through the fence and see if I can see it"*

*Hamish: "I see over the fence, I want to get down".*

Joshua K, in particular, showed intense interest in what the handyman was doing when he was around. The children had also helped the handyman tidy up the outdoor setting and weed the garden. There was a high level of interest in going to purchase the plants for the vegetable garden, and from their conversations with their parents, it was apparent how much they valued the opportunity for contact with the wider world through excursions. The children were consistently making links between centre, home, and their other experiences in the community (wider world).

## ***Situated preferences***

The preferences and dislikes that the children shared indicated that their views were able to be contextualised; in other words they varied depending on the context, as found by Cullen (1996). The notion of 'situated preferences' came from the children's qualified responses regarding outdoor experiences they were not so sure about. They exhibited an ability to place themselves in other situations, to think forward about what they would be able to do or would like to do in the future or a change in opinion on an aspect of preference. I have named this phenomenon 'situated preferences'. For example: Joshua Mc's views on the monkey bars, offers insight into situated preferences, and his beliefs about his own competence both in the present and in the future.

Joshua Mc was the only child who said he did not like the monkey bars, and was never observed even attempting to use them, in spite of using the boxes, planks and slide often. However from what he said, this dislike of the monkey bars was seen by him as a temporary feeling, associated with his lack of confidence in his ability to use them, as can be seen from the following transcript extract:

*Joshua Mc: I don't like the monkey bars*  
*Cheryl to Joshua Mc: Do you not like the monkeys bars very much?*  
*Joshua Mc: No*  
*Joshua G: Sometimes I do, but I can't put my hands ...*  
*Joshua Mc: We can't do it, when I am four I could do it*  
*Cheryl: When you are a bit taller and then you can do it?*  
*Joshua G to Joshua Mc: Are you three still?*

Though Joshua Mc did not prefer the monkey bars at the time, he was able to consider that he would like the monkey bars, in the future, he just was not big enough yet. From the conversation he appeared to consider himself too small either in age or height and linked these to skill ability.

In spite of searching the literature the only other study that touched on children's perspectives in this light was Cullen's (1998) study on road safety. Situated cognition is a relatively new holistic learning theory and one of the key characteristics of this theory, is the placement of the individual cognition within the larger physical and social context of interactions and culturally constructed tools and meanings (Wilson & Myers, 1999). The children's preferences were situated and reflected developing

theory of mind and an ability to integrate past, present and future into why they liked or disliked particular outdoor experiences. They showed realistic awareness of their own competence and confidence levels, and of the risks involved with some activities.

## Teachers ‘Look After Us’ and They Should ‘Play With Us’

The children described what their teachers did outside in the ‘supervisory’ terms. Interestingly this ‘supervisory’ role was never mentioned by the children when asked “what teachers should do” as evident in Table 4. 3. The children clearly thought that their teachers should be involved in their play outside.

**Table 4.3 Views on teacher's role**

What <b>do</b> teachers do outside	What <b>should</b> teachers do outside?	Themes
“Look after the kids” (Sam) “They help you if you are crying and they save you” (Alexia) "Watch us... and they help you if you are crying and they save you" (Jack) “When someone cries the teacher asks them what someone has done” (Sam)	"Um play monsters, X plays monsters with us" (Sam) Play on the monkey bars"(Krissy)  "I think that they should play match number games and inside too. Play games on the seats (Jack)  "Play the monster game, and play jail (Alexia)	Teachers look after us   Teachers should play with us

Two of the children made connections between teachers having to be outside so that they could be outside, showing awareness of the rules, and safety regulations.

Joshua G: *I know, they have to go outside if there is kids outside, but if there is kids outside without a teacher you have to stay inside...*

Mikayla: *We don't go outside by ourselves. Teachers have to be outside when we are outside. If we don't have any teachers we have to be inside.*

The children’s understanding of why they can’t go outside without a teacher was also noted by Sheridan and Samuelsson (2001). Apart from the study mentioned, children’s perceptions of the teacher’s role are virtually non existent in the research literature and so these findings indicate that children have perceptive opinions as to what the teachers do and should do. They were aware that Louise and Maya did not

play with them so much outside and this was even commented on by parents: “Josh noticed the difference in the way the teachers work; inside they play with them more than when they are outside” (Joshua Mc’s mother). As some of the other teachers did get more involved at times, and play games with the children, the children were aware that some teachers do play with them and some don’t.

## Summary

The children valued the many and varied opportunities the outdoor setting provided for them to play. Playing was the predominant theme and synonymous with being outside.

The key themes that emerged from across all the data (researcher observations and children’s data) regarding their perspectives are summed up in Table 4.4.

**Table 4.4 Themes that emerged from children’s perspectives on being outside**

<b>It is where we play, have a sense of place and therefore we can:</b>	
<ul style="list-style-type: none"> <li>• Be physically active challenged, and learn new skills</li> <li>• Play chasing games, imagine and hide away from adult gaze</li> </ul>	<ul style="list-style-type: none"> <li>• Explore and experience nature, natural, aesthetic and wider world</li> <li>• Transport and rearrange</li> </ul>

The children’s preferences were situated and reflected an ability to integrate past, present and future into why they liked or disliked particular outdoor experiences and they drew upon these experiences to suggest other things they would like to have outside that would add new challenges. The children perceived that their teachers took on a ‘supervisory’ role when outside but they articulated clearly that teachers should also play with them outside. Significantly, as will be expanded upon in the next chapter was the interrelationships between the children’s experiences in the outdoors at home, centre and in local community. The values of the children were reflected in the values of the adults, resulting in a harmony across the participants.



## **Chapter Five: THE ADULTS' PERSPECTIVE**

This chapter describes the research findings in relation to teachers', parents' and the centre owner's perspectives on young children being outside and the teacher's role within the centre setting. The chapter is structured around the key themes that emerged from the data. These are: being outside provided more opportunities for children's holistic development than being indoors did; continuity between centre, home and wider world; provision linked to teachers and centre owner's values interest and passion; and the teacher's role is to allow freedom to explore, encourage risk taking while keeping children safe. There was definitely congruence, a harmony between what parents and centre owner, and teachers perspectives on 'being outside'.

### **More Opportunities for Holistic Development Outside**

The adults all had positive perspectives on what the being outside meant for them. Commenting that they found being outside more relaxing, providing health benefits and that they felt much better outside, and therefore this influenced how much time they spent outside with their children. Krissy's parents said "We love being outside it is mostly energising and brings us back to nature", and Hamish's mother said what she valued the most was the "way it stimulates my senses; makes me feel more positive. The teachers (Maya and Louise) similarly shared how they found being outside less stressful, less frustrating. They felt healthier outside and had more time to engage in social and work related interactions with other staff and observe the children. For Suzanne, the centre owner, the outdoors was a "passion" and she just loved being in the outdoors. Some parents commented on the different way they played with children outside, engaging in more adult type activities such as "passing on skills like throwing and catching, and doing something you are enjoying as much as the child" (Joshua Mc's mother).

The adult participants valuing of outdoors for 'self' was echoed in their belief that the outdoors was an essential element in the children's lives and that being outdoors was more beneficial than being indoors for both children and adults. Overall the adults valued the following aspects of the outdoors in relation to children's holistic

development: more opportunity for active movement, more freedom to play and explore; experiences of the nature and natural world (e.g. animals, the weather, plants) and more sensory input; health benefits, opportunities for learning, risk taking, problem solving, using imagination and creativity, and for children to be involved in setting up, rearranging equipment. An example from my data analysis that shows how these categories emerged is given in Table 5.1.

**Table 5.1 Emerging themes of the values of being outside for children**

Indicative comments	Description	Themes
<ul style="list-style-type: none"> <li>▪ ... <i>build up their physical strength, become more adventurous</i></li> <li>▪ <i>Playing on uneven ground and play equipment helps with muscle co-ordination. Ball games help eye-hand coordination</i></li> </ul>	Being outside built physical strength and children can be rougher, take more risks, have more challenges	<b>More opportunities for physically active movement</b>
<ul style="list-style-type: none"> <li>▪ <i>The freedom and space to run...</i></li> <li>▪ <i>Sense of freedom, less boundaries, more space... different activities, experimenting...</i></li> </ul>	Being outside gives more freedom, and opportunities to explore	<b>More freedom to play and explore</b>
<ul style="list-style-type: none"> <li>▪ ... <i>they have the freedom to explore the natural environment.</i></li> <li>▪ <i>There is a lot of interaction when I am cleaning and feeding the animals, children are learning to be gentle and sensitive with the animals</i></li> <li>▪ <i>Important ... to get out in the rain and wind as the experience of being outside is very different – it smells and feels different ... eg puddles, mud .</i></li> </ul>	The outdoors provides a real natural learning environment to discover about animals and nature and provides a greater diversity of sensory experiences and perspectives	<b>More experiences of nature and the natural world</b>
<ul style="list-style-type: none"> <li>▪ ... <i>gets their imagination going and their thinking</i></li> <li>▪ ... <i>able to use lots of natural objects, open-ended objects .. so they can use their creative side</i></li> <li>▪ ...<i>it is an important part of learning</i></li> </ul>	Outdoors benefits children cognitively, and socio-emotionally.	<b>More opportunities for learning, thinking, using imagination and creativity</b>
<ul style="list-style-type: none"> <li>▪ <i>More healthy... the fresh air, and they are not so close to germs as inside</i></li> <li>▪ <i>Being outside gets them moving ... exposes them to sun vitamins. They also get lots of fresh air</i></li> </ul>	Being outdoors provides fresh air, builds immunity, reduces stress, and vitamins	<b>Health benefits</b>
<ul style="list-style-type: none"> <li>▪ <i>They do love shifting...</i></li> <li>▪ ... <i>rearranging them, one day they will be down the bottom, then up the top</i></li> </ul>	Outside has more opportunities to be involved in setting up and rearranging	<b>Opportunities to be involved in set up and rearrange the equipment</b>

### ***The optimal environment***

There was clear evidence of recognition, by all adult participants, of the power of the environment and inherent within that, its role as a 'third teacher' (Malaguzzi, 1998). Recognition that the environment can either enhance or obstruct development of children, the building of relationships, and the sense of belonging came through the data. For children to gain the most from being outside, Suzanne, teachers and parents believed that children needed: to explore natural objects; be in touch with nature and animals; a large space with smaller spaces within it; flexible; moveable equipment; water access that allows them to transport it; being able to run, climb and use large motor skills; opportunities for creativity and problem solving; and things children can manipulate and move around.

It became evident, as I analysed the data across all adult participant groups and the centre documentation that there was a harmony of perspectives on the value of the outdoors as shown in Table 5.1 and about what should be provided in the outdoors, which coincided with many aspects of the owner's (Suzanne) vision for the centre.

#### ***In touch with nature and natural world***

Parents and teachers valued the 'natural' environment that had been created, by Suzanne, the centre owner, reflecting a 'critical pedagogy of place'. The parents' comments during the focus group discussions and in their journal entries indicated an overwhelmingly positive belief that this centre's outdoor environment was great for children and that the outdoor setting had been a major factor in deciding to send their children there. A range of aspects influenced their decision. For example, they really liked the grass, plants, animals, trees and space, and shared how they did not like the artificial grass, plants and trees and crowded small outdoor areas they had seen in other early childhood centres. They also liked the fact that the centre was situated well off the road.

*I think the centre already has good outdoor facilities compared with other nurseries (Wei-Bin's mother).*

*The freedom and space to run (as boys like to do) is fantastic at the centre... The outdoors is great as they get fresh air and can do things that they can't do inside (ie. Running etc). Josh loves coming to the centre and I feel happy leaving him as the staff and the environment etc is lovely (Joshua G's mother).*

The parents commented that the centre having animals was one of the things that they liked about the setting as they felt it was important for children to learn to care and be gentle with them and Suzanne had stated her reasons for wanting animals was:

*Primarily my experience and working in the city, seeing my children with animals, wanting children having access to animals. Lots of children don't have animals and so I wanted children to learn to look after animals and as a day in day out activity. A little animal can be nice to cuddle and nurture... I wanted to have it so the animals could go home for the weekend - connection between centre and home.*

The parents described how they thought the children liked to explore the natural environment. "Children enjoy exploring new things i.e. watching a plant grow that has just produced its first flower (Joshua Mc's mother) ... Things that you can manipulate – leaves, branches" (Hamish's mother). "Jack loves exploring things at daycare and at home" (Jack's mother).

The sandpit and water feature were positively commented on and described as favourites, by the parents. Joshua Mc's mother described how for Joshua the sandpit has:

*always been a feature...Josh came home one night and said we made a volcano today and there was lava. I had said something like there is paint on your hat and he said no mum it is lava.*

Parents showed awareness of the learning opportunities within the sandpit, commenting on the level of problem solving that goes on outside and how creative the children can be. For example, Alexia's mother (looking at photos I had taken of children creating a swimming pool, see Appendix 6) shared how Alexia had told her about this time in the sandpit and that she had written it down "cause she was going on and on, something about putting a tyre over a hole and a pipe in 'it was my idea' she said... amazing how creative they can be".

Parents had commented on how preferences do change over time and with the seasons, for example the water feature. Mikayla had told her mum that "today the water feature was on –this was the best part! And that she had water in the sandpit too". "It is such a hit in the summer... Tipping the water... fantastic" (Joshua Mc's mother). Joshua G's mother commented that Joshua G had just started to enjoy the water feature. Louise (teacher) wrote:

*Water feature – We got it started now and it is so much fun and the children really enjoy it. Hamish can stay there all day at the top, watching and playing in the water that comes up. The children often do it for a while and then stop and have a second go later on.*

Louise and Maya both agreed that the most used areas outdoors were the water feature in summer, the monkey bars, the climbing area and playing along the fence line behind the bushes. Louise, Maya and Suzanne, like the parents, had a fairly accurate but also slightly deeper understanding of what the children most preferred to do in the centre setting. For example though parents knew children liked to hide, “hide and seek is always a favourite” (Alexia’s mother), the teachers were more aware of where the children liked to hide; “they like to be where they think they can’t be seen” (Maya).

*Hiding places... nooks...behind the shed ... they like to be where they think they can’t be seen. They prefer to hide in bushes etc than in side boxes but some do...Planted areas that were not necessarily made for them to be...climbing area (Louise).*

#### Be physically challenged

The parents also commented favourably on: the large moveable climbing equipment- especially the monkey bars, and the variance in terrain. The parents had an understanding of what children value about an outdoor space and were able to articulate their appreciation of that being recognised by the centre owner and teachers. In particular they talked about how they valued children being able to move and manipulate equipment and materials, and the importance of new additions and challenges.

*That’s what I like about them (referring to moveable equipment), Kids have a new adventure every day, rearranging them, one day they will be down the bottom...( Joshua Mc mother) ....or they want to create a new challenge (Hamish’s mother) ....it has been interesting watching Suzanne add to it. We started when the centre first opened and it was just a couple of boxes then and a bridge, and slowly added more things, it has been great to watch it develop (Alexia’s mother).*

Moving things around the outdoor area was also perceived by the adults as a favourite activity of the children. The parents were aware of the children being able to alter the obstacle course and transport things, use the tyres. Sam’s mother said that the children love the tyres “building them up in a tower with one of them in the middle”, as I had observed.

Louise and Maya saw part of their role was: providing resources as the children asked for them and involving the children in the set up. The teachers were encouraging of the children rearranging the low moveable equipment and the transporting of loose materials around the environment.

*Usually spontaneous and children help set up when they arrive... children passing things to you. We like moving things regularly around, draws them to it, refreshes area. Some children don't like the change and others ask for it... get the children to set up the obstacle course how they want it and they help shift it, they are part of it (Louise and Maya).*

Parents concurred that the children's most favourite aspect of the outdoor setting was; the climbing area, especially the monkey bars. "...they (Monkey bars) are so good for them" (Alexia's mother). The parents' commented on how the children liked to climb and go on anything thing that "offers risk or challenge – climbing frame, outdoor furniture" (Hamish's mother). "Monkey bars are a real favourite for Sam – he isn't worried about how high they are" (Sam's mother) and Krissy's parents said how Krissy "swings and hangs upside down on anything she can find, likes being held upside down". Jack's mother said she thought the favourite item was "the climbing frame".

The freedom and space to run was mentioned often. The children love: "practising their running, counting down and using blocks as a starting gun..." (Suzanne, centre owner); "playing running 'chasey' games" (Mikayla's mother) and Wei-Bin's parents thought "they like to run, as simply as this". Sam's mother (teacher in another room) thought he did seem to spend a lot of time outside at the centre and felt that Sam "... benefits from the size of the garden as he doesn't like a playground that is crowded".

The parents, like many of the children, thought that swings would enhance what was offered to the children, offering new physical challenges. Others were not sure like Alexia's mother who shared how she had changed her mind about swings since being at the centre. "When I first came here I thought a swing was missing but it does take up teacher's time" and Hamish's mother added "You have to have someone spotting". The teachers both liked the idea of a barrel swing and Krissy's mother also suggested swings. Suzanne (centre owner), aware of the pros and cons, said:

*Swings!!! I debated it long and hard when setting up the outdoor area here, talked to lots of people. I did like the idea of having them for babies. I liked the*

*'swings and things' brand but decided to leave them out for space reasons and leave for later ... we could well develop a swing area.*

The teachers' suggestion of: "perspex windows in the fence so children can see out into the world" (Maya) had agreement from Louise. This arose from their observation that the children often climbed up on to the large boxes just to get a better view of what was happening over the fence. A climbing tree was suggested by the teachers and some parents but for Suzanne it was one of those areas where there was a tension between dreams and reality: "would have loved to have a climbing tree but what would you have for safe fall underneath"?

#### Having fun

The parents' words also gave a sense that for them their children being happy and enjoying themselves was especially important. Jack's mum wrote "I'm very pleased with the outside area and the centre. The teachers and kids all seem to enjoy being outside' and Wei-Bin's parents wrote that they thought he feels "happy and excited outside at the centre" and that what he enjoys most is being "able to try on different things at the nursery playground, it's a challenge to even go on the monkey bar" .

Overall the adults perspectives on what the children liked to do outside matched with the findings from my observations and the children's data. That is the children most preferred: the large climbing area, especially the monkey bars; moving equipment around; the water feature; hiding; exploring; playing with friends and chasing; the sandpit; and baby side. The adults' comments reflected a high level of concordance across their own views as well as a sound understanding of the children's perspectives on their outdoor experiences.

#### ***Commonsense approach to weather and safety***

Hamish's mother thought it was important for children to get out in the rain and wind as the experience of being outside is very different – it smells and feels different and there are different experiences like puddles and mud. Similarly, Suzanne said, "I believe it is important that children get outdoors everyday no matter how cold or wet". This positive attitude of the adults to the weather is in contrast to other research studies where the weather was seen as a barrier (Kolt, et al., 2005; Lockie & Wright,

2003). Several parents commented on how concerns re sun exposure were addressed through the use of sunscreen and the wearing of sunhats.

One parent commented on outdoor play requiring more supervision and Hamish's and Joshua Mc's mothers commented that a disadvantage was that children do have more accidents outside. Other parents commented on how falling down, cuts and bruises were a 'rite of passage', a part of life and that it is unrealistic to expect them to never hurt themselves. The parents present at the focus group meetings agreed with each other that children need to get hurt, experience what happens in life, and learn from their mistakes.

Safety balanced with the view that teachers need to encourage risk taking and provide challenges emerged as a theme across all the parents' and teachers views on the teacher's role. "Making sure the kids are safe and letting them do things but knowing someone is right there" (Jack's parents) and Wei-Bin's mother said the teachers had a "supervisory role especially on aspects of safety and to encourage the children to try new things". Alexia's mother wanted the teachers to offer "encouragement as Alexia tries out new things that challenge her, to take safe risks"; all the while ensuring the "children had fun, tried things out, explored within a safe environment" (Eilish's mother). Louise and Maya commented that they saw their role as providing safe challenge:

*Making sure they do have challenges, having fun (Louise). ...Providing safe challenges, fun (Maya).*

Hart (1979) found parents to be the strongest influence on children's risk taking either through encouragement or restriction.

### ***Continuity between home, centre and wider world***

It became apparent that not only did all the parents, teachers and the centre owner have a positive view of being outdoors, but they all spent a lot of time in the outdoors as families, either at their own home or enjoying what was in the wider community like the Botanical Gardens, beaches, and parks. It was evident from their conversations and journal entries how much enjoyment and pleasure they got from experiencing these outings with their children. Wei-Bin's parents shared how they "enjoyed feeding the ducks, and go to the playground, and walk in the park". Jack's

mother said: "I enjoy taking the kids to the park and letting them play on everything, watching them cope with things they are not sure about" and Joshua Mc's parents commented:

*We often take the children to the Botanical Gardens to feed the ducks, ride their bikes, run around, comment on the colours of the flowers, birds etc. They also enjoy the park with slides, tunnels and bridges etc.*

Chantelle's parents said "Chantelle has also started athletics – which she loves doing". Suzanne (Joshua K's mother and centre owner) had written about several of the families going to Athletics.

*Joshua has taken up Athletics (running) this term and his best friend from daycare. He loves it and it is now part of their day, practising their running, counting down and using blocks as a starting gun. Many of the other children have become involved. There are now 5 families that go to Athletics...It is lovely to see each of the daycare children cheering each other on.*

The teachers knew about this out of centre interest and involvement in athletics and had observed those children showing the others what they were learning- running races, cartwheels and forward rolls. So they provided the gym mats for them to practise on. I had noted in my research journal that at mat times the teachers showed a genuine interest in what children did on weekends, places they had been and what they were doing in the outdoor environment of their community. They consistently encouraged the children to talk about their family excursions and experiences and they picked up on this and extended it into the outdoors.

The centre owner and teachers valued going on excursions, like to buy plants, into the local community and valued parent/family support with these. The centre brochure stated that "excursions were an important and exciting part of the programme giving opportunity for children to engage in first hand learning and allow educators to make links between the centres curriculum and your child's community". The promoting of care for the environment from weeding to planting indicated that the teachers and management understood the importance of inhabiting space and caring for it, which was noted by parents: "I like the idea of the garden, we both had to come and see the garden they had made. He talked about going to the garden centre and the butterfly plant" (Joshua Mc's mother).

As Kennedy & Surman (2006, p. 48) state “shared experiences, foster deeper learning for families, children and teachers”. We all recognise that we behave differently and feel differently in different settings but as Greenman (2005, p. 17) states “failure to recognise that power of the physical and social environment as a strong influence on children’s behaviour” can create confusion and strain parent, teacher and child relationships. This was not the case for the participants in this study who seemed very aware of the need to inhabit ‘place’ not just ‘reside’.

**Opportunity to mix with siblings and a wider age range of children**  
Opportunity for the children to mix with other children was an important consideration when the centre was set up and appreciated by the parents. Suzanne wanted it “so children in different rooms could spend time together, outside”. Creating a sense of home was another strong value that came through, a value Suzanne was prepared to advocate for and was evident in the centre design. Free-flow indoor-outdoor access, which allowed for this mixing, a non-negotiable set in place by Suzanne, was valued by all adult participants.

*It’s so nice to have that free flow between the indoors and outdoors, the children can decide whether they want to be in or out (Louise, teacher).*

*They have that nice integration between the children from all rooms. Here they can drift between inside and outside whereas some centres restrict (Joshua Mc’s mother)*

However the teachers did feel that sharing the outdoor space with the younger children, limited what happened outside for the older children. A related factor was that when teachers are outside they had shared responsibility for the children, as Maya and Louise explained

*Some challenges not as extreme due to younger children, but you work around that don’t you? (Maya) ....Though we do put more effort into our room eg the art area (Louise) ....We set up certain things in our room because only the older children are in there whereas outside toddlers and young children mix (Maya) ....Depends on who is outside, the staffing for the day, rosters influences what happens (Louise).*

Louise and Maya both thought that dealing with conflict especially with younger ones often seemed to dominate what they did outside, but this was greatly reduced when the older children had the outdoors to themselves.

*Don’t spend a lot of time dealing with conflicts, not that much different to indoors (Louise) ....Outside we may stop, step back and see if they can sort it*

*out themselves more (Maya) ...Maybe more with younger ones, as when outside, responsibility is shared by all staff outside, for all children – sometimes feels like it is over 50% (Louise) ...A lot more resolving of conflicts with little ones and reminding them of the rules. Very different when toddlers have gone inside (Maya).*

My anecdotal observations supported the teachers' perspective that there was very little conflict amongst the older children, and even less that the teachers needed to intervene in. However, when younger ones outside, the teachers attention was certainly more focussed on them.

The teachers, as the findings presented so far clearly show, valued the outdoors for its contribution to children's holistic development and their own well-being. They supported children's desire to be outside and one of them always went outside as soon as a child said they wanted to go out. As the children were free to go outside for approximately 90% of the day, unless it was pouring with rain, this showed a commitment to the centre philosophy and values, as well as a personal match being espoused theory and practice. The research indicates that the greater amount of time children spend outdoors the more the staff plan and set up a variety of activities (Cullen, 1993) and this is what I found.

Table 5.2 focuses on the adult's perspectives on the centre setting itself and is inclusive of evidence presented in Table 5.1.

**Table 5.2 Summary of aspects the adults valued about the centre outdoor setting**

The large natural outdoor space
Moveable equipment – children being able to rearrange
Ability to create new challenges
The variety of experiences
Experience of and care for animals and garden
Free flow between indoors and outdoors
Homeliness and home-centre continuity

### **Provision Related to Teachers' and Centre Owner's Beliefs, Interests and Passion**

Maya and Louise both saw the indoors and outdoor environment as connected, planning for it as one integrated environment, though they admitted this planning was

often spontaneous done on the day or during children's' rest time, as scheduled planning meetings were once a fortnight. As Maya said, with Louise agreeing

*See both the indoors and the outdoors as part of the planning don't separate ...Most planning happens on the run, spontaneous, though we meet every fortnight and talk during children's rest time.*

*We plan challenges and offer new materials (Louise) ...aim to make it tempting (Maya) ...we do follow children's interests and lots of planning has been around the outdoors (Louise).*

Though most of the children said they liked all of the outdoor area I had noted that they rarely mentioned the paved area, and very few photographed anything in it apart from the carpentry table, the paints and the dolls in a stroller and no one drew it. The teachers knew that one of the least used areas was the paved area, and that the use of the area in particular was dependent on what they (the teachers) provided in it and certainly not a favourite.

*They use the courtyard when set up but not as much as upper areas, only when the umbrellas are up and tables set up (Maya)...but they are not used as much (Louise).*

They were also aware that use of the sandpit varied and the sandpit was used far more when an adult sits there "...the children then flock there" (Maya). This was evident in the swimming pool construction that went on for over an hour in spite of the problems they encountered (Appendix 6). So there was evidence that a teacher's presence, in some areas of the playground, increased participation, perseverance and complexity as found by Smith (1993) and Cullen and Allsop (1999).

### **Level of teacher involvement**

One perspective shared by many participants, except the teachers themselves, was that teachers should be more involved in the children's play. Both Louise and Maya saw their role as guiding, assisting, extending, at times redirecting and being there for the children but not getting involved in or leading play.

*Sometimes you are just observing – have no role in their play. Be there if they need you, don't crowd them, guide their play only (Maya).*

Louise in particular was very adamant that teachers should not be too involved in children's dramatic play. Louise grew up and gained her degree in early childhood education in Sweden and her beliefs were reflective of those cultural values held by

Swedish early childhood teachers (Sandberg & Samuelsson, 2005). Louise believed that adult involvement inhibits their play and creative flow.

*If they are engaged in role play you can assist them with props and materials and extend them. I strongly believe you cannot go into role in children's role play as I do not want to lead their play and involved in a role disturbs their play more than I could add to it. I wouldn't be able to keep it going as long as a child would do ....Especially with the older ones, they have such great imaginations anyway. One minute I would be in a role and then I am me; I could not do it.*

The children's views that the teachers should play with them more, were reflected in Suzanne's beliefs about the teacher's role.

*Sometimes it does frustrate me that there is so much guiding of behaviour going on, instead of teachers getting involved with children in their play. It is like the carpentry area – there are not many teachers that are interested or have a passion for carpentry and unless you have that, all you get is a nail in a piece of wood.*

I had noted that rarely was the carpentry table set up in a way that would draw children to it and only on one occasion when I was there were the Guinea Pigs brought out onto the grass area, indicating that the animals in the centre were not really part of the curriculum as much as the parents and Suzanne had hoped.

*With the animals it comes down to the teachers. The guinea pigs have been around the back for a few weeks now. When in the aviary there is interest but you need the teachers who are passionate to get them out each day, to say to the children-lets feed them - etc, they just get forgotten.*

Suzanne's perspective is supported by the findings of others who have investigated the teacher's role (Cullen, 1993; Davies, 1998; Hutt et al, 1989).

#### Motivational aspect of professional development

Suzanne often used the phrase 'passion and interest' in my interview with her as it was a major tension for her as was the apparent lack of knowledge teachers had.

Suzanne believed that teachers need to plan for the outdoors and that professional development certainly went some way to motivate staff and to inspire what happened outdoors. For example, she said:

*That video you gave us also resulted in a staff member hanging up the curtaining outside – that is why I try to do lots professional development with staff ....The teachers have a bit of an interest and passion with the garden but that is just after two years. After watching the video you lent us, Louise was out here yesterday in this garden (paved area) with some of the children cutting the dead flowers with the scissors; that was really neat.*

### Noticing, recognising and responding

Suzanne and the teachers believed that children's behaviour needs to be 'listened' to and that 'listening' should impact on what is provided for children outside. It is about noticing - listening to what children's behaviour is saying, recognising the significance of what is being said and done and then responding (Carr, 2001); as promoted in Kei Tua o te Pae, Assessment for Learning: Early Childhood Exemplars (Ministry of Education, 2004). Suzanne gave the example of:

*...the issue we have had with Josh and Taran throwing things over the fence – what are we missing, what is not happening for them in the programme that they need? The last two days the ducks have been on the roof so I have had them throwing the bread up on the roof and it has kept the ducks up there and let them throw things.*

The teachers had discussed this behaviour with Suzanne, watched a video on supporting the development of fundamental movement skills and together they had come up with strategies to deal with it, as Louise wrote in her journal:

*Throwing- the boys were throwing things over the fence. Now stopped, maybe they are feeling more stimulated with the water feature going and we have introduced more ball play.*

The introduction of teaching the children how to strike the ball was a part of the teacher's response, along with the provision of lots of tennis balls. Responding to this added a completely new dimension to the children's play. Suzanne and the teachers in particular had recognised that the children were 'telling' them what their bodies needed to do. Burton and Rodgeron (2003) who have studied 'throwing' believed that there is a need to understand why very young children spontaneously throw. The week the tennis balls and basketball hoop were added to the environment I observed for one whole morning using tape recorder, journal and camera (Appendix 11). The participant children threw, struck, caught, collected, transported, held, and kicked the balls for the entire time. Joshua G and Joshua Mc's usage of the tennis balls in their play lasted the entire morning and it became evident how important exploring their throwing skills was to them and how having the smaller balls facilitated the practicing of this skill. Environmental factors impacting on throwing, like ball size, are acknowledged (Burton & Rodgeron, 2003) and as in this study the provision of tennis balls facilitated very different types of ball play, than did the bigger balls in the centre.

### Teaching fundamental skills

There was varied opinion amongst parents as to whether teachers have a role in teaching basic physical skills. Some parents felt teachers should take small groups for things outside, like teaching certain skills and others thought these were best taught at home. Suzanne had noted that some teachers did teach basic skills and others did not, highlighting once again the significant role an individual teacher's interests and passions had on what happened outside for children.

*Some do in general most don't. Not sure how much they cover that in their training. What I have learnt, I have learnt from professional development, experience and visiting other centres. I don't think that any of my teachers that are doing correspondence are getting anything on promoting the outdoors and the skills (Suzanne).*

The adult participants' beliefs about what the role of the teacher sat along a continuum. At one end: 'be more involved, play with them, teach children basic physical skills and introduce new ideas'; and at the other end 'don't get involved, don't lead their play, supervise, and physical skills should be taught at home'. In the middle, and by far the most prevalent view was: 'give freedom to explore and take risks, and have fun while keeping them safe'.

### Summary

The outdoor environment was seen by the adults as a vital part of the curriculum and the opportunities that 'being outside' offered to children, and their families were highly valued. There was definitely congruence, a harmony between what parents and centre owner, and teachers valued about the setting.

The adult participants were aware of the influential role that the environment has on physical, social, emotional, cognitive and health aspects of life. There was evidence that the outdoor setting influenced their decision to place their child there. The passion and interest of the centre owner and teachers was significantly influential on outdoor provision.

The findings presented in this chapter show how there are clear interrelationships between all the adult participants' values and between home, centre and community experiences. Table 5.3 below presents the overall summary of the themes that have emerged in this chapter on the adults' perceptions of the value of the outdoors for

children and what the adults thought children liked to do in the centre outdoor environment.

**Table 5.3 Themes emerging from adult's perspectives on the value of outdoors for children**

---

Children have more opportunities for :
vigorous and more complex active movement
moving things around and exploring
playing games and exploring alone or with friends and siblings
experiencing nature and the natural and wider world
hiding
being healthier ( psychologically and physically)
learning, risk taking, problem solving, using imagination and creativity

---

## Chapter Six: DISCUSSION OF FINDINGS

In chapters four and five the findings of this study have been described in terms of children's, parents' and teachers' perceptions of children being outdoors. The discussion that follows returns to the issues raised in the literature review, in relation to the main themes that arose from the findings in order to address the aims of this study.

- Explore young children's perspectives on the experiences of being outside in their early childhood centre
- Investigate the perspectives of the adults on the role of the outdoors in young children's lives

Though participants' perspectives were similar, they were framed in different terms, just as Kylin (1999) and Hart (1979) found. The adults used descriptive comparative terms when describing the outdoors, comparing outdoors with indoors, like: "more freedom", "more physical", "more opportunities for creativity", "more to explore", "more variety of experiences". The children referred to places in terms of what they could do there: "can run", "playing with balls", "swinging on monkey bars", "jumping on tramp".

The main findings were that being in the outdoors was highly significant in the children's lives and the outdoor setting offered unique opportunities for their growth, development and learning. Many of these elements of opportunity can not be replicated indoors. The categories that emerged from findings presented in Chapters four and five have been termed 'elements of opportunity', presented linearly in Table 6.1 and structure the first section of this chapter.

Discussion of the role of teachers and how involved they should be in children's play outside is interwoven in the discussion around the 'elements of opportunity'. There was strong interface between children's and adults' perspectives of the outdoors from across all the data and the significance of this 'harmony' is also examined later in the second section of the chapter in relation to the principle of 'relationships'.

**Table 6.1 Elements of Opportunity**

<p><b>Themes that emerged from children’s perspectives on being outside and my observations (taken from 4. 4).</b></p>	<p><b>Themes that emerged from adults’ perspectives on being outside (taken from 5.3). Children have more opportunities for :</b></p>	<p><b>Categories of significant and unique aspects that the outdoor setting provided (merging of children’s and adult’s perspectives). ‘Elements of Opportunity’ for:</b></p>
<p><b>Outside was where they played and could be:</b>                      Be physically active challenged, and learn new skills</p> <p>Transport and rearrange</p> <p>Play chasing games, imagine and hide away from adult gaze</p> <p>Explore and experience nature, and the natural, aesthetic and wider world</p>	<ul style="list-style-type: none"> <li>•Vigorous and more complex active movement</li> <li>•Moving things around</li> <li>•Playing games and exploring alone or with friend</li> <li>•Experiencing nature and the natural and wider world</li> <li>• Hiding</li> <li>• Being healthier (psychologically and physically)</li> <li>• Learning, risk taking, problem solving, using imagination and creativity</li> </ul>	<p><b>Health and holistic development</b></p> <p><b>Playing, learning, imagining</b></p> <p><b>Vigorous active movement and developing physical skill</b></p> <p><b>Rearranging and transporting</b></p> <p><b>Exploring and experiencing nature, and the natural, aesthetic and wider world</b></p>

**Elements of Opportunity**

These opportunities that ‘being outside’ at the centre provided are by no means definitive and are open-ended honouring the multi-faceted and complex nature of play and learning. Playing and learning is an intrinsic part of all elements, hence the

underlining in Table 6.1. The opportunity for learning will be discussed in relation to each element. They are all interconnected and overlaid and naming them as 'elements of opportunity' signals they are parts of a whole. Relevant quotes from *Te Whāriki* have been placed under each subsection heading in order to highlight relevant links of the findings to *Te Whāriki* and its underpinning theory of a 'critical pedagogy of place'.

### ***Health and holistic development***

*Children experience an environment where their health is promoted* (Ministry of Education, 1996, p.48).

The adults in this study articulated clearly the physical, cognitive and emotional values of being outdoors more so than the social values. This finding is similar to Davies (1998) who found that most teachers saw the outdoor as: providing opportunities for physical, social and emotional development; and a place free from adult direction and structured activities. The belief expressed by the adult participants, that physical activity and movement in early childhood was essential for holistic growth and development, was also found to be held by the 98 teachers and parents surveyed as part of Kolt et al's., (2005) report. This study's findings on teachers' and parents' views are in contrast to those found by Rothlein and Brett (1987) where a majority of both teachers and parents did not regard play (including outdoor play) as important for young children.

The teachers in this centre, like those in Stephenson's (1998) study and Temple and O'Connor's (2002) study, valued the role the outdoors had in children's holistic development and were well aware of the impact that the environment they created had on children's play. The parents valuing of the outdoors in relation to all aspects of development were similar to those found by Clements (2004) but unlike the mothers in Clement's study, these parents appear to spend more time in the outdoors with their children. This may well be a reflection of the wider New Zealand context. The adults were able to articulate the health benefits from being outside for children and themselves. Hamish's mother had commented that being outside improved children's immune systems and vitamin D levels.

The outdoor setting provided for a diverse range of physical abilities and this enriched movement environment where physical activity was encouraged, promoted the development of neuro-muscular and cardio-respiratory systems that support movement of the growing child (Parker & Larkin, 2003). Children's digestive systems are also stimulated through active play (Davies, 2003; Pica, 2006). There are times in the child's life when the brain craves the necessary experiences and in early childhood that craving is understanding and curiosity; a desire to learn about their body and what it can do (Bilton, 2002; Sanders, 2002).

The emotional, spiritual and personal well-being dimension of being outside includes the dreaming, the wondering, the joy and the fun with friends described in the 'social dynamic' category by Stephenson (1998). This transformative aspect to being outside was referred to by Chantelle's parents and captured in the photo essay of her in the sandpit. Long periods of access, the children had to the outdoors, resulted in minimal acts of aggression, just as Frost (2006) posited.

The outdoor setting especially provided opportunities for the fostering of learning dispositions (Carr, 2001). The natural and manmade features of the outdoor environment of the centre stimulated 'play' and learning in a special boundless integrated way, repeatedly focusing all the senses in working together. It has been suggested that the young child's sensory modalities must be stimulated holistically otherwise later dysfunction's can develop (Cosco & Moore, 2001; Parker & Larkin, 2003). The children's choice of things to add to the outdoor environment indicates an awareness of what their need for new challenges.

The health benefits, both psychological and physical, were evident in the children's behaviour that I observed in the photographs, in their use of "I love", "I like" and their positive expressions when in the outdoor environment. It was clear to me as observer how important vital movement and being outside was to their health and holistic well-being. For example, on the children's faces could be seen the emergence of joy, pleasure and increased confidence that came from challenging themselves physically, like running or hopping up and down the steps, achieving a new skill, playing with friends, patting the Guinea Pigs, just sitting and watching others or the clouds go, or by having an idea or solving a problem. Rinaldi (1998, p.115) states that

“pleasure, aesthetics and play are essential in any act of learning and knowledge building”. The children in the study had all three elements present as they spent time outside. As was evident across the findings, learning is not a separate event that occurs all by itself, unsituated and decontextualised.

### ***Playing, learning, imagining***

*Children experience an environment where their play is valued as meaningful learning and the importance of spontaneous play is recognized* (Ministry of Education, 1996, p.84).

The children’s perspective that playing was inseparable from everything they did outside is consistent with the research literature. Like the children in the studies reviewed (Clark & Moss, 2005; Einarsdottir, 2005; Hands & Martin, 2001; Rothlein & Brett, 1987; Sheridan & Samuelsson, 2001; Wiltz & Klein, 2001) the children in this study were adamant that what they most liked about being outside was ‘playing’. This is not new, as Singer (1996) states most children associate outdoors with ‘play’ and indoors with ‘work’, but what is significant is that the children in this study were giving a clear message that ‘playing’ outside was far more than just pretending, as it is so often narrowly defined in the literature (Hill, 2006; Nicolopoulou, 1991; Vander-Ven, 2004).

This study has captured some of the elements of play identified by Sutton-Smith (cited in Mergen, 2003) that make play so important not only for children but for those who work with young children. Those elements are: the ‘naturalness’ of play; the pleasure it brings along with a sense of well-being, and satisfaction; its enhancement of physical, emotional and cognitive flexibility, its creativity, the freedom, the fun, the excitement and thrills, and the possibilities (Mergen, 2003).

Play was for the children in this study connected to having the freedom to engage in whatever they choose to do in the outdoors. It was about being with friends, having fun, engaging with and experiencing the opportunities provided by the setting, just as Wolfgang and Phelps (1983) found. The term ‘play’ as used by the children, appeared to encompass everything they did outside. It was about collaborating on a self chosen task, about problem solving and persevering as in the swimming pool construction.

Similarly, Hart (1979) found children's motivation to play outside was driven by the desire to be competent in the world.

The findings highlight that we need to pay attention to children's notions or concepts of 'play'. Theories on play abound, stemming from an adults' perspective, and generate much debate. However from this study there is little doubt that 'play', as an attitude of mind, is perhaps more essential, more powerful than adults realise; it is learning (Vander-Ven, 2004). It was certainly much more than the constructive functions of play attributed to Piaget and Vygotsky that are entrenched within early childhood education.

Vygotsky (1978), for example, saw play, especially, pretend play, as immensely important in children's lives, especially in the development of higher levels of cognitive thought. He believed that play provided a "much needed background for changes in needs and consciousness" (p.102); the vehicle through which children move forward. Vygotsky's notions of play, just as Piaget theorised, was that play moved children from exploration into the higher level of representational play. These perspectives, though valuing play and lifting the status of play on one hand, have undermined it on the other. The categorising of play into stages is both reductionist and utilitarian (Nicolopoulou, 1991), and solely seeing play as the child's use of pretense or expressive imagination or a phase as one moves on to higher thought denies the reality of how children perceive play.

I observed much imaginative, co-operative, creative play, such as Krissy's rearranging of the obstacle course, Joshua K's wind machine to stop the Pukekos from eating the strawberries and Wei-Bin's ideas on how to challenge themselves further on the rope bridge, and Alexia, Taran, Sam and Joshua coming up with ideas and putting forward solutions when creating the swimming pool. Their imaginative play tended to centre on meaningful activities or experiences and often involved active movement, as in their chasing games.

#### **Chasing games**

The children, in this study, like that in Stephenson's, played various versions of the chasing game that appeared embedded within the play culture of the centre. During

these games the children ran across the open spaces and the many levels making use of the outdoor setting. When involved in chasing games the children would scream and yell, pretending to be afraid until it was over. The chasey game played by both boys and girls together, has many features that appeared to appeal to the children, which have been identified in the literature (Corsaro, 1986; Freeman & Brown, 2004) such as the thrill of being the chased or power of being the chaser; the running and physicality of it; and being able to yell and scream.

The children had observed that the teachers saw the outdoors as being where the children 'played', and specifically mentioned wanting involvement from the teachers in their games. "Play games with us" is different to the responses the children gave in Harding's (2004, cited in Harding, 2005) study when asked the same question. Most of the children indicated that they enjoyed being on their own (Harding, 2005) as Cullen (1993) had found.

#### The absence of socio-dramatic

The low occurrence of socio-dramatic, war and superhero play, in this study could be explained by the physical setting. Hutt et al. (1989) found that levels of fantasy play were low compared to physical play, material play, walking, running, looking and watching; and this was consistent with the findings of this study. Other studies have shown that dramatic play varies according to the setting, the props provided and inclusion of semi-private spaces, and happens more inside than outside (Corsaro, 1992; Frost, 1992; Ihn, 2002; Stephenson, 1998). But much more likely is the fact that the teachers did not become involved in the children's dramatic play, due to their pedagogical beliefs. Stephenson (1998) had found the teachers had an impact on the sustaining and complexity of the dramatic play and Hutt et al. (1989) concluded that the low levels of dramatic play were due to the fact that the teachers rarely got involved in children's dramatic play.

#### Hiding away from public gaze

The vegetation, trees and varying levels of the outdoor setting, in this study, met that need for hiding away, as the space up behind the sandpit between trees and the fence line; and behind the shed were places the children in this study frequented. Children's 'special places' such as forts, dens or places that children make their own contribute to the development of identity and a commitment to place (Hart, 1979; Sobel 1993).

Harding (2005) describes the high use of a 'hidey area' at the back of the pedagogic garden, named 'the house' by two to five year olds, at one of Britain's Early Excellence Centres and Clark and Moss (2005) noted that the children valued the large moulded caterpillar as a place to hide.

### ***Vigorous active movement and developing physical skill***

*Children experience an environment where they gain confidence in and control of their bodies (Ministry of Education, 1996, p. 86).*

The children in this study, above all else, exhibited a motivation and need to move which was acknowledged and supported by the adults and the setting. They engaged in experiences and activities that their brains and bodies were telling them they need to do (Bilton, 2002; Bruner, 1983; Doherty & Bailey, 2003). As stated in *Te Whāriki* "young children need challenging opportunities which keep pace with their physical co-ordination and development" (Ministry of Education, 1996, p. 26). Hence their drive to be outside and engage in 'action, play and movement'; what Bruner (1983) calls the 'culture of childhood'. Davies (2003) likens children's desire to move as an appetite, just like they need to eat, sleep, and to drink, so they need to move.

The children's preference for climbing, sliding, balancing and being challenged was evident in the large flexible climbing equipment being the outright favourite across all data sources, consistent with other studies (Cullen, 1993, Hutt et al., 1989; Smith, 1983; Stephenson, 1998). All the children climbed on the large flexible equipment frequently and the desire and need to climb is instinctive according to Davies (2003) and the benefits endless (Gallahue, 1989). Climbing works every major muscle in the body, it improves physical power, balance speed and agility (Frost, 2003) and there is a curiosity factor that was evident in the findings. The curiosity factor was that they climbed to gain a different perspective on the wider world around them, to see over the fence, as in Hamish's case. Their photographs showed that they had climbed up on to the large boxes to take their photographs. The satisfaction in watching the environment from a height has been noted by others (Frost, 2005).

There are four categories of moving (Davies, 2003) and the flexible climbing area and the variance of terrain in the physical environment catered for all of them. They are:

(1) relating body to the environment (climbing, clambering, swinging and balancing); (2) testing themselves in terms of strength and mobility; (3) testing themselves in terms of dexterity; and (4) enjoying movement for its own sake. Through movement the children were refining and improving their motor skills, developing coordination, balance and body awareness, as well as keeping their organs and muscles healthy (Davies, 2003; Doherty & Bailey, 2003; Pica, 2006; Sanders, 2002).

Monkey bars offer unique opportunities for growth, development and learning. Finding that the children were so drawn to this particular piece of equipment drove me to seek explanations, some of which have been discussed in chapter four. There is virtually no reference to monkey bars in the research literature but they had been identified as a favourite item in a few other studies (Bilton; 2002; Nixon, Acton, Wallis, Ballesteros, & Battistutta, 2003) although none of the research had explained why. There is some evidence that swinging by the arms from monkey bars, rope bridge and going up the slide strengthens arm muscles and supports lung development (Davies, 2003; Pica, 2006). In particular the monkey bars and rope bridge, as seen in the examples of Mikayla, Wei-Bin, Paloma and Alexia, certainly provided the children with the most challenges.

The children who were more confident on the monkey bars often hung upside down in between other actions, which along with spinning around and around influences the development of the brain (McKinlay, Leone, & MacDonald, 2005). Though we are only beginning to understand this elaborate interplay between the brain and body, a theme emerges from this data that movement and learning go hand in hand, each essential to the other (Hannaford, 1995). When the children were using the monkey bars and the rope bridge not only are they physically active but cognitively and socio-emotionally as well. Sanders (2002) suggests that movement concepts clearly articulate the cognitive components of movement - "I am learning what my body does, how and where it moves, and the ways my body relates to myself, other movers and objects" (p. 91). The monkey bars provide the opportunity for "cooperation between mobility, awareness, thinking, experiencing and acting which leads to "a versatile and lasting development of the child" (Zimmer, 2005, p.27).

The children's comments and photographs endorse the belief that movement reflects the inner activity of the person and success in movement can improve self image (Bilton, 2002; Gallahue, 1989). This was evident in the children's expressions and their unsolicited comments such as Jack telling me "I like the monkey bars, I am really good". Roberts (2002 cited in Davies, 2003) states that the sense of mastery is deeply linked with feelings of self esteem.

### ***Rearranging and transporting***

*Children and their families experience an environment where they know that they have a place* (Ministry of Education, 1996, p. 58).

Developing physical strength, notions of powerfulness, putting ideas into practice, having a sense of place' and seeing self as agent of change are just some of play's functions that were evident in the way the children moved things around and rearranged pieces of moveable equipment. Krissy, Jack, Joshua K and others moved quite heavy objects such as the tyres, the ladder and planks. It appears that carrying the heavy equipment was a way of demonstrating physical competence and strength, "a route to a feeling of empowerment" (Stephenson, 1998, p.144). Allowing children to manipulate the environment enables the child to build on his/her own knowledge (Bilton, 2002). Children learn about themselves through their transactions with the environment (Hart, 1979) and Hart saw the opportunity to modify the environment and manipulate equipment enabled children to make themselves at home in the environment.

Krissy rearranging the physical environment also showed she felt a sense of 'belonging', as she developed "an increasing ability to play an active part in running the programme" and "the confidence and ability to express their ideas and to assist others" as stated in *Te Whāriki* (p.58). Recent definitions of play emphasise that it is a 'way' of doing something, not the act itself. Work can be play if it is performed in a relatively creative way (Mergen, 2003), just as in Krissy's rearranging of materials.

#### **Sense of place**

Rearranging, collecting and transporting items reflected their sense that 'they have a place' (Empowerment); an underpinning principle of *Te Whāriki*. Louise and Maya both understood the importance of children participating in setting up, being able to change things around. The children's involvement in setting up the outdoor

environment each day and being able to move things around, transport and create, promoted a sense of 'agency' for the child; a sense that they can contribute, a sense that they are in relationship with this 'place' and the things within it. Sociocultural perspectives reinforce the idea that all participants have agency and worth that need to be appreciated as a right of citizenship (Kennedy & Surman, 2005). This is an essential aspect of the 'relationship' principle in *Te Whāriki* where the adults and the learning environment provide "opportunities for children to have an effect and to change the environment" (Ministry of Education, 1996, p.43).

### ***Experience and explore nature and the natural, aesthetic and wider world***

*Children experience an environment where they develop working theories for making sense of the natural, social, physical and material worlds* (Ministry of Education, 1996, p. 90).

The value of the natural and aesthetic world emerged clearly from the children's photos, photo elicitation and drawings, and from my observations. An explanation of why the children in this study showed a great deal of interest in nature and the natural, aesthetic and wider world, is I suggest due to them having a rich natural environment, with opportunity to see far into the distance. One of the predominant factors that appears to contribute to a variation of what children prefer to do outside is connected to the natural physical and man-made attributes of any given setting.

The findings of this study refute the beliefs that young children (less than eight years old) have less of a preference for natural settings than teenagers and that young children exhibit "utilitarian, dominionistic, and negative attitudes towards nature and non-humans, meaning that nature for them is either something to use, control, or fear" (Kellert, 2002, cited in Mergen, 2003, para. 22). Kellert's view is based on cognitive developmental theory, that children value nature in different ways at different stages of their physical and mental development. Whereas, in this study, as in Hart's (1979) study children showed interest and fascination for the natural world. For example when Mikayla found a dead earwig under the gym mat there was great excitement, children crowding around to look and touch. Alexia picked it up and carried it around on her hand for all to see.

I argue that children's attitudes towards nature are directly linked to their experiences and the attitudes of the other participants in their micro systems, as opposed to their developmental stage. The children in this study showed conclusively that they were very aware of and valued the natural world, including: the weather, the animals, the plants, the trees, the grass, sky, the pathway mosaics, and the insects. Their relationship with nature and the natural world was fostered by their families, through family excursions into local parks, beaches, and other local nature attractions, as in Hamish's and Eilish's cases presented earlier.

This study produced very different results to Holcomb's (1977, cited in Mergen, 2003) study, where city children said they preferred urban landscapes to natural ones. I argue that this was because children in this study had been exposed to natural settings, both at the centre and in the community, whereas the children Holcomb interviewed had not. Early childhood appears to be an important time for children to develop an empathy towards the natural world and this can only be developed through free access to a rich natural area of limited size over extended periods of time (Greenman, 2005; White & Stoecklin, 1998) which is what these children had access too.

The natural world is part of the child's micro-system, an essential component of healthy human growth and development and the child today is the adult of the future who will make decisions affecting the health of the planet. The literature showed that a small but growing body of research indicates that daily experience of nature, spending time outdoors in the fresh air and sunlight, being in touch with plants and animals, caring for all living things, has a measurable impact on the holistic development of the child (Frost, 2006; Hart, 1979; White, 2006).

#### Exploring sand and water

The use of the sandpit, though a favourite, seemed to depend on what else was going on around it, and the presence of others. The teachers had noted that the presence of a teacher increased involvement in the sandpit and research is fairly conclusive that in particular areas of the curriculum like dramatic play, carpentry and sand, if the teacher does not become involved and support and extend the play then children will

not gain the most from the experience (Cullen & Allsop, 1996; Greenman, 2005; Hutt et al., 1989; Rivkin, 2003; Stephenson, 1998). The presence of a teacher who extended the complexity of their play, as in the construction of a swimming pool observation, resulted in an increase in children's reflective thinking, generated creative ideas, and it appeared that their knowledge was extended, was similarly noted by Cullen and Allsop (1999).

The availability and accessibility of loose parts and real tools (like the metal spades) and having a variety of materials supported children's imaginative, co-operative and construction play (Bilton, 2002). Another important aspect of sand is that children can manipulate it without consequences and it cannot be broken, which also applies to the element of water. It is plausible that the lack of emphasis on outcomes or products in the outdoors which gives greater freedom and power to children (Vender-Ven, 2004) may well be another facet of why children like to be outside.

Hutt et al. (1989) commented that without adult presence sand play tended to consist of sifting sand through fingers, filling, tipping and spreading, and went as far as labelling these actions as lacking cognitive complexity. However, I think they failed to realise that playing in the sand, such as in Chantelle's case, can provide an immense amount of sensory input. For Chantelle it was relaxing, pleasurable and she experimented with the equipment and the sand in slow leisurely fashion, absolutely engaged, just as Hart (1979) had observed. As stated in *Te Whāriki* children develop "the knowledge that playing with ideas and materials, with no objective in mind, can be an enjoyable, creative, and valid approach to learning" (Ministry of Education, 1996, p.84).

In this study I found that the water feature itself, even when not in use, was appreciated and liked for its physical elements by the children. Water has been found by others to be an important environmental element for children (Ataov, 2004; Hart, 1979; Stephenson, 1998), not only for how children are able to use it but also its social aspect. Ataov (2004) suggests that children have an emotional and visual response to certain physical aspects of the environment and that water especially is one of the elements in the outdoors that children prefer. Water, like sand, also enables children to perform useful, harmless and satisfying actions (Ataov, 2004).

### Links between home, centre and wider world

The inclusion of athletics in the programme, stemming from community activity, and the children's interest in the centre gardening influencing parents to set up gardens at home, exemplified links between centre and home. The parents in this study had positive attitudes and expectations regarding their child's use of the outdoor and this in turn affected how confident and autonomous the children were in exploring the outdoors independently (Harding, 2005), and the early childhood teachers' expectations further reinforced those parental expectations (Greenman, 2005).

Dialogue between home and centre is vital and easier if there are common values; the values themselves become a continuity tool that eases transition but also facilitates children reaching their potential (Kennedy, 2005; Stonehouse, 1991). According to Kennedy (2005) this can only happen for children if teachers and management understand, acknowledge and respect the children and their families' social and cultural experiences and expectations.

### **Teacher's Role: Provide Safe Fun Challenges and 'Play'**

There has already been discussion on the teacher's role and by far the most prevalent view of the teacher's role was to: "Give freedom to explore and take risks, have fun while keeping them safe", "guide, extend and support", "provide safe challenges", "follow their interests", and "offer new materials".

The children's responses, in this study, may indicate that the children perceived the adults' presence, especially in games and on the climbing area as desirable, possibly because the adult participation adds value to their play and creates an equality not so easily found indoors, as noted by Sheridan and Pramling-Samuelsson (2001). The lack of willingness to be involved in dramatic play, expressed by the teachers, reflects an interesting dichotomy between valuing 'play for' children but not 'play with' children, which is exactly what the children had picked up on. Louise's beliefs and reasons for non participation are reflected in the views given by the Swedish female teachers in the Sandberg and Pramling-Samuelsson (2005) study. The findings were that female teachers showed no play willingness but did think it was important to create inspiring outdoor play environments, just as Louise did. However as Claxton and Carr (2004) state the early childhood teacher is able to enhance, extend and make their play more meaningful, without taking over and controlling it.

The two teacher's aim outside was to provide safe tempting fun challenges that followed children's interests (Bilton, 2002; Greenman, 2005). Louise and Maya ensured that they offered new materials, supported and guided their play, but they certainly did not lead it. The teachers' beliefs about their role reflected the Piagetian belief that the adults' role is to provide a stimulating environment and then children should be left relatively free to discover, explore, problem solve, and experiment. Stephenson (1998) noted that the teachers in her New Zealand study also ascribed to this view but went beyond it and did get very involved at times; for example when coaching. I did observe that when striking and catching was introduced, using a bat and ball placed on top of traffic cones, that other teachers were instructing and supporting the children to hit the ball.

Hesitancy, as on the part of Louise and Maya, to teach fundamental movement skills is detrimental according to Gallahue (1989). The research I reviewed where appropriate skill building programmes had been put in place, showed children in early childhood settings made gains in their overall fundamental movement skills as a result ( e.g. Deli, Bakle & Zachpoulu, 2006; Hands & Martin, 2003). Suzanne's difficulty in employing teachers who have enough knowledge, passion and interest about the outdoors and their role within it was attributed to there being little content on the outdoors and fundamental movement skills in Teacher Education programmes, along with personal values and attitudes. Kolt et al. (2005) found early childhood settings and the educators, who work within them, were the most commonly cited barriers to movement and physical activity. Other studies over the years had similar findings regarding teachers' values, attitudes and subject knowledge (Cullen, 1993; Davies, 1996; Davis, 1998; Hutt et al, 1986; Temple & O'Connor; Stephenson, 1998).

### ***Passion and interest of teachers and the need for ongoing professional development***

Suzanne believed that ongoing professional development was needed to keep staff motivated and the reality was that the interest and passion of individual teachers has a huge impact on what happens for children outside. For example it was after teachers watched a video on physical skill development that tennis balls, bats, cones and

basket ball hoops were introduced. Observing the children several days after striking, catching and throwing had been introduced, showed a considerable development in the way they were playing. The play took on a new dimension, and it was obvious that the teachers had got it right, for example, in ensuring they had more tennis balls than there were children. Bilton (2002) states that children do need to be taught specific skills like throwing and catching, and some children need ideas on how to transition from the ladder or box to the monkey bars, and how to move under them.

The teacher's role and the 'elements of opportunity' are all connected and the 'interrelationships' between people, places, things and events is one of the significant findings that will be discussed further.

## **The Interrelationships Between Values, Perspectives and Provision**

*Children's learning and development are fostered ... if there is a strong connection and consistency among all aspects of the child's world* (Ministry of Education, 1996, p.42).

The outdoor space, in this setting was an optimal environment and when the 'outdoor space', is in harmony with pedagogical values then it follows that these environments respect children in a way that honours their development. *Te Whāriki*, upholds the belief that a "strong connection and consistency among all the aspects of the child's world" ....and "respect for all aspects of that child's world is crucial for learning and development to be fostered" (Ministry of Education, 1996, p. 42).

The valuing of the outdoors means creating a place you want to be in. For Suzanne, the centre owner, it was about creating a place where children, families and staff felt at home. "To live in an environment that has to be, endured or ignored, rather than enjoyed, is to be diminished as a human being" (Sinclair Gaudie, 1969, cited in Greenman, 2005, p1). This study highlights and research indicates that there is a strong connection between the early childhood outdoor environment, the policies, philosophies and practices of teachers and management that underpin the centre and the opportunities for vigorous physical activity (Bayes, 2005; Dowda et al, 2004; Hutt et al., 1986).

The centre outdoor setting reflected the centre owner's values and her critical pedagogy of place' and confirmed the validity of those values regarding the type of outdoor setting children have the right to experience. The parents, by placing the children in this setting, have had their own beliefs and values about the values of the outdoor for children affirmed and thus continue to participate in outdoor experiences with their children. So the child, as an active participant in the micro-systems of home, the centre, and the local community, where being outside is valued, has responded positively to these outdoor experiences. This is not only due to the external influences but also because these influences match the innate, biological drive within the child to engage with the natural world, '*biophilia*' (White & Stoecklin, 1998), and to be physically active.

Hence, there is a harmony across the participants' views on the value of the outdoors and an understanding of the relationship principle. Relationships between: the people factor- family, community, children, teachers; the environment factor – outdoor physical setting (natural and man-made); and holistic development: physical, cognitive, language, emotional, social, moral and spiritual; and the wider New Zealand education, political, cultural context. The model of learning that *Te Whāriki* is based on is one where “cognitive, social, spiritual, cultural, emotional and physical development are integrally interwoven” (Ministry of Education, 1996, p. 41). Learning is inherent within the child, children want to learn, and the child learns through the *whāriki* (woven mat) of relationships with people, places, things and events.

This harmony and connectedness across the participants' perspectives, I argue, clearly stems from the parents making a very considered choice as to the type of place they wanted the child to spend his or her day in. In this case, a centre that had similar values to their own, regarding the benefits of being outside and the type of outdoor environment children should be in; a large outdoor playspace, real grass, trees, and philosophy and practices that said 'your child is important'. The participants seemed to understand the connection between the environment, learning, and people. As Ceppi and Zini (1998, p.12) suggest a relational space is “an environmental fabric

rich in information, without formal rules...with a recognisable feel about it, in harmony with a set of values...it is able to stimulate and permit”.

## **Summary**

The centre outdoor setting provided elements of opportunity for: the health and holistic development of the children; playing, learning, imagining; vigorous active movement and developing physical skill; rearranging and transporting and exploring and experiencing nature, and the natural, aesthetic and wider world.

The power of the environment to promote relationships between all human and non human participants, though often underestimated in early childhood settings (Ridgeway and Hammer, 2006; Dubek, 2005; Greenman, 2005) was found in this study to be understood, especially by the adult participants, and in their own way by the children.

The teacher’s role in the outdoors requires a balance between safety and supervision and providing challenges and allowing children to take risks. There was a variance in opinion regarding the level of involvement by teachers and whether they should teach fundamental movement skills. The children thought teachers should ‘play’ with them. The passion, interests, values and attitudes of the centre owner and the individual teachers impacted on provision in the outdoors.

The principle of ‘relationships’ was evident from the findings reported in chapters four and five. Relationships’ along with ‘play’ became an overarching theme that linked all the parts together. When there is ‘harmony’ within the micro systems the child participates in, and from systems further out, then the child’s experiences in the outdoors are much more likely to be potentially beneficial and rich.

## Chapter Seven: CONCLUSION

The discussion in the previous chapter brought together the children's and adults perspectives on the outdoors, as presented in the findings in chapters four and five. Listening to the centre owner, parents, teachers and children provided an opportunity to open up new ways of thinking about the outdoor environment in which children want to spend so much of their time. The findings that came from listening to the participants' perspectives and examining those perspectives in relation to the research literature are summarised in the first section of this final chapter. I will then identify: the contributions this study makes and the implications for early childhood provision. This is followed by a reflection on the research procedures and tools, noting effectiveness, highlights and challenges and then limitations identified and areas for future research.

### Summary of Findings

The central claim of this thesis is that why children are motivated to be outside is so they can play, get to know the physical world, become environmentally competent, and therefore develop a sense of who they are. For the children in this study 'play' included: being physically active and moving in increasingly complex ways; exploring their place, their world; and engaging with nature, humans and non-humans. As in this study, when the adults in the child's life know this and value these elements of the outdoors, and teachers and centre owner hold a 'critical pedagogy of place' then comes mutuality, joint participation, shared wonder, holistic growth and learning environments are developed that mirror the learning they are to support; a sense of harmony is created. However, as this study also found knowing and implementing do not always coincide.

It was discovered that there is a clear interrelationship between adults' values and outdoor provision and what teachers do and that harmony can eventuate between pedagogical practice and the environment when all families, teachers and centre owner's have analogous values and beliefs, as evident in this study. All the participants valued what the centre outdoor setting had to offer, had a common sense

approach to safety and risk taking and the adults saw it as a learning environment, which in turn impacted on access, provision and what children actually did outside. Valued above all else by the children and the adults was the freedom to actively move, try out new skills, practise them, take risks and be inventive in how they used their bodies and having the equipment to do so. What was also significant was how much cognitive growth, imagination and creativity, went alongside their physical engagement with the equipment; as well as having fun with friends and gaining a sense of accomplishment. The large flexible climbing equipment, especially the monkey bars, was their favourite area. The equipment in this area provided opportunity for the children to: relate their body to the environment by climbing, clambering, sliding, swinging and balancing; test themselves in terms of strength, mobility and dexterity; take risks, and enjoy movement for its own sake.

All participants valued the natural and aesthetic elements present in the outdoor settings. It was evident in this study how significant, in regards outdoor provision, was the influence of knowledgeable, committed early childhood centre management, in this study the centre owner. I learnt that the families had made conscious decision to choose a centre for their child (children) with an outdoor area was spacious, full of natural elements like grass and trees had a varied terrain and where children had indoor-outdoor access for most of the day and opportunity to mix with siblings.

Connecting links between home, centre and their wide community were constantly being made by all participants but especially the children. Their qualified responses and explanations for preferences were an expression of their acquisition of concepts as sought to make sense of their world, to understand it, in light of past and present experiences and their social interactions.

The most prevalent view on the teacher's role was 'Give freedom to explore and take risks, have fun while keeping them safe', 'guide, extend and support', 'provide safe challenges'. The centre owner and the children expressed that they would like the teachers to be more involved; 'play games with us' was the children's view. The parents had a very common sense approach to minor accidents and expected teachers to encourage risk taking.

## Contributions of the Research

This study contributes to the methodology of research with young children highlighting the importance of using a diverse range of research tools that empower the participants, especially young children, and in particular using photo novella and photo elicitation, as a means of eliciting their perspectives.

The results of this study contribute to our understanding of what it is about the outdoors that children and their parents' value. This study affirms that the young children, who increasingly becoming consumers and customers both of product and services (Kjorholt, Moss & Clark, 2006), have something extremely important to say about their early childhood centre outdoor environment and that they have ideas on what else they might like to have in that environment.

This study contributes to understanding of how playground design influences children's play behaviour and development. It also makes a highly important contribution to understanding why the monkey bars are so well used. There is virtually no research that has sought to explain why monkey bars are so popular in early childhood settings. The monkey bars emerging as a clear favourite is an important one for playground design, as it is the children saying we need to move in complicated ways, we like to hang upside down and we need multiple, graduated ways to move.

This study further contributes to an understanding of *Te Whāriki* principles, strands and goals in relation to the outdoors and connecting links between family, community and centre. Freedom to choose, from a diverse range of early childhood settings, has for many years been hailed a strength of New Zealand early childhood service provision. The findings of this study support the premise that parents' value 'choice' and when able they will choose centres for their children that match their own values.

This study adds to the findings of the other studies reviewed, that 'playing outside' is far more important to children and far more significant to their holistic development than we have perhaps realised due to having historically studied children's play through theoretical lens that were reductionist and restrictive.

## Implications for Early Childhood Education Outdoor Provision

Critical to children's learning outside is the design of the outdoor space and the ongoing provision for play within the physical setting. This is where if management and teachers, as in this study have a critical pedagogy of place then elements of opportunity for holistic growth and development will abound. This study strengthens our understanding of how the physical environment of the early childhood centre is the third teacher, a principle underpinning the Reggio approach (Edwards & Gandini, 1998). that is slowly being recognised in New Zealand (Bayes, 2005). If this principle is ascribed to then the design of the environment and what is put into it requires very careful planning and aesthetic reflection. Though a critical pedagogy of place was held by the teachers and centre owner I am not sure that a critical pedagogy of place is widely understood in early childhood education but *Te Whāriki* principles and the emphasis on "*children [and families] experience an environment where*" certainly provides a platform upon which we can critique outdoor provision in early childhood centres (Ministry of Education, 1996).

The outdoor spaces we provide for young children must, as this study confirms, allow children the freedom and opportunity to be physically active; especially to run, climb, swing, slide, balance, hang upside down, dig, jump, and engage with water. Provision of loose parts and a variety of vehicles to transport these in, are also necessary, as is provision of places where they can hide and create imaginary worlds. Teachers need to take responsibility for providing a range of activities, space, resources and equipment within the outdoor environment that will promote and allow for children to develop "increasing knowledge about how to keep healthy; increasing control over bodies, including locomotor skills, non-locomotor skills, manipulative skills and increasing agility, co-ordination, and balance" (*Te Whāriki*, Ministry of Education, 1996, p.86). It was the children who highlighted the significance of the monkey bars, in meeting this *Te Whāriki* goal.

This study substantiates that children and their parents do notice and appreciate the natural and aesthetic aspects of the outdoor environment. Increasingly, as evident in the literature there is a call for early childhood centres and communities to create the necessary diversity of experience of the natural world to empower children as

individuals to “create a new, biologically wise society” (Cosco & Moore, 2000). The implication of this is that early childhood centres must strive for provision of optimal outdoor environments (physical settings plus wise adults) that will support the development of environmental competence, a love of nature, a sense of being part of nature, understanding how nature works, and that humans are dependent on nature (Cosco & Moore, 2000).

Children seek and need to have a “relationship with the natural environment and knowledge of their own place in the environment” as stated in *Te Whāriki* (Ministry of Education, 1996, p. 90), and evident in this study. Therefore early childhood teachers and the centre environment have a role in deepening empathetic connection and expanding the possibilities for learning outwards (Gruenewald, 2003).

The children enjoyed having adults join in their games and who participated in their outdoor play and they sent a clear message to their teachers that it was okay to play. Children do value and appreciate being taught new skills and opportunities to be physically challenged, and this should be part of the teacher’s role. The teachers within a setting, as in this study, will always bring their own values and interests and will influence what happens for children (Ridgway & Hammer, 2005). As with any curriculum in an early childhood centre some areas are privileged over others. That is valid as long as this privileging can be pedagogically justified and not due to a personal lack of interest by teachers.

Being outside is important to children for playing with friends and siblings. However this study highlighted that teachers, working a mixed age outdoor setting, need to be aware of the limitations and strengths of mixed age provision for all children in that setting, and plan accordingly.

This study convincingly demonstrated that unrestricted indoor-outdoor access is not only possible but is optimal for young children’s foundational learning across all domains of development, which needs to be understood by all primary and early childhood teachers and parents. With early childhood regulations under review the sector needs to look at what unrestricted access to the outdoors means. The literature reviewed revealed that several factors lead to a restriction of access to the outdoors.

One is a lack of understanding of the value of outdoor play by parents, teachers, school management and policy makers (Frost, 2006). The personal passion and interest of teachers and centre owners profoundly impact on outdoor provision. It appears that teachers are under-prepared for promoting and extending children's outdoor play, and require ongoing professional development.

There are many relationships with an early childhood centre and they are all interconnected, each influencing the other. Children are constantly making connections between home, centre and their communities. Being outside can have a powerful role to play in fostering those connections. The pedagogy of relationships is a concept that has come into the forefront of early childhood education in New Zealand over recent years, through the influence of the pedagogical practices of the educators and community in Reggio Emilia, Italy (Bayes, 2005). *Relationships* is one of the foundation principles upon which *Te Whāriki* is based and it is not just about partnership with families, it is about all relationships including relationships with the outdoor environment, nature, the natural and the wider world.

What the children in this study have reminded us is that in spite all the rhetoric on play that abounds in early childhood education, play cannot be renamed. The findings from this study that: children say they need to play, they most prefer to play and playing is what children like to do, is mirrored in all other studies that have sought children's views on their experiences in early childhood settings (Sheridan & Pramling-Sameulsson, 2001; Stephenson, 1998; Wiltz & Klein, 2001; Wolfgang & Phelps; 1983). The implication is that we must critically reflect upon play in light of current theory and research, and not allow the term play to become extinct or relegated to narrow definitions.

## **Reflection on Research Tools: effectiveness, highlights and challenges**

This study adds support to the growing understanding that the Mosaic Approach is an effective, flexible and authentic approach to use when engaging in research involving young children. By adapting and adding to the range used by Clark and Moss (2001, 2005), as they themselves encouraged, I was able to further explore research tools

that I believe were empowering for participants and provided multiple ways for them to share their views. The use of multiple tools resulted in data that increased significantly the trustworthiness, and authenticity of this study than if I had only used one or two tools.

Data from the planned observations was useful for discovering the areas and equipment used at specific times and by whom. The data from the time-sampling provided a general picture of the usage of the setting.

Some of the most satisfying moments in the study were those when the children took complete control of the data collection and I was very much a participant, following their direction – ‘record this, photograph that, write this, do that’. The relevance of this is that it demonstrated that the research tools appealed to the children, they understood their purpose and they were meaningful to them.

Photo-elicitation as a method of interviewing worked much more effectively than I had imagined, as found by Clark and Moss (2005,) Warming (2006), and Wiltz and Klein (2001). Using the assorted pictures proved to be a very non-threatening way of opening up conversations and gave me an insight into how they felt about other outdoor experiences, not provided within the centre setting, or that I had not been around to observe. I had not anticipated that looking at the assorted pictures would be such a social event, a time when they sought each others opinions. They proved to be effective interviewers of each other, a research tool worth exploring further.

The photographs taken by the participants and myself were used in three ways: (1) as ‘aides memoires’ in the course of fieldwork; (2) as sources of data in their own right; and (3) as prompts for discussion by research participants (Altrichter et al., 1993; Bryman, 2004; Kervin et al, 2006), all of which added to the richness of the written observations, the descriptions developed, the discovery of the children’s perspectives on outdoor setting and authenticating the findings.

The use of non-verbal research tools like drawing and photography, proved immensely valuable, especially for the more reticent children, like Krissy and Paloma, and gave them visual and action languages that enabled these more taciturn

children to register, develop and share their interest and views ( Carr, Jones & Lee, 2005; Gollop, 2000). Other researchers have also found that there is more to gain from listening to young children's talk during the drawing process (Clark, 2005b; Dockett & Perry, 2003; Fisman, 2001), rather than afterwards.

The children having a camera each to use (Photo Novella) seemed to be an empowering learning experience for all children and validated my decision to not restrict the number they could take to only a few frames as most researchers had done in the studies I reviewed. This finding is consistent with other studies where children have taken photos of the important places and people in their early childhood centres (Einarsdottir, 2005). Not only did the children's photographs offer unrivalled information in understanding the children's perceptions (Brooker 2001), photo novella proved to be an enjoyable experience and one that has subsequently led to children discovering a new found interest and area of expertise. At times as I read through and looked at the data collected, I could see that this project empowered the children to see themselves as competent in taking photographs.

Parents had commented that their children had talked a lot about their pictures at home, and I observed them showing them and talking about them to other children and teachers. Surprisingly looking at their own photos with me did not generate as much discussion as did looking at the assorted pictures I had used for photo elicitation. This was disappointing in some ways but at the time I felt a tension between wanting children to tell me about their photos so I could understand their perspective better, and wanting their responses to be on their terms, which meant respecting short answers, nods, smiles and grins. I realised that in asking them to photograph the things and places they liked outside, they had indeed done as I asked, a matter of trust that their photos were of the places, spaces and people they valued most. Certainly this assumption has been validated by the findings from the other data sources and from findings from similar studies (Clark and Moss, 2005; Einarsdottir, 2005). However in hindsight the strategy Hart (1979) used of asking the children to order their photos from most favourite to least, may well have been a more effective strategy, than just looking at them in their albums.

Recording the conversations I had with the children, using a micro-cassette recorder enabled me to attend to the child. In fact using the tape-recorder became an expectation by the children who often approached me asking to be interviewed and then wanted to listen to themselves. Similar fascination for the ‘sound of their own voices’ has been described by Evans and Fuller (1996, cited by Clark, 2005).

During bookmaking the noticeable aspect was that the children were so excited to see so many photos of themselves taken by other children or myself. As they created their pages it became very apparent that having themselves on the pages was very meaningful. It struck me that perhaps that was why with their own photos, the younger ones especially had been a little disappointed that they could not find themselves in their photos. Hamish said when looking at his photos with me “where is Hamish?” So the pages they created in the book became a wonderful way of them seeing themselves engaging in the outdoor setting doing what was most important - playing.

The two parent focus groups proved to be an effective way not only for me to gain insight into parents’ perspectives on the outdoors but for them to listen to each other and discover how much in common they had. The parent journal provided insightful data and was especially useful for those parents who could not make the focus group meetings. The journal data also provided valuable richness to my understanding of the children’s and adults perspectives.

## **Limitations**

A limitation of the study is my pakeha perspective and that I decided not to include a Maori perspective of the outdoors that would have included the concept of *papātuanuku* and the importance of *whenua*. This was due to: word limit constraints, and to being a Pakeha researcher, there being no Maori participants and concern over the appropriateness of me incorporating these elements. I acknowledge that another limitation of this study is that the participants were predominantly white and middle class, and therefore a broader range of cultural and ethnic perspectives on being outdoors was restricted.

This study involved a single early childhood centre with some typical and non-typical outdoor features, so it does limit the generalisability of some of the data.

Subjectivity, interpretation and context are very much interwoven in qualitative research and I have acknowledged these where I am aware of them.

## **Future Research**

Future research based on this study could take into consideration the limitations I have identified. It would be useful for any future study to find ways to include the richness that a Maori perspective would bring and under our commitment to Tiriti o Waitangi a collaborative project would be appropriate, that involved te Kohanga reo. It would also be useful to repeat this study in different types of early childhood centres that have a greater diversity of families and different types of outdoor settings.

In this study the values and beliefs of the centre owner in particular were major influences on the outdoor provision and worthy of further investigation in a range of early childhood settings. How much do the values and beliefs of the teachers and parents (the dominant culture) influence what outdoor experiences children (minority culture) have and to what effect? A 'critical pedagogy of place provides a contextual framework to think about how politics and the dominant culture influence the materials and physical space we place children in (Gruenewald, 2003). How much has a consumer society driven the play-spaces we provide for children? Do the children inhabit or just reside in early childhood spaces? Children's 'sense of place' is highly relevant to *Te Whāriki* aspirations.

Future research needs to investigate the best way to cultivate awareness of our interrelationships with nature and the natural world. Is it better to just facilitate children's natural appreciation of their relations with their bodies, their environments and nonhumans? Or in order to counter the erosion of experiences with the natural world do teachers do have a responsibility to nurture the child's connectedness to nature? Research carried out collaboratively with early childhood teachers on this aspect could be immensely helpful.

## **Final comments**

This study provides a convincing thesis that young children want to play outside and have the right to play in optimal outdoor environments as much as possible. It is not just about letting children go outside but providing outdoor settings that awaken their senses to the beauty, complexity and ever-changing dynamics of the natural world; that honour children as curious and motivated to explore and problem solve, be physically challenged, to practice and repeat experiences, and then move on to new challenges. The purpose of any early childhood outdoor setting design is to ensure that the necessary stimuli are ever-present in the child's environment to set this learning process in motion through play.

Children need teachers who appreciate and value the opportunities for growth and development the outdoors can provide, and who have the knowledge, skills and advocacy to ensure that young children's experiences in the outdoors areas are rich and as meaningful as possible. Anything less, as this thesis argues, is to place our youngest citizens in a form of prison, where going outside is at the whim of the adult, often a reward for good behaviour or to burn off energy.

Optimal outdoor environments are essential, and being outside is essential: as Jack said "because children like to play outside".



## REFERENCE LIST

- Alderson, P. (2000). Children as researchers: The effects of participation rights on research methodology. In P. Christensen & A. James (Eds.), *Research with children: Perspectives and practices* (pp. 241- 257). London: Falmer Press.
- Altrichter, H., Posch, P., & Somekh, B. (1993). *Data collection. Teachers investigate their work: An introduction to the methods of action research*. London: Routledge
- Arthur, L., Beecher, B., Dockett, S., Farmer, S., & Death, E. (2005). *Programming and planning in early childhood settings* (3rd ed.). New South Wales: Harcourt Brace.
- Ascione, F. (2005). *Children and animals: Exploring the roots of kindness and cruelty*. West Lafayette, Indiana: Purdue University Press.
- Ataov, A. (2004). *Water as part of children's environment & children's preferences for waterfront settings*. Paper presented at the First International Conference on Inclusive Environments: Open Space-People Space, 2004, Edinburgh, Scotland.
- Auerbach, C., & Silverstein, L. (2003). *Qualitative data: An introduction to coding and analysis*. New York: New York University Press.
- Banks, M. (2001). *Visual methods in social research*. London: Sage.
- Barbour, A. C. (1999). The impact of playground design on the play behaviours of children with differing levels of physical competence. *Early Childhood Research Quarterly*, 14(1), 75-98.
- Bassey, M. (1999). *Case study research in educational settings*. Buckingham, Britain: Open University Press.
- Bayes, C. (2005). "Provocations of Reggio Emilia": *Educators making meaning about curriculum*. Unpublished Thesis, Auckland College of Education, Auckland.
- Berg, B. L. (2004). *Qualitative research methods for the social sciences*. Boston: Pearson Allyn & Bacon
- Berk, L. (2004). *Development through the lifespan* (3rd ed.). Needham Heights: Harcourt Brace.
- Bilton, H. (2002). *Outdoor play in the early years: management and innovation* (2nd ed.). London: David Fulton.
- Bilton, H. (2005). *Learning outdoors: Improving the quality of young children's play outdoors*. London: David Fulton.

- Bronfenbrenner, U. (1979). *The ecology of human development: experiments by nature and design*. Cambridge, M.A.: University Press.
- Bronfenbrenner, U. (1988). Foreword. In A. Pence (Ed.), *Ecological research with children and families: From concepts to methodology* (pp. ix-xix). New York: Teachers College Press.
- Brooker, L. (2001). Interviewing children. In G. McNaughton, Rolfe, S., & I. Siraj-Blatchford (Ed.), *Doing early childhood research: International perspectives on theory and practice* (pp. 162 - 177). Buckingham, U.K: Open University Press.
- Brown, P., Sutterby, J., & Thornton, C. (2001). *Dramatic play in outdoor play environments*. Retrieved March 14th, 2005, from <http://www.ptotoday.com/play3.html>
- Browning, P. C., & Hatch, J.A. (1995). Qualitative research in early childhood settings: A review. In J. A. Hatch (Ed.), *Qualitative research in early childhood settings*. Westport: Praeger.
- Bruner, J. (1990). *Acts of meaning*. Cambridge: Harvard University Press.
- Bryman, A. (2004). *Social research methods* (2nd ed.). Oxford: Oxford University Press.
- Buckley, T. (2006, November 8). Warning kids at risk from bone disease. *Manukau Courier*, p.1.
- Burdette, H., & Whitaker, R. (2005). Resurrecting free play in young children: looking beyond fitness and fatness to attention, affiliation and affect. *Archives of Paediatrics & Adolescent Medicine*, 159 (1), 46-50.
- Burrows, L. (2002). Constructing the child: developing discourses in school physical education. *New Zealand Journal of Educational Studies*, 37(2), 127-140.
- Burton, A., & Rodgeron, R. (2003). The development of throwing behaviour. In G. Savelsbergh, K. Davids, J. van der Kamp & Bennett (Eds.), (pp. 225-240).
- Carr, M. (2001). *Assessment in early childhood settings: Learning stories*. London: Paul Chapman Publishing.
- Carr, M., Jones, C., & Lee, W. (2006). Beyond listening: can assessment practice play a part? In A. Clark, A. Kjørholt, & P. Moss (Eds.), *Beyond listening: children's perspectives on early childhood services*. Bristol, UK: The Policy Press.
- Chawla, L. (2002). Insight, creativity, and thoughts on the environment: integrating children and youth into human settlement development. *Environment & Urbanisation*, 14(2), 11-22.

- Christensen, P., & James, A. (2000). Childhood diversity and commonality: some methodological insights. In P. Christensen & A. James (Eds.), *Research with children: Perspectives and practices* (pp. 160-178). London: Falmer Press.
- Ceppi, G., & Zini, M. (Eds.), *Children, spaces and relations*. Reggio Emilia, Northern Italy: Reggio Children and Domus Academy Research Centre.
- Clark, A. (2005a). Listening to and involving young children: A review of research and practice. *Early Child Development and Care*, 175 (6), 489-505.
- Clark, A. (2005b). Talking and listening to children. In M. Dubek (Ed.), *Children's spaces*, (pp.1-13). London: Elsevier.
- Clark, A. (2005c). The silent voice of the camera? Young children and photography as a tool for listening. *Early Childhood Folio: A Collection of Recent Research* (9:2005), 28-33.
- Clark, A., Kjørholt, A., & Moss, P. (Eds.). (2006). *Beyond listening: children's perspectives on early childhood services*. Bristol: Policy Press.
- Clark, A., & Moss, P. (2001). *Listening to children: The mosaic approach*. London: National Children's Bureau: Rowntree Foundation.
- Clark, A., & Moss, P. (2005). *Spaces to play: More listening to young children using the mosaic approach*. London: National Children's Bureau.
- Clarke, D. (2003). Where's your trackie dacks and whistle: Using stories to explore pre-service teachers' meanings of physical education. In G. Whiteford (ed.), *Proceedings of the Inaugural RIPPLE Conference Qualitative Research as Interpretive Practice 2003* (pp. 162-175). Albury, Australia: RIPPLE, Charles Sturt University.
- Claxton, G. & Carr, C. (2004). A framework for teaching learning: The dynamics of dispositions. *Early Years*, 44 (1).
- Clements, R. (2004). An investigation of the status of outdoor play. *Contemporary Issues in Early Childhood*, 5(1), 68-80.
- Cohen, L., Manion, L., & Morrison, K. (2000). *Research methods in education* (5th ed.). London: Routledge Falmer.
- Corsaro, W., & Miller, P. (Eds.). (1992). *Interpretive approaches to children's socialisation*. San Francisco: Jossey Bass Publishers.
- Cosco, N., & Moore, R. (1999). *Playing in place: Why the physical environment is important on playwork*. Paper presented at the 14th Playeducation Annual Play and Development Meeting: Theoretical Playwork, Ely Cambridgeshire, U.K. January 26-27, 1999.

- Cosco, N., & Moore, R. (2001). Developing an earth bound culture through design of childhood habitats. In J. Farris, M. Morris, C. Norman, & J. Semple (Eds.). *People, land, sustainability: A global view of community gardens* (pp1-7). Nottingham: Nottingham University
- Cremin, H. S., & Slatter, B. (2004). Is it possible to access the 'voice' of pre-school children? Results of a research project in a pre-school setting. *Educational Studies*, 30(4), 457-470.
- Cresswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks, California: Sage Publications.
- Cullen, J. (1993). Preschool children's use and perceptions of outdoor play areas. *Early Childhood Development and Care*, 89, 45-56.
- Cullen, J. (1996). Influences on young children's knowledge: The case of road safety education. *International Journal of Early Years Education*, 6(1) 39-48.
- Cullen, J. (1998). "He just runs around all day": Implications for early childhood curriculum. *Early Education*, 16(Autumn), 7-11.
- Cullen, J., & Allsop, G. (1999). *Enriching the knowledge base of children's play*. Paper presented at the Seventh Early Childhood Convention, Nelson, 27-30 September, 1999.
- Cullen, J. (2003). The challenge of Te Whāriki: Catalyst for change? In J. Nutall (Ed.), *Weaving Te Whāriki* (pp. 269-290). Wellington: New Zealand Council for Educational Research.
- Dahlberg, G., Moss, P., & Pence, A. (1999). *Beyond quality in early childhood education and care: Postmodern perspectives*. London: Falmer Press.
- Davies, M. (2003). *Movement and dance in early childhood*. London: Paul Chapman.
- Davies, M. M.(1996). Outdoors: an important context for young children's development. *Early Child Development and Care* (115), 37-49.
- Davis, J. (1998). Young children, environmental education and the future. *Early Childhood Education Journal*, 26(2), 117-122.
- DeBord, K., Hestenes, L., Moore, R., Cosco, N., & McGinnis, J. (2002). Paying attention to outdoor environment is as important as preparing the indoor environment. *Young Children*, 57(3) 32-35.
- Delamont, S. (2002). *Fieldwork in educational settings: Methods, pitfalls and perspectives* (2nd ed.). New York: Routledge.

- Deli, E., Bakle, I., & Zachopoulou, E. (2006). Implementing intervention movement programs for kindergarten children. *Journal of Early Childhood Research*, 4(1), 5-18.
- DeMarie, D. (2001). A trip to the zoo: Children's words and photographs. *Early Childhood Research & Practice*, 3(1), 1-26.
- Denscombe, M. (2002). *Ground rules for good research: a 10 point guide for social researchers*. Buckingham, UK: Open University Press.
- Denzin, N., & Lincoln, Y. (2003a). Introduction: The discipline and practice of qualitative research. In N. Denzin & Y. Lincoln (Eds.), *The landscape of qualitative research: Theories and issues* (pp. 1-46). Thousand Oaks, California: Sage Publications.
- Dietz, W. (2006). Cited in *Exchange Every Day*, April 17, 2006. Retrieved April 17, 2006 from <http://childcareexchange.com/eed/issue?id=1440>
- Dighe, J. (1993). Children and the earth. *Young Children*, 48(3), 58-63.
- Dockett, S., & Perry, B. (2003). Children's views and children's voices in starting school. *Australian Journal of Early Childhood*, 28(1), 4-18.
- Doherty, J., & Bailey, R. (2003). *Supporting physical development and physical education in the early years*. Buckingham: Open University Press.
- Dowda, M., Pate, R., Trost, S., Almeida, M., & Sirard, J. (2004). Influences on preschool policies and practices on children's physical activity. *Journal of Community Health*, 29, 183-196.
- Dudek, M. (2005). Digital landscapes- the new media playground. In M. Dudek (Ed.), *Children's spaces* (pp. 154-177). London: Elsevier.
- Duncan, J. (2006). Aspiring to quality - culturally constructed. *Early Childhood Folio*, 10:2006, 33-36.
- Edwards, A. (2001). Qualitative designs and analysis. In G. MacNaughton, Rolfe, S., & Siraj-Blatchford, I. (Ed.), *Doing early childhood research: International perspectives on theory and practice* (pp. 117-134). Buckingham, England: Open University Press.
- Edwards, C., Gandini, L., & Forman, G. (Eds.). (1998). *The hundred languages of children: the Reggio Emilia approach - advanced reflections* (2nd ed.). Greenwich: Ablex Publishing Corporation.
- Eide, B.J., & Winger, N. (2005). From the children's point of view: methodological and ethical challenges. In A. Clark, A. Kjørholt, & P. Moss (Eds.) *Beyond listening: Children's perspectives on early childhood services* (pp. 71-90). Bristol, UK: The Policy Press.

- Einarsdottir, J. (2005). Playschool in pictures: children's photographs as a research method. *Early Child Development and Care*, 175(6), 523-541.
- Farquhar, S. (2003). *Quality teaching foundations: Best evidence synthesis (best evidence iteration)*. Wellington, New Zealand: Ministry of Education.
- Farver, J. (1992). An analysis of young American and Mexican children's play dialogues: Illustrative study #3. In C. Howes (Ed.), *The collaborative construction of pretend: Social pretend play functions*. (pp. 55-63). Albany: State University of New York Press.
- Fasoli, L. (2003a). Reading photographs of young children: Looking at practices. *Contemporary Issues in Early Childhood*, 4 (1),32-47.
- Fasoli, L. (2003b). Reflections on doing research with young children. *Australian Journal of Early Childhood*, 28(1), 7-11.
- Finch, H., & Lewis, J. (2003). Focus groups. In J. Ritchie, & J. Lewis (Eds.), *Qualitative research practice: a guide for social science students and researchers* (pp. 170-198). Thousand Oaks, California: Sage Publications.
- Fisman, L. (2001). *Child's play: An empirical study of the relationship between the physical form of schoolyards and children's behaviour*. Retrieved June 1, 2006, from [http://www.yale.edu/hixon/research/pdf/LFisman\\_Playgrounds.pdf](http://www.yale.edu/hixon/research/pdf/LFisman_Playgrounds.pdf)
- Fjortoft, I. (2001). The natural environment as a playground for children: the impact of outdoor play activities in pre-primary children. *Early Childhood Education Journal*, 29(2), 111-119.
- Freeman, N., & Brown, M. (2004). Reconceptualising rough and tumble play: Ban the banning. In S. Reifel, & M.H. Brown (Eds.), *Advances in early education and daycare: Social Contexts of early childhood education, reconceptualizing play (II)*, Vol., 13, (pp.219-234).Oxford, UK: Elsevier.
- Friedman, D. (2006). *Report on collected ideas: summary of conversations from working forum on nature education*. Retrieved November 10<sup>th</sup>, 2006 from [http://www.worldforumfoundation.org/wf/wf2006\\_nature/collected\\_ideas.php](http://www.worldforumfoundation.org/wf/wf2006_nature/collected_ideas.php)
- Frost, J. (2006). *The dissolution of children's outdoor play: Causes and consequences*. Paper presented at Common Good Forum on The Value of Play, May 31, 2006, Washington DC. Retrieved on October, 10<sup>th</sup>, 2006 from <http://www.cgood.org/f-valueofplay.html>
- Gallahue, D. (1989). *Understanding motor development: Infants, children, adolescents*. Englewood Cliffs, N.J.: Prentice Hall.

- Garrick, R. (2004). *Playing outdoors in the early years*. London: Continuum.
- Gill, T. (2005). If you go down to the woods. *Ecologist (October, 2005) cited, in Exchange Everyday* Retrieved April, 17, 2006, from <http://www.childcareexchange.com/ed/issue.php?id+1440>
- Gillham, B. (2000). *Case study research methods*. London: Continuum
- Glesne, C. (1999). *Being there: Developing understanding through participant observation. Becoming qualitative researchers: an introduction* (2nd.ed.). New York: Longman.
- Glossop, R. (1988). Bronfenbrenner's ecology of human development: a re-appreciation. In A. Pence (Ed.), *Ecological research with children and families: From concepts to methodology* (pp. 1-15). New York: Teacher's College Press.
- Goelman, H. (1988). The relationships between structure and process variables in home and day care settings on children's language development. In A. Pence (Ed.), *Ecological research with children and families: From concepts to methodology* (pp. 16-34). New York: Teachers College Press.
- Goetz, J., & LeCompte. (1984). *Ethnography and qualitative design in educational research*. Orlando, Florida: Academic Press.
- Gollop, M. (2000). Interviewing children: a research perspective. In A. Smith, N. Taylor & M. Gollop (Eds.), *Children's voices: research, policy and practice* (pp. 18-36). Auckland: Pearson Education Limited.
- Goncu, A. (Ed.). (1999). *Children's engagement in the world: sociocultural perspectives*. Cambridge: Cambridge University Press.
- Graue, M. E., & Walsh, D. J. (1998). *Studying children in context: theories, methods and ethics*. Thousand Oaks, C.A.: Sage.
- Greenfield, C. (2002). The visibility and role of intersubjectivity and peer collaboration in young children's play and cognitive development. *New Zealand Research in Early Childhood Education, Vol.5* 2002, 49-66.
- Greenfield, C. (2004). Can run, play on bikes, jump the zoom slide, and play on the swings: Exploring the value of outdoor play. *Australian Journal of Early Childhood, 29*(2), 1-5.
- Greenfield, C. (2006). Enabling children's voices to be heard: the journey of one researcher. In G. Whiteford (Ed.), *Proceedings of Second RIPPLE QRIP Conference Qualitative Research as Interpretive Practice, 2005*, (pp.177-186). Albury, Australia: RIPPLE, Charles Sturt University.

- Greenman, J. (2005). *Caring spaces, learning places: environments that work*. Redmond, W.A: Exchange Press.
- Gruenewald, D. (2003). The best of both worlds: a critical pedagogy of place. *Educational Researcher*, 32(4).
- Guba, E., & Lincoln, Y. (1981). *Effective evaluation: improving the usefulness of evaluation results through responsive and naturalistic approaches*. San Francisco: Jossey-Bass.
- Halliday, J., & MacNaughton, S. (1982). Sex differences in play at kindergarten. *New Zealand Journal of Educational Studies*, 17(2), 161-170.
- Hammersley, M., & Atkinson, P. (1993). *Ethnography: Principles in practice* (2nd ed.). London: Routledge.
- Hands, B., & Martin, M. (2003). Fundamental movement skills: children's perspectives. *Australian Journal of Early Childhood*, 28(4), 47-51.
- Hannaford, C. (1995). *Smart moves: why learning is not all in your head*. Arlington, VA: Great Ocean Publishers.
- Harding, S. (2005). Outdoor play and the pedagogic garden. In J. Moyles (Ed.), *The excellence of play* (2nd ed., pp. 138-153). Berkshire, U.K.: Open University Press.
- Hart, R. (1979). *Children's experience of place*. New York: Irvington
- Hart, C., & Sheehan, R. (1986). Preschoolers' play behaviour in outdoor environments: effects of traditional and contemporary playgrounds. *American Educational Research Journal*, 23(4), 668-678.
- Hatch, T. (1990). Young children as informants in classroom studies. *Early Childhood Research Quarterly*, 5, 251-264.
- Hedges, H. (2001). A right to respect and reciprocity: Ethics and educational research with children. *New Zealand Research in Early Childhood Education*, 4, 1-18.
- Hedges, H. (2002). Beliefs and principles in practice: Ethical research with child participants. *New Zealand Research in Early Childhood Education*, 5, 31-48.
- Henniger, M. (1994). Planning for outdoor play. *Young Children*, 49(4), 10-18.
- Henniger, M. L. (1999). *Teaching young children: An introduction*. Upper Saddle River, N.J.: Merrill.
- Herington, S. (2005). The sustainable landscape. In M. Dudek (Ed.), *Children's spaces* (pp. 215-244). London: Elsevier.
- Hill, D. (2006). Play as a response to life. *The First years: Nga Tau Tuatahi. New Zealand Journal of Infant and Toddler Education*, 8(1), 3-4.

- Hughes, T., & Helling, M. K. (1991). A case for obtaining informed consent from young children. *Early Childhood Research Quarterly*, 6, 225-232.
- Hutt, J., Tyler, S., Hutt, C., & Christopherson, H. (1989). *Play, exploration and learning*. London: Routledge.
- Ihn, H. (2002). *Analysis of preschool children's equipment choices and play behaviours in outdoor environments*. Retrieved February 14th, 2005, from <http://www.earlychildhood.co./Articles/index.cfm?A=249&FuseAction=Article>
- Isenberg, J. P., & Quinsberry, N. (2002). Play: Essential for all children. *A position paper for the Association for Childhood Education International*. Retrieved on November 20<sup>th</sup>, 2006 from <http://www.acei.org/playpaper.htm>
- Kennedy, A. (2005a). Continuity in early education: building sociocultural connections. In M. Flear, S. Edwards, M. Hammer, A. Kennedy, A. Ridgway, J. Robbins & L. Surman (Eds.), *Early childhood communities: Sociocultural research in practice* (pp. 83-94). Frenchs Forest, NSW: Pearson.
- Kennedy, A. (2005b). Images of children: a picture tells a thousand words. In M. Flear, S. Edwards, M. Hammer, A. Kennedy, A. Ridgway, J. Robbins & L. Surman (Eds.), *Early childhood communities: Sociocultural research in practice* (pp. 15-26). Frenchs Forest, NSW: Pearson.
- Kennedy, A., & Surman, L. (2005). The pedagogy of relationships. In M. Flear, S. Edwards, M. Hammer, A. Kennedy, A. Ridgway, J. Robbins & L. Surman (Eds.), *Early childhood communities: Sociocultural research in practice* (pp. 44-56). Frenchs Forest, NSW: Pearson.
- Kervin, L., Vaille, W., Herrington, J., & Okely, T. (2006). *Research for educators*. Melbourne, Australia: Thomson, Social Science Press.
- Kitson, N. (2006). Fantasy play and the case for adult intervention. In J. Moyles (Ed.), *The excellence of play* (2nd ed., pp. 111-124). Berkshire, England: Open University Press.
- Kolt, G., Schofield, G., MacLachlan, C., Oliver, M., Lucas, P., Maddison, R., et al. (2005). *Active movement scoping exercise and programme evaluation -sport and recreation New Zealand*. Auckland, New Zealand: Auckland University of Technology.
- Kylin, M. (1999). *Making outdoor places for children*. Paper presented at Gothenburg Conference: Communication in urban planning. Gothenburg, October, 1999.
- Lave, J. (1991). Situated learning in communities of practice. In L.B. Resnick, J.M. Levine, & S.D. Teasley (Eds.), *Perspectives on socially shared cognition* (pp.63-82). Washington DC: American Psychological Association

- Lincoln, Y., & Guba, E. (2003). Paradigmatic controversies, contradictions and emerging confluences. In N. Denzin & Y. Lincoln (Eds.), *The landscape of qualitative research: Theories and issues* (pp. 253-291). Thousand Oaks, California: Sage Publications.
- Lockie, C., & Wright, J. (2002). The golden kiwi childhood –is it a lottery? *New Zealand Research in Early Childhood Education*, 5, 157-167.
- MacNaughton, G., & Rolfe, S. (2001). The research process. In G. MacNaughton, Rolfe, S., & Siraj-Blatchford, I. (Ed.), *Doing early childhood research: International perspectives on theory and practice*. Buckingham, U.K.: Open University Press.
- MacPherson, S. (2002). Learning our relations: Teaching reverence for living beings. *Connections*, 26(3), 13-18.
- Maguire, M. (2004). What if you talked to me? I could be listening! Ethical research considerations in engaging with bilingual/multilingual child participants in human inquiry [39 paragraphs]. *Forum: Qualitative Sozialforschung / Forum: Qualitative Social Research*, 6(6 (1), Art 4). Retrieved January, 2005, from <http://www.qualitative-research.net/fqs-txt/1-05/05-1-4-e.htm>
- Malaguzzi, L. (1993). For an education based on relationships. *Young Children*, 49(1), 9 - 12.
- Mayall, B. (2000). Conversations with children: Working with generational issues. In P. Christensen & A. James (Eds.), *Research with children: Perspectives and practices* (pp. 120-135). London: Falmer Press.
- Mergen, B. (2003). Review essay: children and nature in history (59 paragraphs). *Environmental History*, 8(4). Retrieved October, 10<sup>th</sup>, 2006 from <http://www.historycooperative.org/journals/eh/8.4/mergen.html>
- Merriam, S. B. (1998). *Qualitative research and case study applications in education* (2nd ed.). San Francisco: Jossey-Bass Publishers.
- Merriam, S. B., & Simpson, E. L. (2000). *A guide to research for educators and trainers of adults* (2nd ed.). Malabar, Fla.: Krieger Pub. Co.
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis* (2nd ed.). Thousand Oaks, California: SAGE Publications.
- Ministry of Education. (1996). *Te whāriki, he whaariki matauranga mo nga mokopuna o Aotearoa: Early childhood curriculum*. Wellington: Learning Media.
- Ministry of Education (2004). *Kei tua o te pae. Assessment for learning: Early childhood exemplars*. Wellington: Learning Media.

- Ministry of Education. (2006). *Draft criteria for licensing or certification of ECE services: Discussion document*. Wellington: Ministry of Education
- Moore, R.S. (1986). *Childhood's domain: Play and place in child development*. Berkley, C.A:MIG Communications
- Moran, M. J., & Tegano, D. (2005). Moving toward visual literacy: Photography as a language of teacher inquiry. *Early Childhood Research and Practice*. Retrieved August 28<sup>th</sup> 2005, from <http://ecrp.uiuc.edu/v7n1/moran.html>
- Nixon, J., Acton, C., Wallis, B., Ballesteros, M., & Battistutta, D. (2003). Injury and frequency of use of playground equipment in public schools and parks in Brisbane, Australia. *Injury Prevention*, 9, 2110-213.
- O'Kane, C. (2000). The development of participatory techniques: facilitating children's views about decisions which affect them. In P. Christensen & A. James (Eds.), *Research with children: Perspectives and practices* (pp. 136-159). London: Falmer Press.
- Olds, A. (2001). *Child care design guide*. New York: McGraw Hill.
- Parker, H., & Larkin, D. (2003). Children's co-ordination and developmental movement difficulty. In G. Savelsbergh, K. Davids, J. van der Kamp & S. Bennett (Eds.), *Development of movement co-ordination in children* (pp. 107-132). London: Routledge.
- Patton, M. Q. (2002). *Qualitative research and evaluation methods*. Thousand Oaks, California, United States of America: Sage Publications.
- Pence, A. (Ed.). (1988). *Ecological research with children and families: From concepts to methodology*. New York: Teachers College Press.
- Penn, H. (2005). Spaces without children. In M. Dudek (Ed.), *Children's spaces* (pp. 178-194). London: Elsevier.
- Pelligrini, A., & Smith, P. (1988). Physical activity play: the nature and function of a neglected aspect of play. *Child Development*, 69(3), 577-598.
- Phenice, L., & Griffiore, R. (2003). Young children and the natural world. *Contemporary Issues in Early Childhood*, 4(2), 167-171.
- Pica, R. (1997). Beyond physical development: why children need to move. *Young Children*, 52(6), 14-19.
- Pica, R. (2006). Physical fitness and early childhood curriculum. *Young Children*, 61(3), 12-18.

- Pink, S. (2001). *Doing visual ethnography: images, media and representation in research*. London: Sage.
- Pramling Samuelsson, I. (2004). How do children tell us about their childhoods? *Early Childhood Research and Practice*, 6(1), 1-16.
- Prosser, J., & Schwartz, D. (1998). Photographs within the sociological research process. In J. Prosser (Ed.), *Image-based research: A sourcebook for qualitative researchers*. London: Falmer Press.
- Rankin, B. (2004). The importance of intentional socialisation among children in small groups: A conversation with Loris Malaguzzi. *Early Childhood Education Journal*, 32(2), 81-85.
- Ridgway, A., & Hammer, M. (2005). Spaces that educate. In M. Fleer, S. Edwards, M. Hammer, A. Kennedy, A. Ridgway, J. Robbins & L. Surman (Eds.), *Early childhood learning communities: Sociocultural research in practice* (pp. 95-117). Frenchs Forest NSW: Pearson.
- Rinaldi, C. (1998). The space of childhood. In G. Ceppi, & M. Zini (Eds.), *Children, spaces and relations*. Reggio Emilia, Northern Italy: Reggio Children and Domus Academy Research Centre.
- Rinaldi, C. (2001). Documentation and assessment. In C. Guidici, C. Rinaldi & M. Krechevsky (Eds.), *Making learning visible: Children as individual and group learners* (pp. 78 - 89). Reggio Emilia: Project Zero and Reggio Children.
- Rivkin, M. (1995). *The great outdoors: Restoring the child's right to play outside*. Washington D.C: NAEYC.
- Rivkin, M. (1998). Happy play in grassy places: the importance of the outdoor environment in Dewey's educational ideal. *Early Childhood Education Journal*, 25(3), 199-202.
- Rivkin, M. (2000). Outdoor experiences for young children. Retrieved March 14th, 2005, from <http://www.vtaide.com/png/ERIC/Outdoor-XP.htm>
- Robbins, J. (2002). Shoes and ships: Taking a sociocultural approach to interviewing young children. *New Zealand Research in Early Childhood Education*, 5, 13-30.
- Robbins, J. (2005). Contexts, collaboration, and cultural tools: A sociocultural perspective on researching children's thinking. *Contemporary Issues in Early Childhood*, 6(2), 140-149.
- Rogoff, B. (1998). Cognition as a collaborative process. In D. Kuhn & R. S. Siegler (Eds.), *Handbook of child psychology: Cognition, perception and language* (5th ed., Vol. 2, pp. 679 -744). New York: John Wiley.

- Rogoff, B. (2003). *The cultural nature of human development*. Oxford, New York: Oxford University Press.
- Rothlein, L., & Brett, A. (1987). Children's, teachers', and parents' perceptions of play. *Early Childhood Research Quarterly* (2), 45-53.
- Sandberg, A., & Pramling-Samuelsson, I. (2003). Preschool teachers' play experiences then and now, *Early Childhood Research & Practice* , Vol. 5, (1), 1- 22 .
- Sandberg, A., & Pramling-Samuelsson, I. (2005). An interview study of gender differences in preschool teachers' attitudes towards children's play. *Early Childhood Education Journal*, 32(5), 297-305.
- Sanders, S. (2002). *Active for life: Developmentally appropriate movement programs for young children*. Washington D.C.: NAEYC.
- Savelsbergh, G., Davids, K., van der Kamp, J., & Bennett, S. (Eds.). (2003). Theoretical perspectives on the development of motor co-ordination in children. In *Development of motor co-ordination in children: Applications in the fields of ergonomics, health sciences and sport* (pp. 1-14). London: Routledge.
- Sheridan, S., & Pramling-Samuelsson, I. (2001). Children's conceptions of participation and influence in preschools: A perspective of pedagogical quality. *Contemporary Issues in Early Childhood*, 2(2), 169-193.
- Silverman, D. (2001). *Interpreting qualitative data: Methods for analysing talk, text and interaction* (2nd ed.). London: Sage Publications.
- Singer, E. (1996). Prisoners of the method: Breaking open the child-centred methodology in daycare centers. *International Journal of Early Years Education*, 4(2), 28-40.
- Siraj-Blatchford, I., & Siraj-Blatchford, J. (2001). An ethnographic approach to researching young children's learning. In G. MacNaughton, S. Rolfe, & I, Siraj-Blatchford (Eds.), *Doing early childhood research: International perspectives on theory and practice*. Birmingham, England: Open University Press.
- Smith, A. (1983). Sex differences in activities in early childhood centres. *New Zealand Journal of Psychology* (12), 74-81.
- Smith, A. (2006). Early childhood theory, research and policy in Aotearoa-New Zealand: their development and linkages. *Children's Issues*, 10 (1), 23-29.
- Smith, P. (2005). Physical activity and rough and tumble. In J. Moyles (Ed.), *The excellence of play* (2nd ed., pp. 127-137). Berkshire, England: Open University Press.
- Sorin, R. (2003). Research with children. A rich glimpse into the world of childhood. *Australian Journal of Early Childhood*, 28(1), 31-36.

- Stephenson, A. (1998). *Opening up the outdoors: A reappraisal of young children's outdoor experiences*. Unpublished Qualitative Thesis, Victoria University, Wellington.
- Stephenson, A. (1999a). *Opening up the outdoor: a case study of young children's experiences in one childcare centre* (Occasional Paper No.4.): Institute for Early Childhood Studies.
- Stephenson, A. (1999b). Images of empowerment: the outdoor experiences of one year old children. *Early Childhood Folio: A Collection of Recent Research*, 4.
- Stephenson, A. (2003). Physical risk-taking: endangered or dangerous? *Early Years*, 23(1).
- Stine, S. (1997). *Landscapes for learning: creating outdoor environments for children and youth*. New York: John Wiley & Sons.
- Stonehouse, A. W. (1991). *Opening the doors: Child care in a multicultural society*. Watson, A.C.T.: Australian Early Childhood Association.
- Surman, L., Ridway, A., & Edwards, S. (2006). Program planning: negotiating the curriculum. In M. Fleer, S. Edwards, M. Hammer, A. Kennedy, A. Ridgway, J. Robbins & L. Surman (Eds.), *Early childhood learning communities: Sociocultural research in practice* (pp. 174-192). Frenchs Forest, NSW: Pearson Education Australia.
- Tammivaara, J., & Enright, D. (1986). On eliciting information: dialogues with child informants. *Anthropology & Research Quarterly*, 17(4), 218-238.
- Taylor, S., & Morris, V. (1996). Outdoor play in early education settings: is it safe and healthy for children. *Early Childhood Education Journal*, 23(3), 153-158.
- Temple, V. A., & O'Connor, J. P. (2003). *Fostering physical activity for children in childcare*. Retrieved January 10, 2006, from [www.aare.edu.au/03pap/tem03237.pdf](http://www.aare.edu.au/03pap/tem03237.pdf)
- Thomas, G., & Hocking, G. (2003). *Being good at being a child involves a lot of things adults don't understand*. London: Demos.
- Towers, J.(1997). The neglect of playtime: A review of the literature. *Early Child Development and Care* (131), 31-43.
- United Nations. (1989). United Nations convention on the rights of the child (UNCRC). Retrieved February, 16, 2005, from <http://www.unicef.org/crc/crc.html>
- Vander-Ven, K. (2004). Beyond fun and games towards a meaningful theory of play? Can a hermeneutic perspective contribute? In S. Reifel, & M.H. Brown (Eds.), *Advances in early education and daycare: Social Contexts of early childhood education, reconceptualizing play (II)*, Vol., 13, (pp.165-206).Oxford, UK: Elsevier.

- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. London: Harvard University Press.
- Warming, H. (2005). Participant observation: a way to learn about children's perspectives. In A. Clark, A. Kjørholt, & P. Moss (Eds.) *Beyond listening: Children's perspectives on early childhood services* (pp. 51-70). Bristol, UK: The Policy Press.
- White, R. (2006). Interaction with nature during the middle years: its importance in children's development & nature's future. Retrieved on November 15<sup>th</sup>, 2006 from <http://www.whitehutchinson.com/children/articlesnature.shtml>
- White, R., & Stoecklin, V. (1999). *Children's outdoor play and learning environments: Returning to nature*. Retrieved March 7<sup>th</sup>, 2005, from <http://www.whitehutchinson.com/children/articles/outdoor.shtml>
- Williams, G. M. (1994). Talk on the climbing frame. *Early Child Development and Care*, 102, 81-89.
- Wilson, R., Kilmer, S., & Knauehaser, V. (1996). Developing an environmental outdoor play space. *Young Children*, 51 (6), 56-61.
- Wilson, R. (1996). *Starting early: Environmental education during the early childhood years*. Retrieved February 20<sup>th</sup>, 2006, from <http://www.ericdigests.org/1998-1/early.htm>.
- Wilson, B., & Myers, K. (1999). *Situated cognition in theoretical and practical context*. Retrieved November 10<sup>th</sup>, 2006, from <http://carbon.cudenver.edu/~bwilson/SitCog.html>
- Wiltz, N., & Klein, E. (2001). "What do you do in childcare?" Children's perceptions of high and low quality classrooms. *Early Childhood Research Quarterly*, 16(2), 209-236.
- Wolfgang, C., & Phelps, P. (1983). Preschool play materials preference inventory. *Early Childhood Development and Care*, 12, 127-141.
- Woodhead, M., & Faulkner, D. (2000). Subjects, objects or participants: Dilemma of psychological research with children. In P. C. A. James (Ed.), *Research with children: Perspectives and practices* (pp. 9-35). London: Falmer Press.
- Wolcott, H.F. (1994). *Transforming qualitative data; description, analysis and interpretation*. Thousand Oaks, CA: Sage Publications.
- Zimmer, R. (2005). Fitness for body and mind-learning through mobility. *Freizeit & Spiel: leisure and play*, 25-27.

## APPENDICES

# Appendix 1



## Massey University

2 August 2005

FILE

OFFICE OF THE ASSISTANT  
TO THE VICE-CHANCELLOR  
(ETHICS & EQUITY)  
Private Bag 11 222  
Palmerston North  
New Zealand  
T 64 6 350 5573  
F 64 6 350 5622  
humanethics@massey.ac.nz  
www.massey.ac.nz

Cheryl Greenfield  
21A Stewart Gibson Place  
Manurewa  
MANUKAU CITY

Dear Cheryl

Re: HEC: PN Application – 05/43  
Young children's views on being outside at their early childhood centre

Thank you for your letter dated 1 August 2005.

On behalf of the Massey University Human Ethics Committee: Palmerston North I am pleased to advise you that the ethics of your application are approved. Approval is for three years. If this project has not been completed within three years from the date of this letter, reapproval must be requested.

If the nature, content, location, procedures or personnel of your approved application change, please advise the Secretary of the Committee.

**A reminder to include the following statement on all public documents:** *"This project has been reviewed and approved by the Massey University Human Ethics Committee, Palmerston North Application 05/43. If you have any concerns about the ethics of this research, please contact Dr John G O'Neill, Chair, Massey University Campus Human Ethics Committee: PN telephone 06 350 5799 x 8635, email humanethicspn@massey.ac.nz".*

Yours sincerely

Dr John G O'Neill, Chair  
Massey University Campus Human Ethics Committee: Palmerston North

cc Dr Joy Cullen  
Dept of Learning & Teaching  
PN900

Professor Bill Tunmer, HoD  
Dept of Learning & Teaching  
PN900

Ms Caroline Teague  
Graduate School of Education  
PN900

## Appendix 2



# Massey University

COLLEGE OF EDUCATION

Te Kupenga o Te Matauranga

LEARNING AND TEACHING

Private Bag 11 222

Palmerston North

New Zealand

T 64 6 356 9099

F 64 6 351 3383

[www.massey.ac.nz](http://www.massey.ac.nz)

### Information Statement for all Parents, Families and Teachers

My name is Cheryl Greenfield and I am a Massey University Student working on my Masters of Education Thesis. I am a Senior Lecturer at Manukau Institute of Technology, on the Diploma of Teaching (Early Childhood Education) programme, where I have worked for the past 13 years. I have a real interest in early childhood centre outdoor environments and in exploring ways of listening to young children's views, feelings and ideas about being outside.

The main purpose of my research is to explore young children's views of being outside in their early childhood centre. A subsidiary aim is to explore multiple ways of researching with children that enable their views to be valued and heard, in particular through the medium of photography and informal discussion. My main research question is 'what are children's views on being outdoors at their early childhood centre'? The sub-questions are:

- ✚ What purpose do children perceive the outdoor play space to have?
- ✚ What do children like or not like about being outside?
- ✚ What would children like to see changed or added to the outdoor space?
- ✚ What do children think the role of the teacher is in the outdoor play environments?
- ✚ What perceptions do teachers and parents have about children's experiences in the outdoor environment?

My intent is to spend several hours two days a week over twelve weeks in this centre with twelve three and four year old children. I will also be talking to the parents of the participating children and the children's teachers. If you have any questions about this project please free to speak to me when I am in the centre or you can contact me on 9688000 ext 7152.

## **Project Procedures**

- The data collected will be used to present teachers', children's and parents' views within my research thesis, to other early childhood educators and researchers, and to those interested in creating outdoor play spaces for young children. This may be through the medium of conferences, seminars, and journal articles.
- All data as it is gathered will be stored in a locked filing cabinet. My notes and transcripts of audio-tapes loaded onto my computer, and back up files made. The data will be analysed and the findings written up.
- All data will be stored on CD Rom and on my computer hard drive during the project. Permission slips, audio-tape transcripts and photo CD Roms will be given to my Supervisor and will be kept for five years in a secure location. Teachers and parents will be given a summary sheet of the research findings and the centre will be given a copy of the final thesis.
- Additional summaries of the research findings will be available from Cheryl Greenfield directly upon request by ph (09 9688000 ext 7152) or by email [cgreenfield@manukau.ac.nz](mailto:cgreenfield@manukau.ac.nz)
- Using photos as data means that I cannot guarantee complete confidentiality regarding the early childhood centre, the teachers and the parents. However I will make no reference to the name of the centre, teachers' surnames or parent's names in the Thesis and any presentation of the findings thereafter. The centre will be referred to as the 'early childhood centre', the teachers by their first name or by number and parents as the parent of \_\_\_\_\_ (child's name). Only the children's first names, which they prefer to be called by, will be used at all times. Pseudonyms will be used if requested by the participant.
- Personal information that you may share with me in the course of the research, that is not directly related to the research will not be recorded or reported on.
- All information gathered from you such as observations, informal discussions, focus group transcripts will be made available to you for editing and correction prior to any report or publication of the research

## **Participant involvement**

- The first step will be to meet with the teachers and parents who have expressed interest to explain in more detail the purpose and nature of the study and answer any questions. This will require a meeting of approximately one hour after the centre is closed for the day.
- I propose to carry out the fieldwork phase of the research over a twelve week period; approximately two hours for two days each week.
- I will be asking you to attend two focus group discussions of approximately one hour in length. Both sessions will be audio-taped.
- You will also be asked to keep an informal journal over a four week period while I am working with the children to record interesting, relevant comments the children may make regarding the outdoors or their involvement in the research project. You are free to jot down your own thoughts regarding the centre's outdoor environment in the journal. The journal forms part of the data collection.

**Participant's Rights**

You are under no obligation to accept this invitation. If you decide to participate, you have the right to:

- decline to answer any particular question;
- withdraw from the study (specify time-frame);
- ask any questions about the study at any time during participation;
- provide information on the understanding that your name will not be used unless you give permission to the researcher;
- be given access to a summary of the project findings when it is concluded;
- ask for the audio tape to be turned off at any time during the interview.

**Project Contacts**

My supervisors and myself are happy to discuss this project with you at any time; either by phone or by email. My supervisors for this project are Dr Joy Cullen and Dr Kim Powell from Massey University and they can be contacted on 0800 MASSEY ext. 8955 and 8826 respectively. You may contact me on 09 9688000 ext 7152 or by email [cgreenfield@manukau.ac.nz](mailto:cgreenfield@manukau.ac.nz)

**Committee Approval Statement**

This project has been reviewed and approved by the Massey University Human Ethics Committee, PN Application 05/43. If you have any concerns about the conduct of this research, please contact Dr. John O'Neil, Chair, Massey University Campus Human Ethics Committee: Palmerston North, telephone 06 350 5799 ext 8635, email [humanethicspn@massey.ac.nz](mailto:humanethicspn@massey.ac.nz).

# Appendix 3



# Massey University

COLLEGE OF EDUCATION  
Te Kupenga o Te Matauranga

LEARNING AND TEACHING  
Private Bag 11 222  
Palmerston North  
New Zealand  
T 64 6 356 9099  
F 64 6 351 3383  
www.massey.ac.nz

## Young Children's Views On Being Outside at Their Early Childhood Centre

### TEACHER PARTICIPANT CONSENT FORM

This consent form will be held for a period of five (5) years

I have read the Information Sheet and have had the details of the study explained to me. My questions have been answered to my satisfaction, and I understand that I may ask further questions at any time.

I agree/do not agree to the focus group interview being audio taped.

I wish/do not wish to have my journal returned.

I agree to not disclose anything discussed in the Focus Group

I agree to participate in this study under the conditions set out in the Information Sheet.

Signature:

.....

Date:

.....

Full Name - printed

.....



# Massey University

COLLEGE OF EDUCATION  
Te Kupenga o Te Matauranga

LEARNING AND TEACHING  
Private Bag 11 222  
Palmerston North  
New Zealand  
T 64 6 356 9099  
F 64 6 351 3383  
www.massey.ac.nz

## Young Children's Views On Being Outside at Their Early Childhood Centre

### PARENT PARTICIPANT CONSENT FORM

This consent form will be held for a period of five (5) years

I have read the Information Sheet and have had the details of the study explained to me. My questions have been answered to my satisfaction, and I understand that I may ask further questions at any time.

I agree/do not agree to the focus group interview being audio taped.

I wish/do not wish to have my journal returned.

I agree to not disclose anything discussed in the Focus Group

I agree to participate in this study under the conditions set out in the Information Sheet.

By signing this Consent Form, I understand that I am agreeing to have my child photographed and take photographs for the purpose of this research.

Signature:

.....

Date:

.....

Full Name - printed

.....

# Appendix 4



# Massey University

COLLEGE OF EDUCATION  
Te Kupenga o Te Matauranga

LEARNING AND TEACHING  
Private Bag 11 222  
Palmerston North  
New Zealand  
T 64 6 356 9099  
F 64 6 351 3383  
www.massey.ac.nz

## Children's Consent Form to Participate in Research (using child's real first name)

Title of Project:

Young Children's Views On Being Outside at  
Their Early Childhood Centre



This consent form will be held for a period of five (5) years

Researcher: Cheryl Greenfield

My name is: \_\_\_\_\_

- Cheryl has talked to me about what we are going to do.
- I would like to take photos of the outdoor playground at my centre.
- I will let Cheryl take photos of me.
- I would like to share my ideas about the outside playground with Cheryl.
- Cheryl has told me that she will be showing the photos that I take to early childhood teachers and people interested in what I think about being outside
- I agree to Cheryl using my first name when showing my photos to others.
- I understand that my photos will be kept for a long time.
- I can say no if I don't want to talk to Cheryl or take photos.

Child's signature: \_\_\_\_\_



# Appendix 6

**10 November. 2005 Spontaneous participant observation in sandpit only using tape recorder and camera.** Transcript of children playing in the sandpit creating a swimming pool  
 9:30 – 10:50 Joshua K (JK), Sam, Taran, Alexia, Eilish (CG = researcher)

<p>9:30          2 Tyres are rolled up from lower grass area by and brought into sandpit by JK          Tyres placed on end          Sam filling up inside of tyre with sand          JK digging a hole          JK: just <u>trying to make</u> a swimming pool (angrily to the others), that was your last warning          CG: are you making a swimming pool?          JK: yea trying and we playing shut ups,          Taran as he rakes the sand - cause you know why. It is a funny game and cause we say shut up and then we say that's your last warning          CG: that's a good idea to put the sand in the tyre, is that the fence around the swimming pool?          Sam : yea, because I can't get out          CG: that's a good idea because you have to keep swimming pools fenced don't you          Sam: so people don't fall in          JK: but but one time Sam falled in my swimming pool          CG: at your house          JK: yes          CG: ohhh did you          Sam: yes but Josh's got me out          CG: he rescued you did he, did he jump in the pool?          JK and Sam: No, he just stretched his hand out and ....          Sam: it was about this deep          CG: did you jump in or fall in?          Sam: I went ( and he demonstrated how he fell in)          CG: how old were you?          Sam holds up his fingers          CG: three          Sam: no four          JK: I dreamed about you ( to Sam)          Sam: I always about Josh          Sam: I dream about ...          CG: do you ever dream about being at daycare?          Both said "No"          CG: so what do you dream about?          Sam: um athletics          CG : what do you do at Athletics?          Sam: I'm in a running team          JK: and um um um your mums um um stand at the back and children run          JK:- Sam can run fast</p>	<p><b>Comments</b>          Children using items, like the tyres from around centre to use in sandpit           A game that is part of the children's culture at the centre – unwritten scripts showing intersubjectivity           Aware of need for fencing around pools and relates personal experience of falling into a pool           A significant shared experience between the two of them           Able to recall and recount events           Obviously have close friendship ties           Shared interest in athletics           Able to describe Sam's ability</p>	<p><b>Opportunity for:</b> Moving things Physical activity Exploring material world—constructing with sand and water          Problem solving, using imagination and creativity Conversations Making Connections between home and centre</p>
---	--	--

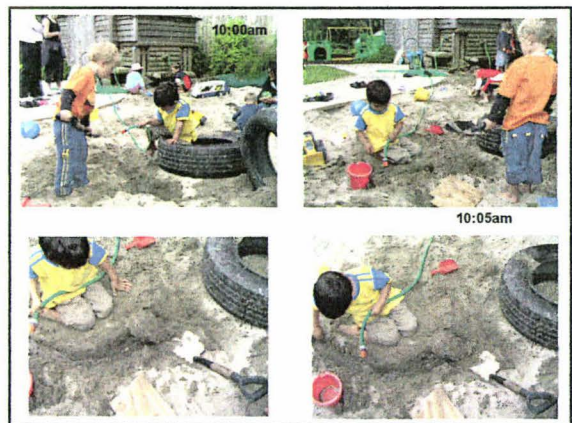
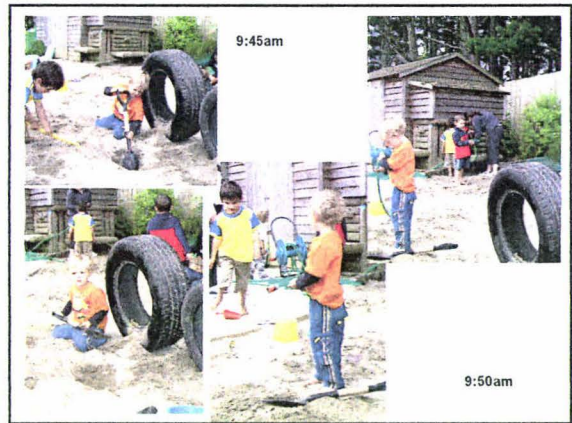
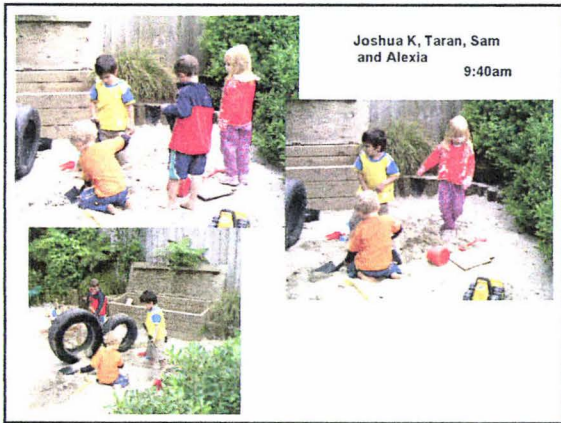
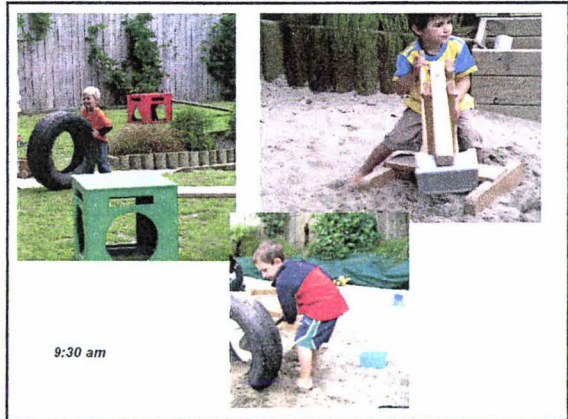
<p>CG: I can't run fast, when you get older it harder to run fast          Sam: not if you're four and three quarters you can run fast</p> <p>Boys continue to dig and a few minutes later</p> <p><b>9:50</b>          Children trying to fill up their swimming pool with water using a very long hose with not much water pressure, no water is coming though          JK singing: Bob the builder can we hose it, yes we can          JK: coming          Sam: I'll look through the hose          Maya: you need to put it down, maybe you need to dig a tunnel that goes down, water needs to go down, it can't go up          Taran starts scrapping trench out with fingers          Maya: you need to figure out why its not happening          Child: let's see          JK: it is going          Maya: are you thinking          JK: no ..... to child taking their hose          Taran takes it off him , holds hose in one hand and continues to make the trench          Sam: hope its coming in          Maya to child – Taran would like it in the tunnel there are two hoses you come and get the other one          They have fitted the long garden hose inside some black piping          Taran : here it comes          JK: lets see if its coming...here it comes</p> <p><b>10:00am</b>          Maya points out that the water is flowing backwards from hose and coming out end of piping,          Sam: here it comes guys is it coming?          Taran: let me see          Alexia has joined in          JK has gone and got red cellophane to line hole          Maya – it needs to go down into the hole ( referring to hose end), why don't you use this tyre here, to put the hose on so it is going down a hill, you know like a waterfall, who's seen a waterfall          CG: like the water feature          Maya: the water needs to go down, like down a mountain          Alexia: maybe we could do this, we.. we .. could put the... put the tyre on top of the hole and then we could put the hose down in through the hole and then the water will go in the hole.</p>	<p>Age related to speed</p> <p>A problem they were trying to solve</p> <p>Have noticed that Joshua K always when faced with a challenge of problem bursts into singing this refrain changing the words to suit the situation</p> <p>Maya encourages them and affirms their thinking – promoting metacogniton</p> <p>Working collaboratively</p> <p>Trying out new idea</p> <p>Alexia has an idea and expresses it</p>
--	---

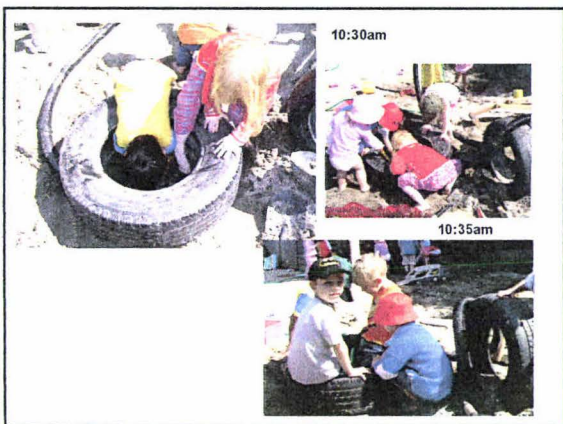
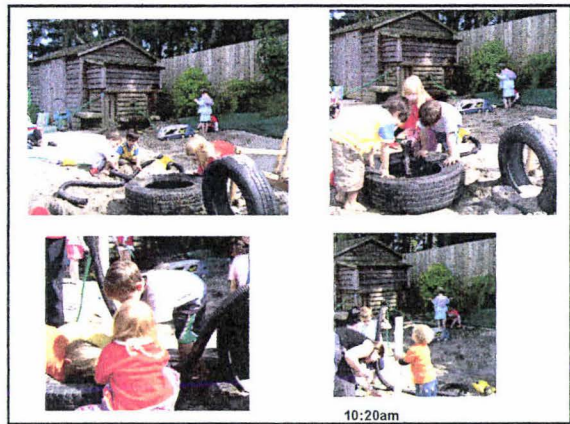
<p>Maya: Ok why don't you try that, Sam did you hear what Lexi said?  Sam: no  Maya: Well Lexi had a good idea, why don't you explain it again  Alexia: we have to put the tyre on top of the hole and put the hose through it....  Sam: I see what you are <u>trying</u> to do  They all start doing it  Maya: see you are working as a team  Alexia: I think it is coming out  Maya: Joshua is <u>trying</u> to untangle the hose, but look the water is till coming out  JK: I <u>am trying</u> to put more hose in, using all this hose means the water will come out  Alexia: do you want to <u>try your</u> idea?  Maya: you guys are working well together, you are listening to each others ideas</p> <p><b>10:15am</b>  Sam: I'll see if it is coming out  Alexia trying to move tyre by herself  Maya: I think Lexi needs some help..where do you want it Lexi?  Sam: I'll help  They manoeuvre it into place  Sam: there Alexia  Maya: awesome.. what is happening to the hose, where Alexia has it .Is it going up or is it going down?  Maya: we need the hose to go down. It needs to go all the way down, down, down  JK: then we'll fill it up backwards and then it will work  Laughter</p> <p><b>10:20</b>  Children still trying to figure it out as the hose goes down into a depression in the sand and then it is uphill to the hole  Maya: but can you see why – whats happening up here. Shows them how the hose is still uphill  JK: this is the problem  Maya ( lifts hose up higher out of depression and water starts to flow) How did we make it work?  Children thinking  Sam: its good  CG: is the water going in?  Alexia: yep my idea was good  Sam: is it coming down now  Alexia: no (as water stops)  Maya and I point out that the hose still is dropping into a small hole</p>	<p>Teacher support her and encourages her to restate it, and encourages Sam to listen</p> <p>Their working together described and affirmed by teacher.</p> <p>Children explaining what they are trying to do</p> <p>Describing attempts to solve problem - use of <u>trying</u> frequent by everyone</p> <p>Being helpful</p> <p>More ideas and staying positive and persevering</p> <p>Problem solving still going on</p> <p>Recognises cause of problem</p> <p>Alexia and others knows her idea was good</p>	<p><b>Opportunity for: Moving things Physical activity Exploring material world –constructing with sand and water and other materials</b></p> <p>Problem solving, using imagination and creativity</p>
--	--	--

<p>JK picked up the hose and the water comes out  Maya – is it going fast  Children – yes  Maya holds up hose - look at me I am not going to stand here all day so how can we get it to stay like this  JK – get a pipe, a big one  JK – need a big one  Sam- Maya its not going  She lifts it higher and it works  Maya – sorry  Alexia and JK sit on edge of tyre putting their feet into the water  Alexia – I can get my toes in, its cold aye, but your toes in  JK – I’ll show you what to do, I’ll show you what to do and places hose on top of pipe  Maya - Sam’s not holding hose up resting it on the pipe– I don’t want to do this all day  Maya – how do we make that stay like that  Alexia – its cold though  <b>10:30</b>  Another teacher – what is the problem , what’s broken, what are you trying to work out  JK – we are <u>trying</u> to work out  Alexia tells her – it is over there the pipe and it has to go down into the hole  Maya – look its happening again, they are trying to figure out how to get it going as they need it up to get the water going  Sam – lifts it up and it works again  Alexia – yay its going  JK- we’ve got to keep it up  Taran- no Lexi, no Lexi we are making a swimming pool ( boys wanting her to take her feet out)  JK - we need to hop out  Taran – we need to hop out  He begins to move the hose around – that’s it now we have lots of water going in  JK – it is going out now  Then water flow stops  CG – is it coming out  JK – no  Hose is moved around and children look to see if water coming out  JK – it’s all tangled  JK – I know what to do  Eilish has joined in- Can I help...</p>	<p>Children continue to come up with new ideas and try them out</p> <p>Joshua K able to tell another teacher what they are doing</p> <p>Excitement each time some water trickles in</p> <p>Someone has turned the tap off but they children are not aware of this</p> <p>Eilish trying to join by offering to help</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);"> <b>Opportunity for: Moving things Physical activity Exploring material world –constructing with sand and water and other materials</b>   Problem solving, using imagination and creativity </p>
--	--	---

<p><b>10:35</b>  Taran – is it going down  Eilish - let me holded it  Alexia - we don't need any sand, we don't need any, we don't need any Eilish  JK – now we are trying to fix it up  Alexia - we don't need any sand, we don't need any Eilish  JK – I know what  Alexia – we do need that (Eilsih returns with bucket of water)  Taran – 'cuse me  JK- the water isn't coming out  Alexia – it isn't coming gout  Alexia – where is the water coming out  Taran – someone is pulling the pipe  JK – Oh know something is blocking the pipe, K_, K_, ...um, um ....  Alexia – let's get the job done</p> <p><b>10:40</b>  Eilish – its coming out of there  JK – no, because this side isn't high enough  Alexia- there is no water in it  Hose gets moved and it comes out  JK – we can't work this out  Alexia – it will dry out and we can't use our feet  JK - Holy  It was discovered that' someone had turned the hose off at the tap  Water now starts to flow and children sit on tyre with feet in water  Sam – I need sunblock on so I don't get burnt  Alexia – I didn't bring a hat  Sam – you are not allowed outside then  Alexia – okay I will go and get it my hat on  Children return with hats</p> <p><b>10:45</b>  Me – the swimming pool is filing up  Sam ... this is a good one  JK – cold aye  They all have their feet in the hole now  Me – Can I take a photo  Children - yes.  Alexia comes back with hat - I am ready ...  Sam - Come on water  Alexia – let me in ..is it coming out</p> <p><b>10:50</b></p>	<p>Clear about not wanting Eilish's offer of sand</p> <p>Accepts the water from Eilish</p> <p>Children coming up with ideas as to what is wrong now</p> <p>Explores another possibility</p> <p>Children beginning to get frustrated</p> <p>Aware of Consequences of not getting water in</p> <p>Joshua K realising what the problem was  Great delight at success</p> <p>Sunsafety awareness</p>	<p style="writing-mode: vertical-rl; transform: rotate(180deg);"> <b>Opportunity for:</b> Moving things Physical activity Exploring material world—constructing with sand and water and other materials    Problem solving, using imagination and creativity </p>
---	--	---

Photo Observation (7)  
 Sandpit Photo Essay  
 November 10<sup>th</sup> 2005





# Appendix 7

## Descriptors of Assorted photos

1. Foursided metal ladder climber
2. Child using a watering can
3. Whacky wall
4. Children climbing a tree and a wooden swing at end of rope
5. Wobble walk
6. Steps surrounded by plants
7. Children blowing Bubbles
8. Playground structure with some moveable ( Tredsafe)
9. Children with scarves blowing in the wind
10. Children using a Parachute
11. Tredsafe cube setup
12. Child with hoop and balls
13. Playground structure with some moveable ( Tredsafe)
14. Child playing in sandpit with truck
15. Children using finger-paint at a table
16. Children in sandpit and children on bikes and scooters
17. Children potting plants
18. Children using clay outside on table
19. Frame house for children to put walls on and paint
20. Children with planks of wood on rocks and grass
21. Mobile steering wheel
22. Vertical rung tunnel
23. Enclosed slide
24. Bush, waterfall, rocks
25. Zoom slide
26. Playhouse
27. Children climbing a large rock
28. Toe hole climbing wall (tredsafe)
29. Abacus & Sound balls.
30. Cleated/Abseil wall (tredsafe)
31. Larger playground structure - timber, plastic tunnel, and two slides
32. Wave climb
33. Children painting a wooden chair they have made in the carpentry area
34. Very large playground structure (Playground centre)
35. Low moveable equipment - Playground centre
36. Children petting rabbit and chicken
37. Large ladder dome
38. Tyre swings
39. Children who have climbed up a tree
40. Children at a beach
41. Pendulum swings
42. Children playing in a puddle
43. Barrel swings and a rope-hand swing
44. Caterpillar tunnel

# Appendix 8



20 September 2005

Ms Cheryl Greenfield  
Deputy Head of Programme  
Department of Social Sciences  
MANUKAU INSTITUTE OF TECHNOLOGY

Dear Cheryl

## RESEARCH GRANT APPLICATION – R05/SS/20

I am pleased to inform you that funding for the project *Children's views on the outdoor playground at their childhood centre* has been approved as follows:

RESEARCH GRANT NUMBER:	R05/SS/20
Disposable cameras and development up to	\$400.00

Please sign and return one copy of the enclosed *Form of Acceptance* by 4 October 2005.

All claims and queries regarding advances on research funds and reimbursement of funds should be directed to me in the first instance. I will require receipts for expenditure.

Please do not hesitate to contact me should you require any further information concerning this grant on extension 8059 or by email [Lana.Ashley@manukau.ac.nz](mailto:Lana.Ashley@manukau.ac.nz)

Yours sincerely

A handwritten signature in black ink, appearing to read 'Lana Ashley'.

Lana Ashley  
Executive Secretary Research and Ethics Committee

Cc: HOD T Fitchett

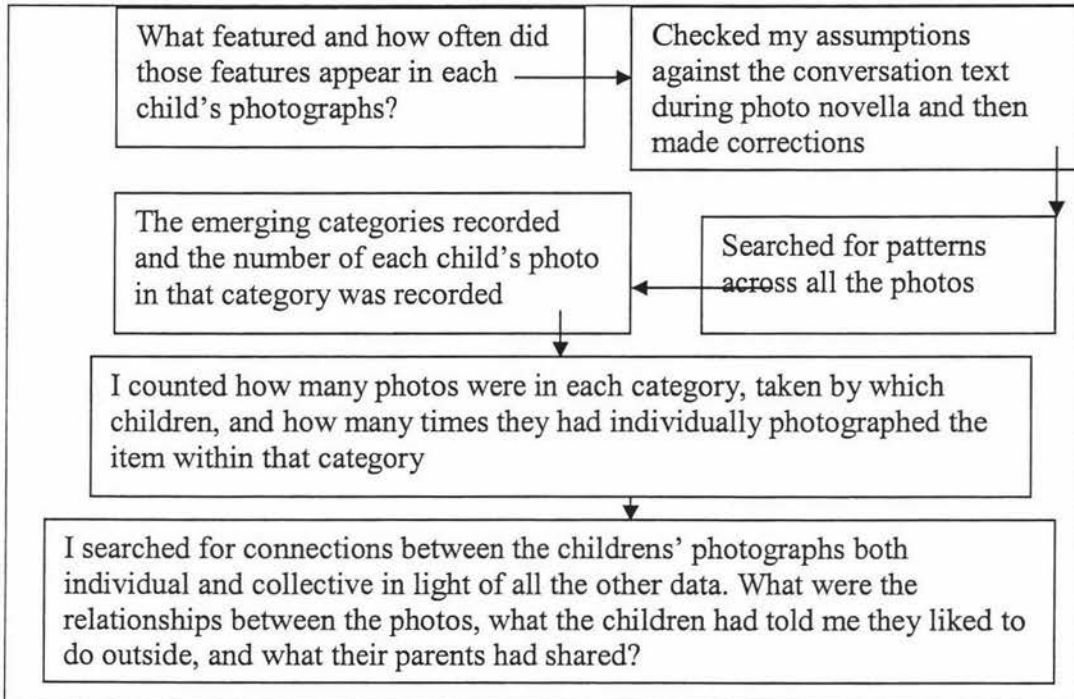
A large, stylized handwritten signature in black ink, likely belonging to Cheryl Greenfield.

Lana Cheryl said will you sign her acceptance form on her behalf so that I can go ahead & pay the invoice for the cameras (and send it back to me).

To Lana

# Appendix 9

## Analysis of children's photographs



How aspects of the outdoor environment each child said they most preferred were evident across all data

<i>Alexia</i>	Conferencing/ Conversations/ Photo elicitation	Researcher Observation (Written & Photographic)	Photo Novella	Drawing	Book making	Parents
Sandpit	♥	♥	♥			♥
Monkey bars	♥	♥	♥	♥	♥	♥
Slide	♥					
Large moveable climbing area incl ladders, planks, boxes, rope bridge	♥	♥	♥			
Balls, bat and cones	♥	♥	♥			♥
Boat	♥		♥			
Tunnel	♥	♥				
Stomping in puddles	♥	♥	♥			
Bikes	♥	♥			♥	♥
Tyres	♥	♥	♥			
Other children/friends	♥		♥			
Painting/Fingerpaint	♥					
Bubble blowing	♥					
Clay	♥					
Steps	♥					
Aviary birds/ guinea pigs /nature	♥		♥		♥	
Water Feature	♥	♥				♥
Chasey Games/ Hide and seek	♥	♥				♥

<i>Wei-bin</i>	Conferencing/ Conversations/ Photo elicitation	Researcher Observation (written and photographic)	Photo novella	Drawing	Parents
Monkey bars	♥	♥	♥	♥	♥
Sandpit	♥	♥	♥		
Mini tramp	♥		♥		
Hitting the ball	♥				
Carpentry	♥				
Painting/fingerpaint	♥		♥		
Bikes	♥	♥			
Balls	♥				
Water feature	♥				
Trees, plants, sky	♥		♥		♥

<i>Chantelle</i>	Conferencing/ Conversations/ Photo elicitation	Researcher Observation (Written & Photographic)	Photo Novella	Drawing	Book making	Parents
Sandpit	♥	♥	♥		♥	♥
Monkey Bars	♥	♥				
Large moveable boxes, slide, tunnel, planks and equipment on bark etc	♥	♥	♥	♥		♥
Baby side bridge, slide	♥		♥			
Low obstacle course/minitramp	♥	♥	♥			♥
Painting	♥	♥	♥			
Flowers, plants, trees, sky	♥		♥			
Water feature	♥	♥	♥	♥		♥
Tyres	♥	♥	♥		♥	
Stroller/dolls	♥	♥	♥			
Rocking horse	♥		♥			
Blowing bubbles	♥					
Bikes	♥	♥			♥	♥

<i>Eilish</i>	Conferencing/ Conversations/ Photo elicitation	Researcher Observation (Written & Photographic)	Photo Novella	Drawing	Parents
Monkey bars	♥	♥	♥	♥	
Trees, plants, sky	♥		♥		
Sandpit	♥	♥	♥		
Water feature	♥	♥		♥	
Slide	♥	♥	♥	♥	
Minitramp	♥	♥	♥		
Not wearing shoes	♥		♥		
Grass & bark	♥		♥		
Friends	♥	♥	♥		♥
Aviary birds/ guinea pigs	♥				
Fingerpaint	♥				
Large and low moveable climbing boxes, planks	♥	♥	♥		

<i>Hamish</i>	Conferencing/ Conversations/ Photo elicitation	Researcher Observation (Written & Photographic)	Photo Novella	Drawing	Book making	Parents	Teachers
Minitramp	♥	♥	♥		♥	♥	
Bikes	♥	♥			♥		
Hammering	♥						
Sandpit	♥	♥	♥				♥
Aviary birds/ guinea pigs ducks	♥	♥	♥	♥		♥	
Ball	♥	♥	♥				
Moon hopper	♥						
Water feature	♥						♥
Large moveable climbing equip - slide	♥	♥	♥	♥			
Plants, trees, sky	♥		♥				
Blowing bubbles	♥		☺				

<i>Jack</i>	Conferencing/ Conversations/ Photo elicitation	Researcher Observation (Written & Photographic)	Photo Novella	Drawing	Book making	Parents
Large moveable climbing equipment –boxes, planks, ladders, tunnel, bridges etc	♥	♥	♥	♥	♥	♥
Monkey bars	♥	♥	♥			
Slide	♥	♥		♥		
Plants, grass, trees	♥	♥	♥	♥	♥	
Birds/ Guinea pigs	♥		♥	♥		
Carpentry	♥					
Bikes	♥					
Mini tramp	♥	♥				

<i>Joshua G</i>	Conferencing/ Conversations/ Photo elicitation	Researcher Observation (Written & Photographic)	Photo Novella	Drawing	Book making	Parents
Slide	♥	♥	♥			♥
Sandpit	♥	♥			♥	♥
Large moveable climbing equipment – boxes, planks, bridges, ladders	♥	♥	♥		♥	♥
Monkey Bars	♥		♥			♥
Painting	♥					
Other children/friends	♥	♥	♥			
Grass areas/ fence	♥		♥	♥		
Gardening, plants	♥			♥		
Carpentry	♥	♥	♥		♥	
Clay	♥					
Balls	♥	♥				
Blowing bubbles	♥					
Animals	♥		♥			

<i>Joshua K</i>	Conferencing/ Conversations/ Photo elicitation	Researcher Observation (Written & Photographic)	Photo Novella	Book making	Parents
Monkey Bars	♥		♥		
Sandpit	♥	♥	♥	♥	
Gardening, plants, trees	♥	♥	♥		
Blowing bubbles	♥				
Fingerpaint	♥				
Large moveable climbing equipment – boxes, planks, bridges, ladders, slide etc	♥	♥	♥	♥	♥
Obstacle course- minitramp	♥		♥		
Chasey Games -running	♥	♥			♥
Grass areas	♥		♥		
Bikes-rideons	♥	♥			♥
Clay	♥				
Balls	♥	♥		♥	♥

<i>Joshua Mc</i>	Conferencing/ Conversations/ Photo elicitation	Researcher Observation (Written & Photographic)	Photo Novella	Drawing	Book making	Parents	Teachers
Sandpit	♥	♥	Took one but did not come out			♥	
Slide	♥	♥		♥		♥	
Bikes	♥	♥			♥	♥	
Large moveable equipment climbing area boxes etc- but not monkey bars	♥	♥	♥			♥	
Boat	♥	♥	♥		♥		
Other children/friends	♥	♥	♥		♥	♥	
Fingerpaint	♥						
Fence	♥		♥	♥			
Plants, grass, flowers	♥	♥	♥	♥		♥	
Animals	♥	♥	♥				
Balls/hoops	♥	♥				♥	

<i>Krissy</i>	Conferencing/ Conversations/ Photo elicitation	Researcher Observation (Written & Photographic)	Photo Novella	Drawing	Book making	Parents	Teachers
Monkey Bars	♥	♥	♥		♥	♥	
Slide	♥	♥					
Sandpit	♥	♥	♥				
All moveable boxes, planks, ladders, tunnel, bridge etc	♥	♥	♥		♥		♥
All of it -water feature	♥	♥		♥	♥		
Stomping in puddles	♥	♥					
Animals	♥	♥	♥				
Balls	♥		♥				

<i>Mikayla</i>	Conferencing/ Conversations Photo elicitation	Researcher Observation (Written & Photographic)	Photo Novella	Drawing	Book making	Parents
Sandpit	♥	♥	♥		♥	♥
Monkey bars	♥	♥	♥	♥	♥	♥
Large Moveable climbing area –slide, bridge, tunnels, boxes, planks	♥	♥	♥		♥	♥
Slide	♥	♥	♥			♥
Low Moveable obstacle course	♥	♥			♥	
Mini tramp	♥	♥				♥
Chasey Games	♥	♥				♥
Water Feature	♥	♥		♥		♥
Animals/Nature	♥	♥	♥		♥	
Baby side outdoor	♥	♥				

<i>Paloma</i>	Conferencing/ Conversations Photo elicitation	Researcher Observation (Written & Photographic)	Photo Novella	Drawing	Book making	Parents
Monkey Bars	♥	♥	♥	♥		♥
Large Moveable climbing area –slide, bridge, tunnels, boxes, planks	♥	♥	♥	♥		♥
Water feature	♥	♥	♥	♥		♥

<i>Sam</i>	Conferencing/ Conversations/ Photo elicitation	Researcher Observation (Written & Photographic)	Photo Novella	Drawing	Book making	Parents
Monkey Bars	♥	♥		♥		
Sandpit	♥	♥	♥	♥		♥
Large Moveable climbing area –slide, bridge, monkey bars, tunnels, boxes, planks	♥	♥	♥	♥		
Water feature	♥	♥	♥	♥		
Plants, gardening, nature	♥	♥			♥	
Behind shed/by fenceline	♥	♥	♥			
Bikes	♥	♥			♥	♥
Clay	♥					
Tyres	♥	♥				♥
Steps	♥	♥	♥			
Other children	♥	♥	♥			
Blowing bubbles	♥					
Boat	♥					

<i>Taran</i>	Conferencing/ Conversations/ Photo elicitation	Researcher Observation (Written & Photographic)	Photo Novella	Drawing	Book making
Monkey Bars	♥	♥		♥	♥
Sandpit	♥	♥	♥		
Behind Shed	♥		♥		
Fenceline/behind bushes	♥	♥	♥		
Bikes/rideons	♥	♥		♥	♥
Large Moveable climbing area –	♥	♥			
Balls	♥	♥	♥		♥
Clay	♥				
Minitramp		♥	♥		
Carpentry	♥				
Boat	♥				
Steps	♥		♥		
Low moveable boxes etc	♥		♥		
Running	♥	♥			

# Appendix 11

## December 1<sup>st</sup> 65 minute running record of what children are doing using photos, tape recorder and written record. 9:35 – 10: 40.

Observing children on high grass area near fence for first ten minutes. A basketball hoop is also on the grass area, the bridge, cones stacked, bat and ball.

9:35	<p>Joshua G and Joshua Mc standing on the bridge that has been placed by itself on high grass area near fence. There are several cones stacked up ( ball is placed on top so they can hit it off) and the children have a bat and a ball and are playing a cricket type game. Sam is batting. Teacher – he has had three hits, how many has he got left? Joshua Mc – one more Teacher – I am glad you are a good counter Teacher to another teacher – they have negotiated who is next to have a turn. Teacher – “Good team work guys” as the children catch the ball and give back to Joshua Mc whose turn it is. Joshua Mc hits ball and Joshua G collects it and gives to Joshua. They are counting the number of hits. J Mc holding up three fingers to indicate how many hits JMc – 1,2,3 He says he is allowed 7 turns. Other children don’t argue. Joshua Mc hits ball again – “ that is four you know” he says, holding up four fingers Joshua MC – “that is four okay” He hits ball again Teacher - is it Josh G’s turn yet Joshua Mc Joshua Mc – no I have only had five, holding up five fingers Me – “if you have seven turns and you have had five, how many hits have you got left?” Joshua Mc – “two”</p>	<p>Comment Cooperative game with rules children have decided on prior to my arrival  Hitting Catching  Lots and lots of maths (counting) and negotiating happening  Starts counting from four – a common way that children count do not go back to one  J Mc really enjoying hitting the ball off the top of the cones and negotiating very successfully to extend the number of turns he can have.  JG asserting himself  J Mc trying to have three more turns  It is agreed  Children accurately keeping count. J MC tries to extend the number yet again and inspite of other children</p>	<p>Experience/motivation categories  Physical play – learning specific skills from peers Challenging and extending themselves physically  Action awareness- Manipulative skills, stability skills. Effort awareness, space awareness and body awareness  Manipulative skills, stability skills. Effort awareness, space awareness and body awareness  Empowerment Building skill Physical play</p>
------	--	---	--

	<p>Me – well done  Josh Mc hits it again.  JMc – one more left  Joshua G – “ give it to me” . They are all counting on the fingers to see how many turns J Mc has left.  Joshua Mc – decided that he is now going to have ten turns – “I’m having ten”  Me – You are having ten now that means you get three more turns  Boys have discussion about this  Joshua Mc – “three more hits”.. “three more hits”  Me – “Are you the wicket keeper?” to Joshua G  He has these hits.  Another child – “you have finished Joshua Mc”  Joshua Mc – “now I am going to have twelve”  Other children – no  Joshua G to me – “did you bring your camera”  Me – yes</p>	<p>not agreeing he preserves with having two more hits.</p>	<p>Empowerment</p> <p>Empowerment</p>
9:45	<p>Alexia now come over and joins them, stand on bridge beside Sam and another boy who are perched on bridge rails with feet on opposing rail  The boys are still counting using their fingers keeping track of Joshua Mc’s hits  Me – “Joshua G’s turn now, you’ve had ten turns”  Joshua G now has the bat  Joshua Mc – “I did twelve”  He hits the ball  Me – good hitting  Joshua G – hits the ball “yeah man”  Me – How many hits are you going to have Josh G”  Joshua G – ten  He hits the ball again  Me – How many have you had now?  Joshua G – two</p>	<p>perching  Hitting  Perching, balancing  Catching  The boys have been awaiting their turn very patiently.  Real pleasure at having hit the ball  Counting  Negotiating  Hitting  Loses interest once not hitting  Children requesting</p>	<p>Action awareness -Stability skills</p> <p>Manipulative skills</p> <p>Manipulative skills, Action awareness stability skills.  Effort awareness, space awareness and body awareness</p> <p>Stability skills</p>

	<p>Alexia is sitting on bridge rail on bridge waiting for a turn- look Cheryl          Joshua Mc- I don't want to play anymore          Alexia – “can I have a tennis ball”          Joshua K comes and asks if there are more tennis balls and teacher suggests he goes and asks a teacher inside for them</p>	<p>more tennis balls and they are provided          Requesting equipment</p>	<p>Empowerment</p>
<p>9:50</p>	<p>Eilish comes past riding on wooden truck along pathway, she has several tennis balls in the back of the truck.</p> <p>Wei-bin is climbing up side of box, using the monkey bars swinging across using arms, on to box and then crawling through the tunnel and jumping off          Boys have finished game of cricket. Eilish looks sad          Me - What happened Eilish          Eilish – those boys took the little balls ( she had them in the back of the truck)          Me – I think someone has gone to get some more          Taran – “we need to five balls”          I point out some other balls          Taran – “we need it “          Me - I can see some balls          Taran – “but I hate those ones”          Me – “what sort of balls do you like?”          Taran – “ that one, the yellow one and the ..” referring to tennis balls</p> <p>Wei-Bin still on the monkey bars hanging up side down , putting legs over, going over hand over hand very fast</p>	<p>Riding and transporting          Riding on trucks ( as Pukekos not allowed on ride ons when toddlers are outside.          Transporting</p> <p>Bark area          Climbing          Swinging/hanging          crawling          Jumping</p> <p>Transporting</p> <p>Expressing point of view- requesting          Knows which ones he wants. Tennis balls popular          Taran prefers tennis balls (hates big balls).          Notice Taran uses extremes of feeling words in relation equipment –love, hate, like</p> <p>Wei-Bin definitely enjoys using the monkeys bars – incredibly agile. Wei-</p>	<p>Stability skills</p> <p>Manipulative skills, Action awareness stability skills.          Effort awareness, space awareness and body awareness</p> <p>Empowerment</p> <p>Manipulative skills, Action awareness stability skills.          Effort awareness, space awareness and body awareness</p> <p>Physical play</p>

		bin appears very confident and competent as he crosses monkey bars at speed  Swinging/hanging	
9:55	Alexia, Joshua G, and Joshua Mc come back with more balls Eilish and Wei-bin join them all on grass area then move away. Alexia, Joshua G and Joshua Mc throwing balls through basketball hoop (only few days old). Other children who have been having morning tea come out outside. I talk to Krissy about her Goldfish Krissy – we don't need a cover	More tennis balls  basketball hoop  Making connecting links with home Throwing	Action awareness – stability and manipulations skills Effort awareness, space awareness and body awareness  Contact with natural world
9:58	Alexia is throwing ball through the hoop and wants me to take a photo. Krissy walks over the plank in middle grass area. Joshua G wants me to take a photo of him hitting the ball. Alexia then has a go at hitting the ball from top of cones and wants me to take a photo. Alexia – “Where did it go?” Alexia puts ball through hoop. Krissy is still walking over low obstacle course Joshua Mc- its my turn.(to hit ball from cone) Joshua G - I want a turn Krissy has a go at doing a forward roll Joshua Mc – “I'm getting it and goes after the ball” Alexia has a turn and does a big hit, I retrieve the ball for her. Alexia and Joshua G and Joshua Mc continue to play with balls on the upper grass area. Joshua and Joshua trying to get ball though hoop. Krissy is beginning to move equipment around low obstacle area.	Throwing Basketball hoop Low moveable obstacle course Children requesting me to photograph them Cones, Bat and ball still being used basketball hoop Low moveable obstacle course Forward roll on mat on middle grass area  Cones, Bat and ball still being used and basketball hoop Throwng Balancing Hitting ball Throwing Catching Rearranging obstacle course Hitting Upper grass area Balancing Moving equipment	Action awareness – stability and manipulations skills Effort awareness, space awareness and body awareness  Action awareness – stability and manipulations skills Effort awareness, space awareness and body awareness  Constructing places

	<p>I am playing catcher for Alexia and trying to take a photo  Joshua Mc- you missed it ( meaning I did not get a shot of her hitting the ball)  Me – I did , lets count 1,2,3  Joshua G – try and do it from far away (instructing me on how to take the photo).</p> <p>Krissy has gone over to large moveable area and trying to get ladder off one of the boxes.  I help her a little to lift it off , after checking that is what she was wanting to do, and she carries it over to low obstacle area</p>	<p>Carrying/placing</p> <p>Krissy has increasingly gained confidence since I have been there in using the equipment and recently without saying anything to anybody she rearranges the courses – both low and higher one on bark area,.  Rearranging obstacle course  Carrying - rearranging</p>	<p>Action awareness – stability and manipulations skills  Effort awareness, space awareness and body awareness</p> <p>Empowerment</p> <p>Physical play</p> <p>Sense of agency</p>
10:06	<p>Krissy moves the ladder around, puts it down, picks it up and moves it again</p> <p>Alexia still playing cricket – hitting the ball off the cone  Joshua G and Joshua Mc throwing tennis balls around</p> <p>Some of the toddlers and the other children walking around and over the obstacle course Krissy has created. She has placed the ladder between two tyres.  Alexia comes over and walks across it as do Joshua G and Joshua Mc – all children holding a tennis ball except Alexia.  Joshua G and Joshua Mc go over to large climbing area and put balls on top of box and climb up and then throw the balls off.  Me – where are you aiming for  Me – shall I put a basket here and you can see if you can get them into the basket  The boys like this idea and try to</p>	<p>Carrying – rearranging</p> <p>Hitting  Cones, Bat and ball still being used and basketball hoop</p> <p>Throwing</p> <p>Placing</p> <p>Balancing</p> <p>Holding  Tennis balls being thrown  Aiming for container on the ground</p> <p>Climbing  Throwing  Throwing tennis balls off large box</p>	<p>Transporting/Rearranging</p> <p>Action awareness – stability and manipulations skills  Effort awareness, space awareness and body awareness</p> <p>Action awareness – locomotor skills, stability and manipulations skills  Effort awareness, space awareness and body awareness</p>

	<p>aim for the basket.</p> <p>Alexia – “This is wobbly” ( referring to ladder krissy has placed between the tyres)  Alexia – “ I think you should ... “  making a suggestion to Krissy about moving the ladder. She picks it up and moves it.</p> <p>Joshua G – I got it, I got it , I got it, rep over and over as he got the ball into the basket.</p>	<p>Rearranging obstacle course – others become involved  Expressing an opinion  Carrying /placing  Expressing an opinion  Carrying/moving</p> <p>Excitement at achieving a goal through the hoop  Aiming for container on the ground with ball</p>	<p>Empowerment</p> <p>Physical play  Empowerment</p>
<p>10:10</p>	<p>Joshua K and Taran, Sam etc have come back outside from morning tea  Teacher – have you told cheryl that you picked the broccoli and ate it  Me – wow was it yummy  Joshua k and Sam – yes</p> <p>Sam and Joshua K go over to mat and want me to take a photo of them doing cartwheels  They call my name several times  Me – I am coming.  Me – I’ll take a photo, ready , off you go.  Me – I think you got you landed  Me – shall I do it on movie  Sam – Can I see the movie  Me – it did not seem to work  Show JK and Sam the photos  Alexia - can we, can you do that thing under your arm ( I have the tape recorder tucked against me using my elbow)  Me – we can I am taping. What would you like to tell me Lexy?  Alexia – um I want to tell you how we are do that (pointing to obstacle course)  Me , checking out– How you are building the obstacle course . So</p>	<p>Doing Cartwheels</p> <p>Athletics – forward rolls, cartwheels</p> <p>Asking to be photographed</p> <p>Alexia asking to be interviewed on tape</p> <p>Rearranging obstacle course – others become involved  Focuses on friends rather than actual task</p>	<p>Contact with natural world</p> <p>Physical play – challenge and extending</p> <p>Action awareness – locomotor skills, stability  Effort awareness, space awareness and body awareness</p> <p>Constructing spaces</p>

	<p>how are you building the obstacle course?  Alexia – um we are doing back and forth, doing running..... Chantelle, me and Chantelle came along and then we both were friends, Me and Mikayla.  Sam- asking me to take a photo at same time as Alexia is talking to me., Chantelle, Sam, Krissy, Hamish</p> <p>Joshua K, Alexia, Joshua G, Joshua Mc are now all outside.  I notice they have placed ladder facing upwards and hook over bars are sticking up, so I explain that I am going to turn it over so no one gets hurt.  Sam and Joshua K doing cartwheels on mat.  Two boys and the other Joshua’s are still throwing balls off top of boxes , the retrieving them and climbing back up to do it all again.  Alexia – can you tape me, can I listen  Joshua G asks me to hold some tennis balls which I do  Mikayla, Krissy and Chantelle on obstacle course  Joshua G comes back and asks me where the balls are  I explain that I must have dropped them while taking a photo and point out where I can see some balls.  Alexia wants to be interviewed again using tape recorder  Me – So Alexia did you like playing on the obstacle course  Alexia – mmmm  Me – did you help build it  Alexia - mm but Chantelle didn’t</p>	<p>Still rearranging obstacle course – others become involved</p> <p>Cartwheels  Climbing  Throwing balls  jumping  Collecting  Balancing</p> <p>Athletics</p> <p>Tennis balls still being thrown off large boxes and over boxes.</p> <p>Alexia asking to be interviewed on tape  Explaining</p> <p>Running over course</p>	<p>Action awareness – locomotor skills, stability  Manipulative skills, Effort awareness, space awareness and body awareness</p> <p>Action awareness – locomotor skills, stability  Manipulative skills, Effort awareness, space awareness and body awareness</p> <p>Action awareness – locomotor skills, stability  Manipulative skills, Effort awareness, space awareness and body awareness</p> <p>Social dynamic</p>
10:15	<p>Krissy, Mikayla, Chantelle, Alexia have found an earwig and looking at</p> <p>Hamish is kicking the ball</p>	<p>Discovery –observing bug  Kicking  Large Ball kicked</p>	<p>Contact with natural world</p> <p>Action -Manipulative skills  Effort awareness</p>

	<p>Joshua G still throwing ball off top of boxes.</p> <p>Krissy , Mikayla and Chantelle looking for the earwig.  Me – can you see the earwig, is he on the ground?  Alexia – I can't see it  Mikayla – he's died  Chantelle finds him and picks him up  Me – put him on there ( the plank so we can see him?  She does  Me – who squashed him  Mikayla – me  Me – how many legs does he have and he has little pincers  Me – his legs are still moving, I will take a photo  Teacher – look what they have a found  Alexia – an earwig  Other children gather round to have a look  Joshua k – don't push  Teacher – if you stand back a bit you could all see  Alexia picks it up to show everyone  Alexia – Taran, taran I'll show you the earwig  Alexia – Joshi do you want to show it  Children ask where the balls are – I suggest they looking for them  Mikayla asks about his legs and pincers  Alexia – calls out to another tea her to have a look at the earwig.</p>	<p>Tennis balls still in use  -Climbing  Throwing  Jumping  Observing insect</p> <p>Observing</p>	<p>Contact with natural world</p>
<p>10:20</p>	<p>Boys are on the boxes still throwing the balls down form the top and then picking them up again.</p> <p>Chantelle is with Alexia on large climbing equipment</p>	<p>Climbing, throwing, jumping  Large climbing equipment still being used and lower obstacle course</p>	<p>Action awareness – locomotor skills, stability  Manipulative skills, Effort awareness, space awareness and body awareness</p>

	<p>Sam brings me a bird nest he has found down on the lower grass area. I take a photo of it.  Me – do you think it came out of the big tree on the weekend  Joshua G – hold onto my balls  Me – last time I lost them  Joshua G – hold on to them tight  Chantelle now on large climbing area other children still using obstacle course.  Joshua K riding around on wooden truck using pathway, going round and round.  ? - Where the balls, where's the balls  Joshua G – can we put the basket there  Me – is here alright – Joshua G – no I move it  Me – here is alright.  Children jumping off box , one child's foot goes into container on ground. I explain that it might not be a good idea to jump off. Ask them what we think we could put here for them get off the box. Taran brings a plank over we try it but Taran wants it up higher.  Me – it won't fit in there ( as we try it)  Taran – I know it will grizzles  We try it and it doesn't work – I point out that it we would need a longer board so we have to put it on the lower place. Taran grizzles and teacher repeats what I have said.  Joshua G suggests we put the trampoline there.  Alexia still holding the earwig</p>	<p>Discovery</p> <p>On boxes Balancing</p> <p>Riding, transporting</p> <p>Jumping</p> <p>Carrying Moving equipment frustrated</p>	<p>Contact with natural world</p> <p>Action awareness – locomotor skills, stability Manipulative skills, Effort awareness, space awareness and body awareness</p> <p>Action awareness – locomotor skills, stability Manipulative skills, Effort awareness, space awareness and body awareness</p>
10:25	<p>Joshua K watching boys on large box throw the balls  Mikayla on monkey bars swinging using arms  Taran on top of box in bark area  Joshua G playing with balls -</p>	<p>Watching Throwing Swinging Climbing, watching Throwing Swinging</p>	<p>Action awareness – locomotor skills, stability Manipulative skills, Effort awareness, space awareness and body</p>

	<p>throwing balls over box          Krissy and Mikayla swinging on the monkey bars          Joshua G and Taran at back of box throwing the balls right over the top now          Me – good throwing          Mikayla on monkey bars still          Boys (Taran and Joshua G) continue to throw balls over top of large box          Joshua K is now throwing balls through basketball hoop          Mikayla is lying inside the mattress she has folded over by the low obstacle course          Me – are you hiding          She nods</p>	<p>Swinging          Throwing            Throwing            Hiding</p>	<p>awareness            Action awareness – locomotor skills, stability          Manipulative skills, Effort awareness, space awareness and body awareness</p>
<p>10:30</p>	<p>Taran and Joshua K walking around pushing strollers that have tennis balls in them          Joshua comes up to me          Me - What do you like do best outside today Joshua K          Joshua – K – playing over there pointing to fence by lower grass area, we move together towards this area.          Me – you like to roll the tyres down there don't you          He nods          Me – what else do you like to do? Do you play on the monkeys bars?          Joshua K - yes          Me – you taking the pushchair full of balls for a walk          Me –it nice down here isn't , its quiet and look at the pretty yellow flowers          Me – I hear you ate the Broccoli out the garden          He nods          Me – is your wind machine working and keeping the pukekos away          Joshua – ah no not really          Me – are they still pinching the strawberries</p>	<p>Pushing          Transporting tennis balls            Joshua like to play by fence in lower grass area, rolling tyres, playing on the monkey bars            Talking about things they like to do outside            Following up on wind machine that I had helped fix            Collecting balls            Transporting balls in</p>	<p>Locomotor skills                    Contact with natural world</p>

	<p>Joshua K – yes  Me – I will have to go and have a look at the garden  Joshua K – yep, there’s some more (as he finds a ball)  Me – have the vegetables grown  Joshua K – a little bit, a tiny tiny bit  Me – do you give them some water  Joshua K – no, sometimes  Me – there’s some daisies  Joshua K – yucky daisies  Me – its nice and cool down here  We continue to walk around the lower grass area.  One of his balls falls out of pram and goes down the slop – he retrieves it  Joshua K – “ sneaky cause they are sneaky”  Taran joins us and Joshua is trying to get the pram back up the steps but the balls keep falling out.  Joshua K -. Now we need ...I have a good idea... we leave this trolley here and I show you what we can put them in.  I point out some more balls for Taran to collect  Joshua – now we have lots to play with  Taran – I want lots  I point out some others I saw  Taran goes and gets them  Me – now you have three balls each  Joshua K – three balls each... now lets have a look for some more  Taran suggest they play rolling game but Joshua K ignores him and walks off.</p>	<p>pram   Animistic thinking – balls move   Metacognition – idea   Problem solving  Metacognitive awareness   Collecting   Expresses a point of view</p>	<p>Manipulative skills           Empowerment</p>
10:40	Obs ended		