

Nurturing a culture of care for infants and first-time parents: The SPACE Programme at Te Marua/Mangaroa Playcentre Early Childhood Centre of Innovation (Round Two)

Final Research Report for the Ministry of Education

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Executive Summary

Background

The SPACE programme (Supporting Parents Alongside Children's Education) at Te Marua/Mangaroa Playcentre is an early childhood Centre of Innovation (COI). The early childhood COI programme is part of the New Zealand Government's 10-year plan for early childhood education policy: *Pathways to the Future/Ngā Huarahi Arataki* (Ministry of Education, 2002).

COIs are required to design and undertake action research and to disseminate the findings. SPACE is an innovative new programme developed within the Hutt Playcentre Association, predominantly for first-time parents with newborn babies. The SPACE programme aims:

- 1. To support parents in their role as the best and most important educators of their children through:
 - Providing them with support and encouragement from other participants in the group and from experienced facilitators, as they share the journey through their child's early months.
 - Giving parents an opportunity to listen to and develop links with, a range of community organisations and service providers.
- 2. To increase participation of children in Early Childhood Education at an early age, provide a quality curriculum, and maximise children's learning from birth.

This COI team (Te Marua/Mangaroa Playcentre's SPACE programme) carried out a 3-year action research project to show how the centre's innovative practices influence learning and teaching. The research addressed two key research questions:

- 1. How does the SPACE programme, implemented at Te Marua/Mangaroa Playcentre for new parents and infants, support and foster their learning?
- 2. How does the SPACE team and programme, together with Te Marua/Mangaroa Playcentre, network and support collaborative relationships?

At Te Marua/Mangaroa Playcentre two cycles of action research were completed between 2005 and 2007. Action research tools included observations, parent interviews, facilitator reflections and crosss-sectoral consultations (interviews and a focus group).

Key Findings

Research Question 1:

How does the SPACE programme, implemented at Te Marua/Mangaroa Playcentre for new parents and infants, support and foster their learning?

Some main themes and findings from the observations and interviews in action research cycles 1 and 2 are summarised below.

Supporting Relationships and Interactions: This theme includes the interactions among parents, infants, speakers, and facilitators and other members of the COI team. Key findings were, for example:

- Participating in the SPACE programme overcomes the feelings of isolation that can
 overwhelm first time mothers and develops the shared understanding that is evident in
 the way both parents and infants contribute to, and participate in, the group sessions.
 These findings are supported by data from the focus group which concluded that
 'good' parenting skills were beneficial in the long term;
- Infants actively sought interactions with others in addition to their parent. This included their peers and other adults;
- Over time, the relationships developed, as participants become familiar with one another and infants and adults actively sought each other out. In addition, parents began to know and respond to the characteristics, personalities, and interests of one another's infants.

Facilitating Environments: This includes both the physical environment (equipment, layout, artefacts) of the centre setting, and the social environment associated with the SPACE sessions. Findings included:

 Recognising that the environment was an aspect of the programme that played a key role in fostering interactions and relationships;

The COI team observed the physical environment, the impact of how the centre was set up, and what changes were needed for the SPACE session to support and foster parents' and infants' learning.

Fostering Holistic Learning: The holistic approach in the SPACE programme includes: learning through exploration; learning within the group; encouraging new experiences; following and extending learning, and fostering child initiated play. Fostering holistic

learning occurred as a result of shared activities which were part of the SPACE programme at Te Marua/Mangaroa Playcentre. For example:

 Parents were supported to become actively involved in new play experiences with their own infants, other infants, other parents, and facilitators. One new experience offered at the Playcentre was messy play.

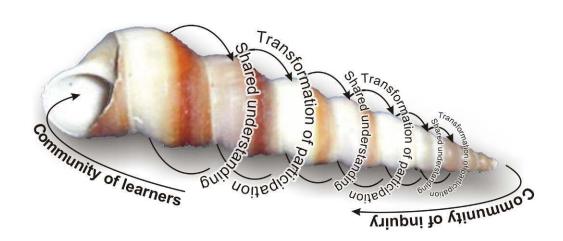
Connecting Families and Communities: This theme focuses on the connections made by SPACE facilitators, by the participating parents themselves, and by other agencies that were contributors to the SPACE sessions:

- Practical information shared during the SPACE sessions about resources had an impact on what parents offered their infants at home.
- There were connections between the SPACE programme at Te Marua/Mangaroa Playcentre and the wider community. As parents grew confident within the SPACE group, they brought new ideas to share within the group.

Tools and artefacts: The use of a variety of tools and artefacts influenced learning within the group. Tools and artefacts used during the SPACE session included: equipment, facilitation strategies including icebreakers that developed rapport in a group or SPACE session, and music. Infants (often aged as young as 6 months) responded actively to music during the course of the SPACE sessions. Observations, facilitator reflections, and parent interviews all showed that music worked as a tool to foster interactions among parents and infants. The use of storybooks also encouraged interactions among parents and infants and fostered their learning. Numerous observations showed infants becoming more engaged over time during storybook readings at the SPACE sessions.

Community of Learners and Inquiry, Transformation of Participation: Parents' participation became transformed during the 30 weeks of the SPACE programme. This was apparent across the observations, reflective comments from the researchers, and the parent interviews. Over time, the facilitators gradually but warmly and actively encouraged more participation from the parents, but at the same time accepted differences in the types of participation. At the beginning of the SPACE programme, some participants were shy and self-conscious. Facilitators encouraged parents to contribute to the SPACE sessions. They employed a range of strategies (or tools) such as icebreakers, which supported contributions from the parents. Rather than positioning themselves as experts, and parents as the novices, facilitators viewed all as participants in a community of learners (Rogoff, 1998). They were open to including contributions from parents and acknowledged their skills.

The following model represents the socio-cultural ideas that informed the findings. Transformation of participation and shared understanding were processes that contributed to building communities of inquirers. This process was cyclical and continuous, with each cycle strengthening the community of learners that included the COI research team, the parents, and their infants. The process led to further inquiry among the research team members and participants, all of whom contributed to how socio-cultural ideas applied to evaluating the innovation of the SPACE programme at Te Marua/Mangaroa Playcentre.



Transformation of Participation: A Conceptual Model

Note: This shell model was conceived by Truus Dingemanse.

Research Question 2:

How does the SPACE team and programme, together with Te Marua/Mangaroa Playcentre, network and support collaborative relationships?

Key themes analysed in relation to this second research question were:

Collaborative Support: This major theme included these subthemes: *nurturing a culture* of care, respecting parents, and valuing families and communities. Examples included:

• The SPACE sessions were designed to foster a culture of care amongst all participants. The discussion and sharing time provided an opportunity for parents to reflect critically on issues and practices that are relevant to parenting. What has become evident during this research is the importance of role modelling. Parents acted as role models for one another. The facilitators and the guest speakers also became role models:

- Including more Māori and also Pacific families was advocated by several key informants from the health and social service agencies;
- There was important affirmation for SPACE as a centre-based group programme, drawing families from the community together as a group.

Communication across Sectors: This second major theme encompassed subthemes of: *referrals, interactions across settings*, and *cross-sectoral content*. The following examples were:

- Participants' interests, knowledge, and needs shaped the nature and direction of the programme. This meant the content was adapted month by month to suit the interests of the participants, and drew on community resources and speakers, as well as expertise within the group.
- There were important findings related to interactions with early childhood services. For example, towards the end of the programme, participants were reflecting on, and discussing, what types of early childhood services they were planning to attend with their children;
- Interactions took place between the SPACE sessions and other settings, for example: early childhood services, community groups, the wider community and the SPACE programme at a regional and national level. Research information from the COI informed the development of the SPACE programme nationally.

Ecological views: Ecological theories helped the COI team to understand how the different groups in the community contributed to infants' and parents' experiences. Facilitators made decisions about the content of the SPACE sessions in consultation with parents, and other members of the research team. They consulted the wider community, and made changes to enhance the effectiveness of the programme. For example, based on parents' interests, guest speakers were invited and the weekly topics accommodated parents' requests.

As part of the research, and to support an intention of *Pathways to the Future* (Ministry of Education, 2002) collaboration across settings was clearly one of the benefits of the programme. COI team members, together with the research associates, networked extensively. A strategy to maintain community links, and to inform the research was to appoint an advisory committee. Members of this group were drawn from health, education and social service sectors. One member commented:

To me SPACE is about connections and communities. The Te Marua/ Mangaroa SPACE COI project has forged a web of powerful and hopefully enduring connections between families, children, facilitators, the playcentre, and the

researchers themselves. I believe a lack of the sense of belonging that a community creates is one of contemporary society's biggest weaknesses and one of the prime reasons for our increasing problems of abuse, violence and crime. SPACE builds communities and the importance of that cannot be overestimated. (Ella Kahu, member of the COI project advisory committee, personal communication, August 10, 2007)

Final Comments

The findings of the research affirmed the value of the SPACE programme at Te Marua/Mangaroa Playcentre for learning and collaboration. Members of the projects' advisory committee provided further insights on the research findings. One comment was, for example:

This project has created new and exciting communities of empowered people. The project team, beginning as Playcentre parents, is now a skilled and active force with enormous interest and potential in the area of educational research, particularly in the development of parenting skills. The parents have become seekers in their own right, with new understanding of their roles and new connections with their community. The babies are active participants in their own learning. The advisory team and the associated community agencies are still learning, and energised by the journey we have all been on and the infinite possibilities for its future benefit for children. (Helen Willberg, member COI project advisory committee, personal communication, August 10, 2007)

Participating parents supported the innovative idea of providing the SPACE programme for new parents and their infants in a group centre-based setting:

It's been really good. Just the fact of having people act as a sound board [to bounce] ideas off. (Parent exit interview, Action Research Cycle 2)

I would tell anybody who is pregnant now to join a SPACE session. I found it really empowering and it gave me confidence and Chris [her infant] loved it, and you know he's going to be empowered and get confidence if his mum is. The better I feel about being the parent, the more that he's going to get out of it. (Parent interview, Action Research Cycle 2)

Table of Contents

Executive Summary	3
Background	3
KEY FINDINGS	4
Research Question 1:	4
How does the SPACE programme, implemented at Te Marua/Mangaroa Playcei	ntre for new
parents and infants, support and foster their learning?	4
Research Question 2:	6
How does the SPACE team and programme, together with Te Marua/Mangaroa	Playcentre,
network and support collaborative relationships?	6
FINAL COMMENTS	8
Table of Contents	9
Acknowledgements	12
Chapter 1 Introduction	1
Overview	1
BACKGROUND	1
New Zealand Centres of Innovation programme	1
Playcentre and the SPACE programme	2
Te Marua/Mangaroa Playcentre	3
RESEARCH AIMS	6
RESEARCH QUESTIONS	7
Chapter 2 Literature Review	8
Overview	8
PHILOSOPHICAL BACKGROUND	8
Te Whāriki	8
Playcentre Philosophy	9
PARENT SUPPORT AND EARLY CHILDHOOD EDUCATION	10
Other Parent/Whānau Led Services	10
Parenting support services	11
Other services	15
Supporting Parents Alongside (their) Children's Education (SPACE)	15
SPACE	17
Theoretical Perspectives	19
Socio-cultural Theoretical Approaches	20
Ecological theory	23
SUMMARY	25
Chapter 3 Research Methods	26

	26
COLLABORATIVE, PARTICIPATORY ACTION RESEARCH	26
ACTION RESEARCH PROCESSES	27
ETHICS AND RELATIONSHIPS	28
RESEARCH METHODS: ACTION RESEARCH	28
Participants	29
Action Research Tools	30
Parent Interviews	34
Focus Group Interviews	35
Interviews with Health and Other Professionals	36
BUILDING RESEARCH CAPACITY: ANALYSIS PROCEDURES	37
SUMMARY	39
Chapter 4 Findings: Supporting and Fostering Learning	40
Overview	40
INTRODUCTORY EXPLANATION OF KEY THEMES	40
Supporting interactions and relationships	40
Facilitating environments	51
Fostering holistic learning	60
Connecting families and communities	67
SUMMARY	73
Chapter 5 Findings: Networking and Supporting Collaborative Relationships Space Programme	_
Key Themes for Research Question Two	
Overview	
DEVELOPMENT OF KEY THEMES	
Collaborative support	
Communication across sectors	
	83
SUMMARY	83 94
SUMMARYChapter 6 Findings: Theoretical Analyses	
SUMMARY Chapter 6 Findings: Theoretical Analyses OVERVIEW	
SUMMARY Chapter 6 Findings: Theoretical Analyses OVERVIEW UNDERSTANDING AND APPLYING OUR SOCIO-CULTURAL THEORETICAL FRAMEWORK	94 95 95
SUMMARY Chapter 6 Findings: Theoretical Analyses OVERVIEW UNDERSTANDING AND APPLYING OUR SOCIO-CULTURAL THEORETICAL FRAMEWORK TOOLS AND ARTEFACTS	
SUMMARY Chapter 6 Findings: Theoretical Analyses OVERVIEW UNDERSTANDING AND APPLYING OUR SOCIO-CULTURAL THEORETICAL FRAMEWORK TOOLS AND ARTEFACTS Music	
SUMMARY Chapter 6 Findings: Theoretical Analyses OVERVIEW UNDERSTANDING AND APPLYING OUR SOCIO-CULTURAL THEORETICAL FRAMEWORK TOOLS AND ARTEFACTS Music Storybooks	
SUMMARY Chapter 6 Findings: Theoretical Analyses	
Summary Chapter 6 Findings: Theoretical Analyses Overview Understanding and applying our socio-cultural theoretical framework Tools and artefacts Music Storybooks Facilitation strategies and course content Discussion and Implications	
Summary Chapter 6 Findings: Theoretical Analyses OVERVIEW UNDERSTANDING AND APPLYING OUR SOCIO-CULTURAL THEORETICAL FRAMEWORK TOOLS AND ARTEFACTS Music Storybooks Facilitation strategies and course content Discussion and Implications SHARED UNDERSTANDING AS A COMMUNITY OF LEARNERS	
Summary	
Summary Chapter 6 Findings: Theoretical Analyses OVERVIEW UNDERSTANDING AND APPLYING OUR SOCIO-CULTURAL THEORETICAL FRAMEWORK TOOLS AND ARTEFACTS Music Storybooks Facilitation strategies and course content Discussion and Implications SHARED UNDERSTANDING AS A COMMUNITY OF LEARNERS Conceptual Socio-cultural Process Transformation of participation	
Summary	

CONTRIBUTING AS A COMMUNITY OF LEARNERS	108
Learning about early education	Error! Bookmark not defined.
Parents' understanding develops through infants' learning	109
Increasing confidence in emergent leadership	110
DISCUSSION	111
ECOLOGICAL CONSTRUCTS	112
Ecological systems	112
DISCUSSION	120
SUMMARY	120
Chapter 7 Summary and Conclusions	121
OVERVIEW	121
SUMMARY: THEMATIC FINDINGS	121
ADVISORS' INSIGHTS	122
CONCLUSIONS	123
References	125
Appendix A A community of learners and inquiry: Team	members' reflections on the
research process	133
Appendix B Relationship agreement	134
Appendix C Consent forms and information sheets	135
Appendix D Parent interview schedule	144
Appendix E Interview questions for health professionals, gues	st speakers and focus group146
Early Childhood Centres of Innovation:	146
Interviewee Code:	146
Interviewer:	146
Date:	146
Appendix F Examples of workbook sheets: observations	147
Appendix G Example of a workbook sheets: parent interviews	147
Appendix G Example of a workbook sheets: parent interviews	148
Appendix H	148
Appendix H	149
Vignette of an infant's exploration and holistic learning	149

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Chapter 1

Introduction

Overview

This chapter introduces the SPACE programme (Supporting Parents Alongside Children's Education), at Te Marua/Mangaroa Playcentre, and the research aims and rationale. Special characteristics of the SPACE programme at Te Marua/Mangaroa Playcentre include its focus on supporting parents and young infants in an early childhood centre setting, with all involved as a "community of learners". The research addresses two key research questions concerned with quality support for parents' and infants' learning, and with collaboration.

Background

New Zealand Centres of Innovation programme

In 2002, the early childhood Centres of Innovation (COI) programme was announced as part of the New Zealand Government's 10-year strategic plan for early childhood education policy: *Pathways to the Future/Ngā Huarahi Arataki* (Ministry of Education, 2002). In 2003 the first 6 COIs were selected. These initial centres are sometimes referred to as the "round one COIs". After a similar selection process, the number increased to 10 from 2005 (the "round two COIs"). Selection of a third round of 6 more new COIs was finalised early in 2006 ("round 3 COIs"). At the time of writing, selection of a fourth round of centres is about to be initiated.

Centres of Innovation are expected to:

- build the use of innovative approaches that result in improved early childhood learning and teaching based on Te Whāriki: Early Childhood Curriculum;
- facilitate action research, with the help of researchers, to show the results the innovative approaches have on learning and teaching;
- share the knowledge, understanding and models of practice with others in the early childhood education sector and parents/whānau.

Our Centre of Innovation, the SPACE Programme at Te Marua/Mangaroa Playcentre, is one of the four COIs that were selected in the second round of the COI programme (2005-2007). Our research is connected primarily to the strategic plan's goal to improve quality, and also to two other goals: to support collaboration between agencies (including researchers) and to increase participation in early childhood education.

Playcentre and the SPACE programme

Playcentre is an internationally recognized early childhood organisation unique to New Zealand. It began as a parent co-operative during the 1940s to support families and promote new developments in early childhood education. Playcentres are unique within early childhood in that they are co-operatively managed and supervised by parents with support from experienced Association and Federation personnel (Playcentre Federation Fact Sheet, May 2006).

Playcentres are a family concept. If you fail to grasp this central theme and its implications you will fail to grow as a movement...you are families meeting other families. Focus on family. Families have full time responsibility, each in the family and with each other. Members of families interact as family members, as individuals, at Playcentre. The interaction is the core of learning...Playcentres are a community, or commune, or communal of families (Grey, cited by Densem & Chapman, 2000, p. 59).

Playcentre philosophy is based on the ideas of child-initiated play and parents as first educators. Playcentre is an early childhood education service, run as a parent cooperative, that commits to the following in order to ensure the quality of early childhood education in each session: learning through play, birth to school age, mixed age sessions, family involvement, other policies and philosophies as decided by the annual national conference.

Recent research has reported consistently that parents'/whānau members' involvement in their children's early education supports learning for all involved (Massey University College of Education Research Team, 2005; Mitchell, Royal Tangaere, Mara, & Wylie, 2006).

SPACE is an innovative new programme developed within the Hutt Playcentre Association, predominantly for first-time parents with newborn babies. The SPACE programme aims:

- To support parents in their role as the best and most important educators of their children through:
 - Providing them with support and encouragement from other participants in the group and from experienced facilitators, as they share the journey through their child's early months.
 - Giving parents an opportunity to listen to, and develop links with, a range of community organisations and service providers.
- 2. To increase participation of children in Early Childhood Education at an early age, provide a quality curriculum, and maximise children's learning from birth.

Sessions are held over three to four terms in a relaxed, baby friendly atmosphere. Weekly session include:

- Opportunities for parents to meet, eat, talk, and learn reciprocally with trained facilitators;
- Discussions on relevant child development and parenting topics;
- Play sessions with age appropriate equipment including heuristic play;
- An introduction to rhymes, music and books for infants.

Te Marua/Mangaroa Playcentre

Te Marua/Mangaroa Playcentre, located in the north of Upper Hutt, in a semi-rural community, runs on a sessional basis five mornings a week. The SPACE programme at Te Marua/Mangaroa Playcentre runs one afternoon per week. The centre has a culture of being hands-on with practice that is grounded in current theory. Centre members value working collaboratively and contributing jointly to the programme. The centre use an established cycle of evaluation, adaptation and implementation.

Like all COIs, the Te Marua/Mangaroa COI research team has carried out a 3-year action research project to show how the centre's innovative practices influence learning and teaching.

The information below provides a more detailed description of the centre environment and culture.

Centre Profile

Centre sessions

General sessions: Monday, Wednesday, Thursday, Friday: 9:30am – 12:00pm.

Fourth session¹: Tuesday: 9:30am – 12:00pm. SPACE session: Thursday: 1:00pm – 3:30pm.

Te Marua/Mangaroa's licence is sessional. Attendance at sessions is high. The majority of families on both the main and SPACE rolls attend regularly (80% of sessions or more), and proactively contact session teams when they will not be attending on a particular day due to illness or other reasons. Back-up is available for adults on the session teams who are unable to attend their session on a given day.

¹'Fourth session' is run specifically for children aged from around 3½ to school age.



Centre Composition

Between 2004 and 2007 of the COI research project, the centre's general roll has numbered between 30 and 40 families with a total of 40 to 50 children. Since 2004, three SPACE programmes have been completed at Te Marua/Mangaroa Playcentre. Two of these SPACE programmes were completed as part of the COI research project. Each programme has had between 14 and 16 families attending sessions.

Te Marua/Mangaroa Playcentre supports a wide catchment area of the upper valley ranging from Akatarawa, Kaitoke, Te Marua, Birchville, Timberlea, Totara Park, Whitemans Valley, Māoribank, and Brown Owl. Many of the children stay until school age and feed into the local schools in this area.

Parental involvement is essential to a Playcentre functioning as an early childhood education centre. Te Marua/Mangaroa Playcentre is supported by mothers and fathers, and also by grandparents, aunts and extended whānau who participate and influence their children at the centre.

This diversity of adults within the centre brings a culture of support and richness. Some parents are engaged in part-time work, some are single parents, and others have both father and mother involved in the sessions. All children are included, as well as their parents and, in some cases, education support workers.

Training/ongoing education for parents.

Te Marua/Mangaroa Playcentre offers a New Zealand Qualifications Authority (NZQA) accredited parent education programme and many members of the centre are taking part in various stages of this training. This means that training is part of being a member of the centre and a high percentage of adults complete the first level of training (Te Wai). Parents often continue with Courses 2 and 3 (Te Puna and Te Manga). Several

continue to Course 4 (Te Awa) and Course 5 (Te Awa Ngutu). The centre regularly encourages parents to train, but it also acknowledges parents' individual styles of learning. Parents often buddy up with others studying at the same level. Communication with parents in general is through regular team and centre meetings; telephone contact, e-mail, notices placed in named family pockets in the centre, and via an information board.

Parents and extended family members are not only valued team members contributing to Playcentre sessions, but are also supported to undertake training within the Playcentre's parent education system. In addition, they may hold office positions, for example: librarian, telephone messenger, special needs co-ordinator, education officer, president, treasurer, equipment convenor, bicultural officer, or property officer.

Te Marua/Mangaroa Playcentre has always encouraged a good sense of ownership for its centre members. Each session operates with a team of parents. Under the regulations, there are always appropriately qualified people on session, but among the parents within each team, knowledge, stages of training completed, and experience vary. First-time parents work/play/learn alongside parents who have older children and who have been involved in the centre for a number of years.

The building and environment

The centre was built in 1993. It is purpose-built centre with a large open-plan area. This area can be changed to incorporate small rooms for various play activities, for example, a family corner. There are low dividers with openings for windows and doors. Storage units can also be moved to create room for play. Adults acknowledge that there is a need for quiet areas, as well as areas without clutter where children can play and learn freely.

There is a fully serviced kitchen in one corner, appropriately cordoned off for safety reasons. The cloakroom includes children's and adults' toilets. There is a sleeping room for infants, an office, and resource and wash-up room. The main room has an extension, accessed by an external door. This allows for carpentry, water play, and concealed storage of large safety mats and equipment.

Since the inception of the research project there have been several improvements. For example, there is extra shelving in the resource room, the office now includes a computer and lockable storage, and a new large cupboard for storage of heuristic resources and infants' toys has been built in the infant's sleep room.

The grounds are open and well-appointed with large sandpit, stage area, and swing areas. There is a large grassed area around the perimeter of the land, bordered by harekeke (flax) and well-established trees. Access to the area is either by ramp or wooden steps. The grounds are fully fenced. The centre is adjacent to a Council park with a pond and nature reserve for ducks, frogs, and pukeko.



Research Aims

At Te Marua/Mangaroa (SPACE) COI, the primary aim of our action research is to explore and evaluate the ways in which the SPACE programme for new parents, and their infants, supports and fosters learning. A second, related intention is to document the way the SPACE team networks, supports collaborative relationships, and works in a cross-sectoral way with other agencies.

Research Questions

The two key research questions in this 3-year study are:

- 1. How does the SPACE programme, implemented at Te Marua/Mangaroa Playcentre for new parents and infants, support and foster their learning?
- 2. How does the SPACE team and programme, together with Te Marua/Mangaroa Playcentre, network and support collaborative relationships?

The next chapter summarises and reviews documents and research literature that provide in-depth information about the background to this study and inform its key area of focus.

Chapter 2

Literature Review

What a child learns through play is self-regulated and self-chosen learning, and it is permanent learning. It is timed and paced correctly to suit an individual rhythm of development. It makes a link with previous experience and prepares for the next leap forward into the future. (Somerset, 1994, p. 151)

Overview

This chapter outlines and reviews research literature and policy documents, with a particular emphasis on these areas: philosophy (*Te Whāriki* and *Playcentre*), parent support and early childhood education; the programme Supporting Parents Alongside their Children's Education (SPACE); and socio-cultural and ecological theoretical perspectives, emphasising infants' learning and development alongside their parents in a community of learners.

Philosophical Background

Te Whāriki

One of the most influential official New Zealand early childhood documents ever published is *Te Whāriki*, the New Zealand early childhood curriculum framework (Ministry of Education, 1996a). It has become the springboard for many initiatives including policy documents such as the *Revised Statement of Desirable Objectives and Practices for Chartered Early Childhood Services in New Zealand* (Ministry of Education, 1996b) and for *Kei tua o te pai/Assessment for learning: Early childhood exemplars* (Ministry of Education, 2005). It has also influenced research direction and orientation (Podmore, May & Carr, 2001; Podmore, & May, with Mara, 1998; Nuttall, 2004).

Despite being more than ten years old, *Te Whāriki* has proven durability. This far-reaching document incorporates several theoretical perspectives to accommodate the diversity in early education services in New Zealand (Te One, 2003). Cullen (2003) noted the catalytic role that *Te Whāriki* could have in the current educational context. Among the emergent trends she identified as a result of the release of *Te Whāriki* was the potential for:

... new forms of professional knowledge that can break down the dichotomies of home and centre. This type of development is consistent with the goal of promoting collaborative relationships in *Pathways to the Future*, and with the 'communities of learners' focus in the Centre of Innovation initiative (Cullen, 2003, p. 286).

The SPACE programme at Te Marua/Mangaroa Playcentre COI provides examples of this type of development as *Te Whāriki* informed both the SPACE programme and the research programme. Together the parent cooperative approach of playcentre and the objectives of the SPACE programme illuminated dichotomies of home and centre as well as revealing tensions between community, the labour market, and family. The principles of *Te Whāriki* (Ministry of Education, 1996a) in particular held significance that influenced the nature of the collaborative relationships both between and among babies, and between first-time parents, facilitators, researchers and research associates. The principles also influenced the overall research approach. A strong sense of coherence is evident between the "Playcentre philosophy" (Dawson, 2007, personal communication) and the principles of *Te Whāriki*.

- Empowerment/Whakamana
- Holistic Development/Kotahitanga
- Family and Community/Whānau Tangata
- Relationships/Ngā Hononga (Ministry of Education, 1996a).

While no one principle can be seen in complete isolation, the concept of empowerment resonated with the researchers and the research associates. This principle articulates a complex theoretical array of ideas in which the transformative experiences of participating in a community of learners empowers both the individual and the group. Emergent leadership is a crucial tenet of Playcentre philosophy. It is acknowledged as empowering for siblings and the wider family, who do not necessarily participate directly in the SPACE sessions. In this way another principle of *Te Whāriki*: family and community can be seen as underpinning the SPACE programme at Te Marua/Mangaroa Playcentre. The content of the programme offers first-time parents and their infants an opportunity to consider how infants' interactions and explorations are best understood in context, and how their learning and development is an holistic process mediated by "responsive, reciprocal, relationships with people, places and things" (Carr & May, 2000).

Playcentre Philosophy

An integral part of Playcentre philosophy is that children and parents learn and contribute together in the early childhood environment. This is explained by Densem and Chapman (2000, p.55) who state: "children reach their full potential most successfully when their parents understand their development and take part in the learning process". Playcentre has long been committed to children learning through self-initiated play. As Gwen Somerset commented:

Once we accept that to play is to learn we cannot do other than appreciate the freedom of a child to choose his or her own play and to play until satisfied with the result. (Somerset, 1994, p. 25)

A second key principle of Playcentre philosophy is the parent co-operative concept. Parents are responsible for the decision-making in relation to the running of their centres and all decisions are made by consensus. Leadership is a shared responsibility. Playcentre culture reflects the diversity of the community it serves.

As stated in the Playcentre Fact Sheet (New Zealand Playcentre Federation, 2007 May):

Playcentre families receive a unique early childhood experience with opportunities for whānau/parents and children to learn together.

This is achieved by offering:

- half day sessions for children of mixed age groupings
- a variety of self selected play activities and comprehensive quality equipment
- an accessible, flexible field-based [centre-based] education programme at minimal cost
- parenting skills and confidence in parenting
- skills for working with children and running Playcentre sessions
- increased cultural awareness
- knowledge of Te Tiriti o Waitangi
- administrative and group facilitation skills.

Parent support and early childhood education

New Zealand has a range of parent education programmes and early childhood services, either with an education or a health focus. These include: early childhood education services that are teacher-led, home-based education and care services, parent/whānau-led services, and parent support services. As the focus of this COI is on parent education and support, what follows is a description of selected recent parent/whānau-led services, and pertinent parent support services.

Other Parent/Whānau Led Services

Te Kōhanga Reo

Kōhanga Reo is classified by the Ministry of Education as a whānau-led service for children from birth to school entry. It developed in the early 1980s and has come to symbolise a focus point for Māori renaissance (Reedy, 2003). It emerged out of a deep concern that te reo Māori was at serious risk of dying out: "Hailed as a grass roots

revolutionary movement (Irwin, 1990) kōhanga reo focused on babies and young children as the future speakers of te reo Māori" (Te One, 2003, p. 23).

The first kōhanga reo opened in Wainuiomata in 1982. As Anne Meade acknowledges, "the idea was born at a national meeting of Māori tribal leaders in 1981. The two main purposes were—and still are—to strengthen and empower Māori families and to save and maintain te reo Māori (the Māori language)" (Meade & Podmore, 2002, p. 12).

The kōhanga movement "brought together a wide range of caregivers and teachers, provided management and administration skills which have opened up exciting possibilities for the child's family" (Reedy, 2003, p. 66). Like Playcentre, kōhanga reo includes whānau, and like Playcentres and the SPACE programme, kōhanga reo has its origins in Aotearoa New Zealand. However, its unique characteristic is its role as a social justice movement, with aspirations beyond early childhood. As Reedy noted:

The language is us and it is ours. We are in control. Yet the language nests have done more than arrest the demise of a language—they have focused attention on the need to revitalise the generally dissipating culture and the marae, the last bastion of that culture. The marae is the cultural setting for the growing child. (Reedy, 2003, pp. 65–66)

The first round of COIs included Te Kōhanga Reo o Pūau Te Moananui a Kiwa. Their findings confirmed the value of whānau relationships as fundamental to cultural identity formation. The staff at that kōhanga reo said:

Whakawhānaungatanga (development of respectful relationships) is integral to the foundations from which Te Kōhanga Reo o Puau works. The whānau believe that the most significant determinant of good outcomes for children is the nature of the relationships. (Kaimahi and kairangahau of Te Kōhanga Reo o Pūau Te Moananui a Kiwa, in Meade, 2005, pp. 39–40)

Parenting support services

Parents as First Teachers (PAFT)

Parents as First Teachers (PAFT) was originally developed by Mildred Winter and colleagues at the University of Missouri, USA, and known as the Parents as Teachers programme. It was a home-visitor programme designed as a remedial intervention to reduce deficits in language, behaviour, and other areas of development (Livingstone, 1998; May, 2001). The programme was introduced to New Zealand by the National Government in 1992. It was targeted for families with children aged under 3 years who were identified as at-risk for health and language outcomes, and the programme was piloted in four regions of New Zealand. Initially it was implemented amidst considerable controversy, partly because it was an imported programme that diverted funding from

existing early childhood services, and partly because it appeared to be a deficit and targeted model (May, 2001).

The programme content has been adapted considerably since its initial implementation in New Zealand. From 1996, a working group developed Ahuru Mōwai, a resource derived from the original PAFT programme but designed to support "the unique ways Māori children grow and develop within the different contexts of their respective whānau" (Early Childhood Development, 1999, p. 4). Originally under the auspices of the Royal New Zealand Plunket Society (1992–1996), administrative responsibility for PAFT gradually shifted to Early Childhood Development, and then to the Ministry of Education. PAFT coordinators were trained, and usually held prior early childhood qualifications. They were responsible for teams of home visitors (some of whom were trained).

There has been a series of evaluations of PAFT (e.g., Farquhar, 2003a; Livingstone, 1998), with mixed findings. For example, Livingstone's (1998) quantitative and qualitative evaluative research demonstrated a number of issues. His comprehensive report concluded that the research:

Uncovered very little in the way of positive, measurable results that can be attributed unequivocally to the PAFT programme. At the very least it might be observed that, in the view of the sensitive ethical issues involved in the "blind" randomised experimental design, the comparison groups did not *suffer* too much!...For some parents, particularly sole parents, basic needs of adequate housing, finance and support may have to be catered for more adequately, before they are in any position to be effective first teachers of their children. The jury is still out. (Livingstone, 1998, p. 43)

Conversely, Farquhar's (2003a) study reported nine positive outcomes of participation in the PAFT programme, for example:

- 1. Parents and caregivers came to view their child as an emergent learner and as a strong and competent learner. This led to parents and caregivers taking a greater interest in the child's learning.
- 2. Child safety and standard of care was improved.
- 3. Child health was enhanced and developmental and health problems were more likely to be identified and acted upon.
- 4. Parent and caregiver knowledge of child development, learning, and best practices for parenting was strengthened (p.vi).

However, in the same report, Farquhar also noted that there were different outcomes for different parents and "that it was more difficult for PAFT as an educational programme to make a difference for families with multiple high needs (usually these included physical needs such as adequate housing, heating, nappies and clothes, food etc.)" (p.vii).

In contrast with SPACE, PAFT remains a home-based, targeted programme, whereas the SPACE programme is run in a group setting in a Playcentre, and enrolment is open to all with infants.

Anau Ako Pasifika

This home-based project was a New Zealand initiative, established with major financial support in 1988 from the Bernard Van Leer Foundation, a philanthropic organisation based in Den Haag in The Netherlands. As Mara (1995, 1997) has described, Pasifika communities, notably through PASIFICA (Pacific Women's Council) and PIPEF (Pacific Islands Polynesian Education Foundation) and the former Department of Education, were actively involved in the development of the proposal for this programme. The meaning of the programme Anau Ako Pasifika translates to: Anau (family) Ako (learning and teaching) Pasifika ("Pacific Islands way") (Mara, 1997, p. 29). The project employed a small team of home tutors who visited the participating families regularly and encouraged language interaction, using resources available in the home together with some additional culturally appropriate resources developed as part of the programme. Each tutor had received specific training for the task and wherever possible was from the same ethnic group as the participating Pasifika family. In addition to working directly with the children, home tutors also emphasised parents' contributions to their children's education and were available to discuss, as appropriate, matters such as community services, health, and budgeting. The programme, active in Auckland, Wellington, and Tokoroa, received funding from the Bernard Van Leer Foundation until 1996 after which it was funded by the Ministry of Education and it continued to be administered by Mrs Teupoko Morgan of Tokoroa. Early evaluation studies, one co-ordinated by Diane Mara and one by Ana Koloto, suggested positive achievements. According to Mara (1997, p. 30-31):

One of the most significant results has been evidence for the empowerment of parents; the encouragement they have received to move out into the community with more confidence, the affirmation of parents that they can and do play a key role in their children's development and that they can fulfil that role by sharing of the languages and cultural skills, knowledge and resources that they already possess.

Unlike SPACE, the Anau Ako Pasifika programme is home-based and specifically designed for Pasifika families. However, like the SPACE programme, the Anau Ako Pasifika programme was "home-grown" in Aotearoa/New Zealand and similarly, its underpinning philosophy included "an acceptance that parents or caregivers and other relatives are the people who have the greatest influence in the child's early learning experiences and development" (Mara, 1997, p. 30).

Plunket

The Family Commission report (Hendricks & Balakrishnan, 2005) describes Plunket as "the largest provider of child health services in New Zealand ... Plunket provides a comprehensive package of Well Child and parents' support services to promote the development of healthy babies and children" (p. 32).

Some of the services offered include: universal service that delivers Well child home and clinic visits, Plunketline (0800 24-hour helpline), and other services to populations with high needs. Plunket also provide additional services which include: health promotion, antenatal education, parenting and education support groups, playgroups, car seat rental programmes and toy libraries.

One of the guiding principles underpinning Plunket is to ensure that parents are supported in their role. Programmes aim to develop parenting skills and confidence. Plunket has implemented a National Parenting Education Programme (PEPE). PEPE consists of four courses: Your New Baby—parenting in the first 6 weeks; Your Growing Baby—parenting from 6 weeks to 1 year; Your Active Toddler—parenting from 1-2 years; and Your Curious Pre-schooler—parenting from 2 to 3 years

(http://www.plunket.org.nz/AM/Template.cfm?Section=Parent_Education_Programme).

Helen May (2001) noted a philosophical convergence between Plunket-Karitane and parent-led early childhood education, in particular "the Playcentre ideal of learning through play" (p. 7). She suggested that both Playcentre and Plunket promote the ideal of the mother at home.

Parents' Centres

Parents' Centres New Zealand is a community-based organisation set up by and for parents in 1952 (Hendricks & Balakrishnan, 2005). Its primary focus is to provide community support and education and parents' education support programmes. Parents' Centre has offered leadership opportunities to parents over the decades (Bell, 2006). The mission of Parents' Centres is to provide support and education to parents within communities, and the intention is to support positive birth experiences through information and education. Parents' Centres are run by volunteers, co-ordinated by a national office. They can operate in a range of settings, from within existing antenatal services, to people's homes.

Other services

A range of other services offer support and education for parents. They can be parent led or offered by various organisations, some funded centrally through Vote: Education, and others rely on mixed funding sources. Many are voluntary. The services include playgroups and Pacific Island early childhood groups (community operated play programmes for children and their parents. The Ministry of Education provide facilitators in some cases). Parent support groups include Family Start, home-based programmes (Hendricks & Balakrishnan, 2005); Barnardos, which in addition to providing home-based services and early childhood education centres, offers parenting support and courses which support families' needs and communication; Home Interaction Programme for Parents and Youngsters (HIPPY), a home-based programme managed by the Pacific Foundation, and targeted for high-needs families with children aged 3½ to 6 years. Another national parenting programme, Whānau Toko i te Ora, is targeted at Māori whānau considered at risk and delivered under the auspices of the Māori Women's Welfare League (Hendricks & Balakrishnan, 2005.). Parents Inc. (established in 1993) is an organisation which offers seminars to community groups with a focus on parenting and family life; and Presbyterian Support also offers "strength-based community support drawing on the expertise of multi-disciplinary teams" (Hendricks & Balakrishnan, 2005, p. 35). Parent support services vary from region to region.

Supporting Parents Alongside (their) Children's Education (SPACE)

As evident in this literature review focused on evaluations of services, there was little support available for first-time parents/infants in early childhood centre settings that combined parent support and infants' learning. This left scope for the development and implementation of a new, locally grown, innovative programme—the SPACE programme.

The SPACE programme arose locally out of a passionate interest in infants, together with a concern about the limitations of targeted community-based services. Sue Pattinson reflected on the idea in this way: "I brought the idea to the meeting [Hutt Playcentre Association centre support meeting, c2001] of starting a new group/session within Playcentre for first-time parents of infants (0–3 months up to 18 months)." The intention was "to offer this service to support first-time parents and their infants in group situation in an early childhood setting." (Pattinson, personal communication, July 15, 2007).

After further discussion, a founding team was formed (Sue Pattinson, Robynn Kopua, Leanne Dawson, Terry Wesselink, and Truus Dingemanse) in 2003, and began to develop and trial the SPACE programme. A founding member of the SPACE programme commented:

Initially it was suggested that this programme would create opportunities to involve new parents and their babies in playcentre at a much earlier age, and potentially keep them and their children enrolled at playcentre for a longer period of time and also provide parents with relevant information on child development at an earlier stage than currently provided within the playcentre training. (Pattinson, personal communication, July 15, 2007)

It was within this group that the core objectives, the vision, and the purpose of the SPACE programme were identified. These underpin the ongoing development of the SPACE programme which has continued to grow both locally and nationally. Operation manuals were written to standardise the delivery of the SPACE programme and so ensure its quality and sustainability.

An informal survey, conducted by members of the Hutt Playcentre Association, found that only a few first-time parents with infants aged under 1 year of age were enrolled at a Playcentre. Those who visited a Playcentre tended to return only after their infants were older, when their parents considered them to be ready to learn. This assumption that learning does not occur in infants and toddlers has been widely disproved by research (Alderson, 2000; Podmore, 1992; Smith, 1998). However, the benefits of early interactions that build strong relationships between parent and infants are well known (Gerber, 2002; Podmore & Bird, 1991).

During the busy development phase of the programme, the team often talked about researching the SPACE programme to investigate the impact it was having on parents and their infants. In late 2004, an opportunity arose to apply to the Ministry of Education to become a Centre of Innovation. Our application was successful and the contract commenced in February 2005. Research Associates from Victoria University, along with Te Marua/Mangaroa Playcentre, joined the Hutt SPACE team to investigate aspects of the SPACE programme.

In order to support Playcentre Associations to implement the SPACE programme the SPACE team looked for funding and developed a relationship with the Ministry of Social Development which has enabled the appointment of the Hutt SPACE National Team. The purpose and vision of this team is to have "SPACE in every place... Providing communities across Aotearoa/NZ with access to the SPACE Programme....strengthening families and whānau through quality parenting support and early childhood education for infants" (retrieved from http://www.space.org.nz on June 3, 2007)

Another founding member of the team made these comments about subsequent developments:

Many people have been actively involved in the development and have supported this new initiative, and continue to do so as the programme grows incorporating research findings, community feedback and recommendations from those running space in their region (Leanne Dawson, personal communication, July 15, 2007).

The following detailed information about the SPACE programme defines SPACE and summarises the typical units and topics included in the programme.

SPACE



Supporting Parents Alongside Children's Education

What is SPACE?

SPACE is a programme for mainly first-time parents and babies. A SPACE programme meets weekly for 30 to 40 weeks in a relaxed and baby friendly environment and provides:

- · opportunities for parents to meet and get to know one another
- play sessions with age-appropriate equipment that supports infants' learning and development
- discussions and information on relevant child development and parenting topics
- an introduction to rhymes, music and books for infants.

How old are the babies when joining SPACE?

Babies joining a new SPACE session are usually between two weeks to three months of age. There are sometimes opportunities for older babies to join in with an existing SPACE or Playcentre session depending on the availability of places.

Who runs the SPACE sessions?

Experienced and trained facilitators run the weekly sessions, along with a support person. Facilitators have Playcentre diploma qualifications and have completed an extensive SPACE facilitators' training programme.

What does a typical SPACE session include?

A typical session runs for up to 2 ½ hours, and usually includes:

- a welcoming and settling in time
- a thought for the session
- · an ice-breaker or sharing time
- music, rhymes and introduction to books
- a discussion topic (or Guest Speaker)
- morning or afternoon tea

What are some of the discussion topics covered in SPACE?

The SPACE programme is divided into three units, and covers a range of topics. The length of the programme varies, but the three units transect several New Zealand primary school terms. Different topics are presented each week. Some of the discussion topics covered in Units 1 and 2 include:

- Getting to know you and your baby
 Establishing attachment
- · Sleeping · Heuristic play
- Natural movement How much is enough?
- Uniquely you: Understanding temperament
 The beauty of the brain
- Music Meaningful men

Unit 3 is an introduction to traditional early childhood areas of play and a short course covering an orientation to Playcentre and early childhood education and care. Some of the areas of play explored and discussed in Unit 3 include:

- Blocks
- Puzzles
- Water play
- Encouraging Playfulness
- Painting
- Sand play
- Playdough
- Outdoor play & challenge courses for infants

Handouts on the discussion topics and areas of play are available each session for parents.

FOR INFORMATION ABOUT SPACE VISIT www.space.org.nz ©Hutt Playcentre Association

What are the objectives of SPACE?

The SPACE programme has four objectives:-

- Children's Education: to increase participation of children in early childhood education at an early age, provide a quality curriculum and maximise children's learning from birth
- Parenting: to ease the transition to parenthood; support parents in their role as the best and most important educators of their children; and help parents to recognise, support and extend their child's learning and development

- Support: provide parents with support and encouragement from one another and experienced facilitators as they share the journey through their child's early months
- Links: give parents an opportunity to hear from, and develop links with a range of community organisations and service providers

The objectives and practices of SPACE are in line with the three goals of the Early Childhood Strategic Plan *Pathways to the Future: Ngā Huarahi Arataki*, to:

- Increase participation in quality ECE services
- Improve quality of ECE services
- Promote collaborative relationships

The SPACE programme is part of the Ministry of Education 'Centres of Innovation' research project.

This research project looks at how the SPACE programme implemented at Te Marua/Mangaroa Playcentre supports and fosters parents and infants' learning, and supports collaborative relationships across the community and agencies. The research project ends in December 2007.

WHERE IS SPACE? The SPACE programme was initially developed and piloted from the Hutt Playcentre Association in 2003. Other Playcentre Associations throughout the country are underway with starting or planning to start SPACE in their area. For more information on where SPACE is running please check out our website: www.space.org.nz

A Hutt SPACE National Team from the Hutt Playcentre Association has been formed to support the growth and sustainability of the programme nationally.

How families can enrol

Families can contact a Playcentre Association that is running SPACE programme in their region (see contact details on www.space.org.nz).

Theoretical Perspectives

This research, focused on the learning and collaboration that takes place at the SPACE programme at Te Marua/Mangaroa Playcentre (a COI), is underpinned by aspects of both socio-cultural and ecological theoretical approaches.

Socio-cultural Theoretical Approaches

Socio-cultural approaches, derived from Lev Vygotsky's (1896-1934) original work, strongly influence some aspects of current understanding of young children's learning and development in early childhood education settings. Vygotsky's cultural historical work has led to more recent developments and approaches (for example the work of Barbara Rogoff, 1998, 2003). These have influenced the development of a theoretical framework for this research.

Communities of Learners, Communities of Practice, Communities of Inquiry

New Zealand's 10-year plan for early childhood education (Ministry of Education, 2002), through its goal of promoting collaborative relationships, endorses the expectation that there will be communities of learners (Podmore & Meade, 2005). The theoretical concept of "community of learners" is connected to international socio-cultural research and theoretical writing (Rogoff, 1998; Vygotsky, 1978). It was envisaged that members of the community of learners in this COI's research project would include: infants, parents, SPACE programme facilitators, and researchers (centre researchers together with their research associates).

Wenger's (1998) writing on "communities of practice" shows how individuals, communities, and organisations can all learn together through shared participation. But firstly, as Wenger states, members of the community involved need to make abstract concepts become workable tools. Marilyn Fleer (2003, p. 232) explores this point further and, by using the example of enacting early childhood curriculum, proposes that:

Meaning does not reside in an individual or even in printed matter, but, rather, meaning exists through a dynamic process of living in the world. Early childhood cannot exist unless a community gives it meaning and brings it into existence.

There is a connection between Wenger's notion of "communities of practice" and this COI's action research process, where COI centre researchers and research associates planned to work together to reify abstract concepts, including key words within the two research questions themselves, as well as theoretical concepts.

Ideally, there is an opportunity for a COI team increasingly to become a "community of inquiry" (Wells, 2001; Wells & Claxton, 2002). Participants reflect on, question, and review the action research processes and findings. Over time, the involvement of the parents and centre researchers requires reaching shared understanding and may, in time, transform their participation.

Shared understanding

Infants' efforts (to learn) are accompanied by biological and cultural features of caregiver-child relationships and cultural practices that encourage involvement of children in the activities of their community. Whether or not they regard themselves as explicitly teaching young children, caregivers routinely model mature performance during joint endevors (sic), adjust their interaction, and structure children's environments and activities in ways that support local forms of learning. (Rogoff, 2003)

Vygotsky wrote about the importance of joint action and understanding (El'konin, 2002). These concepts re-emerged in the work of both Rogoff (1990) and Wenger (1998). Rogoff (1990, 1998), and Rogoff, Mistry, Goncu and Mosier (1993) described learning through guided participation and emphasised the importance of shared thinking. Rogoff contends that children develop their understanding through taking part in interactions and communication experiences. She comments further that:

Communication and shared problem solving inherently bridge the gap between old and new knowledge and between the differing understanding of partners (whether their understanding is at the same or at different levels), as individuals attempt to resolve contradictions or search for the common ground of shared understanding. (Rogoff, 1990, p. 196)

Wenger, who subsequently applied the concept of joint action to communities, states: "Community is constructed and made coherent by practice. There are three dimensions of this process: 'Mutual engagement', 'a joint enterprise' and 'a shared repertoire'" (Wenger, 1998, p. 73). The experience of focused, joint engagement may lead to shared understanding within communities of learners.

According to Joy Cullen (2004), who writes extensively on sociocultural theoretical ideas, shared understanding builds on the concept of intersubjectivity: "... intersubjectivity refers to shared meanings that are co-constructed as participants engage in collaborative activity" (Cullen, 2004, p. 74). However, a cautious approach to studies of infants is advisable because it may be difficult to determine the meanings behind an isolated episode of infants' interactions.

The concept of shared understanding may potentially be applied to adults (for example, researchers and research associates, facilitators and parents), participating in a three-way process of mutual engagement, joint activity or enterprise to develop a shared repertoire of knowledges.

Transformation of Participation

The process of participating in social and cultural events is the basis of shared understanding. According to Rogoff (2003), "development is a process of *people's changing participation in sociocultural activities of their communities."* (p. 52, italics in the original.). Rogoff explained further that when people take part in cultural activities, they develop, and their contributions influence present and future generations (Rogoff, 2003).

Children's participation in day-to-day activities contributes to their social sense (Rogoff, 1990, p. 196). Learning can be understood as a process of participation. In what has been described as a creative process, this participation occurs in episodes of joint attention and activity alongside more skilled others (Smith, 2002). As Rogoff, Matusov and White (1996) explain "[a]dults support children's learning and development through attention to what the children are ready for and interested in as they engage in shared activities in which all contribute" (Rogoff et al., 1996, p. 396). It is a complex interdependent process: "together the interpersonal, personal, and cultural-institutional aspects of the event constitute the activity" (Rogoff, 2003, p. 58). In this case, Playcentre is the cultural institution influencing the activity; the SPACE programme is the event; while the infants, their mothers, and the facilitators interpersonal and personal participation in the SPACE sessions is the activity.

Rogoff et al. (1996) described transformation of participation as a collaborative process. They promoted the concept of a community of learners in which all participants are active and no one is passive. This concept, central to the notion that infants develop through participating in the cultural practices of their communities is that learning is situated. However, a defining characteristic of situated learning is legitimate peripheral participation (Lave & Wenger, 1991, p. 29). Legitimate peripheral participation can be understood in terms of relationships between "newcomers and old-timers ... It concerns the process by which newcomers become part of a community of practice" (Lave & Wenger, 1991, p. 55). The concept of legitimate peripheral participation "is intended as a conceptual bridge" (Lave & Wenger, 1991 p. 55).

For the COI, the infants' peripheral participation in the SPACE programme may be a legitimate means of learning in the social world (Lave & Wenger, 1991, p. 54). During the 30 to 40 weeks of the programme, the session topics gradually but warmly demand more participation from adults and at the same time allow for increased engagement from infants. After about 20 weeks of the SPACE programme, infants are active and mobile participants in the environment. This represents a discernable change in how the concept of legitimate peripheral participation could be applied to the findings of this action research project.

Tools and artefacts

Further socio-cultural theoretical concepts relevant to this research are tools and artefacts. Tools and artefacts are material objects (Engestrom, 1999), for example, the items of equipment used in early childhood centres.

Tools can be categorised further, according to their function, as either material objects, or alternatively as psychological tools like language (Vygotsky, 1978). Artefacts are sometimes seen as a means of transmitting and storing cultural knowledge within and across generations (McDonald, Le, Higgins, & Podmore, 2005; Wartofsky, 1979). The COI research team anticipated that tools and artefacts in this study might include, for example, equipment, facilitation strategies including icebreakers used to develop rapport in a group or SPACE session, and music.

Colwyn Trevarthen (2002, p. 21), who provides insightful perspectives on infants' musical social awareness, asserts that music is an "outward sign of human communication", like language "music is learned", and that musical social awareness is evident quite early in infancy. He elaborates in this way:

A baby's selective orientation to musical sounds, critical discrimination of musical features of sound, and vocal and gestural responses that are timed and expressed to contribute to a joint musical game confirm that music, which is clearly a cultural achievement of human society, has strong roots in human nature. (Trevarthen, 2002, p. 21)

Following Trevarthen's (2002) ideas (and drawing on McDonald et al.'s (2005) discussion on tools and artefacts) music may be viewed, like language, as a "psychological tool" for communication between and among infants and adults. The specific instruments and devices used to create music may be appropriately termed either "material tools" or "cultural artefacts".

Ecological theory

In 1979 Bronfenbrenner (1917–2005) published his revolutionary ecological model of human development. Originally his theory focused on the ecological environment which he "conceived as a set of nested structures, each inside the next like a set of Russian dolls" (Bronfenbrenner, 1979, p. 3). His most recent definition reads:

The ecology of human development is the scientific study of the progressive, mutual accommodation, throughout the life course, between an active, growing human being and the changing properties of the immediate settings in which the developing person lives, as this process is affected by the relations between these settings, and by larger contexts in which the settings are embedded. (Bronfenbrenner, 1992/2005, p. 113)

Ecological theory conceives of the environment as a series of nested settings, beginning with the innermost 'nest' that includes the child (or developing person), and then moves progressively outwards to encompass the settings that influence the child, but which do not include the child. Podmore (2006) describes settings, or systems, referred to in the above definition as follows:

the *microsystem* – the immediate environment of the family and community;

the *mesosystem* of social institutions – for example, education settings, early childhood centres, schools, classrooms;

the exosystem – an external system that connects micro- and mesosystems and affects children indirectly (for example, the parent's workplace);

the *macrosystem* – including cultural, economic, and political systems, together with global changes; and,

the *chronosystem* – the changes that take place over time in an individual's life and at different points in history (p. 29).

The microsystem is the innermost setting, and the one the child participates in. For example, the day-to-day experiences of an individual child participating in the SPACE programme constitute the microsystem, as does the child's home. How various settings interconnect is referred to as the mesosystem. When the developing person participates in a setting, be it the home, early childhood setting, or a community-based activity, that becomes a new microsystem. "A mesosystem is thus a system of microsystems. It is formed or extended whenever the developing person moves into a new setting" (Bronfenbrenner, 1979, p. 25). The exosystem refers to settings that do not actively involve the child, but events that occur here affect the child either directly or indirectly. Surrounding the three systems described is the macrosystem – this includes wider societal beliefs and practices. Bronfenbrenner reviewed his theoretical ideas in later life to include the chronosystem because he believed that events experienced in early childhood had a life-long influence

Ecological theory offers a lens through which to analyse the relationship between the environment and development over time (Bronfenbrenner, 1979; 1992; Bronfenbrenner & Morris, 1998). He believed that human development is a result of increasingly complex joint interaction between the individual and the environment. That includes genetic inheritance as well as enduring proximal processes over extended periods of time (Bronfenbrenner, 2005). Proximal processes can be described as interactions in relationships within settings.

Ecological theory suggests that learning and development are facilitated by warm meaningful reciprocal relationships between the child and an adult/teacher/guide. Through participation in increasingly complex patterns of reciprocal activity the balance of power gradually shifts in favour of the developing person (Smith, 1998). (Te One, in progress)

Summary

Clearly, this research is situated in a philosophical framework closely connected to overarching local philosophies: the principles of *Te Whāriki* (Ministry of Education, 1996) and philosophical ideas from the Playcentre movement. It focuses on a "locally grown" New Zealand parent support and education programme, SPACE, implemented in a centre setting. The research is also underpinned by international theoretical influences, notably socio-cultural and ecological theories.

The next chapter describes how the action research involving the SPACE programme at Te Marua/Mangaroa Playcentre was developed collaboratively and carried out at the centre, how the team became integrated as a community of inquiry, and how the data were analysed and reflected upon in the light of socio-cultural theories.

Chapter 3

Research Methods

Overview

This chapter summarises the collaborative, participatory action research processes. There is a description of the action research processes enacted in this study. Ethical considerations and approvals are noted, together with procedures for robust data generation and analyses. An outline of the two action research cycles is provided, followed by an explanation of each of the action research tools adapted or developed and used for data generation in this research study. These action research tools include: observations of children and adults; parent interviews; interviews and focus groups with key informants; and facilitators' reflections. Finally, the data analysis procedures are outlined, and a framework for analysis is presented.

Collaborative, Participatory Action Research

There is clear evidence of support for the appropriateness of action research to evaluate and document innovations and practices in early childhood education (Smith, Grima, Gaffney, Powell, Masse, & Barnett, 2000, p. 124). Cardno (2003, p. 7) points out that classroom action research is typically qualitative, interpretive, and practical, and "involves teachers holding discussions (often with academics acting as facilitators and advocates of "teacher knowledge" rather than theory)". Participatory action research tends to be strongly associated with liberation and emancipation (Atweh, Kemmis, & Weeks, 1998; McTaggart, 1991).

As McTaggart (1989, 1991) writes in a paper on "16 tenets of participatory action research", action research is collaborative, participatory, self-critical, and it goes in cycles. There are some other key points in Borgia and Schuler's (1996), "five Cs" of action research that can apply in early childhood contexts. Their five points are:

- commitment;
- collaboration;
- concern;
- consideration;
- change.

Action Research Processes

At Te Marua/Mangaroa Playcentre we implemented cycles of participatory action research similar to the spiral approach referred to by Kemmis and McTaggart, (1988), and the cyclic model used by Cardno (2003). Two cycles of action research were planned, along with other mini-cycles as focuses for more specific data collection and analysis. Further mini-cycles were drawn from concerns raised through the reflections and observations of the researchers. During our second cycle of research we became aware of narratives that were evolving for some of the individual parents and children, and these were analysed. Excerpts of these stories appear in Chapters 4 and 5. Music was one focus of the observations that took place during Action Research Cycle 2.

The researchers met after each SPACE session and also at weekly meetings to discuss reflections, observations, and to plan future actions. As the project evolved, the research team and SPACE participants built collaborative relationships. The relationships formed were crucial to enabling the team to overcome challenges within the process. For example, after the first cycle of action research, roles within the team were exchanged. This was in order to maintain enthusiasm and commitment, and also due to personnel changes within the team. For example, two different facilitators were involved in Research Cycle 2, to bring new perspectives and share the workload. New observers generated observational data in the second research cycle. This process of sharing roles was consistent with Borgia and Schuler's (1996) idea that five Cs of action research include: commitment, collaboration, concern, consideration, and change.

Although sharing roles was a challenge in itself, it enabled the team to reach shared understandings about the roles they were undertaking, strengthened relationships, and increased collaboration. At several points during the second cycle the researchers introduced the SPACE parents to examples of data collected from the sessions, thus involving them more as participants in the research. This process was introduced following a suggestion from members of the advisory group that responsive feedback to parents would be important throughout the project.

Another challenge was to discover a method of data analysis that would work for a large team. This process brought together the research associates and research team. Our reflections about this process are described in more detail in Appendix A: "Climbing the mountain to a shared understanding".

An advisory group was set up to support, challenge and question the research team; to maintain a focus based on the research questions; and review research reports. After completing the first action research cycle it was decided that a focus group comprising interested members of the local community would provide useful data for the second research question.

Ethics and relationships

This research was planned in accordance with the Ethical Guidelines of the New Zealand Association for Research in Education (NZARE) (1998). We paid particular attention to general principles, consent, confidentiality, and responsive feedback. Cultural appropriateness and inclusiveness were important considerations. Sensitivity to the needs of infants being observed was important throughout all stages of the research (Cullen, Hedges & Bone, 2005; Hedges, 2002).

We prepared a detailed ethics application and submitted it to Victoria University of Wellington's Ethics Committee. Later, we submitted a second detailed application to a "health professionals" ethics committee, because we planned as part of research question 2 to invite health and education professionals to participate in interviews. This further application was approved in July 2005. We appended a signed "relationships agreement" to the applications (Appendix B).

Prior to the commencement of the SPACE programme and all data collection procedures, participants signed consent forms for their own and their infants' participation in the research (Appendix C).

Research methods: action research

The research was designed to address the two key research questions, using participatory action research processes (Cardno, 2003; Kemmis & McTaggart, 1988, 2005; Wadsworth, 1991). The design included two action research cycles, each of which tracked a group of SPACE parents and their infants through the stages/terms of the SPACE programme. The cycles were designed from the position that the parents who participate in the SPACE programme with their infants are there, not as consumers, but as active participants in a community of learners (Fleer & Richardson 2004a, 2004b; Rogoff, 1998, 2003).

Each cycle included "planning, acting, observing, and reflecting" (Kemmis & McTaggart, 1988, p. 11). Our action research approach used mainly qualitative methods, including indepth interviews and "participant" observations. This is consistent with Borgia and

Schuler's (1996) description of typical action research approaches, and with the desirability of triangulating the data for robustness.

Details of the action research, designed to evaluate the innovation are presented in Table 1. The table provides an outline of the types of data generation/action research tools developed to address each research question, and the theoretical concepts in the analysis framework.

Participants

Action Research Cycle 1

In Action Research Cycle 1 there were 15 parents and 16 infants (one set of twins). Eleven parents were drawn from two antenatal groups, three were referred on by midwives and one had been recommended to join by a family member. Ages of the infants ranged from 3 weeks to 3 months at the commencement of the programme. This group were characterised by a majority of parents returning to the workforce within a year of the birth of their infant, and many of the women were professionals. This meant that not all parents completed the programme; however, all parents, apart from one who moved overseas, participated in an exit interview. Another feature of this group was that several did not live locally and at least two travelled long distances (up to 60kms) to attend the sessions. The parents' ages ranged from mid-20s to early 40s. All households of participants included two parents. Participants were mainly Pākehā New Zealanders; however, there were two immigrants, one from South Africa and one from England. One father participated in the Play term because the mother had returned to work.

Action Research Cycle 2

The second group began with sixteen mother infant pairs enrolled in the programme. One parent left after sporadic attendance, two joined within the first month of the eight month programme, and one joined half-way through the programme (in the fourth month) and then left in the sixth month. This parent's attendance was intermittent because of transport difficulties. Ages of the infants in this group ranged from 1 week to 5½ months at the start of the programme. This group differed from the first group in that only one parent returned to the paid workforce during the programme. This group also included newly arrived immigrants (Ecuador and Scotland). They were geographically more locally based and resided in the local community. One family moved out of the area but the mother and infant still travelled to attend the sessions. There were two single parents and one parent whose partner was transferred to work overseas for six months. This family had only recently moved into the area and had pre-existing support networks. Again the mothers' ages ranged from early 20s to early 40s.

Other participants

There was one focus group interview conducted during the second action research cycle. Seven members of the community participated. They were from a range of health professional services, community support services and education services. Guest speakers were a feature of the programme. Over the two action research cycles there were twelve invited guests, including health professionals. Researchers interviewed two guest speakers and three health professionals.

Action Research Tools

Action research tools included: observations, parent interviews, facilitators' reflections, and cross-sectoral consultation (interviews and a focus group).

Observations

We planned the observations so that they would be consistent with the principles and strands of Te Whāriki (Ministry of Education, 1996). We wanted the observations to be guided by socio-cultural theoretical perspectives, and to record and interpret aspects of learning. For example, some of the observations of communication include a focus on: vocalisations and gestures (Vygotsky, 1978), verbal and non-verbal interactions (coconstruction) with adults (Jordan, 2004), and resources, tools, and artefacts (McDonald, Le, Higgins, & Podmore, 2005) within the social context and environment of the SPACE programme at Te Marua/Mangaroa Playcentre. Responsiveness to infants' emotional and physical wellbeing is a related focus, given that research evidence supports this as another key area for "maximising" infants' and young children's learning. (Farquhar, 2003b)

There were different observers for each action research cycle. Across both research cycles our use of research tools was consistent and similar to those described by Podmore (2006, pp. 93-94). We used notebook and pencil to note our observations and personal reflections. The use of a digital camera and video camera supported and enriched the data. Prior to the start of the programme the consent forms signed by the parents included permission to use video footage and photographs.

Action Research Cycle 1

During this cycle, three observers worked in pairs in three week blocks. Each observer spent three consecutive weeks on the SPACE session overlapping with the next observer's first week. This was to promote continuity in approach.

In order to build confidence in our ability to be effective observers we undertook professional development in qualitative approaches to observation, and current

assessment practices, at an early stage in the first research cycle. A research associate worked alongside the observers initially. This also helped to develop in confidence in our research skills. (Higham, 2007, personal communication)

The main emphasis was on doing a 'broad sweep'

It was about looking at the environment, not just focussing on the details. We were wondering about what to look for, and one of the research associates suggested that we try to observe the big picture to begin. One of the team described this as a broad sweep. (Matthews, 2007, personal communication)

The observers received a copy of the facilitators' plan each week and this was used as a basis for recording observations.

The research approach was qualitative and recorded observations were narrative in style, (see Podmore 2006 p. 58). Several alternative approaches (such as a prepared schedule with the emergent themes) were trialed but the team decided that a structured approach limited observations and subsequently the approach adopted was open-ended and less structured. The observers met with the facilitators after each session to discuss what they had recorded. This reflective process enabled the research team to work collaboratively to make changes that could be put into immediate practice.

Action Research Cycle 2

In this cycle three observers worked in pairs. This was in order to continue with a reflective, narrative approach, and, at the same time, to focus more specifically on infants. This focus included music, and the observers compiled Learning Stories for individual parents, groups of children, and play contexts (Carr, 2001).

Our approaches were also similar to the sociocultural approaches described by Fleer and Richardson (2004b):

Our observations need to include the 'fluid nature' of the learning sequence – the context and the activities over a sustained period. Rather than quick, short and simple observations, rich, embedded and sustained observations are needed. As such, the number of observations reduces significantly. Since the observations must by their very nature focus on small group interactions, complex interpersonal sequences—between children, and children and staff—become the norm and fewer observations are needed. (p. 20)

Throughout the programme the researchers encountered dilemmas of what to record, and endeavoured to be sensitive to the participants. As Podmore (2006), says, "a key principle across all observational processes and approaches is to relate to infants, children, and adults with respect" (p. 62). Observers were conscious of the need to be discreet, to be unobtrusive and yet remain approachable. As the programme evolved, observational

methods were modified in a reciprocal responsive manner. One observer described the process this way:

During the first two units of the research cycles we could sit on the outside of the main group circle, but during the third unit we needed to be in amongst the play activities, and at times to be able to interact with the parents, and particularly the children, in order to capture what was happening accurately. It was interesting to note how we were accepted by all the participants of the programme as 'part of the picture', and that being more closely involved in a physical context, and also included in interactions, with both infants and parents, did not hinder our ability to record our observations. Neither did it appear to interfere with the programme itself. At various points in the programme we were able to share our data with the parents, through PowerPoint presentations. This enhanced the collaboration between all the participants (J. Higham, personal communication, June 2, 2007).

Facilitators' Reflections

Two members of the COI research team facilitated the SPACE sessions during each research cycle and generated data during this process.

Action Research Cycle 1

The first task undertaken was to establish who would facilitate the first action research cycle SPACE session. It was a question of who wanted to be under the 'spotlight' and critiqued. There was plenty of discussion around who would facilitate this session and it was agreed to have Sue Pattinson (SPACE facilitator), supported by Kathy Matthews (Te Marua/Mangaroa Playcentre) to run the SPACE session.

The SPACE programme is supported by print resources which clearly outline the role of the facilitator, the processes to follow, and all aspects of planning and preparation. Within this framework are timeline tasks specific to facilitators which include recommended evaluation processes and reflective practices.

It was evident that running a COI SPACE session was very different to running a standard SPACE session. The question of what it would mean to be a COI SPACE facilitator was an unknown entity, but it soon became clear that the focus on research demanded more reflections and planning from us as facilitators.

Prior to starting the SPACE session, facilitators met and reviewed the SPACE programme, its content, and the procedures and processes to run a SPACE session. These clear guidelines were a good starting point for planning the session. Minutes were taken in these meetings, and included discussions around: group make-up, the resources, session flow and structure, session outline, considerations for the next session, equipment, and SPACE programme review processes, and a 'to do' list. These meetings provided an opportunity for valuable reflection as a team, identifying not only key issues

that needed to be addressed, but also what was working well. These minutes were included as data.

During the session there was ongoing dialogue and non-verbal communication between the facilitators, reflecting on how the session was running. In some cases this involved implementing immediate changes, and in other situations recommendations were made for the future sessions.

Once the session was completed, observers and facilitators met and reflected on how the session went. These meetings were valuable as the observers offered relevant feedback to the facilitators on the session, more specifically on issues around the research process and some of the research findings.

It was deemed appropriate for facilitators then to write up their own personal reflections on the session, to be included as data. According to Podmore (2006), it is useful to include personal reflections on the focus and on the process. It was important to show awareness of how our own understandings may have influenced our interpretations of what we observed. The reflections were similar to diary descriptions which provided a personal account of an adult's personal experiences, and were written from the perspective of the writer, in this COI case, the SPACE facilitator for that session. While these reflections were subjective, Fleer and Richardson (2004b) state that observations are always subjective and reflect the things we value. They believe what we value influences what we observe.

The COI team regularly discussed the sessions and ways to improve them to ensure the focus was on the research questions and agreed methodology. Professional development was undertaken by facilitators in areas where they deemed it necessary, for example, music, socio-cultural approach. Ideas around these were integrated into the session throughout the programme.

The SPACE programme resource recommends regular parent evaluations which were completed at the end of each unit. Feedback from these evaluation forms was critical to the planning of the following unit.

Action Research Cycle 2

The COI team discussed whether it was imperative for data collection to have the same facilitators for both action research cycles, or whether it would be more beneficial to have new facilitators who might contribute different skills. The team agreed that Leanne

Dawson (SPACE team) and Justine Jones (Te Marua/Mangoroa Playcentre) should cofacilitate the second action research cycle. With all the ground work done in first action research cycle, the new team had a head start. Incoming and outgoing facilitators met and reviewed the current process, with recommendations being offered, e.g., setting up the environment to keep it relatively uncluttered because that seemed to facilitate interactions.

Prior to starting the SPACE session, facilitators (Leanne and Justine) met and reviewed the SPACE programme and its content, the procedures and processes to run a SPACE session. Weekly meetings were scheduled to reflect on the session run, and plan for the next session. There was discussion around individual personal reflections, team reflections and a forward plan, with relevant action points to be completed. As in the first action research cycle, these meetings were minuted and included in the data.

The post-session evaluations and reflections were the same for both action research cycles. In addition, facilitators followed a similar process of personal reflection as in the first action research cycle, but focussed more specifically on what was relevant to them. These reflections were collected for data analysis.

Ongoing evaluation processes, including group evaluations with the parents and termly evaluation forms completed by the parents were essential to the process and provided facilitators with valuable feedback and recommendations.

This process has provided us with a tool to reflect on our practices, notice, recognise and respond when necessary. We are more competent as planners, observers, with more in depth reflections and understanding of what is happening for infants and parents on session, and the ability to respond to feedback and recommendations around facilitation skills. (Leanne Dawson, 2007)

Parent Interviews

In-depth interviews with parents were developed with reference to the goals of the SPACE programme. A set of draft questions was prepared collaboratively, with input from the advisory group. (see Appendix D) These were open-ended questions in semi-structured interview style. The rationale for using this format was to allow the questions "to lead to responses that inform the research focus...in a semi-structured interview, open-ended questions are still devised, but during the interview the interviewer is free to probe the answers to ascertain additional information" (Kervin, Vialle, Herrington, & Okely, 2006, p. 88).

Preparations for the interview process were detailed. We addressed the issues of timing (in relation to the completion of the programme), the selection and role of the interviewers, and scheduling and location options.

In round one, the two interviewers trialed the interview process on two parents from a previous SPACE programme. This allowed them to practise interview techniques, observe (each other) and reflect on the process more deeply.

Interviews of the 14 parents in round one were conducted over a one-week period, either in the centre or their own home according to their preference. Confirmation letters, with a brief introduction to the interviewer, were issued to each parent prior to interview taking place. Parents were informed of the consent process and gave consent prior to interviews taking place. They each began with the presentation of a small album containing photos of the parents and infants on session. This provided a valuable prompt to the interview process.

Interviews were audio taped and notes were taken by the interviewer at the conclusion of the interview. As Cardno (2003) states: "if researchers are transcribing interviews, the people they interview should be able to check the transcripts for accuracy" (p. 54). Accordingly, our transcribed interviews were forwarded to the parents.

A similar process was followed for the second round, although one of the interviewers was not part of the COI team but had experience as a SPACE facilitator.

Focus Group Interviews

Participants

Focus groups, first described as a social research method by Merton and Kendall in 1946, were used in market research from the 1960s and 1970s, and as a source of data on group meanings and social research by the 1980s (Merton & Kendall, 1946, cited in Bloor, Frankland, Thomas, & Robson, 2001; Greenbaum, 1993). Focus group interviews are regarded as important and a "sound method of inquiry" enabling researchers "to listen to the plural voices of others" in situations where participants feel comfortable with one another (Madriz, 2000, p. 850).

When used in evaluation studies, this method potentially engenders discussions which yield rich data on group meanings (Bloor, et al., 2001). A number of evaluation studies in early childhood education contexts in New Zealand have used focus groups effectively with practitioners and personnel, either at the planning stage and as an adjunct to other

methods (Podmore & May, with Mara, 1998) or as a major part of the investigation (Renwick & McCauley, 1995; Mara, 1999).

Each consenting participant was supplied with a copy of a standard set of questions for the focus group (see Appendix E). At the focus group the facilitator and the two COI researchers were "moderators" of the focus group, drawing on the experiences and views of the informants (Watts & Ebbutt, 1987, p. 27). One invited participant was unable to attend, but submitted written responses to the questions.

The duration of the focus group interview was 3 hours and began with a lunch to build rapport among participants and the research team. This was because some, but not all, participants knew one another. After lunch the group moved to a separate meeting room where the interview took place. The process began with a brief overview of the SPACE programme that included watching a short promotional DVD about SPACE. The facilitator explained the ethical procedures and participants signed the consent forms before the interview commenced.

Facilitation focused on seeking the involvement of all participants, with the intention of hearing a range of experiences within the group. There were regular checks for accuracy of the records, as well as to ensure that all voices within the group were heard. Recording methods included audio taping the focus group interview, taking notes on a laptop computer throughout the interview, and later writing up a detailed transcript of the interview.

All participants were sent a complete transcript of the interview. It was agreed that participants could add more written information at the time of checking the transcript. This provided further details relevant to some questions.

Analysis of the focus group interview was carried out by searching for main themes and key words in the transcript, to address the research questions.

Interviews with Health and Other Professionals

Health and other professionals and guest speakers on the SPACE programme were invited to take part in an individual interview. The interview was semi-structured, with open-ended questions (see Appendix E). In total, 3 professionals (2 guest speakers and 1 health professional) were interviewed at a time and place convenient to them. Due to professional responsibilities and time constraints, the remaining respondents asked whether they might complete the interview schedule in writing. They did so, and forwarded

it by email (1 health professional and 1 guest speaker). Two COI research team members carried out the interviews, which were tape recorded, and then another team member transcribed them.

Building Research Capacity: Analysis procedures

Consistent with action research principle that supports transformation or change from within, the principles of Te Whāriki remain appropriate as "tall kauri" guiding the processes of empowering the researchers and the research associates in the context of the innovation: Supporting Parents Alongside their Children's Education. Through exchanging and discussing different entry points in the research process, the research associates and the researchers created a coherence that accommodated multiple perspectives. During the early stages of the project, one research associate provided workshops on action research and on observing/qualitative approaches. The process of embarking on observations and reflection was also facilitated and supported by the research associate/s. This included a research associate and a researcher working together in the initial stages of the observations. With the key focus firmly on the first research question, this collaborative action allowed for reflection on what to observe and how to record this for all the researchers in a meaningful way. As one of the researcher's commented:

Nothing I do on SPACE now happens without huge questions—it's like you (the research associate) said—everything is up for grabs – we are critiquing everything. (Pattinson, personal. communication, August 16, 2005*)

In a later workshop, the research team discussed possible methods for analysis. A workshop led by a research associate concentrated in depth on unpacking the research question 1: How does the SPACE programme, implemented at Te Marua/Mangaroa Playcentre for new parents and infants, support and foster their learning?

This developed a "shared meaning" of the words "foster", "support" and "learning". It also created an awareness of the dynamic nature of the research process – these meanings can and will change over the period of the research as it progresses. However, it is entirely consistent with an action research model that requires the researchers and the research associates to re-visit research intentions and examine how what has been observed might change or transform actions. The second part of this workshop was a practical application of "shared meaning" where the team searched through one observation for evidence of how does the SPACE programme, support and foster learning? The team members' reflections on developing shared understanding of theoretical concepts and data analysis is elaborated in Appendix A.

The research team extracted key themes from both the observational and interview transcript data. The process began during the first action research cycle when key themes of interactions, relationships and environment were extracted. These arose in conjunction with in-depth discussions about the diverse interpretations of the research question 1 and how this intersected with our emergent theoretical framework.

In between the two action research cycles, the research team developed a pragmatic approach to data analysis. Two workbooks were produced—one for coding the interviews and one for coding the observations. The purpose of the workbooks was to enter samples of data relevant to each theme. As well, ideas pertinent to the theoretical framework became more evident. Further themes were identified during the second research cycle and these additional themes were included in the workbooks.

Robustness and meaningfulness were achieved by working in groups and in pairs. Throughout this process, the research associates provided advice on the importance of drawing on a wide range of examples from the data, across time and place, to check the rigour of the analyses.

The details of the process and related reflective comments can be found in Appendix A, and Appendix G is an example of several completed workbook pages.

Table 1 lays out the concepts and theoretical constructs that were used in the analytical interpretation of the data.

Table 1: Design and Analysis Framework: Research Questions, Methods, Analyses, Themes, and Constructs

Research Question	Research Methods: Action Research Tools	Sorting And Categorising Of Data: Analysis Of Key Themes	Further Analyses: Theoretical Concepts And Constructs
1. How does the SPACE programmeat Te Marua/Mangaroa Playcentre, support and foster their learning?	Action research cycles: Observations Parent interviews	Supporting interactions and relationships Facilitating environments Fostering holistic learning Connecting families and communities	Socio-cultural theory: Transformation of participation Community of learners and inquiry Shared understanding Tools & artefacts
2. How does the SPACE team and programme network, support collaborative relationships, and work across agencies?	Action research cycles: Observations Interviews with parents and professionals Focus group	Referrals Communication across settings Collaboration across sectors	Ecological systems Microsystem Mesosystem Exosystem Macrosystem Chronosytem

Summary

This chapter described the collaborative research processes and set out the rationale for the research design and analyses. The next chapters focus on the main findings of the research. The findings were analysed and interpreted in the light of key themes in Table 1. These findings are presented in Chapters 4 and 5. The findings are also discussed further in relation to the theoretical constructs outlined in Table 1 (in the right-hand column of the table, where the concepts and theoretical constructs are highlighted), and Chapter 6 is focused on these further theoretical interrogations of the data.

Chapter 4

Findings: Supporting and Fostering Learning Key themes for Research Question One

Overview

This chapter discusses the findings of the research, focusing on the key themes in relation to the first research question: How does the SPACE programme, implemented at Te Marua/Mangaroa Playcentre for new parents and infants, support and foster their learning. Throughout Chapters 4 and 5, some of the material focused on the reflections of the SPACE session facilitators and the observers (who were all COI team members), is presented as boxed text. All names of the participating parents and infants are pseudonyms.

Introductory explanation of key themes

The emergent themes from the observations and interviews in action research Cycles 1 and 2, together with some summary explanations, are:

- Supporting Relationships and Interactions: This theme is closely connected to the relationships principle of Te Whāriki. It includes the interactions among parents, infants, speakers, and facilitators and other members of the COI team.
- Facilitating Environments: This includes both the physical environment (equipment, layout, artefacts) of the centre setting, and the social environment associated with the SPACE sessions.
- Fostering Holistic Learning: This refers both to parents' and infants' learning and development, and to the reciprocal learning that takes place during SPACE sessions and the COI action research process.
- Connecting Families and Communities: This theme focuses on the connections made by SPACE facilitators, by the participating parents themselves, and by other contributors to the SPACE sessions.

Supporting interactions and relationships

Fostering supportive relationships

The observational and interview data generated during SPACE sessions, and the interviews with parents demonstrate how relationships connect infants with one another, at the same time as strengthening parent child relationships. While the initial relationships

are between parents and their infant(s), over time relationships broaden and deepen. The SPACE programme environment facilitates relationships between infants and their parents to develop a supportive community of learners. This community of learners utilises the wider community network to include contributions from 'experts'. Interviews with parents and observations and reflections from facilitators clearly show that participating in SPACE encourages supportive community networks. For example, the groups of participants in the second round of action research have initiated a 'walking group' that meets outside of SPACE sessions. Even between terms, when the SPACE programme is not running, parents have been meeting together. These examples of social interaction are health promoting – supporting the emotional well-being of babies and their parents, particularly mothers. An experienced child health professional noted during the focus group interview with outside agencies:

SPACE is just a neat support. There's not a lot of support for mums out there in the community. You go down any street and everybody's at work. It's not like 30 to 40 years ago when people were at home and you had a neighbour, you could have the support. Whereas these girls (sic, referring to the SPACE programme facilitators and organisers) make support, and it really is a time when they (the first time mothers) need it. ... It's an education and a support. (Focus group interview, Action Research Cycle 2)

In the same focus group another professional from an outside agency, added:

It's a big component of that support. And the friendships that you develop and you move on ... (Focus Group Interview, Action Research Cycle 2)

Participating in the SPACE programme overcomes the feelings of isolation that can overwhelm first-time mothers. Growing trust and friendship was evident in the way both parents and infants contributed to, and participated in, the group sessions. These findings are supported by data from the focus group which concluded that 'good' parenting skills were beneficial in the long term. The principal of a local primary school who had an ex-SPACE parent on her staff commented:

Katherine is the most wonderful example of a brilliant mum. She uses such great techniques with her daughter, she's in the classroom with her daughter for part of the day, and the children see first hand really good parenting. ... As I said, good parenting makes a difference, and I think these days it's so hard to find good role models for good parenting. (Focus Group Interview, Action Research Cycle 2)

These examples are evidence of how nested settings, some of which do not include the infant or the parent, support relationships at a community level.

Environmental influences on relationships

As discussed further in a subsequent section of this chapter, the environment was an aspect of the programme that played a key role in fostering interactions and relationships. Facilitators constantly reflected, in consultation with observers, on how the environment influenced these interactions. As one observer noted:

The room was set up today with the couches, white chairs and floor cushions surrounding the rugs on the floor, with baskets of heuristic play and a few other baby toys on the rugs. Where chairs were provided, parents used them, but the remaining parents used the floor cushions. It was my impression that those who were on the floor interacted more closely with their babies than those who were on the chairs. (Observer's records, Unit 1 Week 1, Action Research Cycle 2)



Infants' interactions started as opportunity based and become more independent and deliberate over time. Opportunities for babies were dictated by where they were placed in the environment, what they could see and access, and their developmental ability. For example, in the first action research cycle, non-mobile infants placed in close proximity to each other had opportunities to interact.

Oliver, Dylan and Hazel lie close to each other, looking at one another. (There are) lots of babbling noises between them. (Observer's records, Week 2 Unit 2, Action Research Cycle 1)

On other occasions, mobile infants' play provided opportunities for non-mobile infants to interact with each other and the environment.

Dylan watches Elizabeth play with the poi, then she drops it and crawls over to a basket that contains some cotton spools. She brings one back, with Dylan watching her all the way, plays with it briefly, then drops it and returns to the basket for another one. Dylan picks up the spool she has dropped and plays with it himself. (Observer's records, Unit 3 Week 5, Action Research Cycle 1)

Differences between the groups in the action research cycles

Distinct differences were noted between the nature of the groups in the two action research cycles. In the first action research cycle, the SPACE group comprised parents from two antenatal groups who had been referred on by the midwives and health professionals. In this first SPACE group, already established relationships influenced the group dynamics in several ways. Some parents appreciated the opportunity to share with a variety of parents. For example, one parent commented:

What I really liked was we'd have a discussion and then we would be given an activity or something ... to go into groups and talk to different mums that (aren't) your own antenatal group and you hear different perspectives. (Parent exit interview, Action Research Cycle 1)

Another parent found joining the existing relationships challenging.

It was quite hard I think to meet all the new mums and especially a lot of them knew each other already ... but once I was there it was great. (Parent exit interview, Action Research Cycle 1)

In the second action research cycle, the participants in the SPACE session were not part of pre-existing groups. Facilitator reflections reported that the group was more cohesive from the start. This also resulted in observable differences over the duration of the second action research cycle. Relationships between parents within the SPACE session deepened and this extended into relationships outside of the SPACE sessions, which in turn allowed the group to support its members individually and as a group in the wider setting.

Jane rang. They both have tonsillitis, and Bryce has an ear infection as well! Jane mentioned that Nancy came to visit on Saturday—suggested she may need a bit of support ..." (Facilitator reflection, unit 1 week7, Action research Cycle 2)

Tracy was on afternoon tea and had made a lovely cake for Emma—we sang happy birthday in te reo which didn't sound half bad—we are getting quite good at it actually. (Observer's records, Unit 3, Week 3, Action Research Cycle 2)

Email communications became a useful tool for the second group (Action Research Cycle 2) to maintain their relationships outside of SPACE. Facilitators adapted to the group members and the distinctly different group dynamics. In addition to their own personal experiences, the combined discussions between facilitators and observers assisted the facilitators to respond appropriately to the group.

Types of relationships

In order to discuss the relationships within the context of the research, the COI team members identified key relationships, and these included: infant-parent, infant-infant, infant-other parent, infant-facilitator/guest speaker, parent-parent, and parent-facilitator/guest speaker.

The infant-parent relationship is the key relationship from which all other relationships develop. Bronfenbrenner's (1979) nested ecological system places the child at the centre of all other interactions.

The parent-child relationship is the most important context for promoting healthy child development. When parents feel supported, they can foster positive interactions with their children. These interactions can increase their sense of parenting success, and improve family functioning and child and family outcomes. (Sims, 2000, p. 40)

These interactions are reciprocal and many examples were recorded throughout the programme:

Alice is on the rug in front of her mum. Mum has been holding her feet and smiling at her. Mum is watching the speaker. Alice starts making a noise and starts looking around. Alice continues to make this sound but focuses on Mum until mum looks down and smiles at her. Alice smiles back. (Observer's records, 2005, Action Research Cycle 1)

Donna picks up Chris (who is crying) and puts him over one shoulder. She lifts him up and down and then jigs him up and down on her knee. He chuckles and she keeps on doing it, saying, "ch, ch, ch." He chuckles more and starts to cry when she stops. Mum jigs him again and he chuckles and chuckles. His eyes are on his mother and every time she stops looking at him he gazes at her, "er, er." He smiles every time she responds to him. (Observer's records, Unit 2 Week 9, Action Research Cycle 2)

In our study infants actively sought interactions with others in addition to their parent. This included their peers and other adults. Lally and Mangione (2006, p. 14) state that:

Infants and toddlers are genetically programmed to learn language, to become more skilful in their small muscle and large muscle functioning, to construct knowledge about the functioning of people and things in the world around them, to seek out significant relationships through which they can be nurtured and protected and to use relationships to learn appropriate and inappropriate ways of relating to others.

The following observations demonstrate how infants interacted with one another, sometimes supported by their parents:

Katherine and Tara [parents] stand their babies up facing each other. Josh [an infant] looks at Tara, but Amy [infant] smiles and vocalises and reaches for Josh.

She touches his left hand, reaches with her right hand and then touches his right hand, He looks at her. (Observer's records, Unit 1 Week 8, Research Cycle 2)

Nicholas [infant] is lying on the floor on his tummy. He is smiling as he reaches out and feels the bottom of Connor's [infant] socks. (Connor's socks are striped, predominantly red and white, and have a raised texture.) Connor kicks his feet, and then stops, and then kicks again, while Nicholas repeatedly reaches out touching Connor's socks...This continues for about five minutes. (Facilitator's Reflection, Unit 2 Week 5, Action Research Cycle1)

Their own and other infants' vocalisations appeared to allow them to become more aware of each other in the setting and encourage interactions. Several observations supported this trend:

Nathan [infant] starts to cry and Bryce [infant] turns to look at him. He gazes with wide open eyes at Nathan and leans towards him. (Observer's records, Unit 2 Week 2, Research Cycle 2)

Towards the end of the programme, as the infants became more mobile and more vocal and were developing relationships with each other, their interactions began to happen in groups and with increasing complexity:

Anna and Iris [both infants] wrestle over a shaker. Anna has it and will not let Iris take it. Iris pulls and pulls and eventually wins it. They both have small shakers too and Iris swaps hers for a rain-maker and then hands back the shaker she has taken from Anna ... Iris babbles to Anna and Anna responds, babbling. (Observer's records, Unit 2 Week 8, Action Research Cycle 2)

Mary comes over and lifts Georgia onto her bottom. She puts the puzzle back in front of her. Isla crawls over and picks up puzzle pieces alongside Georgia. They are both handling the pieces (almost taking turns). Mary helps Georgia to bang two pieces together. Both Isla and Georgia stop what they are doing and watch the pieces banging together, smiling. Isla says "Heyeh". Amy crawls over and they all look at the pieces, watching each other. Georgia bangs two pieces together (without Mum's help), Amy and Isla watch her. Isla drops her piece and crawls away from the group. Georgia and Amy hold several different pieces each, regularly mouthing them and occasionally looking at each other. (Observer's records, Unit 2 Week 7, Action Research Cycle 2)

Initially interactions between infants and other parents in the programme began as responses to either adults' or infants' physical needs. For example, a parent would hold another infant while his/her own parent went to get a drink, or a parent would comfort a distressed infant whose mother was not close by. Over time, the relationships developed as participants become familiar with one another and infants and adults actively sought each other out. In addition, parents began to know and respond to the characteristics, personalities, and interests of one another's infants.

Bryce is watching Katherine. He waits a long time. Katherine sees Bryce looking at her. She moves her head forward and gets eye contact with Bryce. She does this several times, forwards and back. He smiles lots and continues to watch Katherine. (Observer's records, Unit 2 Week 14, Action Research Cycle 2)

Isla [an infant] is on the soft play equipment. She rocks and says "Mum? Mum, Mum, mum, mum", then laughs. She sits down. She looks at Victoria [a parent] and says "Alla." Victoria replies, "Hello". She gets down onto both feet. Standing back up, she supports herself and looks at her mother. "Mum, mum, mum," she says again and climbs off and on the soft blocks. She looks at Sally [an infant], shrieks, laughs and Sally imitates her laugh. Isla then copies her. (Observer's records, Unit 3 Week 2, Action Research Cycle 2)

As the programme progressed, parents made comments about other infants: "Isla is pouring the water down the drain—look, she knows where it goes"; "Nathan, you loved that painting didn't you"; "It's been a week since I've seen Amy and I'm amazed how much her confidence has grown"; and "She's (Kristen) going to be a drummer, Mum."

Observations showed interactions with other infants and also facilitated interactions between infants:

Mary is holding baby Chris. She is talking to him, smiling at him, rocking him. She leans down and talks to baby Georgia. She talks to Chris about Georgia. (Observer's records, Unit 1 Week 7, Action Research Cycle 2)

Trust was an important element of the relationships between infants and other adults in the SPACE programme. Infants learnt to trust the other adults, as did their parents.

Sue (facilitator) was a great support for the mums in the water—holding babies when needed, particularly as the mums were exiting the pool. She got a cuddle with each baby then. Early on in the session, Dianna passed Troy over to Sue. He had a good look at Mum, and then was quite happy to be held by Sue. (Observer's records, Unit 2 Week 9, Action Research Cycle 1)

The facilitators' relationships with the infants developed over time. Towards the end of the programme, it appeared the infants knew the facilitators and would look for interactions with them.

At one point, Leanne [facilitator] was standing up beyond Amy's feet, talking to Tara. Amy was interested in Leanne, and even strained her neck to try to pull her head up to get a better view. Tara rattled a star shape on the baby gym to get Amy's attention. Amy was startled and had a quick look, but her attention went straight back to Leanne. (Observer's records, Unit 1 Week 2, Action Research Cycle 2)

I noticed how Georgia watched me intently when I talked to the group. She must be starting to recognise my voice as a familiar one. (Facilitator's reflections, Unit 1 Week 7, Action Research Cycle 2)

Josh is sitting on the grass facing a babybath full of water and water wheel and various containers. Justine (facilitator) approaches the clutch of mothers' and babies' group. Other babies are near the bath. Josh watches Justine approach the group; he cranes his neck to get full sight of her. She then moves away and returns with a small yellow tub and another water wheel and bucket. Josh hasn't taken his gaze off Justine—almost inquisitive to see what she is doing or bringing. Justine settles down with the yellow tub and waterwheel in it near Josh. She pours

water into the wheel, chatting away quietly. Josh watches and starts to play. (Observer's records, Action Research Cycle 2)

Facilitators were able to model positive interactions with infants to support parents in their own parenting:

Leanne [facilitator] lies on the floor next to Emma [infant]. They touch their fingers together, looking at each other and mirroring each other. Leanne puts a toy between them and Emma reaches for it. (Observer's records, Unit 2 Week 4, Action Research Cycle 2)

Some guest speakers were skilled at modelling interactions with the infants:

[The guest speaker] notices Hazel [infant] who is singing and sings with her, Harry [infant] who is on the floor watches the guest speaker and Ivy [infant] singing to each other craning his neck to see, Ivy is singing and talking loudly constantly to her. (Observer's records, Unit 2 Week 9, Action Research Cycle 1)

A baby is crying while [the guest speaker] is talking. [She] says "lets sing to him..." and starts, "Baa, baa black sheep...". The baby stops crying and watches. (Observer's records, Unit 2 Week 9, Action Research Cycle 1)

The infants, as participants in this action research project, also had opportunities to interact with the observers on session. These relationships also developed over time, with initial interactions being low key through to the end of the programme where infants were observed involved in the action research process.

Amy spies Kathy [observer] across the room. She smiles at her, Kathy smiles back and shrugs her shoulders. Amy gives an even bigger smile. They maintain eye contact for several seconds until Kathy looks away. (Observer's records, Unit 2 Week 7, Action Research Cycle 2)

Infants as Researchers—An Observer's Reflections on the Research Process

Today it has become increasingly hard to stay in the background. In order to observe now I need to be closer to what is happening and to move around more. This puts me in closer contact with both the parents and the babies. I have found that the parents are starting to chat more to me and the babies, who are also more mobile, are very interested in what I am doing, particularly my equipment.

Today several of the babies were very interested in my camera and notebook, particularly Emma, Isla and Amy. Emma snatched the camera twice. I am used to being able to put it down and will have to try to remember to hold on to it all the time in future. Emma did not want to give the camera back. Isla also took it from next to me and Emma cried when she saw Isla with the camera. Amy and Emma also helped themselves to my pencil on several occasions when I was using the camera or filming. They both attempted to make marks or imitate what they see me doing with the pencil and paper. At one point I had three babies crawling or clambering on me wanting my equipment. (Observation, Unit 3, week 7, Action research cycle 2).

Interactions between parents fostered their relationships and built a community within the programme. Facilitators often encouraged parents to support each other by acknowledging and reinforcing their actions.

Nancy's Leah [infant] was a bit unsettled today. (I) [facilitator] took her so Nancy could heat a bottle—Leah seemed quite uncomfortable—arching her back so far back it was hard to hold her. Nancy took her back, but she didn't settle—I offered to help again, but Nancy said it was ok— later, when she still hadn't settled, Jane offered to help feed Leah her medicine. Nancy accepted and they went and sat on the couch together while Jane fed Leah her bottle. When Jane went to leave I thanked her and mentioned how good it was for Nancy to have that support—Jane commented "it's the nurse in me." (Facilitator's reflections, Unit 1 Week 6, Action Research Cycle 2)

Parents in the programme quickly began supporting each other in practical ways, offering rides and ringing each other, or even visiting during the week. This was evident in several facilitators' reflective comments:

I mentioned that Ida will be popping in later (we thought there may have been a mix-up with arrangements where Danielle was going to pick her up but maybe had forgotten, so Kathy drove to fetch her), when in fact Danielle and Victoria both said they had rung to offer her a lift, and left a message as she was not home. Justine immediately thanked them and said we appreciate that they did this. Isn't that great, they are already looking after each other. (Facilitator's reflections, Week, 4, Unit 1, Action Research Cycle 2)

As the programme progressed, and relationships deepened, parents began to recognise other parents' need for support during the session. Parents gained confidence to ask for help or ideas, or even simply to share how hard things are with a young baby. Parents sometimes sought advice from someone in the group who had an older infant:

Mary approaches Donna and asks if she wants a break from Chris. She does this gently but effectively. (Observer's records, Unit 2 Week 2, Action Research Cycle 2)

Selina talks to Sonia about the difficulties she is having with Nathan at night. She says he is crying all evening. Sonia asks whether she has a chance to sleep during the day. (Observer's records, Unit 2 Week 2, Action Research Cycle 2)

The role of the facilitator included using a variety of strategies to build relationships within the programme. At the beginning of the programme facilitators shared personal information in order to build relationships with parents.

We both introduced ourselves, who we were, about our interests, families, education, involvement in Playcentre and the SPACE programme. This was putting ourselves out there... to say who we are. (Facilitator's reflections, Unit 1 Week 1, Action Research Cycle 1)

They were very aware of including everyone and in the early stages of the programme deliberately "made the effort to watch those who were on their own and go over to talk with them" (Facilitator's reflections, Unit 1 Week1, Action Research Cycle 2).

Facilitators also offered support to members of the group, which encouraged others to do the same:

(I) phoned Jody to check how she was doing as she was absent last week. It had been an off day for her, both busy and weather-wise so she didn't feel up to the walk. She apologised for not ringing in, but wasn't sure that she would be missed, (I) assured her that we noticed, and just wanted to check all was OK. (We) discussed the possibility of car pooling with someone who lives close (I) offered a lift next week if the weather was horrible again. (Facilitator's reflections, Unit 1 Week 3, Action Research Cycle 2)

When guest speakers were present, facilitators were often freed up to support parents and build relationships with infants. The observations showed this trend:

Donna has come out of the sleep room. Chris is crying. She tries to sit and listen to [guest speaker], but looks anxious. After a few minutes she goes back to Chris as his cries become louder. Kerry has put Timothy in the sleep room too. Justine [facilitator] goes to see them and takes Chris for Donna. She rocks him outside the sleep room. Donna returns to the group and sits to listen to [guest speaker], noticeably more relaxed. (Observer's records, Unit 2 Week 2, Action Research Cycle 2)

Relationships between facilitators and the group developed during the course of the programme. In both action research cycles, as the programme drew to a close, parents and infants in the group tended to continue to meet. However, the facilitators usually did not continue to meet with the parents and infants. As one facilitator reflected, "It was a really sad day today as this was my last session with these parents." (Facilitator's reflections, Unit 3, Week 7, Action Research Cycle 2).

Experiences that foster interactions and relationships

Throughout the course of the programme, a variety of experiences provided opportunities that fostered interactions and supported relationships that fostered learning about parenting and child learning and development. Examples of these were: the presence of guest speakers, discussion topics, music, and equipment.

When guest speakers were present, different types of interactions were encouraged. For example, on the week with baby massage, as a topic parents were completely focused on their infant, interacting physically, verbally, and emotionally.

Nathan lies waving his arms and legs but is very quiet. He looks from side to side and goes still as mum talks to him and massages. Bryce is also very calm. He looks at mum and gently waves his arms and legs. I notice that Kerry, Jane and Selina all talk to their babies throughout the massage, telling them what is happening. (Observer's records, Unit 2 Week 3, Action Research Cycle 2)

When speakers or facilitators were presenting topics that required parents to listen or work in groups, parents were able to build relationships with others in the group. In turn, infants often had increasing opportunities to interact with their peers, or the environment, while their parents were focusing their attention elsewhere:

As the brainstorming session begins Ruth takes baby Kristen over to the couch where Danielle is sitting. She takes the big sheet to write on with her and places Kristen on the floor in front of them. Danielle continues to feed James and smiles at Kristen while the two mums brainstorm their ideas. Ruth writes on the sheet. (Observer's records, Unit 1 Week 6, Action Research Cycle 2)

At the start of topic time, Victoria placed Joseph on his back, with his head pointing into the middle of the group circle and his feet at her feet. (She was sitting on a chair). He lay on his back, sucking his fist, watching Isla who was sitting to his right on Sonia's Iap...his body stayed very still. I watched Josh all through the topic time. He barely changed position — was content watching Sonia and Isla. After 35mins, he picked up the corner of his rug and mouthed it...continuing to watch Sonia and Isla. After 55 minutes watching Isla, Victoria picked him up and put him on her Iap... I couldn't believe how long Joseph stayed there, and the stillness of his body. Isla and Sonia were in the perfect spot for him to watch. (Observer's records, Unit 1 Week 2, Action Research Cycle 2)

Music supported interactions among all members of the group. Music is discussed further in Chapter 6, where the focus is on the theoretical construct of tools and artefacts.

Equipment provided opportunities for infants to interact with one another and with adults.

Isla plays alongside Emma—she is interested in what Emma is playing with – she grasps at a feather duster with her left hand and gently touches Emma on the head. She then sweeps it gently across Emma's head and face. Emma enjoys this and Angela (mum) is OK with this interaction. Isla chooses bells—she holds them up to show Angela. Angela acknowledges Isla's achievement. (Observer's records, Unit 2 Week 14, Action research Cycle 2)

I noticed Georgia really unsettled and uncomfy on the floor. I lay next to her and pulled the little mirror closer to us. I pointed to the mirror and to her and to myself, and the surprise on her face was precious. She spent a good 5-8 minutes chatting and playing with the baby in the mirror. (Facilitator's reflections, Unit 2 Week 4, Action Research Cycle 2)

This variety of interactions within the SPACE programme built relationships, which deepened over time, and contributed to the development of a strong, supportive community for all participants. This finding is consistent with related international research and writing on early childhood issues: "Relationships don't just spring into being—they grow. They grow from a number of interactions." (Gonzalez-Mena & Eyer, 2004, p. 3)

Facilitating environments

A further key theme pertained to the environment. In this research study, environment was understood as including the physical layout of the centre, the equipment, (e.g., furniture, play resources), the social environment, (e.g., the participants, the COI research team, visiting speakers), and the temporal environment (e.g., changes made over time). These definitions drew on Bronfenbrenner's (1998) modified ecological model of human development as outlined in Chapter 2. They are also consistent with *Te Whāriki*, which also includes comprehensive statements about the environment, with reference to: "The sum total of the experiences, activities, and events, whether direct or indirect, which occur within an environment designed to foster children's learning and development." (Ministry of Education, 1996, p. 10)

The COI team observed the physical environment, the impact of how the centre was set up, and what changes were needed for the SPACE session to support and foster parents' and infants' learning. This included reviewing the furniture, infants' toys/resources, equipment, seating, and infants' sleeping arrangements. This was consistent with research and writing on the topic in early childhood centre settings:

...an environment is a living, changing system. More than physical space, it includes the way time is structured and the roles we are expected to play. It conditions how we feel, think, and behave: and it dramatically affects the quality of our lives. (Greenman. 1988, p. 5, cited in Stead, 2001, p. 19)

An observer noted that:

Due to the number of babies being put onto the rug, the environment has become quite cluttered – babies/ car seats, making it harder for parents to get around during an icebreaker. (Observer's records, Action Research Cycle 1)



The need to reflect on aspects of the environment came through from the COI team members' observations and reflective discussions with the research associates. The observers and facilitators noticed the clutter of bags, car seats, prams, equipment and how this was affecting interactions, safety, and cultural considerations. Facilitators encouraged parents to take their babies from the car seats and place them on the rug with them. An area close to the entrance became the place to leave bags and car seats.



A facilitator reflected that:

The babies on rugs were able to observe much more of the group/environment than in their car seats. They were physically active and free with the bodies. (Facilitator's reflections, Action Research Cycle 1)

The importance of this is consistent with Te Whāriki:

Adults should anticipate a child's needs for comfort and should communicate positive feelings in an environment which is calm and friendly and conducive to warm and intimate interactions. (Ministry of Education, 1996, p. 47)

These changes also resulted in the infants being in closer proximity to one another. The observers recorded that environment was set up differently which allowed for more infant-infant, parent-infant interactions, and that the interior of the building seemed more open and spacious.

In response to parents' concerns over infants sleeping in car seats, the Playcentre provided a portable cot for the infants. This was set up in a quieter area of the main play room so that the infants could sleep, and the cot was used regularly.



Facilitators found that the environment had to be flexible enough to allow the guest speakers to present their information effectively. For example, some guest speakers requested a more formal setting:

I wasn't sure if [the guest speaker] would bring her own screen, so my thinking had been around the pull down one at the centre. [The guest speaker] did bring hers and that freed up where she could be – she actually chose that corner anyway which was interesting. (Facilitator's reflections, Action Research Cycle 1)

The seating arrangements were continually adapted to accommodate the facilitators' approaches, which were interactive and included: providing information on a topic, drawing out discussion from parents' experiences and perspectives, and giving the group members opportunities to address any concerns. These changes to the environment were consistent with Elam's (2005, p. 123) recommendations to "[c]reate an environment where each adult feels emotionally safe, yet intellectually challenged to become all they were meant to be." A facilitator noticed that by rearranging the seating into a circle or square shape, felt more inclusive of all the group members. The facilitators changed the seating by removing chairs and providing cushions on the floor. This promoted opportunities for infants to play on the floor, closer proximity among the group participants, and therefore, more interactions and discussions. An observer recorded:

The area was changed so the square was facing towards the door, so the parents could move more freely and not have to walk over everyone to get to a seat. Very

open and inviting. Most seats were set up on the floor. (Observer's record, Action Research Cycle 1)

A SPACE facilitator noted:

We changed the seating arrangement so that parents were sitting in more of a square/circular shape, rather than a rectangular format. What was happening before this change was the facilitators and guest speakers were sitting at the top of the "rectangle". It was conscious change, to say "this is a discussion, not facilitators as teachers at the top. (Action Research Cycle 1)

Observations during the first action research cycle showed infants and parents being stepped over/across. In view of cultural considerations it was important to avoid this. This extract from the Report to the New Zealand Playcentre Federation from the Working Party on Cultural Issues (1990, p. 35) describes Māori cultural practices:

Traditionally in Māori culture women and girls are encouraged to sit with discretion. Women and girls do not step over other people's bodies or legs. They move or walk around so that they do not need to step over others. Awareness of this can mean others can be sensitive and move so as not to make it difficult for them.

Awareness of cultural practices, therefore, influenced how the environment was set up. The facilitators placed the rugs so there was walking space around them. After making these changes, the need for them seemed obvious and they were effective in terms of both the physical and social environment. On reflection, the team decided that the changes to the physical environment supported and fostered interactions and learning between the babies and parents. This enhanced the social environment by providing the opportunity for more interactive relationships and participation within and from the SPACE group. A facilitator reflected that:

The environment was set up in much the same way we did last term, with two blankets on the floor, equipment etc. Sitting around in a circle on the floor, with the play area being in the middle, is now a very confining space for all the moving babies who are crawling or shuffling along. What amazed me was how close they were to one another, touching and crawling over one another. Some were taking toys off one another, one was pulling hair, yet they all seemed so confident and comfortable they were with being in such close proximity. (Facilitator's reflections, Action Research Cycle 1)

This is consistent with the philosophy in *Te Whāriki*: "Children experience an environment where they gain confidence in and control of their bodies" (Ministry of Education, 1996, p. 86). It is also supported by a goal within the contribution strand of *Te Whāriki* which states: "Children experience an environment where: they are encouraged to learn with and alongside others" (Ministry of Education, 1996, p. 16).

Towards the beginning of the first action research cycle, facilitators and observers became concerned that parents were expecting more advanced physical development from their babies than was realistic. Together with a research associate, the facilitators decided to present a Magda Gerber video as part of the following weekly session with parents. The video emphasised respect for infants by providing them with environments in which they were free to move. Subsequently, the facilitators minimised the equipment provided for the infants on session to allow more freedom of movement. After making these changes, both observers and facilitators noticed more frequent interactions occurring between parents and infants, infants and infants, and parents and parents. For example, several observations over time showed infants spending considerably more time interacting (face-to-face) with their mothers and one another. Once again this view is also consistent with *Te Whāriki*: "Infants are handled in a confident, respectful, and gentle way" (Ministry of Education, 1996, p. 87).

These examples reflect the changes to the environment over time, and how they influenced interactions. As one observer noted following the changes to the environment: "Lots of opportunity for interaction (and incidents) due to small area babies are in" (Observer's records, Action Research Cycle 1).

The second research cycle began with two new facilitators who built on the suggestions, evidence, and knowledge from the first cycle, as well as adding their own skills and culture. Changes to the environment, particularly the removal of clutter encouraged social interactions between all SPACE participants from the first week. A facilitator reflected that:

I felt comfortable with setting up — needed to see the group first before we could make some decision e.g. re position of the chairs. We set up the couch, in the far corner. The red bench formed another couch against the window. We placed two large rugs on the carpet creating a circle effect. Positioned white chairs around the outside of the circle, with some cushions at the furthest corner. We were conscious of the flow of the group, allowing some areas for them to walk through and across so as not to step over babies. On the floor we placed two treasure baskets and one basket with rattles. One of the baby gyms in the centre of the rug. Portacot and babies' room set up. Portacot out in the open area near the kitchen. Also left one of the sofas (one closest to the kitchen) for parents to feed. Two changing tables set up, one in the adult bathroom and the other in the children's one. Display table set up with sign in sheet, enrolment forms, children's books for reading, pens and music sheets. (Facilitator's reflections, Week 1, Unit 1, Action Research Cycle 2)

Another facilitator noted:

No plastic chairs today—really has an impact on the opportunity for interactions, especially for infants—so much closer to the other babies rather than some up, some down—all on same level. (Facilitator's reflections, Action Research Cycle 2)

In addition, the environment was adapted to accommodate speakers presenting their topics. For example:

We had set the room up with no equipment on the blanket and spread the blanket and the cushions quite far out so there was more room to move when doing the baby massage. We moved the couch out at a wider angle and it seemed more comfortable for the group. (Facilitator's reflections, Action Research Cycle 2)

In the middle of the second cycle, the Playcentre rearranged the centre's environment to accommodate infants during the Playcentre general sessions:

Changes to the Environment of Playcentre sessions: A reflection

In July 2006, the centre reviewed its practice in the area of DOP 5e (covering the Exploration strand of *Te Whāriki*). We identified the centre's provision for infants and toddlers as being a significant area for improvement, particularly with regard to the play area and activities available for this age group. With SPACE running at the centre, there was an increasing awareness of what infants can be offered, and recognition that infants and toddlers on general session had quite a different experience of Playcentre than SPACE babies.

I had previously worked with both the Hutt SPACE team and as a member of the COI team, and felt personally quite strongly that we needed to do better for our under 2s. I took the issue identified at the centre meeting and turned it into a action research project, as part of the requirements towards my Playcentre Diploma in Early Childhood and Adult Education (Course 5). Over a period of four weeks, narrative observations of children aged under 2 years were collected by centre members on a form that included space to reflect on the environment, equipment and interactions. These observations were supported by photographic evidence. A visit was also made to another local Playcentre, which had successfully created a heuristic play area for infants.

On the basis of this data collection, the centre identified that the space provided for under 2s was inadequate, both to ensure their safety from older children, and to give them sustained opportunities for exploration. We agreed to rework the interior layout of the centre, creating a new 'quiet' area for infants, including the introduction of heuristic play. A low mirrored divider was purchased, to shelter the area from through-traffic, and a couch was also placed in the area for comfortable feeding of infants.

Following the changes, further observations were made over a period of four weeks. These showed that the new layout had had the desired effect - parents felt safe with their under 2s being in this area, there was a sense that the infants had 'a place' in the centre, and the heuristic play materials were very well used. In fact, the heuristic play materials appealed to *all* age groups, with their open-ended nature stimulating

exploration from the babies through to the 4 year olds (S. Clark, personal communication, July 14, 2006).

The following statement supports the idea of making these types of changes: "Dedicating an area to non-mobile babies offers an opportunity to create an interesting and educational space" (Guyton & Terreni, 2005). An observer noted:

The centre has had a change around – flow slighted disrupted especially for observers accessing other side of room to observe – having to negotiate with grace and decorum our way through the family corner. (Observer's records, Action Research Cycle 1)

One of the positive outcomes of this was that:

The set-up does work, although we are a bit more confined, and the new babies' area worked wonderfully with Leanne [facilitator] having a separate area to play with some of the babies while their mums listened to [the guest speaker]. (Facilitator's reflections, Action Research Cycle 2)

The physical environment (the layout of the centre and how the equipment was placed) had implications for both parents and children, and parents' sense of security. In both action research cycles it was noted that parents chose to sit in the same place every session:

One parent in particular sat in the same place every week in term 1 and term 2 and in the play term, term 3, she was sufficiently relaxed to lie across the floor and play with her child. (Observer's records, Action Research Cycle 2)

In the second cycle the application of Magda Gerber's work was changed and extended. The facilitators reflected that it was important to offer a variety of view points on this topic so they drew on other writers and research to expand and offer further information about natural movement to parents. These included for example: Gerber (2002), Hermsen-van wanrooy (2002) and Santrock (1999).

In the first cycle heuristic play and treasure baskets were introduced as a core component of the programme. In the second cycle treasure baskets were used from the beginning to provide rich sensory experiences for the infants.

Facilitators responded to older infants by providing appropriate equipment. As a facilitator reflected:

I had also talked with Sonia and Angela, about the fact that we were conscious that Emma and Isla were older than the others and so we wanted to make sure that

their needs were met, so we set up their own treasure baskets for them to explore. They seemed to be really happy with that and both commented on how great it was to have two babies the same age as they both thought they were the older ones. (Facilitator's reflections, Action Research Cycle 2)

Other influences came from visiting the environment of another Round 2 COI and from attending a workshop presentation by Palle Krabbe on playfulness at the Australian Early Childhood Education Research Association Conference in 2007. The following observational examples illustrate the impact that these influences had on the participants. One observer noted that:

The facilitators had recreated some of the sensory ideas we had observed at [another Round 2 COI] on our visit the previous week: bubble wrap on the floor just inside the door, taped so that it could not be eaten or tripped on; transparent contact sticky side up, again taped to the floor, near the family area with a selection of collage materials ready to be used; a flax mat in the middle of the rug area with peacock feathers to explore.

The observation continued:

Chris [infant] explores the bubble wrap with his hands, sitting up on the wrap. He reaches for a big crumpled piece of paper and makes growly noises at it, waves it around and then notices Kristen [infant], who is banging puzzle pieces on a puzzle board. Kristen stops what she is doing and turns to see where mum is, vocalising, "Aah, aah," and commando crawls across the bubble wrap. She finds a chair and pulls on it and then rolls on to her back. She says "Baa, baa" and finds her toes. Bryce [infant] has come to see her, drawn by the noises she is making. He starts to move the chair around and discovers it pops the bubbles. Kristen notices too and reaches for the chair. Bryce becomes fascinated by her and reaches for her face. (Observer's records, Action Research Cycle 1)

As the infants became more mobile, observers noted that they instigated a change in the environmental layout by moving out of the established circle to explore a wider area of the Playcentre. This was consistent with the view that:

When the environment offers flexible furnishings and open-ended materials, children engage in a range of activities that foster their development and learning. ... They develop specific skills along with self-awareness and an alertness and respect for others around them. Open-ended materials encourage children to become flexible thinkers and responsive playmates. (Curtis & Carter, 2005, p. 38)

The physical environment at Te Marua/Mangaroa Playcentre influenced how the SPACE programme operated from week to week. Facilitators, observers and guest speakers all noted how changes to the physical environment influenced social interactions within the group. Changes to the environment were important because they allowed for more, and improved quality, interactions:

As Meade (2000) would argue, challenging young children involves more than just rearranging the physical environment. It is highly dependent on the quality of our interactions and the perception we carry of children's capabilities (cited in Stead, 2001, p. 20).

In accordance with the Playcentre culture, trips were organised to visit and explore the wider community. It was interesting to note that on one of the trips the SPACE parents recreated a familiar environment:

Everyone parks their buggies together and to the side of where the group congregated (just like the car seat area at centre). Leanne and Justine have transported a sizeable amount of SPACE equipment to the picnic spot. Leanne spreads out a huge tarpaulin and then we arrange the rugs from playcentre on the top. They have also brought the paddling pool and a treasure basket. Everyone settles around the edge of the rug (just like an ordinary session). Several people spread out extra picnic blankets they've brought themselves and it creates a wonderfully large communal picnic area. (Observer's records, Action Research Cycle 2)

Fostering holistic learning

The SPACE programme is designed to be flexible, adaptable, and responsive to participants. The holistic approach in SPACE programmes includes: learning through exploration; learning within the group; encouraging new experiences; following and extending learning, and fostering child initiated play. This approach was consistent with the model of building a community of learners. A community of learners' model positions all participants as active, including infants. All group members are equally capable and competent, able to manage their own learning, in partnership with responsive adults, who share in the activities of the group (Rogoff, Matuzov, & White, 1996).

Throughout the SPACE programme at Te Marua/Mangaroa Playcentre, the facilitators were able to participate, sharing their own knowledge and experience with all the SPACE participants. This was an enriching experience that fostered learning for all. The next sections provide several examples to illustrate encouraging exploration:

As the guest speaker was delivering a discussion topic, a facilitator saw an opportunity to promote interactions between infants in a newly created area, specifically designed to promote exploration and free movement. Her account is below:

Lisa [infant] and I sat down on the carpet next to the treasure basket. She was in her element. She took out the whisk and explored this with her mouth. ... I lay Emma [another infant] on her tummy and she really moved around rolling from side to side, tummy to back, pulled herself forward to reach some of the toys. As long as she had something to hold she was happy - smiling and responding to my smiles. I lay Lisa on her back, but she did not like that, so I sat her up again, however she was really happy as long as she had the items to explore next to her in the basket. I noticed Angela and Sally [the mothers] watching us often, looking to see if their babies were okay ... Sally actually came up to me later and said, it was so great to see Lisa so happy with someone else, and she seemed relieved that all was okay. (Facilitator's reflections Week 4, Unit 2, Action Research Cycle 2)

The other facilitator noticed this episode and commented:

Leanne did an amazing job with the girls in the baby area – Sally was so happy, almost overwhelmed to see that Lisa [her infant] was happy to stay and play so happily without her, - really neat for Sally to see Lisa developing relationships with other adults. (Facilitator's reflections, Week 4, Unit 2, Action Research Cycle 2)

The same episode was also recorded by one of the observers, who saw exploration within the group:

Lisa is in the area also. Leanne places Lisa close to the basket. She takes a metal whisk out of the basket, brings it to her mouth. Isla crawls over to her and tries to take it. She manages to take it off Lisa. Lisa leans over and tries to suck it again while Isla is holding it. Isla pulls it away. Lisa begins to cry. Leanne takes it from Ilsa and gives it back to Lisa. She moves Ilsa slightly away from Lisa. Isla chooses another toy from the basket, plays with it briefly and then crawls over to Susie [infant] sitting nearby. Leanne lies on the floor next to Emma who is also lying on the floor. They touch their fingers together, looking at each other and mirroring each other. Leanne puts a toy between them and Emma reaches for it. Emma rolls over and towards Lisa who is still sitting beside the basket. They both reach for the same toy. Emma puts her feet up in Lisa's face, they both say oohhh. Emma grunts and says ohhhh. (Observer's records, Week 4, Unit 2, Action Research Cycle 1)

There were further examples of learning in the group. A facilitator reflected on how a piece of equipment drew the group together and in so doing, added further dimensions to the experience:

Sue and I [facilitators] had concerns about music time; then Sue had the fantastic idea of a parachute – takes emphasis off voices and even hands. It worked a treat – the mums were so animated we let them play. Nikki and Kyla's babies were down for a sleep so they felt a little bit out of it. Kyla asked for the parachute next week!! (Facilitator's reflections, Week 5, Unit 2, Action Research Cycle 1)

The facilitator's reflections, how using the parachute supported learning in a group, were supported by an observer's records:

The parachute is laid out, and the group does some songs first sitting around the outside of it (clapping songs – If you're happy and you know it, and Paki Paki...which is being introduced at the morning tea table on general sessions at the moment ... links with the centre!). The parachute play is HUGELY successful. The babies are engrossed. Some laugh and laugh, others have big smiles, others just gaze. Ivy makes a bid for freedom, crawling under the parachute as it is floated up in the air, and away through the gap in the circle (photo). Karen brings her back again, and she again crawls under the parachute. One by one other babies join her crawling under the parachute. Alannah goes under and kneels up high, reaching her arms in the air towards the parachute with a big smile, but overbalances and falls over on her back bumping her head unfortunately. (Observer's records, Week 5, Unit 3, Action Research Cycle 1)

Fostering holistic learning occurred as a result of shared activities which were part of the SPACE programme at Te Marua/Mangaroa Playcentre. Different perspectives of the sessions, and events contributed to insights about learning within the group.

Parents were supported to become actively involved in new play experiences with their own infants, other infants, other parents, and facilitators. One such experience offered at the Playcentre was messy play. Facilitators noted some parents openly commented that they felt uncomfortable with any form of messy play. Participants in the SPACE programme were supported by experienced facilitators to help them feel more comfortable with this play experience. The following vignette is a collation of observers' records, facilitators' reflections, and the parent exit interview. It illustrates how one parent became involved in exploratory play with her infant, following and extending learning for them both:

I was amazed to see Angela [parent] and Emma [her infant] enjoy this time – Angela made several comments about granddad not liking the idea of messy play, but then she and Emma just had fun. Angela covered Emma in shredded paper, throwing it into the air and over her – Emma just waited, and anticipated it, time and time again. (Facilitator's reflections, Week, 5, Unit 2, Action Research Cycle 2)

The next example shows Angela, the parent, more prepared for the new experience of messy play, and even willing to contribute:

Angela arrived early and gave Emma lunch in the highchair. Angela asked if we were doing paint today as she had been talking to Nancy [parent], who had told her to come in her oldest clothes as messy play had been so messy she could only imagine how messy paint might be! ... I was about to finish the playdough mix, when Angela came into kitchen and asked "now, what can I do" – so Angela finished off the playdough which was great. (Facilitator's reflections, Week 3, Unit 3, Action Research Cycle 2)

Angela's experiences over time were evidence of how the facilitators respected her concerns about messy play, and then how, in her own way, she overcame her initial distaste. Angela was eventually empowered to participate alongside her infant in new experiences of messy play activities. In her exit interview she stated:

It's given me insight that I would never, never got, um playing with Emma. We would never ever, ever have gone out and got messy. I don't do messy play I hate painting I hate gunge and yuk and stuff like that but we got really into it, her and I both into it and that's one of the ways it's been good for us and it's also taught me how to be patient. (Parent exit interview, Action Research Cycle 2)

Holistic learning and development also included child-initiated play. The SPACE programme at Te Marua/Mangaroa Playcentre provided numerous opportunities for infants to be part of a network of relationships which offered them a range of play experiences that had the potential to enhance their learning. Introducing infant-initiated play experiences is consistent with Densem's and Chapman's (2000) views that:

Children learn through play. Children's spontaneous play provides opportunities for exploration, experimentation and manipulation that are essential for constructing knowledge. ... During play a child learns to deal with feelings, to interact with others, to resolve conflicts and to gain a sense of competence. Perhaps most important, it is through play that children develop their imaginations and creativity. (p. 123)

An example of an infant engaged in exploration and self-initiated play follows:

Tara [parent] placed a small toy on Amy's [her infant] right side, just out of her reach. When Amy notices it, she reaches out for it. She can't immediately grasp it, but she keeps persevering until she gets it. Then she brings it back to her mouth, and explores it with her tongue using licking movements. (Observer's records, Week 2, Unit 1, Action Research Cycle 2)

The observer then reflected that there were things the adults could do to facilitate Amy's initiative, for example, removing obstacles in places where she can see them easily, or position her so that she can see other infants and adults.

There were several further examples of infants' self-initiated explorations during the SPACE sessions at Te Marua/Mangaroa Playcentre. An observer reflected how infants were exploring the environment and equipment, and participating in rich interactions with other infants and adults:

Nathan [infant] is now up on Selina's [his mother] knee. He has a wooden fork in his hands. He looks at it, then drops it and tries to reach for it. Mum picks it up and taps it on her wrist. Nathan does a little 'spill', S cleans it up, wipes the floor and lifts Nathan back up onto her knee. She turns him towards herself and jiggles him. He turns to the side to look at Emma [infant]. Selina talks to Katherine [parent] next to her and turns Nathan towards Katherine and Josh [infant]. Katherine talks to Nathan as she feeds Josh. Selina kisses Nathan; then turns him back onto the knee. (Observer's records, Week 9, Unit 2, Action Research Cycle 2)

Exploration, a strand of *Te Whāriki*, is seen by many as being important to young children's development. Penrose (1998, p. 90) stated that

Exploration usually involves the child in some form of physical activity and often with natural things. Exploration is about allowing children to be curious and to find out for themselves.

This is clearly evident in the next example of an infant who has the freedom to move and explore:

Inside on rug is Nathan— he is on his tummy. The water pillow is close and he's slapping and trying to clutch it with his hands. In the meantime his toes are feeling their way round the plastic drum. He raises his legs from the hips so all his legs are off the floor and his toes are feeling the drum. He loses interest in the pillow and creeps his way to Selina's knee. He pushes and pulls himself around. He's now done a 180 degree turn around and lying on his side. He can see Josh [infant] and a giraffe – he grasps the giraffe and mouths its leg. Josh has drumstick and bells. Nathan is behind Josh, Nathan peers around Josh to see Maggie [parent]. (Facilitator's reflections, Week 2, Unit 2, Action Research. Cycle 2)

The environment and equipment provided opportunities for infants to self select and explore their physical worlds, with encouragement from adults:

Georgia is sitting independently of Mary (mum) during the discussion. She has several scarves around her. Justine [facilitator] brings a puzzle over and Georgia picks it up. She takes a piece out and then tips the board upside down. She mouths the board whilst holding it in front of her face. She looks at it, then puts it down. She reaches out and touches the blue puzzle piece still in the board. She lifts the board again and holds it vertically and looks along the board. Mum tosses her two more pieces of puzzle and Georgia looks at mum, smiles and goes straight back to the board. She lifts it to her mouth again, licks it, and tips it again. She continues to explore the puzzle board for several minutes and then discovers the scarves under the board. She pulls the pink one out and up using both hands. It is caught on the board and stays down in the middle. She notices the board again and lies it flat. She lies her own body on top of the board as she looks at it closely and intently. Mum comes over to Georgia and puts all the pieces back into the board. Georgia immediately starts to take them out again. She removed the red pieces and puts it in her mouth. The board slips away from her and she stretches over to reach it - grunting, "huh, huh". She tips into her tummy on the board. Leanne [facilitator] pulls the board out from under her and moves it away. Georgia is now on her tummy rolling while holding the orange puzzle piece. She places the piece in her mouth as she rolls onto her side and then her back. She looks at the roof whilst continuing to mouth the piece. (Observer's records, Week 7, Unit 2, Action Research Cycle 2)

Infants, who are naturally curious, begin to explore the wider environment as they become increasingly mobile. As stated in *Te Whāriki* "Adults recognise that curiosity is a prime motivator for physical activity and allow infants to develop skills at their own pace" (Ministry of Education, 1996, p. 87). Gerber (2002, p. 53) also commented: "Every baby moves with more ease and efficiency if allowed to do it at his own time and in his own way, without our trying to teach him." Observers noticed as this example of physical exploration and movement illustrates:

Timothy [infant] is really moving, pulling himself around on his tummy, 'swimming' along on the floor. He uses his right leg to propel himself and pulls himself to Josh [infant] and pulls at his toy. Then he leans on one side and eventually rolls on to his back. He rolls back on his front, crawls to a basket and unpacks two stacking toys. He puts them down and then notices my camera (photo). He pulls himself back to the basket on his tummy and takes out a tin and bottling rings. Then he pulls himself to Josh again. He looks and tugs at the water filled mat and rolls onto his back. He tugs on his toes and chews the tin. He turns his head to look at Josh again and Josh squeals. (Observer's records, Week 9, Unit 2, Action Research Cycle 2)

The research team also noted that the observations showed consistency with Playcentre philosophy where child-initiated play is key component:

A child initiated programme means that the child has the option of doing something or not. It does not mean that the adults have no say in the planning, presentation or involvement with the children. (Densem & Chapman, 2000, p. 125)

The latter part of the SPACE programme introduced areas of play to parents and infants, and encouraged child-initiated play. Observations of infants demonstrated this:

As I carry on videoing Amy [infant] climbs out. She crawls to the waterway on the grass nearby. She explores the boats and I guess that the water in the waterway is cold from her reaction. She shrieks as she touches the water. She pats it and picks up the boats. Then she puts them back down and returns to the pool. Next she notices the mat where I am sitting and discovers that her wet body makes it slippery. She spends several minutes babbling with excitement and sliding around on the mat. (Observer's records, Week 1, Unit 3, Action Research Cycle 2)

Other examples showed adults playing alongside their infants, supporting the infant's interest and extending their exploration and experiences:

I [the observer] video Josh [infant] with mum, Katherine, inside the pop-up tent tunnel. Josh is inside the tunnel and mum tries to coax him through to another segment. This means crawling over a step or flap of fabric. He thinks about this for a while and then decides to crawl out of the tunnel through the nearest gap. Mum encourages Josh, but he does not want to go over the lip of the tent). She waves a plastic duck at him and puts it in the next segment of the tunnel. This works and he crawls through to reach it. She moves the duck further to encourage him further into the tunnel and he does. They blow raspberries at each other and Josh babbles and babbles to her. He goes back over the lip of the tent, but not all the way. He pauses and sits. They take turns to babble at each other. Josh has a big smile on his face. Katherine put the duck ahead of him again and encourages him to "Come on" and, "Good boy" and he does what she wants. He notices me and stops occasionally to look at me and smile. He reaches the duck again and sits up. Mum moves to the other side of the tunnel and encourages him through. He smiles as she appears through the various exits of the tents. Now is making it over the lips of the pop-up tents more easily, not pausing or regarding them as barriers. (Observer's records, Week 1, Unit 3, Action Research Cycle 2)

There is a long length of clear duraceal stuck to the floor – sticky side up and there is a tray of collage resources including glitter in little bottles, cut up pieces of fabric and tinsel. Amy [infant] crawls onto the Duraceal. She finds the playdough equipment (tiered trays) and gets a cup. She's back on the duraceal with the cup. She tries to push the cup on the duraceal but it sticks. Tracy [Amy's mother] is playing with the collage resources. Amy sees her mum playing and joins her. There are lots of verbals from Amy. She babbles to her mum, and waits for her response then babbles again. She picks up a glitter bottle and tells me [the observer] about it. She gets a handful of tinsel and lets it fall onto the duraceal. Leanne [the facilitator] joins this play. (Observer's records, Week 4, Unit 3, Action Research Cycle 2)

In the above observations, holistic learning was fostered through extending experiences with traditional early childhood activities as well as through interactions with a range of adults.

Responses from the parents suggested that the introduction to play sessions as part of the SPACE programme at Te Marua/Mangaroa Playcentre supported them to play alongside their infants. The two facilitators in action research cycle 2 asked the parents to share how they were feeling about the play unit. Parents' responses included:

I'm playing with him in a way I wouldn't have played with him at home.

I'm enjoying having the mess here at the centre and not at home.

It's great to have different activities set up inside and outside.

Getting new ideas – not sure what to do with them at home. It's great to get the new ideas.

I've enjoyed it for Emma. She is exploring everything. It's where they are at; so you just have to do it, don't you?

I'm enjoying the different area of play. We didn't do sand until we did it here, so now we have a sandpit at home.

It's great to see what a playcentre session might look like as they get older. (Observer's records, Week 5, Unit 3, Action Research Cycle 2)

After analysing the data, it became clear the SPACE sessions supported and fostered holistic learning. In this context, holistic learning included exploration, their social interaction with their parents, other infants, and other adults. It was clear that infants were able to communicate effectively and to use the environment for self-selected play. New experiences supported infants and their parents to strengthen their sense of belonging to a community of learners. Observations of one infant throughout the programme illustrate many examples of the holistic learning approach in the SPACE programme (Appendix H).

Connecting families and communities

In this study family and community is viewed as part of the wider ecological system (Bronfenbrenner, 1979). The SPACE programme at Te Marua/Mangaroa Playcentre provided a forum for parents to share their ideas and experiences. The programme connected the families with one another; participating parents to their extended family networks; and families to their communities. The information and ideas discussed at SPACE sessions were shared widely. A parent's comments illustrate this:

I'd come home on a Thursday full of....the topic we'd been talking about and doing, and it was always a good source of conversation that evening and the following weekend...because it was a matter of so and so said we should try this, shall we give it a go? From his point of view...it gave us another avenue to go down. (Parent exit interview, Action Research Cycle 1)

Other observations showed that information from the SPACE programme at Te Marua/Managaroa was shared, and discussed with partners at home:

Three Dads attended this session. I had mentioned about some babies having higher sensory thresholds than others,...and that we'd discussed this previously in the over-stimulation topic ...One mother shook her head saying "no, I don't remember", but the father (who wasn't there [at that session]) said he remembered. (Facilitator's reflections, Week 3, Unit 3, Action Research Cycle 1)

It was evident that parents were changing their practices in response to information they had been presented with, and sharing information with their partners at home. The over stimulation topic had provided some useful information for parents, e.g. one mum who had been putting her infant to bed with a radio on, had tried turning it off and found her baby had slept much better. Another one was able to identify occasions where her infant had been over stimulated during the week and respond appropriately. (Observer's records, Action Research Cycle 1)

Practical information shared during the SPACE sessions about resources also had an impact on what was offered at home

I spoke with Sonia who said she has made a heuristic play basket at home. She commented that it was intriguing watching the things that Isla likes – the carabinas, the bike pump – not the things she would have expected. (Facilitator's reflection, Week 8, Unit 1, Action Research Cycle 2)

Figure 1 illustrates this communication process between participating parents and their families.

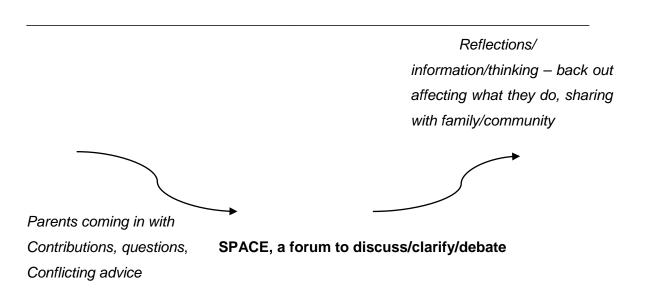


Figure 1:

Connections among parents, the SPACE programme, and their families and the community.

Overall, partners/fathers/husbands encouraged the mothers to attend the SPACE programme at Te Marua/Mangaroa Playcentre:

He [the infant's father] has been really positive, and sometimes when things get on top of you and it's just not working out, you might [miss] a few weeks, and he's already encouraging me, you know you've got SPACE tomorrow, you've got to make sure you get there...because I think he thought it was good for J as well as me. (Parent exit interview, Action Research Cycle 1)

Occasionally partners attended SPACE sessions, particularly during the play unit, or when there were specific topics or events, for example, swimming. Even though partners were often working full time, there were numerous occasions where they would visit briefly for part of the session. During the parent interviews, it became clear that partners were very keen to attend where possible:

He's [a father] come once. He thinks it fantastic. ... I think at first her thought it was just another coffee group where we sit round and do nothing. So I made him come to one session and it was the first session of messy play and he came in this work clothes and he had to come home and get changed afterwards. He realised—no we don't just sit around and do nothing—we actually interact and play. He just said it was so cool, really cool. (Parent exit interview, Action Research Cycle 1)

Some fathers were more motivated to attend if they knew other fathers would be there:

Three dads attended this session, and seemed keen to participate. They seemed comfortable on session as they knew each other. (Observer's records, Week 3, Unit 3, Action Research Cycle 1)

[Glad there is] another guy here...hoping you hadn't piked out on me... (Observer's records, Week 3, Unit 3, Action Research Cycle 1)

During the first action research cycle a father became a regular participant in the programme when his partner was working. Over time, he became integrated into the group:

He's enjoyed it ...and he didn't know what it was going to be. He came back and said 'wow, that was really (cool)', like he didn't know what to expect. (Parent exit interview, Action Research Cycle 1)

Noel (dad) and Emma [infant] are first to arrive and settle into play. There are musical instruments laid out on the mat. E puts the bells in her mouth. Dad says "No, we don't eat it, shake it!" E shakes the bells and dad gives smiles and positive feedback. E smiles too. (Observer's records, Week 4, Unit 3, Action Research Cycle 1)

Even though facilitators encouraged both parents to attend, perceptions of parents' roles varied. In some instances, partners/fathers viewed the SPACE sessions as specifically for mothers. For example, one mother stated:

He has been invited along but hasn't been able to make it, and I think they feel it is still the mother's place. (Parent exit interview, Action Research Cycle 1)

Consistent with a philosophical approach to early education, facilitators encouraged joint learning experiences, in which both parents could participate alongside their infants:

Parents were fascinated with the way a lump of corn flour would liquefy in the palm of their hand. I [facilitator] was putting a lump of corn flour on Dylan's [infant] hand when Janice [his mother] said 'oh let me see!! and took it very excitedly, then apologised saying "but its so much fun, I want to see'. Dylan's father was also enjoying the experience. Playcentre philosophy includes parents playing with and alongside their babies and that it is a whole family/whānau experience. The whole family playing with the messy play was an example of this. (Facilitator's reflection, Action Research Cycle 1)

Parents commented that SPACE provided opportunities to build confidence in their role as a parent.

I think once again like with swimming and that, with me having confidence, I can say 'hey this is what we do. (Parent exit interview, Action Research Cycle 1)

In general the data suggested that the programme contributed to how the partners perceived, and were involved in, their children's early childhood experiences:

He would have liked to have come, he'd liked to have been more involved, but he reads the handouts... and we have enrolled in Playcentre and so he is going to try and, because of this, (SPACE) and how much we've got from this, he wants to come to Playcentre at least once a month. (Parent exit interview, Action Research Cycle 1)

There were also connections with extended family members of some of the SPACE participants. Some extended family members knew the SPACE programme facilitators at Te Marua/Mangaroa Playcentre, and shared with the facilitators, how valuable their daughters had found the programme:

[Selina's] mum...thinks the programme sounds great and wants me to keep in touch [with Selina] as she can remember feeling isolated as a new mum – across the generations, mothers can relate. (Facilitator's reflections, Action Research Cycle 2)

Another grandmother shared her experience of when her children were young, and how the community/friends supported one another. She contrasted this with communities today.

Nancy's mum...commented on how good SPACE was as when her children were younger they had groups of friends with children that used to spend time together and grew up togetherthat kind of thing doesn't happen any more with everyone being so busy. (Facilitator's reflections, Action Research Cycle 2)

The grandmothers' support for the programme was based on their experiences of isolation for first-time mothers:

Today the role of parent is a particularly demanding one because of the social and technological changes since the parents' own early upbringing. Such changes mean that the new generation of parents cannot rely on family memory or traditional custom to help them decide what to do in new situations. (Morris, 1989, p.15)

They also perceived there was a need for community 'connectedness', and for support for parents of very young children. This perception was reiterated by a focus group member:

It's just a neat support. There's not a lot of support for mums out there in the community. You go down any street and everybody's at work. It's not like 30-40 years ago when people were at home and you had a neighbour, you could have the support, whereas the SPACE facilitators provide support, and it really is a time when they need it. (Focus group participant, education sector, Action Research Cycle 2)

Similarly, Duncan and Bowden (2004) found that early childhood services provided support for some families who were isolated from traditional family and community networks.

As well as connections among families attending the SPACE sessions, there were connections between the SPACE programme at Te Marua/Mangaroa Playcentre and the wider community. Members of the SPACE group brought new ideas with them to share as they grew confident within the group. For example two parents in Action Research Cycle 2 were attending a sign language class in the wider community and communicated this information to other participants in the SPACE group. This in turn provided an

opportunity for other members of the group to contribute further information on the same subject, thereby pooling community resources and knowledge:

Bridget [a parent] shared some of the signs within the group. We also talked about Emma Karen from Playcentre who runs workshops on sign language. Justine suggested we sing Tim the turtle using the baby signs. Bridget then showed us a few songs using baby sign, which everyone joined in. She looked over to Sonia (the other parent attending the class) for support and they sang together. (Facilitator's reflections, Week 8, Unit 2, Action Research Cycle 2)

Facilitators drew on their own contacts with people in the community and invited them to support the group. For example Kathy, a facilitator invited a health professional (now retired), she knew personally to join the group as a guest speaker.

Parents participating in the SPACE programme at Te Marua/Mangaroa Playcentre often shared their experiences of the programme with their friends in the community:

[A parent] is talking about how she went to a friend's house that has no children. Her friend was worried about what baby O would play with and so C asked for a few things from the kitchen—a whisk, wooden spoon, bowl and pot. Her friend was amazed at how well O then played happily and didn't need all of these toys. C [explained] "I got that from SPACE". (Observer's records, Action Research Cycle 1)

Finally, parents made connections with their own experiences and these have been interpreted as contributing to a culture of group care, which is discussed further as part of research question 2. In the examples that follow, the value of a discussion was recognised as a factor which connected the SPACE participants through sharing experiences. This led to increased awareness of different perspectives, which in turn fostered shared understanding of one another's circumstances, beliefs, and practices:

During the round of introductions/icebreakers there were many people who shared a lot about their childhood memories and things they have kept from when they were younger for their own babies. (Facilitator's reflections, Action Research Cycle 2)

What I really liked was that we'd have a discussion and then we would be given an activity or something we were to have to go into groups and talk to different mums...and you hear different perspectives...and hear a different point of view. (Parent exit interview, Action Research Cycle 1)

This kind of contribution was received enthusiastically by other members of the group, and encouraged the participants to support one another. The next series of examples illustrate this:

Jane [parent] had brought the book in that she promised. I asked her if this could be sung or read...she was not sure. It definitely had a tune, so I started singing and was amazed at how many parents joined in. (Facilitator's reflections, Action Research Cycle 2)

Ida [parent] shares at length about her thoughts on speaking Spanish to Susie [her infant]. She says she finds it quite difficult in isolation. Several people offer encouragement. (Observer's records, Action Research Cycle 1)

Sonia [parent] brought her sling to show – she demonstrated it for the group and then Danielle [another parent] had a go also – she shared so naturally and the group accepted her contribution very positively. (Facilitator's reflections Week 2, Unit 1, Action research cycle 2)

Sharing encouraged an atmosphere of mutual respect and trust where parents could safely share and identify with each other:

It is such a huge release and you can sit down and go 'Oh I've had the worst week and Troy hasn't slept and I've got so much work on.' I was there the other day and I was almost in tears, I'd had a really really bad week, and I said 'No matter what I'm going to SPACE'...and Kathy and Sue will just sit there and let you talk away your problems. (Parent exit interview, Action Research Cycle 1)

The support gained from each other, and the facilitators within the group is evident in the parent interviews as presented below:

I [parent] just really loved the guidance from the other people, the facilitators...so I could say, 'I'm having a problem with changing O's nappy at the moment'...and all of these women have had children before, and they say, 'oh, why don't you try this?' (Parent exit interview, Action Research Cycle 1)

Just having a support network of other mums who were going through the same sort of things we were all in the same boat. All of a sudden we had this new life but we desperately wanted to have to love and look after and cherish and all the rest of it, but none of us really knew I guess what to expect. (Parent exit interview, Action Research Cycle 2)

It's an opportunity to go and relax with other mums and other kids...like you actually are a bit down if you can't go because your baby's sick or you've got something else on. So you actually make the effort to go. (Parent exit interview, Action Research Cycle 2)

Contributing to the SPACE sessions at Te Marua/Mangaroa Playcentre allowed participants to share aspects of their families' cultures:

Nancy [parent] brought a song sheet in for us to sing – Kookaburra. Her aunty sings it to Lisa and it makes her giggle so she searched for the words on the net and put them together for us! I copied off a few for us to use during singing and thanked her. (Facilitator's reflections, Action Research Cycle 2)

This sharing was reciprocal with facilitators also sharing their experiences with the group. An observer noted how the facilitator's contributions influenced the group dynamics:

Personal information sharing of facilitators may have helped to set the scene for openness in the group and relaxed sharing. (Observer's records, Week 1 Unit 1, Action Research Cycle 1)

These contributions revealed the facilitator's personal experiences and illustrate the degree of trust established on SPACE sessions:

Kathy [facilitator] begins session by standing and singing softly in Māori...parents stopped talking and watched/listened to Kathy. (Observer's records, Action Research Cycle 1)

We talked about bilingualism and second languages...I used an example of my second language from South Africa and shared a short poem I learned in my childhood with the group. (Facilitator's reflections, Action Research Cycle 2)

The data presented in this section of the findings chapters showed important links between the SPACE families and communities. Further community connections and networking are discussed in the next chapter, which focuses on the second research question.

Summary

This chapter presented key findings, interpreted thematically for the first research question. Key themes were interpreted, drawing on a wealth of observational and interview data, supported by relevant research literature and reflections. The chapter included a detailed discussion of how the SPACE programme at Te Marua/Mangaroa Playcentre supported learning among the parents and infants who participated in the programme. Findings highlighted the importance of fostering supportive relationships and interactions, providing facilitating environments during the SPACE sessions, fostering an holistic approach to learning, and connecting families and communities. The next chapter examines key themes for the second research question.

Chapter 5

Findings: Networking and Supporting Collaborative Relationships through the Space Programme Key Themes for Research Question Two

Overview

This chapter addresses research question 2: How does the SPACE team and programme, together with Te Marua/Mangaroa Playcentre, network and support collaborative relationships? For research question 2, the key themes include: referrals, communication across settings, and collaboration across health, education and welfare sectors.

Development of key themes

After reflecting on this second major research question, and mining and interrogating the relevant data sources, the COI centre researchers developed the following model to demonstrate the emergent themes. As presented in Figure 2, collaborative support was a major theme, with its subthemes defined as: nurturing a culture of care, respecting parents, and valuing families and communities. The other major theme, communication across sectors, included subthemes of: referrals, interactions across settings, and cross-sectoral content. The following sections of this chapter provide detailed findings for each of these themes.

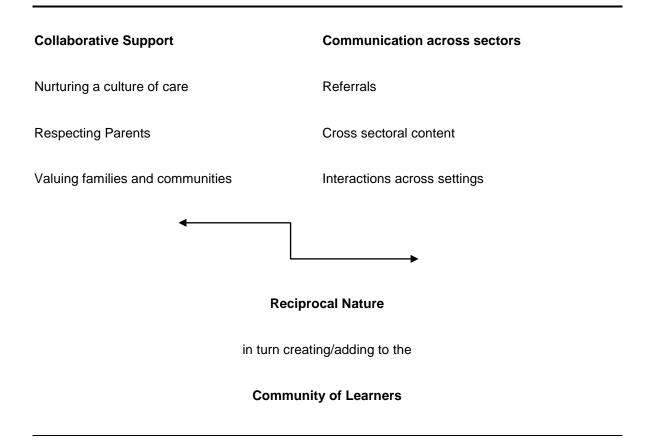


Figure 2:

Key themes evident when the data were analysed, drawing on ecological theory, in relation to research question 2 (action research cycle 2)

Collaborative support

Nurturing a culture of care

The SPACE programme aims to provide support for families. This is consistent with Bronfenbrenner's (1979, 2005) view that the family is a major influential structure in supporting human learning and development, and endeavours. The SPACE programme also addresses the question, raised by Bronfenbrenner, asking who supports the primary care givers in families. Individual parents enrol in the SPACE programme with their infant/s. As in this research project, a SPACE group is usually made up of between 15-17 parents and their infants, two facilitators and, on occasion, guest speakers. The facilitators aim to deliver the SPACE programme in an intimate and friendly group setting, using a collaborative approach to learning. A focus of the SPACE programme is to support parents as they adjust to parenthood, and build relationships pertaining to parenting. The overall intention is to value parents in their new role and to accept them as individuals within a group setting.



The SPACE sessions were designed to foster a culture of care amongst all participants. The discussion and sharing time provided an opportunity for parents to reflect critically on issues and practices that are relevant to parenting. What has become evident during this research is the importance of role modelling. Parents acted as role models for one another, and the facilitators, and the guest speakers also became role models. For example, one facilitator observed another facilitator role modelling in this way:

Onto the music, the hello song. While I noticed a number of mums standing on the edge with sleeping babies, they all seemed to be singing and rocking to the music. Justine had managed to have a hold of Bryce, which was great so she could really show them how it was done. My baby doll was a little sad and not very soft and cuddly. I did however have Joseph watching me the whole time, smiling away and really excited with the scarf song. (Facilitator's reflections, Unit 1, Week 4 Action Research Cycle 2)

The facilitators' responsiveness and their flexible approach to running the session also appeared to be factors that supported a culture of care. As reflected in the following excerpts, the facilitators recognised what was working for parents, and responded appropriately:

Music was a disaster. Babies were not interested and parents seemed hot and tired. We started with a few songs and fingerplays, but it was a real struggle. Parents seemed to talk during the songs and babies were wandering around the

centre, interested in exploring. I suggested that we maybe have classical music with bubbles instead and seemed to get many nods. We did this and it was fun, seemed to relax everyone. – Will think of doing music first next week, so we have the rest of the time to play. (Facilitator's reflections, Week 2, Unit 3, Action Research Cycle 2)

The facilitators adjusted the following week's music session based on the reflection above. A commitment to responsive facilitation is evident in the next reflection:

We started the session with the music sheets. So many parents were getting up and down, with babies sleeping, parents standing at the back. The light was off so it was dark, perhaps this was why – time to sleep. The songs went well, but then many parents started to move up to rock their babies. I was conscious that only 5/6 parents were left. I was indecisive on what to do, quieten the music down and play classical music with the bubbles or continue with the parachute as the babies on the floor were anticipating the parachute. I decided to continue with the parachute (could not ignore the smiling faces). I asked parents if they would mind if we saved the bubbles for next time as so many babies were sleeping. (Facilitator's reflections, Week 2, Unit 3, Action Research Cycle 2)

Supporting parents to contribute by sharing personal experiences were further dimensions of nurturing a culture of care. During both action research cycles, observers and facilitators noted numerous incidents of reciprocal discussions that were based either on the topic presented during the SPACE session, or on personal experiences. Several examples follow:

There has been a lot of information sharing around the topic of Sensory Overload. During the discussion time on the topic of Sensory Overload, the facilitators promote thinking and contribution from the parents. Later during the topic [Justine, the facilitator] asks questions about how the babies respond to different stimuli, i.e., hats, food. Several of the parents who hadn't contributed to the earlier discussion do so now and Justine shares her own experiences with the group. The parents enjoy sharing their experiences and there is a great deal of laughter as they listen to each other. (Observer's records, Action Research Cycle 2)

To open up the topic we asked parents to share with the group what they noticed their babies were doing. Angela said something to Sally and they both laughed, so I asked Angela if she was happy to start and share. Her story was funny – "Emma having had her first nose dive, being sat up unsupported". We went around the group a different way this time (so just not starting with the same people each week) and I thought everyone was happy to offer some comment. I was very conscious though of them talking about how their babies were sitting and being propped up. Three talked about the babies keen to stand. The parents of the younger ones had identified movements like swatting, grasping. (Facilitator's reflections, Unit 1, Week 4, Action Research Cycle 2)

Justine [facilitator] listens to the suggestions from the group she's involved with. She extends/elaborates when the suggestions are shared. Nancy and Donna share their ideas/views and support each other with positive feedback. Justine makes sense of their dilemmas. She also brings the group back to focus and group discusses where they can source items. (Observer's records, Action Research Cycle 2)

The above examples were evidence of both how information was shared with the groups, and how this sharing, in turn, supported parents to discuss their own experiences. Facilitators also encouraged deeper thinking and reflection, thereby promoting the well-being of the parents participating in the SPACE programme. This was apparent in both the facilitators' and the observers' records:

It is super to see them offering one another valuable advice. I, however, am finding it really hard to listen to some conversations where parents are offering advice which I find that I do not agree with and trying not to state my opinion, but to rather question them on theirs. ... I don't feel that they are expecting us to be the expert, rather more of an information sharing opportunity. However, when the advice is questionable, and possibly not correct ... that is a challenge. I try to [introduce different perspectives] to the discussion. For example, re baby swings, what would grandparents think: They used to use them and baby loves it, so spent ages in it? Or, from a physiotherapist perspective, [will there be] physical damage? Not sure if this is the right approach, but will have to see. (Facilitator's reflections, Action Research Cycle 2)

Parents' contributions also promoted thinking amongst the group. The observers' records showed that this occurred regularly:

Donna, Victoria and Tracy are sitting alongside each other (near window). Donna throws a question out to them about how they deal with cradle cap. Victoria mentions she uses almond oil "I get it from the supermarket". Conversation about how to use it, how long do you leave oil on for, how do you get the crusty bits off. Tracy is quietly listening and joining in when she has something to share. (Observer's records, Action Research Cycle 2)

It was also apparent from the parent interviews that opportunities to contribute by sharing their experiences of parenting were important:

Lisa [infant] had very, in comparison to a couple of the other babies, very minor reflux and being able to talk to the different mums whose babies were suffering worse reflux was great and yes, just having I guess a support network of other mums who were going through the same sort of things we were all in the same boat. All of a sudden we had this new life but we desperately wanted to love and look after and cherish and all the rest of it but none of us really knew I guess what to expect, like I say, instinct told you what to do ... so it was really [reassuring] from that point of view. (Parent exit interview, Action Research Cycle 2)

The supportive nature of the group nurtured a culture of care by providing opportunities for parents to share personal reflections on their parenting styles, skills, and concerns. This created additional opportunities for discussion within the group. Several sources of data consolidated this theme including focus group interview with health and education professionals, and voluntary social agencies, interviews with guest speakers, and facilitators' reflections. A facilitator remembered:

Some parents were very willing today to share their doubts and concerns and reflections on their own practices. [For example some parents made these comments]:

'Whenever I put him down to play on his own, I feel really guilty. Does anyone else feel like that?' ...

'I think it's a bit hard nowadays. [Advice] is just everywhere. [A specified health service] is a very worthwhile source of information, but I do get confused'

'A lot of things we buy are to give ourselves more time.' (Facilitator's reflections, Action Research Cycle 1)

Focus group participants commented that parents who had participated in the SPACE programme appeared more knowledgeable and certain about their early education choices:

I was thinking probably it brings parents along to me who have more knowledge about what they want for their children, where they want their children to go ... they've got a head start. (Focus group participant, voluntary social service agency, Focus Group Interview, Action Research Cycle 2)

I've found the same. Because all the information's great, but unless you feel okay with yourself and get that support, you can't take that information on board. So just having that support to start with. (Focus group participant, education sector, Focus Group Interview, Action Research Cycle 2)

Confident parenting was an appreciable outcome of the programme noted by a guest speaker:

I think that the learning from each other is really powerful. And the networking with each other...That's what I see. And it gives them the confidence to go home and be good parents. That's definitely what I see. (Guest speaker interview, Action Research Cycle 2)

Further, the joint process of working together developed a sense of community because the common focus was on parenting experiences. A focus group participant noticed the effects:

I think when you're in a group that's being facilitated in a way that's about the sharing of knowledge, the sharing of parenting knowledge, just that process in itself, rather than 'Well I learned this about blah blah.' Just the process of working together ... and realizing that someone else's worries are the same as yours. (Focus group participant, voluntary social service agency, Focus Group Interview, Action Research Cycle 2)

Respecting parents

This theme encompassed valuing parents, using their expertise, and fostering emergent leadership. Both facilitators and guest speakers demonstrated respectful relationships and at the same time reassured parents in their new role.

You've all got lovely babies. You all look like you're the experts! ... Don't change what you're doing [with the swaddling] – you've got it right. (Observer's records of a health professional guest speaker's presentation, Action Research Cycle 1)

The environment provided a safe forum for parents to share and debate, and then question the information offered. As the facilitator explains:

Sue emphasises that this is one opinion, one point of thinking that you can take from it what you want as a parent. Giving the decision making control back to parents – highlighting a very important perspective to take when we are dealing with the mountains of advice and information in the parenting world. (Observer's reflections, Action Research Cycle 2)

One parent reflected in her interview;

I could make an informed decision rather than an uninformed one or feel like I was being badgered into something so that's been something I've really liked. (Parent exit interview, Action Research Cycle 2)

Parents commented on how they felt their needs as adults were respected in the context of the SPACE programme. In the example below, a parent reflected on one of the sessions run by a guest speaker:

The session I found quite useful was the one about mothers, yeah I found it really good it really kind of helped me at that time. I thought, it's alright to realize that things are different, and everything's changed, but you will eventually regain the balance. I found that session really really good and I took away quite a bit from that. Because you are so focused on your baby all the time, it was kind of nice to step out and think about how it's affected you [as an adult]. (Parent exit interview, Action Research Cycle 1)

Respect also involved facilitators affirming parents by reassuring them about their practices with their infants:

I talked with Jody [parent] regarding her concerns on what to do with Tony [her infant], what toys she should get him, what she should be doing with him. I reassured her that he will tell her in his own way and she will also begin to be able to tell. Then it seemed to trigger when she said oh yes, I remember when he started to watch things that moved on his mobile and so she responded in some way. (Facilitator's reflections, Action Research Cycle 2)

During cuppa time, Sally [parent] asked me if I could give her advice about Lisa [her infant] having solids. She explained what had happened, with her not wanting solids this week (after being on solids for a few weeks) and asked me because I had a lot of experience that maybe I could offer her some advice. Initially I was reluctant to offer her my own advice, again how much do you tell them to do, the tug between the facilitator and the parent. However, since I'm a nutritionist, I felt I could advise her in the capacity and we talked for sometime about what she could try. It seemed she already had some wonderful ideas, but just needed some reaffirmation. (Facilitator's reflection, Action Research Cycle 2)

Guest speakers also respected and affirmed parents' contributions to the discussions that were part of the SPACE programme at Te Marua/Mangaroa Playcentre:

[The SPACE programme] gives [the parents] a forum to talk openly about what is still a controversial issue about, you know, how to be a parent and whatever in life. So I think ... the session I do is different from the rest of SPACE because it's not about the children. It's a great opportunity to give women an opportunity to think about themselves. And that to me is an important part of their development and learning, because the individual's really important as well. (Guest Speaker Interview, Action Research Cycle 2)

Further, valuing parents' expertise meant the facilitators were attuned to recognising their potential contributions to the SPACE sessions. In both action research cycles, the facilitators drew on the prior knowledge and experience of the parents. The following examples show how parents' professional expertise was incorporated into the programme:

Justine and I worked through the content we planned to cover, and gave a brief overview of structure of the ear. I did comment that we were not the experts and there may be others who do know more than we do. I was thinking of Jane (the nurse), not realizing that Katherine is an ear clinic nurse. Gosh how amazing she was. She offered such valuable information, talking confidently and responding to parents' questions. ... So pleased to see her feel comfortable enough to share her knowledge with the group. Possible guest speaker for other SPACE sessions? (Facilitator's reflections, Action Research Cycle 2)

Second language experience was another area where parental expertise was acknowledged and incorporated into the SPACE sessions:

During a second round of sharing, Ray [father] again contributes to the discussion of what everyone's favourite language is. All adults were listening intently to what others said. However, there was a lot of noise from the babies — crying and general unsettled noises. As the discussion continues there is a lot of interest in bilingualism and the use of second languages. Ida shares her experience with Spanish/English with Susie. Katherine shares about her friends whose children attend Kohanga Reo and are bilingual. (Observer's record, Action Research Cycle 2)

Families were asked last week to bring something in another language to share. Ida shares a song in Spanish (which everyone joins in with). Kaye shares two books in Te Reo Māori, Ruth shares a CD with 'Allouette' on and Leanne shares an Afrikaans rhyme. As the 'Allouette' CD plays, people sing along and Ruth dances with Isla (not her baby) to the music. (Observer's records, Action Research Cycle 2)

The SPACE programme at Te Marua/Mangaroa Playcentre encouraged collaborative support among participants in the group:

I asked Ida if she would feel comfortable singing it to the group (she loves singing), and she looked at the words and said they were a little different to what she knew, but would still be happy to sing. She was just awesome, leading the group, everyone got involved and it was fantastic. They all tried to say the words (she

said them slowly and carefully so we could all repeat them) and sing along. Well done Ida (especially as the group was really big to). After this we sang the English version. (Facilitator's reflections, Action Research Cycle 2)

Mutually respectful relationships were fostered within the SPACE sessions and facilitators created many opportunities to develop these in the group. A COI facilitator team member acknowledged this by drawing on Bettelheim:

Perfection is not within the grasp of ordinary human beings. Efforts to attain it typically interfere with that lenient response to the imperfections of others, including those of one's child, which alone make good human relations possible. But it is quite possible to be a good enough parent – that is, a parent who raises his child well. To achieve this, the mistakes we make in rearing our child—errors often made just because of the intensity of our emotional involvement in and with our child—must be more than compensated for by the many instances in which we do right by our child. (Bettelheim, 1987, p.ix, cited in Bernstone, 1989, p. 26)

Valuing families and communities

There were positive comments from participants in the SPACE programme, the guest speakers, and the wider community about the value of the programme for families:

Well I'm very impressed with the SPACE programme. And it seems to be running very well, and I admire the people who organise it – with the energy and their enthusiasm that they show for these families, because it's really needed in our community. (Guest speaker interview, Action Research Cycle 2)

It's filled a big gap. Whereas if you had a special need or a social need, there were lots of places. If you were a young mum, you know, there were lots of places to go. There was a gap, no one filled that gap. There's a real gap that's being filled by SPACE. (Focus group participant, education sector, Focus Group Interview, Action Research Cycle 2)

The long-term benefits of supporting parents and families were acknowledged by focus group participants and a guest speaker as a part of SPACE:

Good parenting always has an impact in society, which is why I'm interested in anything that goes into helping parents in any way when children are young. The ramifications are fifty years down the track, aren't they? They're for life. (Focus group participant, voluntary social service agency, Focus Group Interview, Action Research Cycle 2)

[We tell] them [the parents], they have got the most important job, not only are they best at it, but it's the most important role. (Guest Speaker Interview, Action Research Cycle 2)

However, there were also suggestions about broadening the scope of the SPACE programme to include grandparents. A health professional, who was also a guest speaker, noted that more and more grandparents were caring for their grandchildren. Further, key informants from the health and social service agencies wanted to include Māori and also Pacific families:

I guess something that I think would be really great to see, [would be to have] Polynesian and Māori families involved in actually running and administering the [SPACE programme]. So it's delivering for people... whānau. I guess for me, Plunket and Playcentre are quite white middle class type societies. (Health professional interview, Action Research Cycle 2)

Nevertheless there was important affirmation for SPACE as a centre-based group programme, drawing families from the community together as a group. One participant in the focus group commented:

It seems to be such an individual world at the moment; everybody's off doing their own surviving. And to have that time just to be part of a community—of people doing the same thing, similar thing [is valuable]. (Focus group participant, education professional, Focus Group Interview, Action Research Cycle 2)

Collaborative support was a feature of the SPACE programme at Te Marua/Mangaroa Playcentre. This included nurturing a culture of care, respecting parents, and valuing families in communities. It was apparent from a variety of data sources that the SPACE programme supported the family as an influential structure in society, and that it supported the primary caregivers who participated in the programme.

Communication across sectors

The types of communication across the health, education and welfare sectors identified via data analysis included referrals, into and within the programme, cross-sectoral content and interactions across settings. Duncan and Bowden (2004, p. 42) reported four key themes, identified by participants in their research, that supported their parenting and the resilience of their families:

Being there; meeting the holistic needs of the children; assisting parents to be involved in their children's lives; and negotiating and facilitating family contacts with other agencies and families.

Referrals

Initially it was thought that the term referrals meant referrals to a SPACE session from other agencies. A researcher noted referrals were also going out of the SPACE programme.

While analysing the interview data and reflecting on the examples of referrals being identified, I realised that the referrals are a multi-directional process. (Truus Dingemanse, personal communication, July 15, 2006)

Some of these referrals resulted in interactions across settings and were influenced by the cross-sectoral content of the programme. Facilitators, other parents and guest speakers

were able to answer questions and refer parents to other community services that may have been of assistance to them.

Referrals into the programme at Te Marua/Mangaroa Playcentre occurred in several ways. At a regional level, the Hutt Playcentre Association employs a SPACE Support Person (SSP) who regularly distributes pamphlets, advertises new sessions, and meets with community agencies to promote the SPACE programme. The SSP co-ordinates SPACE programmes and refers parents to sessions in liaison with local Playcentres. Each Playcentre, including Te Marua/Mangaroa Playcentre, is responsible for recruiting families for their SPACE session.

Te Marua/Mangaroa Playcentre used various methods to recruit families for the programme. These included a letterbox drop in the local feeder areas, flyers at local schools/colleges, churches, doctors' surgeries, Plunket rooms, Upper Hutt Women's Centre, Presbyterian Support Services, and local midwives. Prior to the commencement of the research, Te Marua/Mangaroa Playcentre placed an advertisement in the Upper Hutt *Leader* and the *Hutt News* [both local newspapers]. The Hutt Playcentre Association wrote an article on the SPACE programme which appeared in the Upper Hutt *Leader* and the *Hutt News*, which publicised the programme further.

Parent interviews showed that referrals came predominately from direct personal contact with midwives, Plunket, and from parents referring other parents:

The Plunket suggested it. If the nurse hadn't of mentioned it, I would never have known about it...I never went to an antenatal group, so I had no other network. So it was really important. (Parent exit interview, Action Research Cycle 2)

My midwife passed my name on (Parent exit interview, Action Research Cycle 1).

...as part of our antenatal group, one of the girls was really keen to do it and she'd seen the brochure and everything and I hadn't and everyone else was doing, so I thought I'd just go along as well, so, I didn't know what it was about, I didn't even know what SPACE stood for. I didn't even know there was going to be that amount of people going along as well, which was a bonus. (Parent exit interview, Action Research Cycle 1)

...I was advised by my midwife and Plunket nurse to come along...everyone I seemed to come across they showed the SPACE pamphlet, so I figured it was a good idea. (Parent exit interview, Action Research Cycle 1)

The following example shows a direct referral from a parent who had participated in Te Marua/Mangaroa Playcentre's first SPACE programme, completed in 2004:

Well I, it was a stretch class that I was doing when I was pregnant in Lower Hutt hospital who put me on, who gave me a pamphlet but then a friend of mine—[friend's name]—she's a teacher and she had been to the previous SPACE and

she said it was absolutely awesome and [my friend is] lovely and I thought if [the friend] thinks its lovely then its going to be lovely, and cause she's very particular as well about what she does with her children so and I thought if she's keen, then it must be good...I'm always raving to people. (Parent exit interview, Action Research Cycle 2)

In Action Research Cycle 2, in addition to direct personal referrals, the article and advertisement in the Upper Hutt Leader played an important role in generating interest in the SPACE sessions at Te Marua/Mangaroa Playcentre. Parents reported on how they learnt about the programme in this way:

I saw it advertised in the Upper Hutt Leader. (Parent exit interview Action Research Cycle 2)

Well I think I first saw SPACE, just like a little ad in the paper for it. (Parent exit interview Action Research Cycle 2)

...in the May-June issue of the Leader they had an article in there with a phone number and I rang them up and said look Emma's like four /five months old can we still come in? And they said yeah we'd be happy to have somebody. (Parent exit interview. Action Research Cycle 2)

Referrals played a significant part of networking within the SPACE programme itself. As part of the SPACE programme, parents were offered choices of topics, such as swimming, and baby massage. The facilitators then sourced speakers through the Hutt SPACE team, or from the community, to provide information on these topics. As well as presenting their topics, these guest speakers provided contact details for parents to participate in other similar activities within the community. For example, a parent enquired about singing lessons for adults during a music session presented by a guest speaker. A facilitator reflected:

I caught up with the [guest speaker] at an Advisory Board meeting and she mentioned that a couple of the mums from our group had emailed her with respect to singing lessons. (Facilitator's reflections, Week 9, Unit 1, Action Research Cycle 1)

Interest in the music session continued and was still evident in the next term. For example this discussion between parents was recorded:

They were talking about a group of them getting together and starting together if possible. (Observer's records, Week 2, Unit 2, Action Research Cycle 1)

There were opportunities for speakers to promote their services.

There are questions for [guest speaker] about where to buy massage oil...Kelsey offers further sessions for small groups. (Observer's records, Week 3, Unit 2, Action Research Cycle 2)

A local swimming instructor is very keen to support SPACE sessions through giving talks etc and would like the opportunity to promote H20's swimming programme. (Facilitator's reflections, Week 9, Unit 2, Action Research Cycle 2)

Referrals also came from parents within the group, for example:

Ida [a parent] shares with the group about the Plunket facility where you can take your baby and people will help you settle her (and) take care of baby while you have your lunch. (Observer's comment, Week 2, Unit 1, Action Research Cycle 2)

A parent offered the following:

...her father in law was in Education and has done research on reading to infants. She asked if we may be interested in having him come and talk to the group sometime, he is happy to do so if we would like. (Facilitator's reflections, Week 7, Unit 1 Action Research Cycle 2)

Parents and facilitators were able to share information and ideas for resources in conjunction with their infants' experiences and interests.

Janice (parent) mentioned that the Playcentre Shop was going to order her in a ball with holes shaped like octagons. Some didn't know the Playcentre Shop existed and were asking questions about it – where it was, what you can get there. (Observer's records, Week 2, Unit 2, Action Research Cycle 1)

Ruth approached me later to ask which CD the 'Red Wagon' was on, and where she could buy it. I mentioned the Playcentre Shop as this was where we bought it. (Facilitator's reflections Week 8, Unit 1, Action Research Cycle 2)

Sonia has a sling and uses it as a front pack and shows group. Group interested (esp. Nancy & Danielle). She says it's just a piece of calico 4½ metres long – shows group. Group discusses where to source material. (Observer's records, Week 2, Unit 1 Action research Cycle 2)

Parents were invited to attend training workshops run by the Hutt Playcentre Association and a First Aid course to be run at the Playcentre.

We talked about the Te Wai [a Playcentre course] and what we could offer...Jane came over and talked about the courses and we talked them through, she was really keen to attend some and was asking about how she could enrol. (Facilitator's reflections, Week 3, Unit 3, Action Research Cycle 2)

Later Tina [a parent] approached me to ask me about the CPR course being run through the Association and we talked about how she could have her expired first aid certificate validated. Really great to see some parents using the parent education courses on offer. (Facilitator's reflections, Week 1, Unit 2, Action Research Cycle 2)

An observer reflected:

Justine [facilitator] is talking with Donna about Playcentre training. Donna [a parent] has ECE qualifications and so Justine has brought her the information about crosscrediting her qualifications for PC training. This has come as a result of talking about Te Wai. (Observer's records, Week 6, Unit 3, Action Research Cycle 2)

In Action Research Cycle 1, many parents were considering returning to paid employment. Facilitators and parents were able to discuss and make recommendations about early childhood options:

Kath said she is returning to work part time. We discussed childcare alternatives. Talked with her about some of the things she could look for, including staff, qualifications/experience, staff turnover, how they interact with the children etc. Recommended she could phone the Early Learning Centre I had worked for several years ago, as the same head supervisor was there. I felt confident to recommend this centre. Kath left a message to say she'd visited. (Facilitator's reflections, Week 4, Unit 3, Action Research Cycle 1)

In Action Research Cycle 2, many parents showed interest in continuing on to their local Playcentre session:

...handed out contact numbers of Island Bay Playcentre to Sonia [parent], Wellington Playcentre Association to Tara [parent] and Leanne gave Wallaceville Playcentre's number to Donna [parent]. (Facilitator's reflections, Week 3, Unit 3, Action Research Cycle 2)

Ruth [parent] contacted me and asked if I could find out how many places were available at Te Marua/Mangaroa as quite a few of them are interested in coming to the same session. (Facilitator's reflections, Week 7, Unit 3, Action Research Cycle 2)

There were a few issues related to referrals, including the availability of the SPACE programme in other regions, and whether there were sufficient places available for those referred by health professionals:

There has been a big feedback after having referred people that they've rung up and there's no space on the programme, or the programme doesn't start till later in the year...so I have had some sort of negative feedback I suppose that, you know, people are really keen to join up, but there's just not the number of facilitators or other groups that they can attend so that is a shame. (Health professional interview, Action Research Cycle 2)

Ida mentioned she is shifting to Palmerston so won't be coming next year – her partner's company is relocating...Ida asked if she could go to SPACE in Palmerston – explained it wasn't being run there yet, but there were Playcentres she could try – will get list for her. (Facilitator's reflections, Week 4, Unit 2, Action Research Cycle 2)

I've got a friend of mine in Newlands and I've been trying to get her into a SPACE near her. But there's actually not much over there and she can't seem to get in to any Playcentre over there. (Parent exit interview, Action Research Cycle 2)

Referrals for the SPACE programme at Te Marua/Mangaroa Playcentre came from several sources. SPACE participants were referred by midwives and other health

professionals, and some responded to an article and advertisements in local newspapers. At least one parent found out about programme via the Ministry of Education's website. Referrals worked into the programme, and beyond the programme into other regions and other Playcentres. Generally, there appeared to be more demand than places available.

Cross-Sectoral Content

The SPACE programme draws from guest speakers across agencies and sectors, for example, midwives and other health professionals, early childhood education services, and other community-based services. The intention is to inform participants and connect them to available services in their communities.

Participants' interests, knowledge, and needs shaped the nature and direction of the SPACE programme at Te Marua/Mangaroa Playcentre. This meant the content was adapted to suit the interests of the participants, and drew on community resources and speakers, as well as expertise within the group. In fact speakers formed an integral part of the programme and introduced a new dynamic to the group.

I introduced [the guest speaker] and she comfortably settled into the session. Great to watch - works out priorities - cuts to the topic - gets parents thinking and participating in a non-intrusive way. E.g.: baby cries while she is talking – let's sing to baby – baby stops crying – back to details but has now demonstrated how important/useful singing is. (Facilitator's reflections, Week 9, Unit 1, Action Research Cycle 1)

...the two speakers that were really good, for me, was first aid, not that I remember much now, but it was really good to have somebody show you and then swimming was just incredible. (Parent exit interview, Action Research Cycle 1)

Yeah I enjoyed all of it really; just having those speakers for the first couple of terms was really good to have that kind of input. (Parent exit interview, Action Research Cycle 1)

I loved it when we had [guest speaker] came, cause it was just really nice for someone to verbalise that we do need to think and look after ourselves. (Parent exit interview, Action Research Cycle 1)

Guest speakers themselves reflected on the value of participating in the SPACE programme:

I suppose for me its been a real opportunity ... to put together a workshop that I had thought about and wanted to talk to and for me it's a huge opportunity to actually get a message that I really believe in, out to a whole lot of new parents, at a time when I think they need to hear a different way. So ... personally, it has definitely been great for me. And just my connection with the SPACE, I think, yeah, it has opened doors for me actually, in a broader sense. (Guest speaker interview, Action Research cycle 2)

The facilitators acknowledged and incorporated parents' knowledge and expertise. Parents were able to contribute to discussions by drawing on their own background and experiences. Topics were tailored to meet parents' interests, taking into account the age of the infants and the specific requests of each group. At the beginning of the SPACE programme, parents responded to a questionnaire about their preferred topics:

We are reviewing the topic schedule forms that we handed out for parents to complete. A number of parents have identified similar topics they would like covered. There are a number of topics parents have merely requested information on. Leanne [facilitator] to photocopy articles and to print out the relevant handouts for these parents. (Facilitators' Meeting Minutes, September 2006, Action Research Cycle 2)

Participants reflected that, even if the topic information was not new to them, they were now looking at things from a parent's perspective:

I'm a trained nurse and I've done child development, but when it's your own kid you just forget all that stuff. ... Because you don't know what to expect, and so it was nice to have [guest speakers] come along and talk about those things. (Parent exit interview, Action Research Cycle 2)

Parents also commented on the discussions that took place as part of Te Marua/Mangaroa's SPACE programme. One parent stated:

I think just the discussions that are held about different aspects of the child and seeing them growing up and what they're doing and their needs and about your needs. Just to kind of discuss so that you don't have these unrealistic expectations. You know, 'Why isn't my child doing that yet?' and ...and just with the other mums too on session ... their contributions have all helped too. (Parent exit interview, Action Research Cycle 2)

Guest speakers also adapted to the requests of the group. This was evident across several data sources including guest speaker interviews and observations. For example:

Yes, well for me, when I go to talk to the group I do stress that I like to see that they are all working as a group. The group dynamics are working by the time I've come along – that they are teaching each other about parenting, and that's telling them that there isn't a right or a wrong way, whichever they get their information from they trust, they trust these people that they meet out with regularly with the advice that they give them and tell them what they did and what it could be. And I think, they really teach each other. And that's what my aim is, that they will be confident enough to share their teaching with the others in the group. (Guest speaker interview, Action Research Cycle 2)

...on some occasions as [the guest speaker] was not talking all of the time, she allowed the parents and babies some quiet time just to share the experience. [The guest speaker] read to babies, and when a few started to become unsettled, she wrapped it up and explained that often babies do react this way as massage is stimulation and can be tiring. (Facilitator's reflections Week 3, Unit 2, Action Research Cycle 2)

The facilitators needed to consider not only the requests and interests of the group but their own limitations, and what was ethical or controversial. For example, one facilitator commented:

A parent rang me who had concerns about the new immunisation schedule and wondered if we could have a discussion on session. I spoke to Leanne [facilitator] about it and we agreed that it was such a personal decision that this forum would not be appropriate - we referred her to other avenues to source more information and reassured her that then she would be able to make an informed decision. (J. Jones, personal communication, September 13, 2006)

Cross-sectoral content of the SPACE programme at Te Marua/Mangaroa Playcentre was important, and adapted to the interests and requests of the group members. Parents, facilitators and guest speakers all commented favourably on the topics selected for discussion during sessions.

Interactions across settings

Interactions were evident between the SPACE sessions and other settings, including: early childhood services, community groups, the wider community, and the regional, and national SPACE programme. This finding is consistent with Duncan and Bowden (2004), who noted that early childhood centres offered parents venues for a range of activities that deepened community-based networks, thereby reducing social isolation, as well as affirming them in their role as parents.

There were important findings related to interactions with early childhood services. Towards the end of the programme, participants were reflecting on, and discussing, what types of early childhood services they were planning to attend with their children. Examples of parents' comments follow:

Everyone [parents on the SPACE session] is going off to their own Playcentres, I don't really know where I'm going to Playcentre, I have no idea. I can go to Te Marua (or) I can go to Totara Park. (Parent exit interview, Action Research Cycle 1)

He's going into daycare twice a week, two days a week, which would be quite full on for him, but I'm going to miss out on that, so I want to take him to Playcentre for me mainly. (Parent exit interview, Action Research Cycle 1)

I am keen to get involved later on in Montessori. That's because I was involved in that. I guess I didn't know much about Playcentre before this, and so that was good for me to go along and have a look. (Parent exit interview, Action Research Cycle 1)

The facilitators offered parents opportunities to discuss questions about various early childhood services, and encouraged them to continue with the services of their choice once the SPACE programme at Te Marua/Mangaroa Playcentre had finished. As the

following examples show, parents appreciated their experiences of the Playcentre environment, and felt confident about choosing an early childhood service:

The daycare thing, I think I feel better about it because it's a lot more structured and that, but there's a lot of free play there for him as well, and I know he thrives on it. I think I'd feel a little bit nervous if he'd just come from home straight into daycare. (Parent exit interview, Action Research Cycle 1)

I've always loved child-centred learning and child-directed learning so it's Playcentre. It's always been up there on the list for me. (Parent exit interview, Action Research Cycle 1)

For some families, early exposure to Playcentre as a result of participating in the SPACE programme at Te Marua/Mangaroa influenced their decision to try an early childhood service that they may not have otherwise considered.

I always remember thinking I'm never taking my child to Playcentre, because I'll have to stay with them. Why would I want to do that? You take them away so you have your afternoon off - he's going to be a kindy kid. And now I'm like 'oh my gosh', I'm never taking him away from Playcentre because it's just so cool. So in that respect I don't think he would have been a Playcentre kid if I hadn't done SPACE. (Parent exit interview, Action Research Cycle 1)

One of the early childhood options available to the parents in the SPACE programme was to make the transition into Te Marua/Mangaroa Playcentre's general session. There were numerous opportunities for interactions between the SPACE participants and the general session parents and their children. For example, in Action Research Cycle 1, the families participating in the SPACE programme were welcomed by parents at a general session during the cross-over time (as the general session was ending and the SPACE session was beginning). This cross-over time created opportunities for interactions for parents and infants as the following examples demonstrate:

Links being formed already between centre members, SPACE parents, e.g., during cross over [from the general session to the SPACE session], there was time for admiring one another's' babies and children, and some people knew/recognised each other. (Observer's records, Week 1, Unit 1, Action Research Cycle 1)



Poster from the SPACE session on display at the centre

At cross-over between sessions, an ex-SPACE mum who is now on Thursday general session, stayed behind to chat with current SPACE parents. Her daughter pottered around with the toys, enjoying those she doesn't usually see out. As [Playcentre parent] went to leave, [her daughter] was waving to all the SPACE mums. Opportunity for these parents to see older children in action. (Observer's records, Week 5, Unit 1, Action Research Cycle 1).

During the cross-over times, conversations between SPACE parents and general session parents were, for example, about how the Playcentre's general session had been, or how the children's experiences had been during that Playcentre session. Two examples follow:

That's the thing I [SPACE parent] found most exciting, watching them find their mates. [Playcentre child] is just getting into it when its time to leave – she doesn't want to go home today. (Observer's records, Week 2, Unit 3, Action Research Cycle 1)

[A general session parent explains to a SPACE parent] We grew potatoes last term; today we cut them up and made chips...amazing the different way the kids dealt with it, some straight in there using their fingers! (Observer's records, Week 2, Unit 3, Action Research Cycle 1)

Throughout the SPACE programme, participants asked questions about Playcentre philosophy and practice:

Jenn asked me if this was a kindergarten and were the older children staying? I explained that Playcentre is an alternative early childhood service that goes from birth to 6 year olds. It's different from kindergarten as the parents are the ones who run the centre, undertake the Playcentre training and work with the children. (Facilitator's reflections, Week 2, Action Research Cycle 1)

During house keeping Justine [facilitator] was excellent giving the parents information about parent education courses at the centre and centre happenings. Justine also handed out the afternoon tea roster, which everyone filled in, so we will see. (Facilitator's reflections, Week 1, Unit 2, Action Research Cycle 2)

Towards the end of the final term of the SPACE programme, participants were offered the opportunity to visit a general session at Te Marua/Mangaroa Playcentre. In addition, facilitators encouraged parents from outside the community to visit a general session at their own local Playcentre.

Dianna [parent] says to a small group at the table, 'I'm so going to miss SPACE', and explains she will be living in Lower Hutt. Sue [facilitator] says she can go to Playcentre there and Dianna still seems uncertain. Sue says that she will go along with Dianna... 'Will you go with me?' she asks...Dianna says she was going to stay at Te Marua/Mangaroa with the others, but 'If he's going to school down there' Sue affirms her reasoning. (Observer's records, Week 4, Unit 3, Action Research Cycle 1)

There were other opportunities to link with the centre. On one occasion a parent offered to bake a cake for a centre fundraiser.

Jane [SPACE parent] spotted the notice on the door about the catering fundraiser and asked if we would like her to do something – suggested she take a look first, which she did and then offered to either provide a BBQ or do some scones, or possibly both! (Facilitator's reflections, Week 4, Unit 2, Action Research Cycle 2)

Parents participating in the SPACE programme initiated interactions both within the group, and out in the local community. A facilitator reflected on how the SPACE group had organised a 'Halloween' surprise for them (the facilitators):

Well, they did surprise us – the babies were all dressed up – witches, pumpkins, ghosts, farmers, cats, rabbits, little devils, ballerinas – they looked amazing and what a lot of effort had gone into it! We took photos of the babies in groups – I mentioned the calendar fundraiser the centre is doing and said I would get info for next week if they were interested. (Facilitator's reflections, Week 4, Unit 2, Action Research Cycle 2)

On several occasions parents arranged to meet a guest speaker outside the SPACE programme, because they had a strong interest in that particular topic, for example, to enrol for swimming lessons, or to attend a community-based facility, like a baby massage session. Parents also suggested speakers they had heard in other forums who might be of interest to others in the group. These reciprocal arrangements and interactions with the guest speakers were further examples of interactions across settings in the community.

Finally, there some strong links made between the Te Marua/Mangaroa COI team and the Hutt SPACE National Team:

The COI findings are already impacting on the national development of the SPACE programme. Because the research is making us observe and reflect on the delivery of the programme, we have added and changed the content. We based it more on the principles of Te Whāriki and included more natural materials. We got rid of lots of equipment and had more of a focus on heuristic play. We also started to use the research articles that Sarah and Val [research associates] recommended, and that had an impact on our training programme. After we visited the Institute for Early Childhood Studies, we got really excited about how these books could support the Hutt SPACE National Team. We certainly spent our book budget. As well, we all started grappling with socio-cultural theory and we started to include it more in the SPACE facilitator training. (S. Pattinson, personal communication, February 5, 2007)

Overall, then, the data show that the SPACE programme at Te Marua/Mangaroa Playcentre offered opportunities for a range of interactions across settings, and extended parents' networking within the community. The outcomes for infants and parents were evident in the data which includes numerous examples of how the group worked together in mutually respectful ways to enhance and develop collaborative support.

Summary

This chapter presented findings for the second research question. It examined how the SPACE team and programme, together with Te Marua/Mangaoa Playcentre, networked and supported collaborative relationships. This included an account of how collaborative support and communication took place across education, health and community services. A climate of respect nurtured a culture of care that valued families and agencies in the wider community. Shared experiences of first-time parenting in a group setting developed trust amongst the participants, and enhanced confidence in their new role. The next chapter provides further analysis and discussion of the data, from socio-cultural and ecological perspectives.

Chapter 6

Findings: Theoretical Analyses

Overview

This chapter provides further analyses of the findings from both cycles, drawing on socio-

cultural frameworks and constructs, together with ecological approaches, for analysis.

The discussion focuses on: tools and artefacts (in relation, for example, to infants'

learning); shared understanding about how the SPACE programme supported and

fostered learning for infants and first-time parents, and how the programme developed

collaborative relationships at a community level.

Understanding and applying our socio-cultural theoretical framework

The process of identifying key themes across the observations highlighted a need for the

team to develop a shared theoretical framework for analysis. We engaged in intensive

professional development to discuss theoretical concepts. The team members' reflections

on developing shared understanding of theoretical concepts and data analysis are

elaborated in Appendix A. The theoretical concepts that emerged include: tools and

artefacts, community of learners, transformation of participation, and shared understanding about how the SPACE programme supported and fostered learning for

infants and first time parents, and how the programme developed collaborative

relationships at a community level.

Tools and artefacts

A range of tools and artefacts supported participants' learning during the SPACE sessions

at Te Marua/Mangaroa Playcentre. These included music, storybooks, the SPACE

facilitation strategies and course content, and numerous types of play materials and

equipment, both indoors and outdoors.

Music

Analyses and syntheses of several data sources, including observations, facilitators'

reflections, and parent interviews, showed that music served as a tool for relaxing SPACE

session participants, for interaction, and for initiating responses and enjoyment over time.

It was also apparent, drawing on the same data sources, that specific material tools were

introduced effectively to support the music (examples included rakau sticks and various

instruments).

95

Relaxing with music over time

There was evidence in the analysed data that music tended to relax the infants. This occurred across both the first and second action research cycles. As one observer recorded during the first action research cycle:

They start with "Old MacDonald had a Farm" with drums, bells and triangles. Mothers are playing the instruments. One infant cuddles closer to his mum, other than that the babies appear to be very relaxed and enjoying the music. The group moves on to the song "Paki paki" [an action song involving clapping] at which point one infant laughs.

The music coming through first seemed to relax everyone. They tended to come out of themselves a little more and they really joined in. There was a lot of laughing as well. (Observer's records, Week 3 Action Research Cycle 1)

Music as a tool for interaction

The SPACE session facilitators also used music to encourage interactions between mothers and their infants, and among the participants in general. In the early stages of the SPACE sessions (week 3) one of the facilitators recorded:

Although the group seems to handle singing together, there is still that process that needs to happen where they begin to use it as a tool for interaction with their babies—for example, ...[one mother] was singing today which was awesome, but ... [her infant] had his back to her for a while whilst sitting on her knee. ... In comparison, [another mother] had [her infant] facing her on her knee and they were having fun and affirming one another. [This infant] could see mum's face, they had eye contact, laughing and smiling. [The mother] had control of [her infant] so she could move, rock and sway, but also be supported. (Facilitator's reflections, Week 3, Term 1, Action Research Cycle 2)

The observations showed that there were variations among mother-infant pairs, but also that the levels of interaction increased over time:

Several of the parents do the actions to the songs with their babies. Chris is still lying on the floor and Donna pulls him up to her, but still leaves him on the floor. Danielle tries to "Zoom" James [her infant] "to the moon" but he objects, crying. Jane does the actions in front of Bryce and he watches mum, but also Nancy who is looking in his direction as she reads from a sheet of paper. She notices him watching her and half sings to him and half to Leah [her own infant] who is feeding. Isla is smiling and obviously enjoying the actions mum does with her. Donna picks Chris up and puts him in his car seat and rocks him (to the song "Is she getting ready to go?") and sings to him in the car seat. (Observer's records, Unit 1 Week 8, Action Research Cycle 2)

Music first, "E toru ngā mea" I think the mums' participation is better this week—gentle, thoughtful singing. Next, "Willoby Walloby Woo"—all enthusiastic and did well. Katherine engages in lots of eye contact with each baby when it's their turn to be sung to. The mums sing this song strongly. "Cuddly koala": Nancy didn't follow the actions but did her own—walking her fingers up Leah's [her infant's] tummy and touching Leah's nose. Rowing song: Parents rock their babies while they sing. Tara lets Amy watch the other babies around her, particularly Isla who is nearby, instead of getting her to participate in the rocking movements. (Observer's records, Unit 2, Week 2, Action Research Cycle 2)

Responding and enjoying the music

Infants started responding to the music very soon after the commencement of the SPACE programme sessions. They responded and expressed enjoyment by quietening, smiling and laughing, and moving physically to the rhythm of the singing and the recorded music. During the first action research cycle, a facilitator's reflections documented these trends and responses.

Sally played the guitar and sang with us this week. Kathy and I planned the songs and we'd just started singing, beginning with 'Galoop'. The babies immediately just quietened down. Ivy was smiling and laughing, kicking and responding to the music. Troy kept smiling and responding to the music and also the singing. (Facilitator's reflections, Week 2, Action Research Cycle 1)

Other examples were apparent in the observational records made by both observers in the second action research cycle:

Music, Peter Rabbit song: Tina and Nancy both hold their babies' hands to show them the actions. Both babies are smiling and relaxed, allowing their arms to be moved with the rhythm and actions. (Observer's records, Week 19, Term 4 2006, Action Research Cycle 2).

During the second action research cycle observers focusing on infants' vocalisations and interactions also consistently noted that the infants responded to music. Across most SPACE sessions there were quite extensive observations of infants responding; the excerpts below are examples extracted from a larger data set of coded observations demonstrating this trend.

Today the waiata is on a CD. Emma sits and rocks to it and so does Isla. Joseph also noticeably responds to the music by waving his arms and legs with the beat. (Observer's records, Week 9, Term 4 2006, Action Research Cycle 2)

Music: a tape of waiata accompanies music today....Krystal is on the floor on her back, facing her mum Bridget – she anticipates mum clapping and her eyes blink on the impact of the clap. (Observer's records, Week 15, Term 4 2006, Action Research Cycle 2)

Lisa [who arrives after the session has started] is still by the door and rocks to the music as the group sing their waiata. She claps as the song finishes. The group sing the "Hullo" song and I video Lisa's response as she jigs to the music, then crawls to the circle. She does not stop but carries on to the family corner where Isla, Amy, and Emma are exploring. They look at their parents singing. (Observer's records, Week 2, Term 1 2007, Action Research Cycle 2)

The group sings the "hello" song...The facilitator (Justine) suggests that as the parents are sitting in a circle they use the order they are sitting in to sing the babies' names. They do very well at matching the correct parent and baby as they go round the circle. I notice that many of the babies stop their play to listen to the singing and that several respond to their names being sung by smiling, turning, or even just pausing. (Observer's records, Week 1 Term 1 2007, Action Research Cycle 2)

Song time: "Aroha is love" is being sung. Kristen shows enjoyment of this, she's sitting facing the group and is looking at Justine. She giggles and vocalises at the end of the song, looking around at the group. Ruth [her mother] turns Kristen to face her when they sing "E tu". Kristen watches her mum demonstrate the actions. (Observer's records, Week 3 Term 1, 27 February 2007, Action Research Cycle 2)

In addition to the observations showing infants' responsiveness to music, parents also commented that their infants responded differently to different songs:

When Leanne [facilitator] invited people to bring songs from home, Sonia told the group that "...Happy and You Know It" was Isla's favourite song, so the group sang it together. Isla was responding animatedly to this—laughing and moving her limbs. (Observer's records Unit 1 Week 1, Action Research Cycle 2)

The observers and COI team members reflected on meanings and implications as they generated and analysed the data. In the words of one observer, who reflected on data showing infants' responsiveness and apparent enjoyment of the music.

How do we know the babies are really enjoying the singing?—There's no crying, they're gazing with unblinking eyes at the facilitators. (Observer's records, Week 3, Unit 1, 15 August 2006 Action Research Cycle 2)

This observation and reflection is consistent with comments that parents made during their exit interviews. Many parents mentioned that the music experienced in the SPACE programme was enjoyable, and for a few parents, music was the highlight of SPACE. In regard to the music, Ida described her experiences, and those of her infant, in this way:

Oh, I loved it. That was the best part (both laugh). I'm always singing to Sally and until now I remember some of the songs. And she loves a couple of them, every night as part of her night routine, we would do these two songs. Yeah that was the best part for me. (Parent exit interview, Research Cycle 2)

Donna was similarly enthusiastic about the music, and she also appreciated the shared group experience of creating music and some of the material tools introduced as part of the music:

The music was great. I loved the music. There're just some things that are harder to do at home, like the lycra and the parachute and all those shared type things. I really enjoyed doing those. And Chris [her infant] loved it too. I don't know if you saw... the photos, but there's a few of them in there with him with the lycra and the parachute and he's loving it. He really enjoyed the music. (Parent exit interview, Research Cycle 1)

Introducing other material tools as part of the music

As part of the music programme, the SPACE facilitators introduced a variety of material tools. These included, for example, *rakau* sticks, different instruments, cloth, stones, and a

magnetic board. The observations below show how these material tools served to mediate the interactions between adults and infants, and between the infants.

Georgia [an infant, aged 7 months] is holding the end of the *rakau* stick with Mary [her mother] holding the other end. Mary is jiggling the stick in time to the music. Georgia is laughing and chuckling. Mum is laughing and smiling back at her. (Observer's records, 21/11/2006, Action Research Cycle 2)

"Listen to the music 123": Selina has a green maraca [a percussion instrument, traditionally made from a gourd filled with dried seeds]. She is shaking it rhythmically. Timothy [infant aged 6 months] watches this intently. [The observer queries whether he is registering the connection between the sound and the shake]. Timothy is on the rug, holding a bell rattle, mouthing and fingering it...He is on his back, bringing his feet up and his toes to his mouth. He's also holding the bell rattle. (Observer's records, Week 13, Action Research Cycle 2)

For variety, the facilitators also used stones, newspapers, and ribbons:

I wanted to try and introduce a variety to music. We had songs without accompanying music, songs with tape/CD, used rolled-up newspapers to tap the rhythm, and stones to make different sounds. The rainbow ribbons were a hit. Unfortunately I did not have enough to go around, but those parents who had one would tickle the babies nearest them. Wonderful interactions were happening between parents and babies. The babies spent some time exploring the props, and mouthing the river stones and the newspaper rolls. Very interactive session, with lots of variety, hand movements, and it was such fun, with plenty of laughter when we sang "Johnny taps with one hammer". Finding out the butterfly (hand movement) for "Peter Rabbit" was hysterical, with everyone trying to work it out. It is really good to use the CDs and the props [tools] to take the emphasis off the singing. Parents are still singing quietly but are far more interactive with their babies. (Facilitator's reflections, Week 7, Action Research Cycle 2)

Related observations showed how the stones and ribbons were used:

Next they use stones, tapping them together to the music. Ida leans over Krystal and talks to her. Bridget [Krystal's mother] chuckles at this, then leans back over her baby, smiling and tapping the stones close to Krystal's chest. (Observer's records, Unit 2, Week 8, Action Research Cycle 2)

Ribbons are introduced and the mums are waving the ribbons during the rainbow song. Sally and Ida are fully involved in the music during the ribbons. Sally reaches up and takes the ribbons as Isla waves them in front of her face. (Observer's records, Unit 2, Week 8, Action Research Cycle 2)

The magnet board was a further tool prepared by one of the facilitators in action research cycle 2. The facilitators' intention was that the board could be used during the singing that was an integral part of the SPACE sessions.



In the following observations, there are accounts of how the magnetic board was used with the singing:

Justine had made magnetic storyboard resources and the babies were really into it. At least four of them crawled over to take them [the magnets] off the board, which made the song obsolete, but it was wonderful to see them so intrigued, taking them on and off, on and off.

... The parents did not seem to move, just watching their babies with the magnetic board. Justine got the (figures for) Old Mac (Donald), which she placed on the notice board (babies took the magnets off). The babies really enjoyed the song "Old MacDonald" accompanied by the magnets (all the animals). We just went with it and enjoyed the moment with the babies. (Facilitator's reflections, Week 4, Action Research Cycle 2)

Leanne [one facilitator] picks up the magnetic board and Justine [the other facilitator] returns with the pieces for "Old MacDonald". Everyone joins in. The babies take the pieces off as fast as the facilitators can put them on. (Observer's records, Week 4, Action Research Cycle 2)

The magnetic board is still a big attraction. Kristen [infant aged 8 months] is playing with it now. She puts the pieces on it again and again. They are all upside down so they don't cling. She manages all this on her tummy with her legs lifted up. She crashes the pieces together like cymbals and Ruth [her mother] sits down next to her, bringing some real cymbals for Kristen. Kristen takes them and crashes them together (Observer's records, Week 4, Term 1 2007, Action Research Cycle 2).

Influence on learning: a summary

As Trevarthen (2002) noted, research across several cultures has demonstrated that young infants are capable of responding to music, and further, infants' development of musical discrimination appears to be a forerunner of their language learning. Data generated in both action research cycles in this study showed infants (often aged around 6 months) responding actively to music during the course of the SPACE sessions. There

were also consistent observational excerpts, together with supporting facilitator reflections and parent interview data, showing that music worked as a tool to foster parent-infant verbal and physical interactions.

Storybooks

In addition to introducing tools such as the magnetic board during music, the facilitators increasingly used storybooks in the SPACE sessions. One observer noted, in regard to this trend: "Music, books, and magnetic board stories are all seamlessly interwoven today" (Observer's records, Week 5, Unit 3, Action Research Cycle 2). As with the music, there were numerous observational excerpts showing infants' increased engagement over time with the storybook readings:

Justine [facilitator] reads "Brown Bear Brown Bear"....Timothy [an infant] sits just in front of her, really looking at the book as she reads. He sits on his knees, smiling, wide-eyed and mouth open. Josh sits nearby on [his mother's] knee and he also watches. Timothy has a toy car now and starts to play with this. Leah [an infant] notices Justine and begins to watch. She begins to show an interest [in the storybook reading] until she is distracted by Timothy and his car. She crawls towards a heater. (Observer's records, Week 2 Unit 3, Action Research Cycle 2)

Justine [facilitator] reads the story. I have videoed this as the levels of involvement of the babies were immense. Many babies are listening and there is lots of interacting. (Observer's records, Week 5 Unit 3, Action Research Cycle 2)

Music and a book: We read the book and parents and babies are really getting into it, watching and listening to the story. (Facilitator's reflections, Unit 1, Week 6, Action Research Cycle 2)

Parents' enjoyment was also noteworthy:

The singing and reading time is really fun. The book read "The Pig in the Pond" is a great book. I heard one or two parents "ooh" and "aah", and a comment, "What a great book". (Facilitator's reflections, Week 5, Action Research Cycle 2)

Like music, the story reading and storybook became a tool for encouraging interaction:

Justine (facilitator) reads a thought and Leanne (facilitator) reads a story—"Brown Bear Brown Bear". The parents join in with the story, by singing the words. Donna holds James (her infant) in a sitting position, but he is very wobbly. Nathan smiles all the way through the story and vocalises "eeh" sounds, which actually sound very similar to the word "me" which is repeated throughout the story. Selina (his mother) sings and talks to him, sharing the book with him even though it is across the room. (Observer's records, Unit 2, Week 8, Action Research Cycle 2)

Facilitation strategies and course content

A wide range of other tools including painting materials, puzzles, messy play materials, and sand (an outdoor sandpit) also served as material tools to foster parents' and infants' learning. The SPACE session facilitators used these tools to encourage infants'

exploration and also to support more sustained parent-infant interaction. Observations set out in Appendix G include additional examples of mediation of tools.

Near the beginning of each weekly SPACE session, the facilitators used specific strategies such as "icebreakers". (Icebreakers were also used at COI research team meetings, and featured invariably on the agenda of the COI advisory group meetings.) The SPACE session facilitators introduced a wide variety of icebreakers to relax the parents and support their participation:

Introduction/icebreaker: We did a round of names and babies' names, with how many hours sleep they all got last night. Everyone seemed willing to offer information. (Facilitator's reflections, Unit 1 Week 2, Action Research Cycle 2)

Often, the icebreakers were linked to the course content:

The icebreaker today is sharing about hearing [Later] the group watches a Power Point presentation about hearing. Most of the parents watch. (Observer's records, Unit 1 Week 8, Action research Cycle 2)

Facilitators also made use of the available opportunities to introduce the participating new parents to *Te Whāriki*, a key tool in early childhood practice in New Zealand:

I introduced *Te Whāriki* (as the link was on the "about me" sheets that had been placed out to complete). I referred to *Te Whāriki* and mentioned the principles and the strands. There were plenty of blank faces, but also some who were really interested. I looked over to Donna [a parent] and commented that as an early childhood teacher she would be familiar with this, and she laughed and said she knows it inside out. (Facilitator's reflections, Week 5, Action Research Cycle 2)

Discussion and Implications

As shown in the detailed examples above, in the context of the SPACE programme at Te Marua/Mangaroa Playcentre, the use of material tools influenced infants' learning. This is consistent with McDonald et al's (2005, p. 123) studies of material tools and artefacts in classrooms, where the authors note that "Wartofsky's (1979) concept of three linked levels of artefacts was useful in providing a broad framework for the exploration of the use and understanding of both material and psychological tools". Wartofsky's (1979) levels of artefacts included: firstly, primary artefacts, such as objects and the specific skills associated with their use; secondly, secondary artefacts which are mainly representations like maps, diagrams, and symbolic records of information; and thirdly, imaginative and theoretical concepts encompassing play and also scientific theories.

The examples of the use of tools with parents and infants in the present study can be further understood in relation to theoretical writings on tools and artefacts, including

Wartofsky's levels of artefacts (McDonald et al., 2005; Wartofsky, 1979). In this study, the introduction and mediation of specific material tools (primary artefacts), for example, as part of the music, became associated with infants' increasing responsiveness to music. These material objects (primary artefacts) also became instrumental in supporting parent-infant interactions. There are also examples in the data generated in this study that are symbolic records (secondary artefacts); for example photographs and video footage, affirmed for parents that their infants were enjoying and responding to aspects of the programme, including the music. (An example here is the excerpt from the exit interview with Donna, a parent, cited in the music section above.)

Theoretical concepts shared by the facilitators with the parents, and by the research associates with the COI researchers, provide an example of Wartofsky's (1979) third level of artefacts. During the process of the research, team members developed relevant theoretical maps and diagrams as further tools for theoretical analyses. The next section of this chapter includes a diagram in this category, developed by research team members to understand and interpret the data on community of learners, shared understanding, and transformation of participation.

Shared Understanding as a Community of Learners

Throughout this 3-year research study, it was important for the research team to develop a shared understanding of the theoretical concepts used to interrogate the data in relation to the two key research questions. In accordance with Joy Cullen's (2004, p. 74) writing, the team members took on board the idea that shared meanings "are co-constructed as participants engage in collaborative activity." The collaborative activities that were part of the research included, for example, the team members' discussions. These discussions led, most notably during the analysis phase, to key insights that added strength to the emerging themes and theoretical framework. The action research tools used to generate data (written observations, interviews with parents, videos, photographs and the reflective journals kept by the facilitators and the researchers), together with professional development and articles about socio-cultural theory that were circulated and discussed by the team, facilitated the process.

The long-term strategic plan for early childhood education (Ministry of Education, 2002) draws on the concept of a community of learners as a way to build collaboration, increase participation, and improve quality. As explained in Podmore (2004, p. 194):

Current understanding of "community of learners and community of practice" is derived in part from burgeoning international sociocultural research and theoretical writing, which largely stems from the early work of Russian theorist Lev Vygotsky

(1978). Prominent North American socio-cultural theorist, Barbara Rogoff (1998, p. 689) interprets human development and learning as "a process of transformation of participation where individuals participate and contribute to ongoing activity."

The writings of these theorists (notably Rogoff) influenced the COI research team members' understanding of the concept of a community of learners. The team reflected on the ideas and applied them to the research with parents and infants. In addition, the centre researchers and research associates worked as a team to build a sense of community as learners/collaborative researchers (Appendix A). The key idea was that in a community of learners everyone, including each parent, infant, and research team member is an active participant (Rogoff, Matusov, & White, 1996).

Further reflection on communities of learning required the team to investigate the three concepts of shared understanding, community of learners, and transformation of participation. The relationships between these ideas are represented diagrammatically in Figure 3.

Community of learners Transformation participation Shared understanding Transformation participation Community of inquiry Community of inquiry

Figure 3: A Conceptual Model Showing Inter-connection of Three Theoretical Constructs: Community of Learners, Shared Understanding, and Community of Inquiry.

The COI researcher who designed Figure 3 explains it as follows:

As a SPACE session formed, i.e., the parents and babies started bonding as a group with the facilitators, the researchers embarked on the process of gathering data and analysing them. We saw two things happening—the SPACE group became a community of learners that 'shared understandings' during the SPACE sessions. They transformed their participation through shared understanding. At the same time, the researchers and the research associates formed another community of learners. As we engaged in this collaborative activity (discussing and analysing the data), we underwent a further transformation of participation which led us to an even deeper level of contribution, collaboration and understanding. We became a community of inquiry. In this community participants feel confident and secure to source or contribute additional levels of involvement, which in turn transforms to a deeper shared understanding. We thought of ourselves as a community of inquiry because we were asking questions beyond the original research question, and looking at how what we had learnt in one setting (the Te Marua/Mangaroa SPACE sessions) influenced our practices in another (developing new resources for SPACE, like training facilitators and introducing sociocultural theories). Our resulting community of learners looked very different from the original one, having undergone many transformations and reached many shared understandings on their journey. This process occurred numerous times, in multiple contexts within the SPACE setting, and with a variety of participants. (T. Dingemanse, personal communication, 4 June, 2007)

Transformation of participation

Transformation of participation is a process whereby people change their understanding and contributions during the course of a shared activity or programme. This research considered how participation had been transformed over the two action research cycles. Initially a number of parents were passive recipients in the SPACE programme, content to watch, and respond to facilitators' suggestions. As the programme followed its course, parents became more active and mutually supportive of each other. For example there were more numerous incidents of parents taking the initiative to contribute.

Facilitators were aware from the start of the SPACE programme that parents had the potential to contribute actively to the programme. In the first week of the research a facilitator noted this:

Cuppa time: Melanie came and helped out—discussed how she had just recently tried Milo. Happy to help distribute drinks (also a good opportunity to get to know her). She was concerned about Connor not sleeping. (I said we will be covering sleep in a couple of weeks—reinforced that things change constantly and to be easy on self and babe—that she was doing well). (Facilitator's reflections, Unit 1, Week 1, Action Research Cycle 1)

This reflection was further supported by observational data. Two examples were:

Already parents are participating rather than consuming e.g., Melanie offering to help make drinks, parents invited to offer a favourite song, Karen offering to bring her "Going on a bear hunt" book. (Observer's records, Unit 1, Week 1, Action Research Cycle 1)

I was surprised at how actively the parents participated both in the formal and informal social time e.g., the icebreaker. (Observer's records, Unit 1, Week 1, Action Research Cycle 1)

However, observers also noted that not all parents seemed entirely comfortable with joining in: "one parent seem less confident in her participation. She did participate, but was less animated/enthusiastic/comfortable" (Observer' records, Week 1, Action Research Cycle 1). Facilitators and observers were aware that the type of participation varied among parents.

In that same week, after the facilitators asked the group for their suggestions about suitable nursery rhymes, one of the observers wrote:

The music session seemed to be more successful (when) the group 'owned' the songs, e.g., twinkle twinkle was sung so fast, but 'incy wincy', suggested by Carolyn, went well. (Observer's records, Unit 1, Week 1, Action Research Cycle 1)

In the second week, the observers noted "more active participation from group members—Jasmine and Janice help to make afternoon tea" (Observer's records, Week 2, Action Research Cycle 1). From week to week, parents assumed more responsibility in supporting the routines of the SPACE programme. In the previous week (week 1), Karen volunteered to bring along the song "Going on a bear hunt". In the second week an observation recorded a range of contributions from parents, including the song, "Going on a bear hunt":

Melanie helps stack cushions at the end of session, Jasmine shares two action songs with the group that she has learnt from her parents, and Karen brings her "Going on a bear hunt" book and leads the group in a clapping chant with hand actions. [The group] sang and did clapping rhythm very quickly – group needs to slow down. This was supporting parents alongside their children's education. Even though Karen was going too quickly for the babies, she *was* contributing to the group. (Observer's record, Unit 1, Week 2, Action Research Cycle 1)

The parents' level of participation had some flow-on effects for the facilitators responsible for setting the programme from week to week.

Parent participation in programme increased again e.g., Carolyn asks if she can help set up rugs, put out toys. Greater enthusiasm at music time, especially with the now familiar action songs. Parents requesting words of other songs they enjoyed when young and inputting to the programme as to what they would like to have as their next topic.

Sue introduces temperament and provides another opportunity for group ownership, e.g., offering parents a choice as to next topic from temperament, physical development, crying, over stimulation—making it real and in context for where parents are at. (Observer's records, Unit 1, Week 3, Action Research Cycle 1)

Including parents' contributions in the programme

Another observation illustrated how parents' knowledge and experience was included by facilitators in the SPACE programme. A pattern of sharing responsibility for what happened on SPACE sessions continued into the fourth week and beyond.

I asked if someone would be interested to read out the whakatauki. Nora (sitting next to me) volunteered. Group dynamics—involving parents in running part of the session—taking responsibility. Building respect for another mum's input. ... Caroline started 'Morning Town' [a popular folk song] off. She seemed self-conscious but was happy to continue while we joined in. The songs were done fast again. I need to get a flip board organised. When we were singing I made it quite obvious that I was going to sing slower. Both Sue and I mentioned to slow the songs down. Should have thanked Caroline for taking the initiative. (Facilitator's reflections, Unit 1, Week 4, Action Research Cycle 1)

SPACE programme tools and artefacts like music, the icebreaker at the beginning of the sessions, and the content, created opportunities for parents and facilitators to respond to and help each other. When facilitators allowed for parental input, this developed confidence among parents to contribute further, even when they felt self-conscious.

Donna (a parent) asks Sue (a facilitator) to check with the group re: her taking photos during the session for the parents' presentation at the SPACE conference. The fact that Sue has enlisted Donna's help in putting together a presentation for the conference, along with Harriet's (another parent) help with IT training for the COI team, and Caroline (also a parent), has helped to find the venue for the conference highlights not only Sue's skill in identifying places for people, raising teams but the emergent leadership that is central to playcentre's philosophy. (Observer's records, Unit 2, Week 5, Action Research Cycle 1)

In the following week, Donna (a parent) presented the PowerPoint show about SPACE which was "absolutely wonderful" (Facilitator comment, Unit 2, Week 6, Action Research Cycle 1). Allowing space and time for contributions proved to be important. Both the facilitators and the guest speakers acknowledged this:

Pregnant pause at the end when [guest speaker] has finished. Kathy (facilitator) holds off saying anything and Melanie (a parent) takes the lead, thanking [the guest speaker]. The group follows in turn, taking responsibility for their part. (Observer's records, Unit 2, Week 4, Action Research Cycle 1)

Changes in understanding

The interview data revealed parents' perceptions of how they felt about the music, and how, over time, their attitudes changed as they understood the joy music held for infants:

...I remember when we (met for the) first session and it was talked about doing music and we were kind of all "oh my God!" You know, and I remember D singing and we were all a bit nervous about it but ... like. What are we in for! I just don't sing, and you know, by about week 3 we were all so excited and looking forward to it (singing). ... I think because it was just part of it ... you know you lose your self-consciousness. (Parent exit interview, Action Research Cycle 1)

Another parent commented in this way on the singing:

Singing was interesting. I must admit you know at sort of the first time I sang 'oh my'. I mean, I'd never sung before. You know you go from a work environment to singing! It was like "oh my goodness." I'd never heard of "Galoop went the frog" [an action song]. Now, oh, he loves it—it's his favourite song. (Parent exit interview, Action Research Cycle 1)

One facilitator reflected on the changes in understanding in her journal:

Sharing is on a deeper level than previously—not just the surface stuff. Kyla telling the group she "makes herself go out" is something very personal to share, but also makes the group more aware of each other as individuals, not just mothers of babies. (Facilitator's reflections, Unit 2, Week 6, Action Research Cycle 1)

Contributing as a community of learners

As the group of parents became more comfortable with one another, the research team noticed that they became more mutually supportive. It was no longer the facilitator who took all the responsibility for the well-being of the group, which now operated more visibly as a community of learners. This occurred both within the centre and in sessions held in the wider community. In the ice-breaker at the beginning of the session and a week before the trip to the swimming pool, Melanie (a parent) remembered that she:

... swam as a baby, loved it, but can't swim now. She hasn't worn togs since age 12. (Observer's records, Week 8, Action Research Cycle 1)

As a trip to the pools was planned by the group, the observers noticed how parents supported one member to overcome her anxiety about her water confidence. Later in the session other parents in the group offered her support and encouragement to come to the pool. In the following observational excerpt, Melanie (a parent), is concerned about putting her head under the water and Kyla (another parent), reassures Melanie:

"I was terrified until 3 years ago when I had to get in the water." She reassures Melanie that "you get used to it." Other members of the group also try to explain to Melanie how the water doesn't go up your nose. (Observer's records, Week 8, Action Research Cycle 1)

When Melanie was interviewed at the conclusion of Action Research Cycle 1, she stated:

I would suggest that there are more people coming in to talk or perhaps visits out like we went swimming - that was really good. (Parent Interview, Action Research Cycle 1)

Learning about parenting

The concept "transformation of participation" suggests that it is through participation in cultural activities (in the broadest sense of the words) that learning takes place. For many parents, there was an increased awareness of observing their infants, and interacting with them. There was even speculation about what their infants might be learning. Throughout the programme, parents were encouraged to both interact and play with their children. Group play experiences were valued by the parents:

And I think that probably helped her a lot ... being around other children. Cause she didn't interact with them that much – she'd look at them a lot and watch other children doing things. And her confidence increased, because at first she would sit in one place and now it's as if she owns the whole Playcentre because she goes where she wants to go. (Parent exit interview, Action Research Cycle 1)

For one parent, SPACE sessions were an opportunity to observe other infants a little older than her own child. This "helped her thinking" (Parent exit interview, Action Research Cycle 1):

Yeah, it definitely has in terms of, as I've said looking at the older babies and what they're doing and understanding what she could be playing with and exploring but I'm sure SPACE has helped her to develop her exploratory nature.

Heuristic play was mentioned in almost every parent interview in the first action research cycle. Changing attitudes, about what a toy or play thing was, had a major impact on the parents, with many setting up heuristic play baskets at home. A parent summed it up:

Heuristic play—that's a really big thing for me. I think its really neat and have set up a kit at home as well, and I think it's fascinating and its ... the toys she has ... I don't know if you call them toys but they're the things that she enjoys the most, and I think have stimulated the best play for her which is lovely.

[Interviewer]: and do you think you have come to that yourself if you hadn't come to SPACE?

Inadvertently, but probably not built on it as much, as in, she would have had all those things to play with, but knowing to turn the music off and the TV off and all those things that are in the background off and to stay back and *not* interfere as much with her play. I wouldn't have known to do those things ... and I would have tried to help her play, rather than just let her be. (Parent exit interview, Action Research Cycle 1)

Facilitators encouraged parents to observe their child's development more closely:

SPACE has really allowed me to observe his development and observe his play and playing with him and other kids as well. (Parent exit interview, Action Research Cycle 1)

Another parent commented:

I mean the interaction with other babies was, has just been fantastic. And to have that, and to see mum interacting with other adults in a social situation in also fantastic. I'd like to think that because we were more knowledgeable, she's had a better start. (Parent exit interview, Action Research Cycle 1)

One parent added this in her interviewP:

SPACE has impacted on my ability to observe his development. I remember one day, very early on, and the babies were all at that stage where all they could do was lie on their backs. They're all going like this (demonstrates waving arms and legs), and Sue said something about "You imagine if you lay on the ground and did that for an hour how sore your stomach muscles would be", and I was like "oh my god, that's so true" and then they would do something and Sue or Kathy would say "can you see how they're doing that? That's part of development". At the moment it's about sucking the paint brush ... Sue's like "yep, and he'll do that [until] he's 15". (Parent exit interview, Action Research Cycle 1)

As a result of observing their infants, parents understood more about play and learning and interacted and played with them more. During the second action research cycle, and in response to a suggestion from the advisory committee, members of the research team created PowerPoint shows to share their observations of infants with the parents. This further emphasised the value of observations as a tool to understand children's learning, as well as to enhance adult-infant interactions.

Increasing confidence in emergent leadership

In the context of the SPACE programme, parents' participation sometimes changed from observing quietly on the side of an activity, or listening attentively to a guest speaker, to taking a much more active role. Lave and Wenger (1991) use the phrase legitimate peripheral participation to explain increasing involvement from the perspective of a newcomer: "The newcomer is not just an observer but also a participant at increasingly multiple levels as a member of the community" (p, 98). The research team understood that parents, as members of a community of learners, could participate peripherally and still be supported by, and learn from, the programme.

In the second action research cycle, for example, it became clear over time that parents gained confidence from week to week.

I noticed a mother (Danielle) who I thought was really nervous, make a huge effort to get up and talk with others. Maybe she is just nervous as a mum with her new baby? She seemed overwhelmed especially when she commented how different this is from work, and she really does not know what to do with him other than feed, bath, change him and put him to sleep. (Facilitator's reflections, Week 1, Unit 1, Action Research Cycle 2)

At this stage of the research, the facilitators and parents were still getting to know one another. The following week, an observer summarised a conversation between Danielle and a facilitator:

Danielle told the facilitator that she had taken away information and ideas from the previous week and tried them at home but James (her infant) had been too little. She mentioned that she was disappointed that the advice had not worked, but she had learnt from this experience and the facilitator reassured her. (Observer's records, Week 2, Unit1, Action Research Cycle 2)

In the fourth week of the programme the facilitator recorded that:

Danielle seemed so much more confident when talking one on one with her. She said, "Oh, James needs a feed, time for shushing (soothing) him, time for this." It seems as if she's starting to read the signs and coping well. (Facilitator's reflections, Unit1, Week 4, Action Research Cycle 2)

Observers and facilitators noted in subsequent sessions that Danielle actively initiated conversations with other parents and their infants. She became more confident and active in the programme. These data provide an account how of Danielle's participation changed over time.

Discussion

The following model is a diagrammatic representation of the socio-cultural constructs that synthesise the theoretical analyses of the findings. Transformation of participation and shared understanding were processes that contributed to building communities of inquirers. This process was cyclical and continuous with each cycle strengthening the community of learners and supporting further inquiry among the research team members and participants (Figure 4).

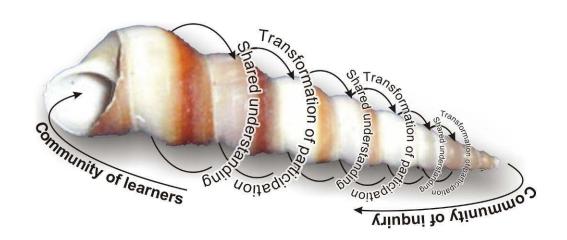


Figure 4: Transformation of Participation: A Conceptual Model

The data presented on parents' participation were triangulated across three separate data sources: observations and reflective comments from the researchers, and in the parent interviews. A range of strategies, such as icebreakers, supported contributions from the parents. Over time, the facilitators gradually but warmly demanded more participation from the parents, but at the same time accepted differences in how parents contributed. Rather than positioning themselves as experts, and parents as the novices, facilitators viewed all as participants in a community of learners (Rogoff, 1998). They were open to including contributions from parents and acknowledged their skills in certain areas. The dynamic features of transforming participation included the facilitators' responsiveness to parental input, shared responsibility in a familiar environment, and, together with the research associates, the facilitators' and the observers' continued reflections on the content and delivery of the SPACE programme at Te Marua/Mangaroa Playcentre.

Ecological constructs

Ecological systems

Ecological theory, or bio-ecological theory (Bronfenbrenner, 1979, 2005), contends that development is an active process that considers not only the people participating in the immediate, observable setting or microsystem, but also the influences of events in the wider world. These influences were apparent in the data generated by both action research cycles.

Infants and parents in SPACE

An example of a microsystem was the SPACE sessions, where infants and (most usually) mothers joined with the facilitators as a community of learners. One way this happened is described below:

... Donna pointed to the large poster card and asked if this was to make up the collage of photos of the whole group for the SPACE wall. She asked me if she could start it up and painted SPACE on it and then attached a gorgeous photo of Chris [her infant]. I noticed later that a number of other photos had been stuck on. I will take the poster home to place a border around it. (Observer's records, Week 5, Unit 1, Action Research Cycle 2)

Other microsystems apparent in this research were: the participating families' homes, their ante-natal groups, and the extended family and community networks previously and concurrently established during the research.

We were aware that a group of participants met outside of SPACE socially as a continuation of their antenatal group. As facilitators we encouraged participants to meet with one another socially over the holiday breaks and we know that at least one participant opened her home. (Facilitator's reflections, Week 6. Unit 2, Action Research Cycle 1)

Connecting strategies

Microsystems are connected with other microsystems by mesosystems. Mesosystem activities created new microsystems. Data presented in this section demonstrate how the SPACE programme connected the infants and their families with the COI research team using a variety of tools and artefacts. Telephoning and emailing parents fostered relationships among parents. These were initially supported by the facilitators both during the sessions and outside of them.

Sonia had rung and left a message asking if anyone else lived near her and could I give her phone numbers as she was stuck for a ride—gave her two and my cell in case she had no luck—great taking the initiative to get there! (Facilitator's reflections, Week 2, Unit 1, Action Research Cycle 2)

As the SPACE programme progressed, the facilitators and the participating parents were in regular contact between the sessions. This was increasingly evident in the facilitators' journal records:

On Tuesday night I received a phone call from Mary apologising for not coming today and not calling in. Georgia [her infant] was not having a good day so it just was not a happening thing for them. Also cleared emails from Selina apologising for not making it – again just not a good day. (Facilitator's reflections, Week 2, Unit 2, Action Research Cycle 2)

In the same week, this facilitator heard from Donna:

Donna rang and left a message Tuesday morning to say her and Chris [her infant] would not be in. Chris had his immunisations on Monday and had not been well since – will ring and follow up to see how they are going. (Facilitator's reflections, Week 2, Unit 2, Action Research Cycle 2)

By the following Tuesday, Donna had rung again:

Chris is much better, but Donna and her partner have a good dose of the 'flu so won't be in. It seems Chris may not have reacted to the vaccine, but may have been coming down with the same 'flu they now have. Donna sounds relieved. (Facilitator's reflections, Week 3, Unit 3, Action Research Cycle 2)

Parents themselves took the initiative to network supportively. It is the last session before Christmas 2006. The example draws from two data sources:

Mary has been holding a box for a few minutes. She goes from person to person handing out stars, each with the baby's name on and 2006 Christmas decorations she has decorated herself. (Observer's records, Week, 11, Unit 2, Action Research Cycle 2)

One of the facilitators noted:

Mary [parent] had emailed me to ask for the babies' names earlier in the term. She had put the babies' names on lovely little stars in gold pen. She asked if I could hand them around as she was worried about getting the names muddled. I said I could do it with her, but she ended up going around the group and handing them out – they were neat little gifts and she got some great feedback from them. (Facilitator's reflections, Week 11, Unit 2, Action Research Cycle 2)

Different yet identifiable microsystems were the COI research team meetings which included meetings and discussions with the research associates and which included first negotiating an ethics proposal and a relationships agreement (See Appendices B and C). Second, one research associate provided professional development on action research and observation, followed by further sessions with both research associates on analysis (see Appendix A) and sociocultural theory. Prior to dissemination activities, including conference presentations, the research associates and centre researchers met for planning purposes. Over the 3 years of the research, frequent telephone calls, visits, and emails mediated and supported a strong working relationship between the researchers and the research associates. Both groups bring their respective skills and experiences together to work as one:

We sat down today to work on the draft milestone report [to the Ministry of Education], ready for the meeting of the advisory group, and to talk about the questions Justine had sent through on behalf of the team. They [the COI researchers] seemed to be getting stuck on analysis. Their computer software package was not going to work effectively because it would mean that data could

only be analysed at the centre. We came up with the idea of workbooks and made up some mock examples to take to the meeting. We cut and pasted the questions for Action Research Cycle 1 into the workbooks and then created a page per theme, and a page for each theoretical construct. They were even colour-coded: a green workbook for the observations, and a blue one for the interview data. (S. Te One & V. Podmore, personal communication, May 15, 2006)

At the beginning of the last phase of the research, COI team members again visited Victoria University's School of Education Studies to use the resources in the Institute for Early Childhood Studies:

Sue (COI researcher) arrived and we did a library catalogue search from my office and then headed down to the library where we sourced quite a few materials and I left her to search out more books and journals. Our administrator lent her a copying card. The following week Kathy (COI researcher) came in. I went through some of the Institute resources to find journal articles. I introduced her to the Head of School and other colleagues. We sat together for a while browsing the journals. Our administrator offered to sort out the photocopying charges with her. (S. Te One, personal communication, June 4, 2007)

External influences on the SPACE programme

Support and advice offered by the research associates to the COI researchers were generated in an exosystem, or a setting which did not include the infants and parents participating in the SPACE sessions. However, decisions made in this context (based on reflective comments from the facilitators, and on shared analyses of observational data) had a direct impact on the weekly events in Te Marua/Mangaroa Playcentre's SPACE sessions.

Exosystem influences were varied. For some parents, parental leave conditions necessitated a return to work, for others, the experience of the SPACE programme changed previous plans to return to work, as well as attitudes to early education services. A few parents were able to negotiate their arrangements across settings. The following example shows how this, in turn, influenced planning of the SPACE sessions:

Jasmine [a parent] talked to the new principal at her school [her workplace] about returning to work but also wanting to be with Alice. Jasmine said the principal would support her in her decision and Jasmine asked for one (or two?) days teaching a week, but not on a Thursday [SPACE session day] (WE NEED TO CONSIDER THIS NEXT TERM IF WE CHANGE THE SPACE DAY). (Facilitator's journal, Week 2, Unit 2, Action Research Cycle 1)

During the same SPACE session, this facilitator noticed a conversation between a parent and one of the research associates in which Bridget (a participating parent) was talking to Sarah (a research associate) about shift work and being tired. Several weeks later, a facilitator wrote:

Nicholas [Rebecca's infant] came to session today after a long break away from SPACE. Mum has been working lots of shifts—even the mums she usually sees hadn't seen her for a while. Nicholas was carried high on Mum's hip—straight back and twisting to see what was ahead of him. Rebecca was relaxed and happy to be here and both of them were greeted warmly by the parents. (Facilitator's journal, Week 5, Unit 3, Action Research Cycle 1)

Another facilitator wrote:

Work: talking with Janice after session. She mentioned that she wasn't initially maternal but is really starting to enjoy Dylan now. She said she has been thinking about work, but feeling more out of place as time goes on. She has been watching as Jasmine and Karen [two other SPACE parents] have been writing their resignation letters, and are not intending to go back to their full time jobs. (Facilitator's reflections, Week 2, Unit 2, Action Research Cycle 1)

Regular hui with the Ministry of Education, organised as part of the COI programme, were one component of a national policy initiative to improve quality, increase participation, and promote collaboration (Ministry of Education, 2002). At the microsystem level, the infants and parents on the SPACE programme did not directly participate in these hui; however, the COI research team and the research associates shared their data, reflections, and theoretical thinking with other Round 2 COI. This led to new relationships that might not have developed without the opportunity to meet at a national level.

Wider community attitudes, beliefs and values

The macrosystem encompasses all the other systems and includes national policies, both for Playcentre and for early childhood services, as well as attitudes, values and beliefs. At a policy level, an early reflection from a facilitator recorded:

In the housekeeping part, we mentioned that we are a licensed centre with Early Childhood Regulations, and that's why we needed to do certain things such as change babies in the toilet area. (Facilitator's reflections, Week I Unit 1, Action Research Cycle 1)

Some of these influences were powerful and generated discussions for all involved. As one observer wrote:

SLOW DOWN! This seems to be an emerging theme—slow down the songs, don't rush your baby's development, don't let society rush or pressure you. An interesting theme to explore—what is the effect of the fast pace of life on our parenting? (Observation, Week 4, Unit 2, Action Research Cycle 2)

For example, after one of the facilitators noted how some infants were being stood-up, she expressed her concerns to the other facilitators and observers after the session.

One parent was standing her baby up on her feet. Other parents near her also began to stand or pull their babies up (unconsciously). I had noticed from other

SPACE session how early parents prop their babies up and I recalled a video I'd viewed at [the former] Wellington College of Education so I asked Sarah (associate researcher) about it. She mentioned it was a video about Magda Gerber and provided the video for us to view the following week. (Facilitator's reflections, Week 4, Unit 1, Action Research Cycle 1)

This facilitator noted how one action had led all the other parents to follow suit and prompted her to reflect on how infant development could promote competitiveness amongst the group to see which infant was sitting first, or rolling over. Some messages from society include favouring early, structured educational experiences. In recent years, accelerated learning has been promoted by some as desirable (e.g., Doman, 1965). Part of the SPACE philosophy was to support parents to enjoy their infants in the present. In response to her concerns this facilitator discussed the issue with the research associate and together sourced material from the Institute for Early Childhood Studies reference library. Several child development texts (Gerber, 2002; Santrock, 1999), and video material about infants' development, were incorporated into the next weekly session of the programme. An observer noted how parents responded to the video while it was playing:

Karen [parent] had Ivy [her infant] sitting on the floor with her hand supporting her back. Ivy is unable to sit unaided. A few minutes later Ivy is on her back, lying flat with 'freedom to move' [the name of the video]. (Observer's records, Week 5, Unit 1, Action Research Cycle 1)

Once the video had finished playing, this observer recorded two more examples of how the material had influenced the way the parents interacted with their infants:

I had another look around the room after the video and ... noticed that just about all the babies are either lying flat on the floor on their backs, or being held lying down by their mums. Rachel [parent] sits with Trish [her infant] up in front of her then (I think) seems to realise what she was doing and lies her down instead. The groups move back into their circle to feed back. Comments from the groups were very positive such as: the video made sense and they liked the equipment. Thoughts about the use of equipment such as jolly jumpers and about pressure felt from friends and relatives about their own baby's physical development. (Observation, Week 5, Unit 1, Action Research Cycle 1)

Subsequently, these research-based resources were purchased by the Hutt National SPACE team to be available on loan to SPACE programmes in other areas. The research prompted further links at a macro systems level which included other regional Playcentre associations, and a working relationship with the research associates, who acted in an advisory capacity. As well as tapping into the academic literature to investigate purchases, networks were shared between the researchers and the research associates, and this resulted in potential new contacts for the SPACE programme.

Some data indicated how complex decision-making was for some parents. For example, discussions about health issues included a wide range of opinions gleaned from traditional medicine (from a range of health professionals), natural therapies, alternative medicines, and grandparents' advice. There was no clear answer on the right way to deal with some specific issues. Some parents found this responsibility difficult, particularly when making decisions about whether or not to have their infants vaccinated or immunised. Parents wanted to discuss the choices and health care options available to them. When there was no one clear choice, it was a double-edged sword for some. The responsibility for making decisions about an infant were influenced by wider debates and then brought back into the SPACE session (the microsystem) for further discussion. As one parent found, the SPACE sessions were a supportive environment where she could discuss difficult decisions. In an exit interview, this parent commented:

Listening to their [the SPACE facilitators'] experiences, and advice from them and there's a couple of times that I had a few things that I was a bit confused about with decisions to make for Leah, whether I was making the right one and Justine was really good and set me onto different paths to go and research myself so that I could make an informed decision rather than an uninformed one or felt like I was being badgered into something so that's been something that I've really liked.... (Parent exit interview, Action Research Cycle 2)

The implications of this for the SPACE sessions affected the facilitators' beliefs that the programme was supportive and not judgemental. Television viewing for infants was another topic debated. "It comes up frequently as an issue in discussions we have and we have agreed we will start to think about a debate for this" (Facilitator's Journal, Week 2, Unit 2, Action Research Cycle 1):

The question was asked about babies watching TV. I asked the question: Was TV for us as parents, or for the baby, with the implication that it becomes the child minder. A parent asked about the Baby Einstein videos (this has been a common question from other sessions). This could lead onto what message is coming from the name of these video series. Watch these videos and you will have a brainy baby. (Facilitator's reflections, Week 5, Unit 1, Action Research Cycle 1)

Reflective discussions in Action Research Cycle 1 noted infants clothing. Strong messages about boy and girl clothing are prevalent, but noting the clothing also alerted the researchers to how much effort the parents on the SPACE programme made with their infants' appearance. While the mothers tended to wear jeans and track pants, their infants were "dressed like a Pumpkin Patch catalogue" (Facilitator's reflection, Week 5, Unit 1, Action Research Cycle 1).

Clothes came into the discussion. I mentioned about having clothes that the babies can move freely in, and what message was the clothing we see in shops giving us? We talked about the meaning of infants' clothes. What did they say and portray? Is the message that infants are mini adults? Is there much difference in

the clothing or teenage clothing? Do we see the knitted layette now? (Facilitator's reflections, Week 5, Unit 1, Action Research Cycle 1)

Development is life long

Bronfenbrenner (2005) extended his bio-ecological model to include development throughout life. Examples from the data suggested that participation in the SPACE programme resulted in personal changes recorded by the research team in their observations during the sessions, in reflective comments, and in the interview data.

Spent some time talking to Donna [a parent]. She had been in hospital and was feeling a bit miserable and overwhelmed. Donna has a background in ECE, managing and teaching, and had even looked into applying for COI at one stage, but openly stated that nothing had prepared her for the emotion that comes with caring for your own baby. She mentioned that the expectation on her (with her background) is that this should be easy, but this was not the case: "I know what to do from 6 months on ..." (Facilitator's reflections, Week 1, Unit 1, Action Research Cycle 2)

In the final term of the SPACE programme, a facilitator wrote:

Thinking about Donna and Chris [her infant]. Donna has come a long way—with her being so reserved and apprehensive in the early stages, to now being confident and eager to be involved. All her EC education is coming though. She knows a lot of songs and is keen to share her experience and knowledge with Chris. All the uncertainty of being a new mother has lifted. (Facilitator's reflections, Week 3, Unit 3, Action Research Cycle 2)

The experience of first-time parenting was observed in the following conversation from a parent interview with the mother and father. Even though Donna (mother) had a background in early childhood education, the experience of having her own child was completely different. Her husband noted:

...you see, she's been involved in early childhood for 10 years and I thought – oh you know, when she first had the baby....she said its all a learning curve for me as well. And when she said that to me, I freaked out ...I thought you knew it all.

He continued:

But in terms of SPACE it's been really good for Donna. Just how she looked forward to going out there.....She's not alone sort of thing.

Donna reflected:

Yeah, it gave me confidence and I suppose, confidence that if I didn't know something I could find out. I could ask a question and get other peoples feedback. (Parent exit interview, Action Research Cycle 2)

Discussion

Data from both action research cycles demonstrated how participants in the immediate setting (microsystems) were influenced by events in other settings where they were not present (Bronfenbrenner, 1979, 2005). Facilitators fostered support networks during the SPACE programme using their skills to connect participants with one another expertise from outside (mesosystems). Resources and (exosystems) Marua/Mangaroa Playcentre were incorporated into weekly SPACE sessions in response to the facilitators' and observers' reflective comments. Wider professional relationships were developed with other COI services. Ministry of Education COI hui were a forum where current issues and debates (at the macrosystem) were addressed. theoretical analyses and interpretations demonstrate how, for several parents, participation in the SPACE programme instilled a degree of confidence in their new parenting role.

Summary

Socio-cultural and ecological theoretical constructs informed the interpretation of the wealth of data generated during this three-year study. The above discussion of tools and artefacts and their mediation offers further insights on how the SPACE programme at Te Marua/Mangaroa Playcentre supports and fosters infants' learning and mother-infant interactions. The analysis of how parents' participation was transformed over time explains with additional details how participation in the SPACE programme fostered learning and emergent leadership among the participating adults. Finally, the application of ecological perspectives to the data provides insights into the ways in which participating in the SPACE programme can connect systems and promote collaboration and networking across settings.

Chapter 7

Summary and Conclusions

Overview

This brief concluding chapter summarises the main findings on innovative support for parents and infants through delivery of the programme Supporting Parents Alongside Children's Education (SPACE). There is an emphasis on support and learning through participation in an innovative programme situated within an early childhood centre nested in its community.

Summary: Thematic Findings

This three-year collaborative action research project generated extensive qualitative data related to two key research questions:

- 1. How does the SPACE programme, implemented at Te Marua/Mangaroa Playcentre for new parents and infants, support and foster their learning?
- 2. How does the SPACE team and programme, together with Te Marua/Mangaroa Playcentre, network and support collaborative relationships?

The literature reviewed in Chapter 2 of this report shows that, prior to the introduction of SPACE, there was a gap in provision, and an identified need for a support and education programme for new parents and their infants in a group setting within early childhood centres (Playcentres). The SPACE programme, a locally developed educational innovation, supported parents and their new infants within Te Marua/Mangaroa Playcentre and in the wider community.

This research demonstrates how the SPACE programme at Te Marua/Mangaroa Playcentre supported and fostered learning among the participating parents, their infants, and the COI team. Thematic analyses across a range of data sources (observations of SPACE sessions, exit interviews with participating parents, reflections of SPACE programme facilitators) show how several processes and strategies contributed to the participants' learning. These included:

- supporting relationships and interactions;
- providing and adapting facilitative environments;
- fostering holistic learning;
- connecting families and communities.

Overall, effective networking occurred and collaborative relationships were encouraged and enacted throughout the two cycles of the action research at Te Marua/Mangaroa Playcentre. There were two major themes related to networking:

- collaborative support across sectors;
- communication across sectors. This included referrals (a multi-directional process—including, for example, referrals of parents into SPACE programme, and referrals from SPACE on to other early childhood education sessions), interactions across settings (for example, interactions with the Playcentre as a whole, including the Hutt National SPACE programme, and with other early childhood services), and the cross-sectoral content of the SPACE programme itself (the SPACE programme at Te Marua/Mangaroa Playcentre included guest speakers from the health sector and topics requested by the parents and reflecting the particular interests of the group).

There was evidence that interactions occurred between the SPACE sessions and other settings, for example: other Playcentres and early childhood services, community groups, the wider community, and the SPACE programme at not only a regional level but, as the programme grew nationally, a nation-wide level.

Socio-cultural and ecological theoretical perspectives extended the COI team members' reflections during the process of being a COI, and deepened the interpretations of the findings in this report (Chapter 6). Some examples of the theoretical constructs used in this process were: tools and artefacts, transformation of participation, and ecological systems. An analysis of the mediation of tools and artefacts demonstrated how the SPACE programme at Te Marua/Mangaroa Playcentre supported and fostered infants' learning and mother-infant interactions during music sessions and storybook reading. Parents' participation in the SPACE programme was transformed over time in ways that fostered their learning and emergent leadership. The application of ecological perspectives to the data provided insights into how participation in the SPACE programme connected systems and promoted collaboration and networking across different settings, including homes, the Playcentre, and the wider community.

Advisors' insights

Advisors associated with this research project provided some further insights as they reflected on the final analyses and the findings. Their statements illuminate the implications of this COI research project for children, parents, communities, and research.

There was support for the key findings on the benefits of the innovation (the SPACE programme at Te Marua/Mangaroa Playcentre), which include effective networking and benefits for children, families, and society:

To me SPACE is about connections and communities. The Te Marua/ Mangaroa SPACE COI project has forged a web of powerful and hopefully enduring connections between families, children, facilitators, the playcentre, and the researchers themselves. I believe a lack of the sense of belonging that a community creates is one of contemporary society's biggest weaknesses and one of the prime reasons for our increasing problems of abuse, violence and crime. SPACE builds communities and the importance of that cannot be overestimated (Ella Kahu, member of the COI project advisory committee, personal communication, August 10, 2007)

In October 2003 five women had a dream. This research is one of many results of that dream. (Janet Dixon, member of the COI project advisory committee, personal communication, August 16, 2007)

This project has created new and exciting communities of empowered people. The project team, beginning as Playcentre parents, is now a skilled and active force with enormous interest and potential in the area of educational research, particularly in the development of parenting skills. The parents have become seekers in their own right, with new understanding of their roles and new connections with their community. The babies are active participants in their own learning. The advisory team and the associated community agencies are still learning, and energised by the journey we have all been on and the infinite possibilities for its future benefit for children. (Helen Willberg, member COI project advisory committee, personal communication, August 10, 2007)

Conclusions

Finally, the report concludes with the voices of participating parents. This first comment reiterates support for the innovative idea of providing the SPACE programme for new parents and their infants in a group centre-based setting:

It's been really good; just the fact of having people [act as] a sound board [to bounce] ideas off. (Parent exit interview, Action Research Cycle 2)

Parents unequivocally recommended the programme to others. During interviews carried out as they exited the SPACE programme, parents commented favourably on their experiences during the programme. They emphasised the importance of: the group interactions to participants' well-being and to infants' learning, the facilitators' and guest speakers' expertise, and the confidence and empowerment experienced through participation in the SPACE programme:

I've loved [SPACE], I really have. I would recommend any new parent go to it whether it's a mum or dad or both. To take their baby along because it's such a fantastic experience...watching all the babies around you grow. Seeing how they interact with the other babies and their fascination with [each other] is just amazing.

He [Josh] probably wouldn't get that opportunity anywhere else. (Parent exit interview, Action Research Cycle 1)

I've been raving about it. Telling everyone to go...It's made me more aware of what's good and what's not. Because you've got these amazing people [the SPACE programme facilitators and guest speakers] who are just so well educated with early childhood development and they're guiding you into what's good. (Parent interview, Action Research Cycle 1)

I would tell anybody who is pregnant now to join a SPACE session. I found it really empowering and it gave me confidence and Chris [her infant] loved it, and you know he's going to be empowered and get confidence if his mum is. The better I feel about being the parent, the more that he's going to get out of it. (Parent interview, Action Research Cycle 2)

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APPENDICES

Appendix A:

Community of Learners and Inquiry: Team Members' Reflections on the Research Process

Appendix B
Relationship agreement

Appendix C

Consent forms and information sheets

Appendix D

Parent interview schedules

Appendix E

Interview questions for health professionals, guest speakers, and focus
group

Appendix F

Examples of workbook sheets: Observation

Appendix G

Examples of workbook sheets: Parent interviews

Appendix H

Vignette of an infant's exploration and holistic learning

Appendix A

A community of learners and inquiry:

Team members' reflections on the research process

Climbing the mountain to a shared understanding

Throughout the first action research cycle, data were collected on a weekly basis by observers and facilitators. On completion of the programme, parent interviews were conducted and transcribed as further data.

In November 2005 when the COI team met with the research associate we identified some emerging themes: environment, relationships and interactions. Over the Christmas break we read through the data to reflect and identify other key areas to consider. This led to a brainstorming session on what these key areas were, and a comprehensive list was compiled. We did this because we were conscious that we did not want to miss anything. On reflection, this was because we were inexperienced in research and data analysis, and by getting too specific we made the mountain into an Everest!

The research associates spent time with us discussing socio-cultural theories to help us gain an understanding of this perspective. The COI team met again with the research associates who worked with us to develop a proposed analysis framework which included sorting and categorising of data: analysis of key themes, and theoretical concepts and constructs.

That is when we felt the need for oxygen tanks. We scheduled professional development which including looking at analytical processes, socio-cultural perspective, observation techniques, data management, and mentoring.

We were now feeling more confident to attempt analysing some of the data. Using a computer package we started to analyse the data. Initially we identified which themes and segments of data we felt were relevant and attempted to categorise those. This process began well until we then moved onto sub-categorising. This proved more difficult and time consuming to do than we had envisaged. The team lost the focus and had different perspectives on how to continue this process.

The outcome of this was we needed to extend our knowledge base on socio-cultural concepts and constructs, and how to analyse data. A team member took on the responsibility of collecting and compiling relevant literature in liaison with the research associates and other professionals.

During our mentoring session we focused on our personal, research, political and professional goals of why we had undertaken the COI project. We identified that we had the data on one hand, and the theoretical framework on the other, but we needed scaffolding to bridge that gap. We rescheduled a meeting with the research associates to revisit ours goals and to establish a way forward.

The research associates presented the team with two work books for data analysis. They also provided examples of how this could look, after cutting and pasting some of the data under the key themes and theoretical constructs. We divided into two teams, with one team per work book (observers' and facilitators' data, and parent interview data). This process has been inspiring, and although slow to begin with, it is now more expedient and enjoyable.

Appendix B

Relationship agreement

27 April 2005

RELATIONSHIP AGREEMENT BETWEEN TE MARUA/MANGAROA PLAYCENTRE AND THE SPACE TEAM and their RESEARCH ASSOCIATES

Preamble

We intend the working relationship to be collaborative and based on mutual respect and understanding. All parties recognise that Te Marua/Mangaroa Playcentre members and the SPACE team members are volunteers, with time constraints created by their family and other responsibilities, and with ranges of expertise in different aspects of the centre of innovation project. We respect that team members will want different levels and types of participation and this may vary for individuals throughout the duration of the project. We aim to draw from members' interests and strengths and build capacity and confidence.

Purpose and Philosophy

A co-operative approach will be implemented between Te Marua/Mangaroa Playcentre and the SPACE team members, the research associates, and the advisory group.

Communication and Roles

Communication will take place by regular e-mail and telephone contact, and by personal visits. Regular contact will be initiated and maintained throughout the project (March 2005-April 2007). The lead research associate will link through the contract manager, and the COI project co-ordinator/s, in reporting and documenting research as set out in the contracts with the Ministry of Education. The researcher associate will provide allocated sections of reports and comments on draft reports to the lead research associate prior to compilation of the milestone reports to the Ministry of Education. In the event of the lead researcher's agreed absence (overseas leave approved by the university) the research associate will fulfil that role. The COI project co-ordinators and the contract manager will liaise with, and report back to, the Hutt Playcentre Association.

Publications and Addresses

Joint publications, writing, and oral presentations will acknowledge the authorship of all parties involved

Signed by:	Date
COI Project Co-ordinators	
Contract Manager	
Dr Val Podmore Lead Research Associate, Victoria Uni	versity of Wellington
Sarah Te One Research Associate, Victoria University	of Wellington
SPACE Co-ordinator	

Appendix C Consent forms and information sheets

VICTORIA UNIVERSITY OF WELLINGTON Te Whare Wananga o te Upoko o te Ika a Maui



Early Childhood Centres of Innovation:

Action Research with Te Marua/Mangaroa Playcentre and the SPACE (Supporting Parents Alongside Children's Education) Programme

INFORMATION SHEET FOR PLAYCENTRE RESEARCHERS

Kia ora. We are all delighted that *Te Marua/Mangaroa Playcentre Implementing the SPACE programme* was selected as an early childhood Centre of Innovation. The researchers invited to work alongside your centre are Dr Val Podmore and Sarah Te One from Victoria University of Wellington. The research is funded by the Ministry of Education.

We are warmly inviting you to be collaborators in this research. Our proposed research has been approved by the Ethics Committee of Victoria University. Two key research questions are:

- 1. How does the SPACE programme, implemented at Te Marua/Mangaroa Playcentre for new parents and infants, support and foster their learning?
- 2. How does the SPACE team and programme, together with Te Marua/Mangaroa Playcentre, network, support collaborative relationships, and work across agencies?

We are seeking centre participants' (educators'/parents') written consent to participate, and consent from the participating children's parents. We will respect confidentiality, and we will ask permission from each parent before photographs of their children are included in research presentations.

If you agree to participate, you will be gathering research observations and materials. Confidential material will be stored in a locked cabinet at the Playcentre or in my office at Victoria University and destroyed within 2 years of completion of the project. Videotapes made by the Playcentre will be kept by the playcentre or wiped electronically. You will have the right to withdraw from the research at any stage before preparation of the final reports in April 2007. A final research report will be prepared for the Ministry of Education. Written summaries about the research, and talks where appropriate, will be offered to centre researchers and parents.

If you have any queries or would like any further information about the project, you are welcome to contact me at Tel. (04) 463 6027, e-mail: val.podmore@vuw.ac.nz, and/or talk to the SPACE liaison person at the playcentre Tel. (04) 526 4574.

Kind regards

Val Podmore (Dr)

Lead Research Associate (in collaboration with Sarah Te One, Te Marua/Mangaroa Playcentre, and the SPACE team).

Te Whare Wananga o te Upoko o te Ika a Maui



Early Childhood Centres of Innovation: Action Research with Te Marua/Mangaroa Playcentre and the SPACE (Supporting Parents Alongside Children's Education) Programme

CONSENT FORM - PLAYCENTRE RESEARCHERS

I have been given and understood an explanation of this research project. I understand that I will be asked to help with collecting data that may be used for research reports, conference papers, and articles.

1 1 /			
I agree to participate in collecting:	(Please circle that wh	ich applies)	
observations of participating infants* (with their parent/s)		YES	NO
photographs of participating infants*		YES	NO
video records of participating infants	*	YES	NO
diary records (with my own reflective learning and reflections on the progra		YES	NO
I agree to participate in focus group i and to having my comments recorde		oroject, YES	NO
My consent to participate means that	t:		
 My name will not be on my diary focus or advisory groups. 	entries, self-report no	tes, and comm	ents made at the
I will be offered the opportunity to and of the draft research report the			O .
I can say no at any time to further	r collection of observa	tions or work fo	or this project.
I will receive (and may be invited research at the end of the project)		tten summary r	eport on the
*Here, participating infants mea Playcentre whose parent/s have g			
CENTRE RESEARCHER'S FULL N	AME:		
First name F (please print)	Family name		
Signature	Date_		

Te Whare Wananga o te Upoko o te Ika a Maui



Early Childhood Centres of Innovation:

Action Research with Te Marua/Mangaroa Playcentre and the SPACE (Supporting Parents Alongside Children's Education) Programme

INFORMATION SHEET FOR SPACE PARENTS

Kia ora. We are all delighted that *Te Marua/Mangaroa Playcentre implementing the SPACE programme* was selected as an early childhood Centre of Innovation. The centres of innovation have developed action research proposals, working alongside researchers. The researchers invited to work with Te Marua/Mangaroa Playcentre and the SPACE team are Dr Val Podmore and Sarah Te One from Victoria University. Two key research guestions that the research is looking into are:

- 1. How does the SPACE programme, implemented at Te Marua/Mangaroa Playcentre for new parents and infants, support and foster their learning?
- 2. How does the SPACE team and programme, together with Te Marua/Mangaroa Playcentre, network, support collaborative relationships, and work across agencies?

The research has been approved by the Ethics Committee of Victoria University.

We (the researchers and centre) warmly invite you and your child to take part in this research. As part of this project we will be collecting observations of infants, and examples of their learning and communication. We will also invite you to take part in a parent interview that will take around half an hour.

We respect confidentiality. Confidential material will be stored in a locked cabinet at the Playcentre or in my office at Victoria University and destroyed within 2 years of completion of the project. Videotapes made by the Playcentre will be kept by the playcentre. If you agree to your child being photographed, we will ask your permission before photographs are included in any presentations or talks about the research. If you agree to an interview, you will be offered a chance to check and correct the interview transcript. You may say "no" at any time to further collection of observations or work for this project. You have the right to withdraw from the research at any stage before preparation of the final reports in April 2007. You will be offered a written summary about the research, and there may be opportunities to find out about the research during the project. A final research report will be prepared for the Ministry of Education.

If you have any questions or want any further information about the project, you are welcome to talk to the SPACE liaison person at the Playcentre Tel. (04) 526 4574, or to me at Tel. (04) 463 6027, e-mail: val.podmore@vuw.ac.nz.

Val Podmore (Dr)

Lead Research Associate (in collaboration with Sarah Te One, Te Marua/Mangaroa Playcentre, and the SPACE team).

Te Whare Wananga o te Upoko o te Ika a Maui



Early Childhood Centres of Innovation:

Action Research with Te Marua/Mangaroa Playcentre and the SPACE (Supporting Parents Alongside Children's Education) Programme

<u>CONSENT FORM – INFANTS' PARTICIPATION</u>

I have been given and understood an explanation of this research project. I understand that the observations and material collected for this project may be used for research reports, and presentations and papers about the project.

Your written permission is required before your child is observed (sometimes with you) for this project

CHILD'S NAME Family Name			
Girl Boy	Date of Birth		
I give permission:	(-1,		
for observations of my child and myself	(Please circle to be included in this project	that which YES	applies) NO
for photos of my child and myself to be i	ncluded in this project	YES	NO
for my child and myself to be included i	n short video clips for this project	YES	NO
for my comments and observations to b and included in the project	e written down sometimes	YES	NO
I understand that:			
• I can say no at any time to further c	ollection of observations or work for the	nis project.	
• I will be asked permission before place.	notographs or video clips of my child a	ire shown i	in talks about the
• I will be offered a written summary	of the research at the end of the proje	ct.	
PARENT/CAREGIVER'S FULL NAME:			
First name(please print)	Family name		_
Signature	Date		
Tick this space if you DON'T w project If you don't want your child			•
name		₁	

Te Whare Wananga o te Upoko o te Ika a Maui



Early Childhood Centres of Innovation:

Action Research with Te Marua/Mangaroa Playcentre and the SPACE (Supporting Parents Alongside Children's Education) Programme

CONSENT FORM - SPACE PARENTS OF INFANTS

I have been given and understood an explanation of this research project. I understand that I will be invited to participate in an interview or to provide written comments to questions about participating in the SPACE programme with my infant.

Ιaς	ree to participate in:	(Please circle that which app	lies)	
an	nterview (duration around half an hour,	at a convenient time and place	e) YES	NO
aud	lio recording of the interview		YES	NO
	viding written answers to questions abo gramme at Te Marua/Mangaroa Playce	•	YES	NO
Му	consent to participate means that:			
•	My name will not be on the interview trawriting.	inscript, or on comments I mak	ke made	e in
•	I will be offered the opportunity to see a	nd correct sections of the inter	view tra	anscript.
•	Audiotapes and the transcript of the interview will be stored in a locked cabinet and destroyed/wiped within 2 years of the completion of the research.			et and
•	I can say no at any time to further collection of data or work for this project.			
•	I will receive a written summary report of	on the research at the end of the	ne proje	ct.
РΑ	RENT'S FULL NAME:			
	et name Family ease <i>print</i>)	name		
Sig	nature	Date		

Te Whare Wananga o te Upoko o te Ika a Maui



Letter To Clinical Manager/Health Professionals

[Date]	
Dear	

Early Childhood Centres of Innovation: Action Research with Te Marua/Mangaroa Playcentre and the SPACE (Supporting Parents Alongside Children's Education) Programme

In December 2004, the Minister of Education Trevor Mallard announced four new Early Childhood Centres of Innovation (COIs) in New Zealand, and we are delighted that *Te Marua/Mangaroa Playcentre Implementing the SPACE programme* was selected. The centres of innovation have developed action research proposals, working alongside researchers. The researchers invited to work with the Te Marua/Mangaroa Playcentre and the SPACE team are confirmed as Dr Val Podmore and Sarah Te One from Victoria University of Wellington. The research is funded by the Ministry of Education.

We (the researchers and COI) have planned a collaborative action research project to address two key questions:

- 1. How does the SPACE programme, implemented at Te Marua/Mangaroa Playcentre for new parents and infants, support and foster their learning?
- 2. How does the SPACE team and programme, together with Te Marua/Mangaroa Playcentre, network, support collaborative relationships, and work across agencies?

The research includes infants and their parents and other education and health professionals. We are now formally seeking permission in principle to invite [Health professionals] with connections to the SPACE programme at Te Marua/Mangaroa Playcentre to participate in the research.

Participation and collaboration are key features of the research. Proposed types of data to be collected include: observations of infants with their parents, and interviews with key personnel. We will be seeking written consent from the [health professionals] to participate, and from the participating infants' parents. We will respect confidentiality, will offer participants the opportunity to preview their interview transcripts, and will seek consent from participants to include specific excerpts from the interviews in the research reports. Interview transcripts and materials gathered within the interviews, will be stored by in a locked cabinet at the Playcentre or in my office at Victoria University of Wellington.

Confidential data will be destroyed within 2 years of completion of the project. All participants will have the right to withdraw from the research at any stage prior to final analyses and writing of the draft final reports in March 2007. Our proposed research has the approval of the Ethics Committee of Victoria University of Wellington.

Feedback about the research will be provided in the form of written summaries for participants, with the offer of talks where appropriate. Progress reports and a final research report (due late 2007) will be prepared for the Ministry of Education.

If you have any queries or would like any further information about the project, you are welcome to contact me at Tel. (04) 463 6027, e-mail: val.podmore@vuw.ac.nz, and/or the SPACE liaison person at the Playcentre Tel. (04) 526 4574.

Yours sincerely,

Val Podmore (Dr)

Lead Research Associate (in collaboration with Sarah Te One, Te Marua/Mangaroa Playcentre, and the SPACE team).

Te Whare Wananga o te Upoko o te Ika a Maui



Early Childhood Centres of Innovation:

Action Research with Te Marua/Mangaroa Playcentre and the SPACE (Supporting Parents Alongside Children's Education) Programme

INFORMATION SHEET FOR HEALTH PROFESSIONALS/KEY INFORMANTS

Kia ora. We are delighted that *Te Marua/Mangaroa Playcentre Implementing the SPACE programme* was selected as an early childhood Centre of Innovation (COI). The centres of innovation have developed action research proposals, working alongside researchers. The researchers invited to work with the COI *Te Marua/Mangaroa Playcentre and the SPACE team* are Dr Val Podmore and Sarah Te One from Victoria University. This project is funded by the Ministry of Education. The research has been approved by the Ethics Committee of Victoria University.

We (the researchers and centre) are warmly inviting you to collaborate in this research. Our proposed research has been approved by the Ethics Committee of Victoria University. Two key research questions are:

- 1. How does the SPACE programme, implemented at Te Marua/Mangaroa Playcentre for new parents and infants, support and foster their learning?
- 2. How does the SPACE team and programme, together with Te Marua/Mangaroa Playcentre, network, support collaborative relationships, and work across agencies?

The research includes infants and their parents and other education and health professionals. As part of the study we are now formally inviting participation and seeking permission to interview you in your role as a [Health Professional] with connections to the SPACE programme at Te Marua/Mangaroa Playcentre.

If you agree to participate, interviews will be at a mutually convenient time and place. Interview transcripts will be stored in a locked cabinet at the playcentre or in my office at Victoria University. You will be offered the opportunity to correct/amend your interview transcript, and also to preview sections of draft reports which include excerpts from your transcripts. Confidential material will be destroyed within 2 years of completion of the project. You will have the right to withdraw from the research at any stage before preparation of the final reports in April 2007. A final research report will be prepared for the Ministry of Education. Written summaries about the research, and talks where appropriate, will be offered to Playcentre educators and facilitators, parents and participating health professionals.

If you have any queries or would like any further information about the project, you are welcome to contact me at Tel. (04) 463 6027, e-mail: val.podmore@vuw.ac.nz, and/or the SPACE liaison person at the Playcentre Tel. (04) 526 4574.

Val Podmore (Dr) Lead Research Associate (in collaboration with Sarah Te One, Te Marua/Mangaroa Playcentre, and the SPACE team).

Te Whare Wananga o te Upoko o te Ika a Maui



Early Childhood Centres of Innovation:

Action Research with Te Marua/Mangaroa Playcentre and the SPACE (Supporting Parents Alongside Children's Education) Programme

<u>CONSENT FORM – HEALTH PROFESSIONALS/KEY INFORMANTS</u>

I have been given and understood an explanation of this research project. I understand that I will be consulted about this research study and invited to participate in an interview/focus group.

I agree to participate in:	(Please circle that which app	olies)	
an interview of up to one ho	ur's duration	YES	NO
audio transcription of the inte	erview	YES	NO
I agree to participate in focus and to having my comments	s group interview/s about the precorded at the group/s	oroject, YES	NO
My consent to participate me	eans that:		
 My name will not be on the advisory groups. 	ne interview transcript, or on c	omments mad	e at the focus or
• •	rtunity to see and amend sect nd of the draft research repor		
• I can say no at any time t	o further collection of data or	work for this pr	oject.
•	cript of the interview will be st years of the completion of the		d cabinet and
I will receive a written sur	mmary report on the research	at the end of the	ne project.
HEALTH PROFESSIONAL'S	S/KEY INFORMANT'S FULL	NAME:	
First name(please print)	Family name		
Signature	Date		

Appendix D

Parent interview schedule

Ва	ckground:
Da	te of infant's commencement in the SPACE Programme:
Da	te of interview/response to questions
Int	erviewee Code:
Int	erviewer:
Da	te:
Inf	ants' learning and development (links to research question 1)
	e first questions are about whether (and how) the SPACE programme has influenced ur understandings and involvement in's (your infant's) learning and development.
1.	Has the SPACE programme has supported your infant's learning and development? [If yes] How?
2.	Since being involved in the SPACE programme, have you made any decisions or changes in regard your infant's learning and development? [If yes] What decisions/changes have you made?
Pa	rent support (links to research question 1)
3.	Has the SPACE programme supported you (as a new parent) in your transition into parenthood? [If yes] How?
4.	Since being involved in the SPACE programme, have you made any decisions or changes in regard to parenting? [If yes] What decisions/changes have you made?
5.	What choices/decisions have you made about your infant's early childhood education and care?. (probes: transition to other centres? returning to work? choices of early childhood services?)
6.	Can you please describe your experiences of:
	Te Whāriki?
	Observing?
	Planning?
	Parenting styles?
	Changes in rearing patterns?

Community networking (links to research question 2)

The next questions are about whether and/or how the SPACE programme has supported, informed, influenced, or benefited this community.

- 7. Since being involved in the SPACE programme, have you experienced SPACE programme parents supporting one another?

 [If yes]

 How have you learnt from, and supported one another?
- 8. To what extent has SPACE become your/your families' support network?
- 9. Is there anything else you would like to say about the SPACE programme at Te Marua/Mangaroa Playcentre?

Appendix E

Interview questions for health professionals, guest speakers and focus group

Early Childhood Centres of Innovation:

Action Research with Te Marua/Mangaroa Playcentre and the SPACE (Supporting Parents Alongside Children's Education) Programme

QUESTIONS FOR HEALTH PROFESSIONALS/ KEY INFORMANTS AND FOCUS GROUP

Inte	rviewee Code:
Inte	rviewer:
Date	9 :
(The	ese questions link to research question 2)
Exa	mples of types of questions (to be developed further):
1.	How did you first find out about the SPACE programme?
2.	What kinds of links have you had with the SPACE programme?
3.	Have you, as a professional, had any feedback from participants in the SPACE programme? [If yes] What was the feedback?
4.	Have you observed changes in parents participating in the programme?
5.	Has the SPACE programme supported you in your professional role? [If yes] How? {If no] Have you any comments about this?
6.	Have you discussed the SPACE programme with others? [If yes] Who? In what context/s?
7.	Is there anything else you would like to say about the SPACE programme?

Appendix F

Examples of workbook sheets: observations

Observation workbook excerpts, presented in this Appendix, illustrate the data collation and analysis process for used for classifying the large volume of observational data generated in the study. The particular page that follows was one of many pages in the workbooks that showed collated, cut-and-pasted examples of *tools and artifacts*.

The songs on the CD are good, they add a different focus—the songs are all great for the babies. Can't wait for the parachute.

— adding variety to programme.

borough borough

Felt good about the range of information offered on session today – a couple of differing philosophies, not too narrow or too broad really, but hopefully just opening up discussion/consideration of different views, especially with regards to props like walkers, equipment etc.

Good to be able to offer another handout so that parents weren't't just going home with information about Magda Gerber, but also had other perspectives to read at home and share with their partners/whānau.

Breaking into groups for the brainstorming was very successful. I flitted between two groups, and people seemed to share quite openly their ideas, with these two groups thinking Magda Gerber's ideas were quite logical and sound although some comments made me wonder as to how much they actually got out of it for example,

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WK F

Justine and I had plenty of discussion around how much information we wanted to offer the parents. We were very conscious of only introducing Magda Gerber's philosophy, both with the video and the handouts on Natural movement. We felt that we were there to share information on different view points for them to take away what they wanted to. By merely offering one side to the story (as such) we were not really giving the big picture on early physical development.

we agreed to talk a little bit about the 'traditional' way – what say, grandparents points of view, a bit on early childhood research, and also another few brief points on Baby Moves. M. Van Wanrooy. Also decided to amend the handout on See me move (– a topic that would be in Unit 2 – Physical development), to include a bit on physical development and positions for babies, and what they are able to do.

Music as a foot.

Te Aroha -- seems easier to open with this, most of them seem to be singing along. Time to introduce another one next week

 $0 - \omega q - \zeta$ The thought we chose from the 'sce me move topic' – about not being able to fly into flying. It was short, and seemed appropriate for the Natural movement.

ice to realize took.

We then did the introduction and icebreakers (did not forget them this week). We felt that while it is wonderful to have parents share about their babies, often this is all they focus on, so we thought we could try and have some fun icebreakers which included finding out something about the parents. We asked them what physical challenge they would most like to do? It was great for them to have to think about themselves for a change and some had some immediate and realistic goals they would like to achieve; getting fit again, some mentioned doing some cycling races, another keen to go snowboarding, some to go running. Seemed to struggle to talk about herself—she said, her whole focus was to have a baby and so she is just concerned about that. Perhaps needs some reminders that she is still a very capable person, mother or not!

When people were sharing, there was a lot of laughter and oohs and aahs, some even offering some suggestions on where to do those things and how. Pressure is on histing

Appendix G

Example of a workbook sheets: parent interviews

Parent interview workbook excerpts are presented in this Appendix. These brief excerpts illustrate the data collation and analysis process used for classifying the parent interview data generated in this study. This particular page was one of a larger number of pages in the interview workbooks that showed collated, cut-and-pasted examples of *transformation of participation* as experienced by parents over time.

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Yeah, that's true that was, I found that really interesting and I think that did actually probably influence the way, or like I often consciously think about that essays in relation to the way that I handle situations with and her physical development and movement and things and probably just. I mean I think I probably

charges to what she does.

would have been quite good about ...sitting back and letting her explore anyway. But I think that now Im maybe more conscious about it.

√8. /

Well, in our particular case, we didn't know other people. We don't have family around. So it was, for me, was very important that she could see other people and know other babies and I think, I don't know how much they pay attention to other babies, but I think in a way they learn from children. That they, one is lying and looks to one side and then she tries to touch it, tries to reach over so it then tries to roll before, at home you never try before rolling, just because of another baby's there. They were very curious about each other. So they will touch the faces or just stare at each other. I think that they learn from each other, they can imitate. (Sue: that's fantastic). Even if it doesn't seem that they're paying attention to each other, you know what I mean, theyre doing their own unique thing but that they stare, you know.

For her learning and development, I think, like as I was saying that social was assect interacting with the other babies and the other nums and seeing her move through sort of phases, like when she was a little bit younger – earlier on, she was sort of the big, she was the oldest baby of the group, so she was, there was sort of a point where she was a little bit younger.

quite mobile compared to all the rest of them. She was going around and really like wanting to touch their faces and be a bit rough and stuff and then actually now seeing that's almost reversed. Like she sort of sits there and puts up with the other babies coming up and wanting to climb and grab her face and other things, so sort of seeing her moving through those different phases has been really neat and....

refer to for other

Appendix H

Vignette of an infant's exploration and holistic learning

Isla's story: Following an infant through sessions, Action research cycle 2

On analysing the data, it became clear there were some wonderful stories around infants and their exploration, their social interaction with their parents, other infants, and other adults, the ability to communicate their needs, and how infants use the environment for self-selected play. From observing one infant throughout the programme, we have some examples of her journey. There was clear evidence of the positive interactions between parents and their infants. During the first session, one observer commented:

The first baby that stood out for me was Isla and her mum, Sonia. Both were relaxing on the floor. Isla was dressed in comfortable light trousers, and woollen jersey and a woollen hat. Isla sitting on her mum's lap, back against mum's front (facing outwards to the group). Isla is watching and listening to Leanne's voice who is sitting opposite her. She looks around at group (most sitting on chairs, couch and the red ottomam). Sonia turns Isla towards her, but Isla wants to continue to look at group. Mum brings her in closer to her — cradling her, Isla is now attempting to suck Sonia's chin...., she cranes her neck, and flops backwards (with mum's support), sucking her own hands......upright again (mum helped), looks at other mums on couch (Nancy and Jody) — turns head to see others behind. (Observer's records, Week 1, Unit 1, Action research cycle 2).

As one of the observers noticed:

Isla holds/grips both hands, some fingers poking out of her fists – attempting to suck thumb?? She's really interested on what's going on around her – not so much focused on the surroundings but more on the people. She can focus and hold her focus on people who are some distance away. Her neck supports her head well. She responds to noises, voices and sounds around her. (Observer's records, Week 1, Unit 1, Action research cycle 2).

As facilitators we were conscious of the individual needs of the infants wanting to ensure we provided the appropriate learning experiences. The infant was one of the older infants on session, so we discussed and agreed to providing equipment that would be openended.

A facilitator reflected:

I had also talked with Sonia and Arnna, about the fact that we were conscious that Emma and Isla were older than the others and so we wanted to make sure that their needs were met, so we set up their own treasure baskets for them to explore. They seemed to be really happy with that and both commented on how great it was to have two infants the same age as they both thought they were the older ones. (Facilitator's reflections, Week 1, Unit 1, Action research cycle 2).

It was wonderful to see how, with the introduction of treasure baskets in the previous week, the infants now have the opportunity to explore the objects supported by the mothers:

Topic time. Sonia was sitting on the floor, with Isla on her lap. Sonia pulled the heuristic play basket closer to Isla, and Isla leaned towards it and chose the bottling rings tied together with rope.

She actively explored the bottling rings – transferring them between her hands, holding them with both hands, gripping them with her gums, rolling her tongue around the rings. She dropped the rings, and reached down (with Sonia supporting her) and picked it up again, ignoring another toy that it had dropped next to.

Sonia rocked Isla gently from side to side. Isla was comfortably nestled in Sonia's lap, and her body was very still apart from her focus on the bottling rings.

Isla discovered the tasselled end on the rope that tied the rings together. She held the rope steady with one hand, and ran her fingers over the tassels. She gave it a quick shake, then pulled it back to her mouth.

Isla dropped the rings again, and this time she couldn't reach them by stretching her arms towards them. Instead she picked up a netting bag with jar lids in it, turned it around and around and looked at it. Her interest in this bag didn't last long, but she had spent 15 minutes exploring the bottling rings.

Next she explored a long piece of driftwood. She held it like a bottle, with both hands. She had a really good suck on one end of it, eyes looking around the room as she sucked, but not at Jacob (who was down below her eye level)

At this point, Sonia put Isla down on the ground on her back so that she could pick up another babe next to her who was restless. On the floor Isla rolled on to her tummy, and discovered Emma's feet.

She used the handles of the heuristic play basket to pull herself towards the basket, chose a woollen ball then dropped it. She rolled several times from back to front and front to back, waved her arms and legs and vocalised a little.

Sonia offered Isla the driftwood back, and she took it. Although she was facing Emma, she was more focused on the driftwood than Emma. She explored the driftwood for 5 minutes.

Emma was lying on her back next to Isla, holding a bunch of keys that Anna had given her. Isla saw this, and reached out and took the keys from Emma. Sonia noticed this, and passed Emma another bunch of keys. Isla took them from her too! Then she rolled onto her back and played with the keys. She was much freer to play lying on her back. While she was on her back, she kicked her legs onto the floor – thump, thump over and over.

Summary – Isla freely chose from the heuristic play basket. Some items grabbed her attention more than others, and she persisted in playing with them. It was easier for her to explore the toys sitting on mum's lap and lying on her back. The heuristic play equipment seemed to attract her more than the people around her. (Observer's records, Week 2, Unit 1, Action research cycle 2).

We added an extra Treasure basket for Emma and Isla as they are grasping, holding, and mouthing wanting to explore. (Facilitator's reflections, Week 2, Unit 1, Action research cycle 2).

Isla's mobility added a new dimension to her exploring and interacting with other infants, parents, and facilitators.

Isla is pulling herself up on the mirror partition. She is blowing raspberries with her tongue. She leans on the mirror (seems to be feeling her balance as she has her eyes shut). She says "ahhh, ehhh, cough, ahhh (high pitched). She bends down, squats, looks up at Marion with her index finger in her mouth, she wobbles, leans over to her side, drops to the ground and crawls on her tummy towards a group of infants. Leanne strokes her back, she picks up a toy, looks at it, turns it over, drops it, turns around and sits in front of the mirror holding a poi. She rolls onto her back, swings the poi in the air, brings it to her mouth, looks at it again, puts it back in her mouth.

Isla crawls over and picks up puzzle pieces alongside Georgia. They are both handling the pieces (almost taking turns). Marian helps G to bang two pieces together – both Isla and Georgia stop what they are doing and watch the pieces banging together, smiling. Isla says "Heyeh". Amy crawls over and they all look at the pieces, watching each other. Georgia bangs two pieces together (without Mum's help), A and I watch her. Isla drops her piece and crawls away from the group. Georgia and Amy hold several different pieces each, regularly mouthing them and occasionally looking at each other. They continue to make eye contact for several minutes while they sit there.

Isla returns to the group and reaches for the same piece that Georgia has. Isla hands a piece to G, G takes it, they look at each other. Isla hands another piece to G, which she takes and they look at each other again. This is repeated 3 times. Isla turns her back on G and G reaches out and touches I's head. She repeats this. Isla turns around and they look at each other again. I pushes the puzzle board away from her and then crawls after it. Georgia watches her and then sits looking around the room.

Later (about 15 minutes) Georgia and Isla are sitting upright facing each other. Isla has a tin. She puts it down, Georgia picks it up and holds it up. Isla moves onto her tummy and crawls closer to G. She puts two egg shakers into the tin while G holds it. They both try to look into the tin at the same time. I puts a puzzle piece into the tin and they both look in. Isla takes the tin from G and turns around. Georgia picks up a puzzle piece, rolls onto her back holding the piece, looking up at the roof. She rolls from side to side saying "ahhhh". She rolls again, backwards and forwards. Isla continues to sit putting things in and out of the tin. She tips it up near her face and then reaches in to take things out.

Isla is now commando crawling and heads off towards the new infant area set up in the centre. She is moving around the area picking up different toys and touching different pieces of equipment. She crawls back out of the area and stops by the little chair. She slides it backwards and forwards on the floor, holding it by one hand. IT makes a scraping noise and she looks around the room and smiles. She stops, looks in the box beside the chair and then reaches back towards the chair and begins moving it again, She turns around whilst still holding the chair and notices Leanne and Emma now in the infant area. She crawls back over to the area and beings picking up and exploring different equipment. (Observer's records, Week 4, Unit 2, Action research cycle 2).

An infant enjoys being part of a new experience, even if is what parent initiated:

Sonia brings Isla to the foot and hand printing. Isla looks at me and watches Leanne paint her hand. She looks at the print when it is done and watches the print happening. (She is very aware of the whole process and seems to be working out what is happening). She holds her hand open and willingly lets it be printed again and again. (The activity seems to be as much fun for her as it is for the adult's benefit). (Observer's records, Week 5, Unit 1, Action research cycle 2).

Having access to the environment that is child initiated, encourages opportunities for physical exploration and problem solving.

As people begin to leave Isla is still on the mat. There is a lot more room now and Isla commando crawls over to someone else's drinking cup on the floor. She picks it up, rolls onto her back and explores the cup with her eyes, hands and mouth. She continues to crawl across the floor, pushing a toy on front of her, reaching for it, catching it and then pushing it away again to crawl after it. (Observer's records, Week 6, Unit 1, Action research cycle 2).

Isla was having an amazing time with the items. She was positioned on the floor on her tummy. Playing with a large stainless steel bowl (mouthing it and rolling it between her two hands), she then discarded this and rolled over to the basket where she picked out a metal spoon. While on her back, she held it in her right hand and rolled over on her tummy, where she noticed a wooden object. She banged the spoon on this object and then she turned and banged the spoon onto a metal object lying near the basket. She noticed the noise it made and turned to bang the wooden item. She held onto the spoon and managed to roll herself over to the stainless bowl (same one as before) and started to bang this. Incredible – I wonder if she realized that the materials were the same so that they would make the same noise. Did she feel it may be similar noise as it has the same look and felt the same when she touched it. (Facilitator's reflections, Week 6, Unit 1, Action research cycle 2).

Drawing on a concept presented by another COI, an activity was planned for an infant to provide rich new experiences. This parent had no expectations for the infant on how to explore, but it was fascinating to watch how she followed the infant's cues:

Body Painting: An area behind the couch and near the heater is set up. Layers of newspapers are taped onto the floor. Justine has prepped two large bowls of paint – white and yellow. There is a towel and the chub is organized for washing infants in. The room is warm. Sonia brings Isla to the area. Isla has a nappy on. She is tentative about lying on the paint. She's happy with her hands in paint. She uses pincer grip and rubs her finger and thump together. Isla holds her hand high. Mum does 'high 5' action. (Observer's records, Week 6, Unit 1, Action research cycle 2).

After the discussion, I shared with the group what we had planned for Isla, the body painting, and mentioned that we would provide the opportunity for this experience another time, but that if people could give Isla a little space to explore the paint. Thanks to Kathy who had set up the painting area — Sonia really got stuck in with Isla and the relationship was so inspiring to watch. She gave Isla time to warm up and had no expectations, allowing Isla to explore at her own pace, but still encouraging her and supporting her by role modeling. She was in no hurry and just spent the time on the floor exploring with Isla. (Facilitator's reflections, Week 6, Unit 1, Action research cycle 2).

The next observational excerpt shows Isla learning together with the facilitator, alongside her mother:

Isla sits in the sand and feels the sand with her fingers and toes. She reaches for her toes, to feel the sand that is now stuck to them. Mum makes her pretend cakes and sings her "Happy Birthday". she tells Isla it is like her cake yesterday. (Isla had her first birthday yesterday). Justine introduces some small containers of water to the sandpit and Isla notices immediately. She asks mum to pass her one, pointing and squealing to communicate her needs. Mum puts it in front of her and Isla dips her fingers in. (Photo). Isla tips some of the water from the container into the sand

next to her several times and mixes the wet sand with her fingers. Then she bashes the container (now empty) into the sand. She looks at mum and squeals at her, holding onto the container. Mum is busy chatting so Isla goes back to the container and uses her fingers to put sand into it. She looks at the sand intently as it trickles into the container from her open hand. (Observer's records, Week 2, Unit 3, Action research cycle 2).

This excerpt concerns mobility expectations, familiarity, and anticipation during self selective play:

Timothy Isla and Amy in the family area

Timothy, Isla and Amy go into the family area. Amy has a piece of folded paper and stands at the table opening it. Timothy is on the floor underneath and has a plastic plate. He tosses it on the floor, picks it up, puts it down, passes it from one hand to another and throws it ahead of himself. He crawls after it. Then slides it across the floor, still crawling after it.

Isla has a phone in her hand and stands at the desk. Amy is on the other phone at the table. Then they both discover the keyboard and both push the buttons. They swap places, walking along the furniture and around each other. (The group on the rug are now blowing bubbles to the Sugar Plum Fairy music.) Amy notices and goes to see. Isla watches for a little longer from the family area and then goes to see too. Amy is quickly in the middle of the rug and trying to touch the bubbles. She sits. Isla crawls after them and up to Leanne who has the bubbles. She reaches for the wand and watches Jane who also has them. Amy is still content with trying to catch them. Isla claps when Leanne blows and watches. She claps again next time she blows lots of bubbles. Leanne stops but Isla continues to follow the bubbles. She goes to see Katherine who also has them. (Observer's records, Week 3, Unit 2, Action research cycle 2).

To sum up, these are some personal reflections from Isla's parent, Sonia:

Sonia: For myself, I really enjoyed some of the sessions that they explained about child development and the brain development – I found that really fascinating and just some of those concepts to do with child development that and the ideas that we can practically put to use to help her develop. And then I guess for Isla I really enjoyed seeing her, oh well I liked when we started, she was really into the treasure baskets and it was just really fun watching her exploring and all of the things in the treasure baskets and, just watching her and like going around and interacting with the other infants and all the other mums. She's a very sociable little child, so it was really neat watching her being able to really explore and be in a safe place to do, and accepting place to do that. (Parent exit interview, Action research cycle 2).