

**OCCASIONAL PAPER No. 7
2000**

**Pedagogical documentation :
Beyond observations**

Sophie Alcock

Series Editor: Carmen Dalli

**Institute for Early Childhood Studies
Victoria University of Wellington
PO Box 600
Wellington
New Zealand**

ISBN 0-475-20060-8

CONTENTS

Introduction	1
What is pedagogical documentation?	1
Setting the scene	3
Interpretations and implications of the policy context	9
An action research project: Reflecting on some traditions and tools of pedagogical documentation	12
Considerations and challenges for teachers using documentation	27
References	32

INTRODUCTION

This paper explores some of the issues for teachers in New Zealand / Aotearoa using pedagogical documentation. My interest in pedagogical documentation developed after visiting Sweden and Denmark as the 1996 recipient of the Margaret M. Blackwell Travel Study Fellowship. To my surprise “Reggio Emilia inspired” documentation was a prominent focus of discussion among many practitioners and some administrators and academics. The surprise was because Reggio Emilia is in Italy and I was in Scandinavia: a different cultural climate. My interest in pedagogical documentation has also stemmed from my observations, as a professional development facilitator, of stressed-out teachers collating extensive collections of unreflective written child observations for unclear reasons. The third stimulus for this paper developed from the first two, and was a small case study research project which involved myself, as a researcher and a professional development facilitator, working with four teachers in a childcare centre, over a six-month period. The professional development focus was on the teachers’ *use* of pedagogical documentation while the research programme explored the teachers’ *understandings*. This paper is, however, broader than the research project. It is divided into five sections. The first three sections review the literature, and the historical and current policy contexts of documentation. Sections 4 and 5 describe the research project and present some insights gained about teachers’ use of documentation. The five sections are:

1. What is pedagogical documentation ?
2. Setting the scene: policy, history and culture
3. Interpretations and implications of the policy context
4. An action research project: Reflecting on some traditions and tools of pedagogical documentation
5. Considerations and challenges for teachers using documentation.

1. WHAT IS PEDAGOGICAL DOCUMENTATION?

Pedagogical documentation can be defined as all documentation that has pedagogy as its focus. The documentation may be thought of as *content* and the pedagogy as *process*. In this way pedagogical documentation can be used as a tool for mediating

the understandings of both adults and children. By making children's thinking visible documentation facilitates teaching and learning. In the literature, the terms documentation and pedagogical documentation are often used interchangeably for referring to pedagogical documentation. However, pedagogical documentation is not to be confused with administrative documentation which encompasses, among others, documentation about policies, procedures, nappy changing and sleeping schedules.

The content of pedagogical documentation can include:

- children's works;
- photographs, plans and drafts of work in progress;
- audio / video tape recordings of children and teachers in action;
- written transcriptions of children's taped and spontaneous articulations;
- comments and interviews;
- illustrations and child observations.

Ideally this documentation is publicly displayed as photos or as original works on walls, shelves and tables (Dahlberg, 1995). Documentation displayed thus can stimulate memory and reflection in viewers and provide continuity for the planned programme. However, in my experience, the idea of displaying pedagogical documentation in New Zealand centres is usually constrained by insufficient clear wall space. Sometimes documentation display is also constrained by teachers' misinterpretations of the Privacy Act (1993) and their consequent fear of individual children's documentation being seen by parents other than the children's own. Ironically walls are frequently crammed with painted products. Without any analytical explanation and explicit linkage to learning goals or outcomes these colourful products can create a sense of chaotic clutter rather than inspiring pedagogical reflection. In my view products displayed thus, are not pedagogical documentation. The largely descriptive explanations which sometimes accompany these products do not engender the sort of questioning and understanding responses in viewers, that clearly displayed pedagogical documentation provokes.

Child portfolios (profiles) and other observation-based documentation systems may be regarded as less public forms of pedagogical documentation if they are used pedagogically, to inform learning and teaching. That is what can distinguish portfolios

from being private files for posterity and accountability. As this paper points out, it is this process of how documentation is used that determines the pedagogical value of the documentation (Dahlberg, 1995).

Tools for teachers carrying out the documentation process can include:

- cameras;
- audio and /or video recorders;
- computers and photocopiers;
- pen and paper.

I am tempted to add “voices” to this list of mainly technological tools, emphasising the critical importance of talk in the process of pedagogical documentation. After all language is a cultural tool for mediating and developing shared understandings. Dahlberg (1995), Lenz Taguchi (1997) and Vecchi (1993) have described the documentation process as encompassing reflection, *discussion* and action, based on acknowledging diverse interpretations of the documentation products. This collaborative, collegial *discussion* is a way of connecting theory with practice and is essential to the mediating function of documentation. Without this pedagogical *process* documentation can deteriorate into a meaningless paper collecting exercise.

2. SETTING THE SCENE

2.1 The current policy context

Assessment and evaluation are internationally important educational and political issues (Wylie, 1994). Pedagogical documentation has an important role in both issues; however, pedagogical documentation is broader than assessment and evaluation. Pedagogical documentation involves the development of shared understandings about children’s learning, with a variety of “stakeholder” groups. It therefore acknowledges and affirms the diversity of “stakeholder” groups’ understandings of worthwhile learning. Pedagogical documentation may also be used to challenge accepted assessment practices such as the obsessive and sometimes exclusive reliance on individually written observations of individual children. In New Zealand / Aotearoa concepts of assessment and evaluation have recently received an added impetus from several areas including:

- the creation in 1990 of the Education Review Office, a crown agency which audits early childhood centres to evaluate how well centres are meeting their charter undertakings to the Government (including how centres evaluate their programmes);
- the mandating (1991) and revision (1996) of the Government's Statement of Desirable Objectives and Practices for chartered early childhood services (DOPs) and associated professional development programmes to assist centres in implementing the DOPs. DOPs have become the crux of Charters (Ministry of Education, 1998). All chartered (funded) early childhood services must comply with the DOPs.
- the publication of the draft and final versions of the early childhood curriculum, *Te Whaariki* (Ministry of Education, 1993, 1996), associated professional development programmes to support centres implementing *Te Whaariki*, as well as Ministry of Education sponsored research exploring the use of *Te Whaariki* in assessment and evaluation;
- challenges to predominant theories of learning (Rogoff, 1990; Vygotsky, 1978; Wertsch, 1985), which are redefining the image of the child and the consequent role of adults in relation to children. This redefined image views the child as actively co-constructing knowledge "through responsive and reciprocal relationships with people, places and things" (Te Whaariki, 1996, p. 14) within particular cultural contexts and it has implications for how teachers organise relationships and interactions with children, parents and whanau.
- the general climate of accountability that stems from the monetarist perspective which pervades current social policy and education (Wylie, 1994).

The place of pedagogical documentation in relation to these themes will be addressed throughout this paper. An important focus of this paper is the practical use, for early childhood teachers, of pedagogical documentation in relation to DOPs requirements. This practical focus acknowledges the current political importance of teachers' use of pedagogical documentation for accountability: assessment of learning and evaluation of programmes. In this way, teachers can publicise the value of early childhood services for children and society.

2.2 The historical context

The idea of pedagogical documentation is not a new 1990s trend. Child observations as a tool for documentation, were initially promoted in the 1890's by the American Child Study movement, under the founding leadership of G. Stanley Hall (Singer, 1992). He advocated child observations as a scientific method for assisting kindergarten teachers and mothers to *understand* children. During the 1920s-30s period, a wealth of observational research was carried out in the United States and Europe. Describing the range and nature of these observations Singer (1992) has written:

The first thing noticeable to a present-day psychologist is the descriptive character of a great deal of this research...Isaacs (1964) described the emotional relationships of the children in her nursery school: their loves, arguments, friendships, pleasures, jealousies, enmities and sexual curiosity. The subjects discussed by the researchers were more diverse than we are used to nowadays. Under the heading "emotional development" research can cover humour, children's jokes, boredom, pleasure, curiosity, crying, laughing, sex, jealousy, anger and fear (Arrington, 1943; Jersild, 1947). (cited in Singer, 1992, p. 81)

The child observations, carried out by researchers such as Susan Isaacs, Jean Piaget, Sigmund Freud and Margaret Buhler in Europe, are examples of pedagogical documentation because they were used as tools for studying and *understanding* the whole child, within an open paradigm, where preconceived standards such as developmental norms did not frame the observations. Isaacs frequently focused on studying the interactions of small groups of children, rather than individuals.

However, during the 1920s the second wave of the American Child Study Movement became aligned with research in the developing science of psychology and observations became a tool scientists used for studying child behaviour (Singer, 1992). Over time a "scientific expert" psychological perspective of children gradually displaced the mothers' *understanding* perspective. Written child observations became a tool in the empirical scientific trend which, under the leadership of psychologists such as Thorndike and Watson (Singer, 1992) emphasised tests, measurement and a

behaviourist paradigm. Since this period, the rationale of openly observing for *understanding* has gradually been replaced by a narrower use of observations as a tool for categorizing individual children according to preconceived constructs such as psychological developmental norms. Child behaviour is often discussed in terms of artificial and naive categories such as physical, emotional, social and cognitive/ intellectual/ linguistic stages of development, which are used to analyse so-called objective behaviour-based child observations. This use of observations reflects a scientific positivist perspective as well as the lingering influence of a behaviourist paradigm on developmental psychology.

Just as the exploratory use of written observations for understanding, rather than categorising children, is not new, neither is the use of visual images. Within anthropology, Bateson and Mead (1942) experimented extensively in the 1930's with the use of photographs and film to capture the character of Balinese people. They felt that the words of written ethnographic observations could not adequately record the ethos, or the wholeness of people. However, since this 1930s -1940s period the use of photographs as serious documentation for understanding people has been largely ignored and photography has been relegated within the social sciences to the status of "unscientific" photo journalism (Wiedel, 1995).

The present day emphasis on pedagogical documentation seeks to *understand* the whole child in context, acknowledging a diversity of perspectives and interpretations. Acknowledging diversity, teachers document with a variety of technological tools, as well as children's own voiced ideas. In this way pedagogical documentation can assist the development of shared understandings of children within the social, historical and cultural contexts which influence their co-construction of learning, thinking and knowledge. Through openly sharing pedagogical documentation, teachers, children and other "stakeholders" all become learners.

2.3 The cultural context

Present day interest in pedagogical documentation seems to derive its inspiration from the importance placed on documentation in Reggio Emilia, despite the earlier origins of documentation as child study. Internationally Reggio Emilia has become a symbol for utopian early childhood programmes (Johnson, 1999). As the social, historical and cultural (wealthy communist) context of Reggio Emilia centres differs from that of its admirers and imitators it is neither possible, nor necessarily desirable, to attempt to replicate Reggio Emilia programmes in their entirety in contexts outside Reggio Emilia. However, documentation as it is used in Reggio Emilia, may be used as a tool for mediating the understandings of children in their own diverse social, cultural and historical contexts (Dahlberg, 1995; Lenz Taguchi, 1997).

Widely publicised, internationally circulated children's art exhibitions display the pedagogical documentation created by and about children in Reggio Emilia. Within the Reggio Emilia centres themselves, beautifully displayed pedagogical documentation on walls and shelves serves several functions including:

- contributing to the aesthetic awareness of children and adults;
- allowing adults and children to revisit experiences
- demonstrating publicly the creativity and competence of young children;
- making public the thinking and learning processes of young children.

(Edwards, Gandini & Forman, 1993; Gandini, 1993; Katz, 1993).

Although the Reggio Emilia model of early childhood education is famous for documentation of art, children there are taught and encouraged to express and develop their ideas by using a variety of symbol systems to communicate thinking and feeling. These "hundred languages" (Malaguzzi, 1993) can include various art media as well as for example; discussion, puppetry, drama, mathematics, music and movement. Technological tools such as audio and video cameras and photographs visually and aurally document these creative and expressive processes providing a documentary archive about children's thinking and learning. Pedagogical documentation in all its forms is the essential lynchpin for recording and reflecting on past learning, from multiple perspectives, via multiple "languages" (Katz 1993, Katz and Chard 1996, Dahlberg 1995, Lenz Taguchi 1997, Vecchi 1993). This process ensures that present and future programmes retain meaning and relevance to children's learning. The

acknowledgement of diverse “languages” for thinking and communicating has important implications for valuing and respecting diversity in any place or culture. Multiple languages can facilitate communication between multiple groups, from children, to parents, to political and other “stakeholders”.

2.4 Documentation for public legitimation of early childhood education in Reggio Emilia and in Aotearoa / New Zealand

The use of pedagogical documentation to inform and communicate with a wide range of stakeholders can assist in the legitimation of early childhood education services by displaying the value of early childhood education to the wider community. In Reggio Emilia, the public face of pedagogical documentation keeps parents, families and all citizens informed of early childhood practices in their municipally funded centres (Dahlberg, 1995). In this way pedagogical documentation legitimises the programmes at a local political macro level (Bronfenbrenner, 1979). All citizens can see the value of quality early childhood programmes in the public pedagogical documentation.

There are many reasons why early childhood teachers in New Zealand/Aotearoa do not generally display and use documentation in this public way. On a macro level the reasons may reflect social values which emphasise privacy, competition and individualism. This contrasts with the traditional emphasis in the socialist (communist) Emilia Romagna region on collective public responsibilities. In New Zealand early childhood education is not regarded as a public responsibility. Here the government contributes a percentage towards service running costs and it is the responsibility of parents to pay the substantial balance. This is considered to be a 50:50 split. Legitimation of the sector is not helped when the Education Review Office (ERO) suggests that early childhood *education* is a misnomer (ERO, 1998). Therefore, early childhood teachers must somehow show the wider public how they do “educate” children. Pedagogical documentation can assist teachers to publicly articulate their teaching and children’s learning (Dahlberg & Aasen, 1998). At a micro level (Bronfenbrenner, 1979) many centres in this country do use some forms of pedagogical documentation for the ongoing formative assessment of children’s learning and evaluation of their programmes. Written child observations are probably the most prevalent form of documentation. However, the pedagogical

value of this documentation may be limited when it is collected for specific audiences and not used to inform curriculum planning. For example, the observations written into portfolios for parents may differ from the observations teachers use to plan curriculum. Ideally the same documentation can efficiently and usefully inform parents/ caregivers, whanau, teachers, children, the Education Review Office and the curriculum programme.

Some challenges for teachers in Aotearoa / New Zealand to consider when using documentation to publicly demonstrate the value of quality early childhood education programmes, concern:

- a) how documentation can inform multiple audiences,
- b) what learning is worth documenting, and
- c) how it can best be documented.

Bearing these issues in mind, teachers can use pedagogical documentation to assist them in both publicizing, and advocating for, quality early childhood education.

3. INTERPRETATIONS AND IMPLICATIONS OF THE POLICY CONTEXT

3.1 The Statement of Desirable Objectives and Practices (DOPs, 1990; 1996)

The DOPs (1990; 1996) express the government's expectations for quality early childhood education and appear to endorse the importance of both administrative and pedagogical documentation. They provide a policy perspective on documentation for accountability. The Education Review Office carries out audits of centres to review how well the centre management and educators are implementing the DOPs. However, Hurst (1995) has argued that the pedagogical content of a lot of the documentation that ERO checks is questionable. For example non-smoking legislation and other health and safety regulations require more documentation in the form of policies than is required for the curriculum. The current move by some centres towards developing curriculum policies is also worrying. Policies don't necessarily match practices, though as part of a managerial approach to education they may assist the ERO review process.

Launder and Dalli (1997) have suggested that the DOPs (1990) played a significant role in encouraging centres to collect information (documentation) about children in order to comply with the DOPs requirement for teachers to discuss and inform parents about children's progress. Prior to 1990 this type of accountability requirement did not exist. Systems for fulfilling the DOPs (1990) requirements emerged over time, through trial and error (Launder & Dalli, 1997). As a professional development facilitator from 1992 onwards, my general, though unsystematic and Wellington-based, impression has been that many teachers were motivated to collect information and develop individual child portfolios and other records of development, to fulfil what they perceived as ERO requirements and growing parental expectations. Observations written on "yellow post-its", and child portfolios, were some of the outcomes of the observation-gathering frenzy that developed in some centres. In my view understanding children and their learning was not the priority of this information-gathering exercise. Fulfilling DOPs requirements as interpreted by ERO evaluators was. The Education Review Office audits seemed to endorse this focus on child portfolios, possibly because they provided evidence that centres met the requirement of reporting to parents.

Ideally, pedagogical documentation can fulfill the DOPs requirements of reporting to parents about children's progress, while simultaneously informing curriculum planning, assisting children's learning and promoting teachers' reflective practice. Teachers' understandings of both pedagogical documentation and the DOPs (1996) are likely to influence their practice. For example DOP 8b (1996) may be interpreted narrowly, as endorsing traditional observations, or more broadly, as inclusive of pedagogical documentation. DOP 8b reads:

Educators should provide opportunities for parents/guardians to discuss, both formally and informally, their child's progress, interests, abilities and areas for development on a regular basis, sharing specific *observation-based* evidence (DOPs, 1996).

In support of a broader pedagogical interpretation of observations, "Quality in Action" the Ministry of Education's (1998) supporting document for the DOPs (1996), interprets observation thus:

Educators: observe, and gather information about children's thinking,

schemata, and learning, using a range of methods, including written observations, conversations with children, discussions with family/whanau, video and audio recordings, photographs and selected samples of children's work. (p. 30)

In order to avoid confusion it is important that educators and ERO are familiar with this broader interpretation of "*observation based evidence*".

The DOPs (1996) may also appear to endorse an individualistic focus as DOP 3 states:

Educators should demonstrate knowledge and understanding of the learning and development of each child, *identify learning goals for individual children*, and use this information as a basis for planning, evaluating and improving curriculum programmes. (DOPs, 1996)

Acknowledging that children learn through relationships, the supporting document interprets DOP 3 more widely than literally;

Educators, set learning objectives for individual children *and* groups of children. (MoE, 1998, p. 31)

This broader interpretation of DOP 3 appears also in DOP 2 which states:

Educators should demonstrate understanding of current theory and principles of learning and development... (DOP 2, 1996).

These statements suggest therefore that teachers and ERO need to interpret DOP 3 in the light of current learning theory (DOP 2) which acknowledges that learning is social and that context is critical and thus goals for small groups may sometimes be more appropriate than goals for individuals. Objective setting per se may also be questionable from the perspective of DOP 2 (1996).

DOP 5 consists of the five Te Whaariki (1993) "learning aims", renamed "strands", (Te Whaariki,1996): belonging, wellbeing, exploration communication and contribution (collaboration). Together they form the framework for an integrated curriculum. The revised DOPs (1996) essentially strengthened these foundational

curriculum strands of Te Whaariki (1996) by making their implementation mandatory for all chartered early childhood services from 1 August 1998. In accordance with the DOPs (1996), chartered early childhood services are now required to demonstrate for ERO how they are implementing the strands of Te Whaariki. Clearly pedagogical documentation is one method centres can use to do this while meeting the requirements of DOPs 2, 3, and 8. Written observations that focus exclusively on individual children are likely to decontextualise and thereby misrepresent learning. Such observations provide insufficient information for teachers “planning, implementing and evaluating curriculum” (DOP 5, 1996), which is consistent with Te Whaariki (1996). In contrast, ecologically sound observations of individual children focus on children’s interactions and, therefore, include the social (and physical) context. In early childhood centres, written observations that highlight learning and reflect the integrated nature of the strands of Te Whaariki will often become observations of small groups of children. They may also include teachers’ interactions with children.

4 AN ACTION RESEARCH PROJECT: REFLECTING ON SOME TRADITIONS AND TOOLS OF PEDAGOGICAL DOCUMENTATION

As mentioned in the introduction, I was both a researcher and a professional development facilitator in a small action research project, working collaboratively with four teachers in a full day childcare centre for six months in 1998. In this section I outline the project and insights that emerged for the teachers, and myself as a researcher. I also present some further reflections on the nature of pedagogical documentation, including the tools of documentation. I will call the centre “Kiwi” centre and the teachers; Annette, Bev, Henry and Ripeka. The research project involved the teachers exploring methods for documenting learning, which went beyond their current use of written child observations. From the start of the project the teachers were clear about two conditions. Firstly, that the documentation should not require more time than their current planning systems and secondly, that it should contribute usefully to both curriculum planning and informing parents. My intention was also that pedagogical documentation would present children as located in a more authentic learning context of interactions and relationships than the usual observations of individual children.

As a participant observer in the research project, I was the principal human research tool. Geertz (1983, p. 58, cited in Schwandt, (1994, p. 123)) has aptly described the overall aim of the participant observer as being: “to figure out what the devil they think they’re up to”. The detective data gathering role of the participant observer is extended and summarized in Denzin’s (1970) eclectic description of participant observation as “a field strategy that simultaneously combines document analysis, respondent and informant interviewing, direct participation and observation and introspection” (cited by Silverman D. 1993, p. 157). I did use these multiple strategies.

Over the six months of the study I attended about six staff planning meetings and fifteen centre sessions. Data gathered and generated as primary source data included the pedagogical documentation of children, which the teachers had compiled, as well as the documentation I assisted them to develop. Pedagogical documentation included wall displays of art works and photos (polaroid, photocopies and others), video recordings, written observations and individual child portfolios. This raw pedagogical documentation served multiple functions as well as being valid research data. It also provided a basis for teacher professional development, for reporting to parents and for assisting children to reflect on prior experiences.

For the purposes of my study, I made copies of video recordings and photographs, so the centre retained ownership of the original data. Children also received copies of photographs where they were the main subjects in the photograph. Reliability in data analysis was assisted by all staff viewing the videos, sharing written observations and analysing and discussing video segments and written observations as a group, at staff meetings. During session time, the children also saw the videos on a televideo and their viewer responses became part of my data. This raw documentation was a marvellous basis for triangulation, acknowledging the multiple perspectives and understandings of children as well as their teachers.

Through participant observation, taped semi-formal individual interviews and informal group and individual interviews and conversations, I tested my understandings about how the teachers interpreted and used this documentation in

their daily practice. In interviews with individual teachers I provided tape transcripts for verification and to confirm reliability. In this way analyses and emerging ideas were checked out, particularly with the supervisor who acted as a key informant. Her conclusions were frequently similar to my own which reaffirmed the validity of ongoing data analysis. These emergent research ideas became part of the action research process as the teachers explored documentation using various tools.

I used a journal for reflection and field notes and I typed up notes after each staff meeting and centre session. The teachers shared a centre journal. This began well and included focus questions and reflective comments and was referred to at staff meeting times. However, the greater importance of shared dialogue became increasingly apparent over the research period (Knowles, 1996), and the journal faded. The reasons for the journal fading were various, but primarily related to accessibility as, unknown to myself, it was usually kept locked in an office filing cabinet. This restricted its use.

Technological tools used for documentation by the teachers included a video camera, (a heavy old one and a modern light camcorder), tele-video for playback during sessions, a polaroid camera and an ordinary camera. An audio cassette player was introduced but due to constraints of time its use was not fully explored. The teachers said that they planned to explore the use of audio tapes. All the tools, except the normal camera, which the teachers had been using prior to the project, were introduced and used by myself working alongside the teachers before they used them. The way in which these tools mediated teachers' understandings of children's learning will be described and analysed in the following section.

4.1 The discourse of child observations in Kiwi centre

In Kiwi centre the structural constraints of centre life ensured that it was difficult for teachers to keep current with their planned written observations, with the result that the teachers frequently felt "behind". This was a recurrent and prominent issue in both formal and informal interviews with teachers. Written observations seemed to be a chore that teachers seldom felt on top of because of all the perceived constraints of

time, including staff sickness, working with relievers (who were not required to “do” observations), insufficient non-contact time and other unplanned events. Written observations were an administrative burden, for planning, portfolios and ERO. My experience as a professional development facilitator suggests that this is a common occurrence in many centres. For example, during the six month research period all four teachers in the research centre, pointed out to me on several occasions that they were “behind” in programme planning, or “hadn’t had programme planning” that fortnight. This meant that they had either, not done written observations on the three children whose turn it was to be observed, and/or they had not therefore, analysed these observations, nor developed written learning goals for the three individual focus children. Despite this perception of “being behind”, everything seemed to run as usual. To me, as an observer, the flexible programme structure seemed to be more dependent on regular relief teachers, clear rosters and predictable routines, than written child observations.

However, in stark contrast to this negative perspective, all the teachers advocated systematic observation as an invaluable tool for learning about children. Written child observations were unquestionably accepted by these teachers as also essential, at a theoretical level, for planning curriculum. The importance of written observations of individual children was apparent in staff programme planning meetings where staff discussed and reflected on their observations of children, and developed goals and strategies from their observation analyses. In these meetings, the teachers also included other information from parents as well as their informal (unwritten) observations; however, written observations formed the basis of the valued pedagogical information. The teachers debated and discussed goal setting and implementation strategies in detail, particularly around the goal subject, its specificity, and associated skills and knowledge. Planning seemed to be a more involved dialogic process than follow-up assessment. The focus on individual goals for individual children probably contributed to the lack of assessment follow-up, simply because there was a time lapse, of months, between children’s rostered observation weeks. Formal assessments also depended on written observations and it was difficult for the teachers to juggle observing children for assessment purposes, while simultaneously observing a new group of children for planning purposes. Planning did, however,

demand that teachers use informal assessment information, though they may not have called it assessment as it wasn't written observations.

The teachers did point out that the process whereby they now all observed the same three children was a huge advance over previous more individualised systems. The shared focus enhanced their collegiality as well as contributing to broader understandings of individual children. This suggests that the teachers learnt more about children through collaborative observation-based dialogue (Knowles 1996), than through individual teachers observing and planning for individual children. Though all the teachers valued written observations, Ripeka did feel that the emphasis on written observations could be reduced. For these teachers the emphasis had already been reduced from the previous system whereby they had individually been responsible for observing several different children to the present more collaborative, useful and enjoyable approach.

Child portfolios also gave prominence to written observations, despite the greater appeal for parents and children of more visual displays of learning (photographs). All the written parent feedback comments in Kiwi centre's portfolios related to photos. The children also showed obvious enjoyment and interest when revisiting experiences, through pictures.

4.2 Including the children's voice as a technique in Kiwi centre

The inclusion of children's perspectives or "voice" (Smith, 1998), in the planning, assessment-documentation process is not a usual policy in centres I am familiar with, (including Kiwi centre), though some are currently exploring this issue. Traditionally adults have relied on their observations of individual children, where they use their "superior" understandings to develop appropriate learning goals for children. The deliberate inclusion of children in planning and assessment has not been part of this way of working. Within a socio-cultural perspective, on the other hand, knowledge and learning are seen as socially and culturally constructed, so the view that children passively recreate existing knowledge exemplified in observations which record adults' "superior" understandings, is fundamentally flawed. Thus, the inclusion of children's "voices" in the planning and documentation process is compatible with a

socio-cultural perspective where children and adults are seen to work alongside each other in co-constructing knowledge and understandings.

It follows, therefore, that one way of respecting children as people and subjects in a shared culture, is to include their voices in the documentation, planning and assessment process. In Kiwi centre there was one occasion where this inclusion was made quite explicit:

The teachers in a staff meeting were having difficulty deciding what to plan for April, despite using their observations and other knowledge of April. As a facilitator I suggested that they ask April what she'd like to do, including her in the process. April was three years old, and seemed confident and articulate (Sophie's journal record, June 1998).

At Kiwi centre I observed that children were tacitly included in aspects of planning that affected them, such as when the teachers arranged the physical environment to facilitate children's activity choices. However, the process of inclusion could have been made more explicit, as in the example above, and through the use of visual documentation which children can "read".

As the project proceeded, it became clear that the teachers in the research centre were becoming increasingly aware of *how* they included children when using photos as pedagogical documentation. This awareness was heightened as they experimented with the instantaneous results of using a polaroid camera and began to use children's verbatim descriptions and explanations of the photos. These children's words provided interesting and useful clues to children's understandings as well as involved children more actively in the documentation process. Four-year old Else demonstrated a wonderful confidence in her physical skills and delightful use of language. Describing a polaroid photo she said:

I can go really fast on this bike without falling off. Some people call me a cool cat (Else, March, 1998).

Fred (4 years old) was clearly involved in developing working theories when he described himself in the photo,

He's going through the slime and water and he can't get through it because

there's so much slime on the road (Fred, March, 1998).

For another photo of the same scene Fred said,

I'm testing the sticky stuff with the bike" (after pouring sticky stuff onto the path, (Fred, March, 1998).

Extending on working theories Gregory's explanation of a house building photo was that the house was in preparation for an earthquake,

so when the centre breaks we can go in here (Gregory, 3 years old, April, 1998).

In these examples the children's text added considerable meaning and context which the photos alone would not have conveyed.

These examples also indicate that when teachers included the children's voices, the children gained some control over how their experiences were documented. This approach reduces the adult:child power imbalance, thereby contributing to the development of reciprocal relationships (Te Whaariki, 1996). This is important if children are to be perceived as subjects, actively engaged in their own development, co-constructing and creating knowledge, rather than being perceived as passively observed objects to be filled with knowledge. In this sense, the protocols of qualitative research apply to teachers, just as much as to researchers, through emphasising the importance of checking out documentation data with the children as research participants.

4.3 Reflections on inclusive documentation in Kiwi centre

Active involvement of children in planning and documentation is an area ripe for further exploration. It holds the potential of overcoming the present over-reliance on individual written observations done "to" children. The use of a variety of documentation techniques can provide a more inclusive, triangulated understanding of children than that provided by decontextualised individual child observations. In my study of teachers using pedagogical documentation I became increasingly aware of the pedagogical importance of unwritten observations as a form of documentation for

stimulating pedagogical discussions. Among the four teachers, multiple perspectives of documentation (including unwritten and written observations), did stimulate collaborative dialogue and provide a basis for planning which linked practice to theory while acknowledging the complexity of learning. In their planning meetings the teachers became engaged in deconstructing and reconstructing their pedagogical practice through dialogue around the planning process itself, as well as the documentation of individual children in context. For these teachers, discourse around the place of written observations of individual children remained a challenging issue as they sought to plan a curriculum which promoted learning through relationships and group-based routines. From an outsider perspective it seemed that a more explicit focus on planning and documenting the interactions of individuals and small groups might reduce this individual:group tension and highlight learning through relationships.

4.4 Technological tools used in Kiwi centre

In a move away from the almost exclusive reliance on written observations of individual children for planning curriculum, teachers in the research project used video, polaroid and ordinary photographs to explore ways of visually documenting children's learning. These techniques for capturing children's "voice" supplemented the written observations of focus children. This slow cyclical planning process appeared to work for them, as they discussed observations, visual, written and unwritten, from their different perspectives, focussing on three rostered children each fortnight.

The technological tools used in the research centre were all observation-based and relied on visual images, from various perspectives. This visual focus was intended to make otherwise invisible learning processes visible, acknowledging that words/text alone may be insufficient for this purpose. The advantage of using a variety of tools for documentation was summarised by teachers Annette and Ripeka:

Annette: Well, initially documentation was to me just a written report of children's learning, ...well now I can see that it's more than just a written report. You can record in lots of other ways, as we have been doing with the

photographs, which is really effective because you can actually get a lot more information, especially with a video tape... by doing all these other ways of documenting children's learning it probably provides a more holistic picture, I think, of it all. (A. tape 24/6/98, p. 1)

Ripeka: I think it's basically more of a broader outlook because we've just been concentrating on written observations and doing it that way whereas like using the video and the taperecorder you pick up on more and you see different things from different angles and different perceptions and things (R., tape 26/6/98 p. 26).

4.4.1 Photographs

The teachers in Kiwi centre had been using photographs, as snapshots in child portfolios and on wall displays, for several years, though they had not linked photos explicitly to children's learning. Photos, like children's original works in portfolios, were add-ons to the more important written observations. For example, a lot of portfolios in Kiwi centre contained wonderful photos of children happily engaged in "messy play". With a few explanatory details these photos could have been linked to Te Whaariki, and possibly posed goals for ongoing learning. Bev described how the documentation of whanau photos contributed to the curriculum programme theoretically (Te Whaariki: Belonging) and practically (they formed a basis for discussion):

Bev: I've related (photos) to the belongings strand of Te Whaariki...When I put the photos up and we talked about them. They (children) were bringing in their friends to show them who their whanau was...and it's for the families too, but often like a child will go up to their own photo and the other children will come along...the person who has joined them will say "come and look at my photos", so it's a fairly reciprocal arrangement. (Bev, tape 26/6/98 p. 13)

At the start of the project, the teachers already found photographs a useful medium for capturing moments which they judged to be important. Photos and other images can contribute to a more inclusive and democratic environment for young children because they can access and interpret this sort of documentation, when it is displayed

appropriately, on walls and in accessible portfolios. During the research period there was an increase in the display of photos as documentation, at child height on the centre walls. The teachers pointed out that the research and professional development focus on documentation had contributed to more photos being taken (Bev. tape 26/6/98, p.11). The related accessibility of equipment illustrates one issue of using technology:

We've often got a film in it now whereas before we didn't often get a film for the camera. (Bev. tape 26/6/98, p. 11)

By retaining the vividness of the past, in the present, photos are likely to stimulate and assist children to reflect on the photographed experience. For adults too photos can capture a depth and richness beyond words (Bateson & Mead, 1942; Wiedel, 1995). After the project, three of the four teachers pointed out that they preferred photographs to video because photographs are more concretely visible than video film footage.

4.4.2 Video

The preparation required to leave children, get the camera from the office and set it up, including charging the battery, created barriers to teachers using the video camera. It potentially interrupted the flow of play and the engagement of teachers with children. When the televideo was used for playback during session time an adult had to stay nearby to ensure that two-year-olds didn't post things into it, or try other damaging experiments. Both the teachers and I found the mini video camcorder less physically intrusive and a lot easier to manage than the larger video cameras. When using the mini camera we could talk with children while simultaneously filming them, almost as a participant observer, with a rather obtrusive third eye, which children seemed to ignore after the first few minutes.

Video also required time, at least equal to that spent videoing, just to view the recording. Analysing it required still more time after centre hours. When this barrier

was overcome, however, video segments of “critical incidents” did provide useful documentation for the programme planning meetings.

By highlighting situations the video stimulated reflection and challenged some assumptions among the teachers. Some examples were: the large amount of time Oscar spent lying on the floor, the skill of some of the child carpenters, the articulateness of Jill and Else being interviewed on camera, the evidence that Tim and Jim were very adept at making complicated masks without adult help and proof that the older children weren’t monopolising teacher time after all. Video also made the social and physical context of children’s learning explicit and highlighted the impossibility of focusing on individual children without including others.

The centre had the use of a portable televideo for several weeks making immediate video playback possible. With this facility, the video was used as a tool by some children, though usually with an adult doing the videoing at a child’s request. I recorded one of these instances as follows:

Gregory asked me to video him making a block construction, from start to finish. I did this. It took 15 minutes. He and a child helper then viewed the video with some interest and humour as they sat next to the completed block construction. The helper, Aline, told Gregory “say hello to Gregory on TV”, which he did, with great hilarity and repetition. Aline and Gregory then compared their block construction to the one on TV. It was an intricately balanced complicated construction. (Sophie’s journal, March 1998)

Not only was Gregory empowered to initiate this documentation, involving himself in the documentation process, but his and Aline’s reflection on the block construction became an explicit part of the documentation process. Documentation seemed to stimulate both the initial construction and later humorous reflection. On other occasions the teachers replayed video footage to all the children as a group, with mixed results and great initial interest. On viewing himself making a mask, Tim’s reaction was to go and fetch the mask from his locker and re-examine it, so the replay prompted memory and reflection for Tim. However, the novelty wore off after three days, with some of the older children, including Tim, stating that they would prefer “real” videos, by which they meant commercially produced children’s programmes. I

wondered if replay may have been more effective for facilitating child reflection when a small group were involved in a specific experience, like Gregory and Aline with the block construction, rather than all the children together viewing the video which only showed some of them.

4.4.3 Polaroid camera

In using the polaroid camera the children also seemed to develop some control and ownership over the documentation process. This was demonstrated when they began asking for their photos to be taken in what were, to them, significant poses, such as around a flying ship a small group had constructed. The polaroid seemed appropriate for this type of posed photograph because the act of using the polaroid did otherwise interrupt concentrated play, so that photograph-taking became a technological experience in itself. The polaroid interrupted play by making a busy noise and producing almost instantaneous results so that children could both hear and see the camera working and the film developing. As a technological tool it was fascinating for adults and children alike. The immediate results and active involvement in the photographic process probably enhanced children's awareness of photographs, as well as the incident photographed. This awareness was further extended as colour photocopies were made of the photos, enabling children to take home their photos, while retaining a copy on the centre wall, a process which also enhanced communication with families. The ordinary camera was, however, less intrusive and therefore seemed more appropriate for taking a series of photos documenting a creative or constructive process, such as building, playing and/or painting.

4.5 Reflections beyond the study

This section extends beyond the research project at Kiwi centre and describes some further insights on the nature of pedagogical documentation. It focuses on child observations, the use of photographs and the inclusion of children in the documentation process.

4.5.1 Observations as documentation

One interpretation of the use of observations which the research project did not explore is the more sinister Foucauldian view that observations intrude on children's

privacy, and take advantage of their powerlessness. From this perspective observations may create a subject versus object barrier between the observer and the observed, disempowering children as objects. This view of children as objects may also be reflected in the Western idea of children's play culture as separate from adult's work culture. One way around this separation may be for teachers to use pedagogical documentation as a tool for reflecting critically on the content and nature of children's learning (and play) and teacher's teaching (and work). The teachers in the research project were too tied to everyday practicalities to use pedagogical documentation in this critically, questioning, post-modern way.

However, because written child observations have become a dominant discourse in early childhood education programmes, it does seem important to critically question their status and purpose. Pre-service training courses, professional development courses and early childhood education text books attribute considerable importance to written individual child observations, reinforcing for teachers the important role of these observations in quality programmes (Arthur et al., 1996; Faragher & MacNaughton, 1990; Hutchin, 1996; Pascal & Bertram, 1997). Influential Piagetian-based views about early childhood practices, including the concept of developmentally appropriate practice, are derived from child observations (Bredekamp, 1987). The apparent dependency of early childhood programmes on individual written observations may reflect the heavy weighting traditionally given to developmental psychology as the specialised knowledge base for early childhood education. The continued focus on "objective" observations, (Hutchin, 1996) also echoes a behaviourist paradigm, where observations describe, and don't interpret behaviour. This conveys the positivist impression that reality consists only of what is visible and observable. The subsequent use of written observations for categorising individual children within a developmental framework (Dahlberg 1998, Lenz Taguchi 1997), or Te Whaariki strands, and linked to accountability, is very different from the pre-1930's use of observations for *understanding* children (Singer, 1992). Pedagogical documentation is also about *understanding*, from multiple perspectives, using multiple sources of information besides written observations.

4.5.2 Including children in documentation

Techniques for including children in documentation, including observations, can be quite simple. For example, during the research project, as I observed teachers using written observations to understand children, I became increasingly aware of the value of simply asking children to explain situations, just as I also began to ask the teachers for explanations. A related technique for teachers involves checking out the content of observations with children and amending observation notes accordingly. Teachers can also include themselves in their written observations acknowledging that they too are learners, who, through their interactions, assist children's learning. Observations used in this interactive way can assist teachers and children to reflect, revisit and make meaningful connections with prior experiences. In this way pedagogical documentation can contribute actively to the planned curriculum.

4.5.3 Using photographs in documentation

The use of photographs linked to learning theory, rather than as a snapshot tourist curriculum, does require further exploration and research. Visual images as “voices without words” (Walker 1993), have the power to challenge the prevailing acceptance of written words as the only valid medium for communicating the learning in early childhood programmes to “stakeholder” groups such as parents, ERO, Ministry of Education (MoE) and politicians. However, images usually require added words of explanation in order to make explicit the implicit theory and understandings which teachers may associate with images. This articulation of the learning in the image can be difficult without oversimplifying both the learning and the image. Conversely the visual image can also act as a prompt assisting teachers to articulate the learning in the picture.

For the research centre, photographs were probably the most usefully manageable documentation tools explored. This may have been because the teachers were already using a photograph camera and ways in which this usage could be extended and linked to the programme seemed a sensible focus for development. Polaroid film and video equipment, though great for stimulating critical reflection, are expensive. Managing video filming and analysis seemed more complicated and time consuming than using a camera for photographs. Unlike video images, photographs can be displayed on walls and in portfolios. While technological advances, including the use of digital video cameras and computer technology with scanners, have altered this situation, financial barriers preclude the use of this sort of technology in most early childhood centres. It is conceivable, however, that this situation might well change in the future.

Avoiding snapshots, framing carefully considered photographs and linking them to pedagogy, is an ongoing area for teacher professional development in Kiwi centre, as in many early childhood centres. Linking and articulating the pedagogy in the image both demands, and develops, teachers, to be critically reflective practitioners.

5 CONSIDERATIONS AND CHALLENGES FOR TEACHERS USING DOCUMENTATION

In my study eight points became themes or issues:

- Who is the documentation for?
- The status of visual documentation;
- Inclusion of children in the documentation process;
- Including portfolios in the curriculum;
- Individual documentation versus interactive learning;
- The legitimization of unwritten observations and teacher talk;
- Pedagogical documentation is not new;
- Documentation creates images.

This list is not exhaustive. It also includes some issues which have been implicitly, rather than explicitly, addressed in this paper. This section serves the purpose of an extended summary of these issues for teachers in other centres who may also be considering how they when document children's learning:

5.1 Who is the documentation for?

The issue of "who pedagogical documentation is for", incorporates questions about the purpose of documentation and who benefits from it: children, teachers, parents/whanau, ERO, the wider community and society (Carr & Cowie, 1997). Teachers need to discuss and clarify these questions while also considering the accessibility of pedagogical documentation for the various intended audiences. Pedagogical documentation that serves multiple audiences including children, parents, teachers and ERO, may be the most useful because it avoids duplication. By providing the same raw information to all audiences, it also treats people democratically. This type of documentation does not imply uniformity, however, as different people will interpret the same documentation differently, reflecting their unique perspectives. Photographs (with text), children's original works (with explanations) and children's own revealing explanations can fulfill the requirements of documentation for multiple

audiences and purposes. Multiple audiences for documentation is an issue teachers at the research centre, like many teachers in other centres, continue to explore.

5.2 The status of visual documentation

Photographs and other visual forms of documentation linked to theory seemed to be under-valued in the research centre. My experience, in most centres I visit, tells me that this is a generalised situation. Unlike written observations, photographs were not explicitly used by the teachers to inform curriculum planning, assessment or evaluation. Instead, photographs were directed at parents (and children). I have suggested that photographs which are skillfully framed and located within a theoretical context of children's learning may reduce documentation duplication by making the documentation more meaningful as well as able to serve multiple audiences. Photographs may also capture an ethos which words cannot, although photos do usually benefit from written explanations to both contextualise the image and make the learning explicit. Similarly, children's drawn plans, or diagrams and other creative products, can assist adults to understand children's thinking.

5.3 Inclusion of children in the documentation process

By including children as participants in the documentation process children's awareness of themselves, their actions, thinking and learning is likely to be enhanced. I have described some ways in which teachers can do this. In Kiwi centre one outcome of the focus on documentation was that the children became aware of pedagogical documentation. This was demonstrated at the end of the project by older children's comments, showing an awareness and pride in their portfolios and other personal documentation, such as the whanau documentation on the centre walls.

5.4 Including portfolios in the programme

Compiling child portfolios seemed to take a lot of teacher time in the research centre, yet, as in many centres, they almost seemed to be extraneous to the centre programme, stored in the office and compiled during non-contact time, or out of centre hours. One implication of the project, which I discussed with the teachers, was

that they consider including children in the portfolio process, during session time. Children and teachers together, could select content, decide on the ubiquitous learning goals and appropriate the strategies for implementing them. Children's verbatim explanations and descriptions could also be included in the portfolio. Ongoing portfolio development repositioned thus, as pedagogical documentation, might become meaningful for teachers, children and parents, as well as being integral to the curriculum. This approach would also avoid some documentation duplication.

5.5 Individual documentation versus interactive learning

For myself the research project accentuated the tension between teachers' use of individual planning systems to document learning, and the interdependent learning community within which they worked. The children in the research centre saw themselves as a community. This was epitomised when they sometimes temporarily excluded members, or barred visitors from their play. From a socio-cultural perspective, teachers' observations should focus on interactions between children and the socio-cultural environment, including "people, places and things" (Te Whaariki, 1996). Bateson (1979) has referred to the centrality of interaction as, "the pattern that connects". From this perspective, teachers too play an active mediating role, co-constructing their understandings of children. This has implications for teachers' reflexively using pedagogical documentation to study their own interactions.

5.6 The legitimization of unwritten observations and teacher talk

Throughout the research process the importance of teachers talking pedagogy together, became increasingly obvious. This suggests that documentation can provide a basis for dialogue. However, teachers, centre management, ERO and the MoE need to value and prioritise this teacher talk. The phrase "mental documentation" was used by one of the research teachers, Ripeka, to describe the unwritten observations that also contributed to pedagogical conversations. The issue of what constitutes pedagogical dialogue possibly needs clarification. For the teachers in the research centre, the language of learning dispositions, child development theory and Te Whaariki, helped provide a pedagogical basis for dialogue based on documentation: written, unwritten and visual.

5.7 Pedagogical documentation isn't new

A historical (and socio-cultural) overview of early childhood education is imperative for teachers to understand present day trends in context, acknowledging that documentation for dialogue and communication is not a new 90s fad, epitomised in Reggio Emilia. Bateson and Mead (1942), Issacs, Dewey (referred to by Singer, 1992) and others, advocated forms of documentation with similar rationales to pedagogical documentation as it is promoted in the late 1990s in Reggio Emilia and by Forman (1996), Dahlberg and Aasen (1998), Lenz Taguchi (1997) and others.

5.8 Documentation creates images

From an ethical perspective I became increasingly aware of the importance of teachers being aware of the different messages that their documentation may convey to different audiences. Different documentation techniques may create different images of children. For example, in my research project factual video footage challenged some teacher assumptions and perceptions. Different documentation techniques and interpretations will also reflect the cultural values and beliefs of teachers as the documentors. A challenge for teachers using documentation is to be reflectively aware of “the embeddedness of the developing mind in society” (Kessen, 1981, p. 269). This includes the minds of teachers themselves as well as the minds of the children they document, their parents and other audiences. It is in this mind-culture interplay that the image of the child is constructed.

CONCLUSION

In the decade since 1990, early childhood teachers in Aotearoa / New Zealand, have become increasingly aware of issues around the assessment of children's learning and evaluation of programmes. This awareness has developed in response to policy initiatives such as the creation of an Education Review Office, the gazetting of charter requirements, including the statement of Desirable Objectives and Practices (1990; 1996) and the development and final publication of “official” early childhood curriculum guidelines (Te Whaariki). Professional development programmes, funded

by the Ministry of Education, have probably heightened and hastened this awareness. Of course these initiatives must be seen as being a reflection of the general political climate of accountability (Wylie, 1994), as well as the growth of the early childhood sector. From a practical teaching perspective, and in response to increasing demands and pressures for accountability, it seems imperative that teachers understand and use pedagogical documentation, as a way of being accountable: assessing learning and evaluating programme effectiveness, while at the same time enjoying teaching and avoiding burnout. In this sense, a focus on pedagogical documentation can benefit children's learning and teachers' teaching. It can also contribute to public awareness of both early childhood education as a service and children as valued citizens.

This paper has described some of the issues around pedagogical documentation generally and, at a more practical level, some of the issues for the teachers who participated in a small action research project exploring pedagogical documentation. It has also argued that when teachers use documentation pedagogically, they simultaneously engage in researching their own practice, in researching children's experiences, in planning meaningful curriculum for them and in developing professionally.

References

- Arthur, L., Beecher, B., Dockett, S., Farmer, S., & Death, E. (Eds). (1996). *Programming and planning in early childhood settings* (2nd Ed.). Sydney: Harcourt Brace.
- Barsotti, A., Dahlberg, G., Gothson, H., & Aasen, G. (1994). *Early childhood education in a changing world - A Swedish practice-oriented research project in cooperation with Reggio Emilia*. Unpublished paper, Stockholm Institute of Education, Department of Early Childhood Education.
- Bateson, G. (1979). *Mind and nature*. New York: Dutton.
- Bateson, G., & Mead, M. (1942). *Balinese character, a photographic analysis*. Special Publications of the New York Academy of Sciences, Vol. 2, New York: The Academy.
- Bredenkamp, S. (Ed.). (1987). *Developmentally appropriate practice in early childhood programmes serving children from birth through age 8*. Washington D.C: NAEYC.
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Cambridge, Massachusetts: Harvard University Press.
- Carr, M., & Cowie, B.(1997). *Assessment: Why record?*. Paper presented at NZARE Annual Conference, December 1997, Auckland.
- Carr, M., May, H., & Podmore, V. (1998). *Learning and teaching stories: New approaches to assessment and evaluation in relation to Te Whāriki*. Wellington: Victoria University, Institute for Early Childhood Studies.
- Cullen, J. (1997). *Children's voices: Challenging early childhood practice?* Paper presented at AECA National Conference, Children in the Balance: Melbourne, 20-23 September.
- Dahlberg, G. (1995). *Everything is a beginning and everything is dangerous: Some reflections on the Reggio Emilia experience* . Paper presented at the International Seminar "Nostalgia del Futuro" 16-17 October 1995, Aula Magna, University of Milan.
- Dahlberg, G., & Aasen, G.(1994). Evaluation and regulation: a question of empowerment. In Moss, P. Pence, A. (Eds.) *Valuing quality in early childhood services: New approaches to defining quality*. (pp. 157-171). London: Paul Chapman.
- Dahlberg, G., & Aasen, G. (1998). Loris Malaguzzi och den Pedagogiska Filosofin I Reggio Emilia. in *Boken om Pedagogerna*. Svedberg, L. Zaar, M. (Eds) Stockholm: Liber.
- Dahlberg, G. & Lenz Taguchi, H. (1994). *Forskola och skola - om två skilda traditioner och om visionen om en motesplats*. Stockholm: HLS Forlag.
- Education Review Office. (1998). *The use of Te Whāriki*. Wellington: Education Review Office.
- Edwards, C., Gandini, L., & Forman, G. (Eds.). (1993). *The hundred languages of children*. New Jersey: Ablex Publishing Corporation.
- Faragher, J., & MacNaughton, G. (1990). *Working with young children*. Victoria: Tafe Publications.
- Forman, G. (1996). *Design, documentation and discourse: Cornerstones of negotiated curriculum* Keynote address, Weaving Webs Conference: Melbourne: Melbourne University.
- Gandini, L. (1993). Fundamentals of the Reggio Emilia approach to early childhood education. *Young Children*. 49, pp. 4-8.

- Harding, J., & Meldon-Smith, L. (1996). *How to make observations and assessments*. London: Hodder & Stoughton.
- Hurst, K. (1995). *Monitoring quality in early childhood education*. Wellington: Ministry of Education, Research Division.
- Hutchin, V. (1996). *Tracking significant achievement in the early years*. London: Hodder & Stoughton.
- Johnson, R. (1999). Colonialism and cargo cults in early childhood education: Does Reggio Emilia really exist? *Contemporary Issues in Early Childhood*. 1, 1, 61-78.
- Katz, L. (1993). What can we learn from Reggio Emilia. In Edwards, C., Gandini, L., Forman, G. (Eds.). *The hundred languages of children*. New Jersey: Ablex Publishing Corporation.
- Katz, L. & Chard, S. (1996). The Contribution of documentation to the quality of early childhood education. *Eric Digest*, eric@uiuc.edu
- Kessel, F., & Siegel, A. (Eds.). (1983). *The child and other cultural inventions* Houston Symposium, N. 4. New York.
- Kessen, W. (1981). The American child and other cultural inventions. In F. Kessel and A. Siegel (Eds.), *The child and other cultural inventions*. (pp. 26-47). Houston Symposium, N. 4. New York.
- Knowles Kennedy, D. (1996). After Reggio Emilia: May the conversation begin *Young Children*. 51, 24-27.
- Lauder, D., & Dalli, C. (1997). *How is my child doing?* Occasional paper N.2, Wellington: Institute for Early Childhood Studies, Victoria University.
- Lenz Taguchi, H. (1997). *Varfor pedagogisk dokumentation?* Stockholm: HLS Forlag.
- Malaguzzi, L. (1993). History, ideas and basic philosophy, interview with L. Gandini. In C. Edwards, L. Gandini, & G. Forman (Eds.). *The hundred languages of children*. (pp. 41-89). New Jersey: Ablex Publishing Corporation.
- Mayyikut, P., & Morehouse, R. (1994). *Beginning qualitative research. A philosophic and practical guide*. London: Palmer Press.
- Ministry of Education. (1993). *Te Whāriki, Draft guidelines for developmentally appropriate programmes in early childhood services*. Wellington: Learning Media.
- Ministry of Education. (1996). *Te Whāriki, early childhood curriculum*. Wellington: Learning Media.
- Ministry of Education. (1998). *Quality in action: Te mahi whai hua: Implementing the revised statement of desirable objectives and practices in New Zealand early childhood services*. Wellington: Learning Media.
- Moss, P. & Pence, A. (Eds.) (1994). *Valuing quality in early childhood services: New approaches to defining quality*. London: Paul Chapman.
- Pascal, C., & Bertram, T. (1997). *Effective early learning: Case studies in improvement* London: Hodder & Stoughton Educational.
- Rogoff, B. (1990). *Apprenticeship in thinking: Cognitive development in social context*. New York: Oxford University Press.
- Schatz, M. (Ed.). (1993). *Qualitative voices in educational research*. London: Palmer Press.
- Schwandt, T. A. (1994). Constructivist, interpretivist approaches to human enquiry. In N. Denzin, & Y. Lincoln, (Eds.), *Handbook of qualitative research* pp. 118-137. Newbury Park: Sage
- Silverman, D. (1993) *Interpreting Qualitative Data* . Newberry Park: Sage.

- Singer, E. (1992). *Childcare and the psychology of development* Routledge: New York.
- Smith, A. (1998). *Understanding children's development* (4th Ed.). Bridget Williams Books Ltd: Wellington.
- Tishman, S., Jay, E., & Perkins, D. (1993). Teaching thinking dispositions: From transmission to enculturation. *Theory into practice*. 32, pp. 147-153.
- Van Maanen, M. (1990). *Researching lived experience: Human science for an action sensitive pedagogy*. (Chapter 4). New York: State University of New York Press.
- Vechi, V. (1993). The role of the atelierista. In C. Edwards, L. Gandini, & G. Forman (Eds.). *The hundred languages of children*. (pp. 119-129). New Jersey: Ablex Publishing Corporation.
- Vygotsky, L. S. (1978). *Mind in Society. The development of higher psychological processes*. Edited by Cole et al. Cambridge: Harvard University Press.
- Walker, R. (1993). Finding a silent voice for the researcher: Using photographs in evaluation and research. In Schratz, M. (Ed.), *Qualitative voices in educational research* (pp. 72-92). London: Palmer Press.
- Wertsch, J.V. (1985). *Vygotsky and the social formation of mind*. Cambridge: Harvard University Press.
- Wiedel, J. (1995). Being there: using pictures to see the invisible. In *Research as social change: New opportunities for qualitative research* (pp. 65-89). London: Routledge.
- Winegar, L. T. (1989). Children's emerging understanding of social events: Co-construction and social process. In J. Valsiner, (Ed). *Child development within culturally structured environments*. Vol. 2. *Social co-construction and environmental guidance in development*. (pp. 3-27). Norwood, NJ: Ablex.
- Wylie, C. (1994). *What research on early childhood education / care outcomes can, can't tell policymakers*. New Zealand Council for Educational Research: Wellington.