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Theorising Practice in Early Childhood Education

A thesis presented in partial fulfilment of the requirements for the degree of Master of Arts in Education at Massey University.

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ABSTRACT

This thesis employs a case study approach to examine the educational theories and practices of early childhood teachers in New Zealand. The traditional conception of education as an 'applied science' is rejected in favour of a praxis account in which educational theory consists of the more or less consciously held beliefs, values and assumptions of practitioners as manifested in their practice. It is argued that theory and practice are mutually constitutive and dialectically related parts of a whole. However a review of the literature on early childhood teachers' beliefs reveals that educational theory has been largely conceptualised as a body of knowledge which teachers apply to their practice.

Following 80 hours of observation in two early childhood centres which focused on six teachers' interactions with eight 4 year old children, interviews were conducted with teachers and children to explore their views of practice. Six case studies are presented in which the beliefs and practices of these early childhood teachers are examined and the nature of their 'operational theories' explored. In the main, teachers identified the psycho-social domain as their primary focus, with only two teachers making reference to cognitive development. Teachers described children as 'learning through activity' and most subscribed to a non-interventionist view of teacher role. However all teachers were found to explicitly teach socially appropriate behaviour, this being the focus of the majority of interactions. Teachers offered apparently contradictory accounts of play. It is argued that these reflected both their formal and intuitive knowledge and that it was the latter which informed their interaction with children.

Teachers' abilities to theorise their practice differed. While some offered full and relatively coherent accounts of the beliefs which informed their practice, most teachers' 'operational theories' contained 'gaps' and apparent inconsistencies. While the problems associated with making peoples' beliefs explicit are acknowledged, it is also argued that early childhood education will be most effective when teachers transform their practice into praxis through critical reflection and attempts to resolve any such inconsistencies. The implications of this claim for teacher education are discussed and an interactive 'problem centred' approach proposed.
PREFACE

The present study arose firstly from reflection on my work as a supervisor of early childhood teachers throughout 1985, a position in which I encouraged others to implement curriculum innovations. My questions, initially about how to change practice, became focused on attempts to understand what this practice meant to the teachers I worked with. I came to understand resistance to change as reflections of a teacher's personal commitment to her practice, such commitment suggesting strong but often unexpressed beliefs about the educational process. I also came to suspect that explanations offered for some practices were not statements of genuine belief at all but rather statements which teachers perceived as legitimate within the prevailing 'free play' ideology.

I next found myself involved in the pre-service training of early childhood teachers in the institutional context of a College of Education. Research in my own classroom provided evidence that students' existing knowledge, constructed from life experience beyond the classroom, strongly influenced what was learned in courses of formal study. Like the teachers I had met earlier, these beginning teachers had powerful beliefs which influenced the way they made sense of each new idea they encountered.

It is from such a background that the present study was first conceptualised. It began with an assumption that the educational worth of children's experiences in early childhood settings would depend on the theories held by their teachers. Originally I intended to examine a set of theoretical propositions about young children's learning and development in the light of children's actual educational experiences. I proposed also to interview the teachers to ascertain their commitment to these propositions. My assumption was that the empirical evidence provided by the observational data would allow such propositions to be evaluated and that any 'gaps' between teachers' espoused beliefs and objective reality would be attributable either to the inadequacy of the beliefs or a problem in their application.

While it is this view that underpins much of the literature on teachers' beliefs and their relationship to educational practice, my fieldwork led me to question its adequacy. Thus this report is only peripherally concerned with questions of 'good practice' in early childhood settings. Rather it offers an alternative understanding of the theory-practice relationship, exemplifies this through six case studies and discusses the implications for teacher education.
ACKNOWLEDGEMENTS

Grateful acknowledgement is offered to the teachers and children who participated in this study. Their involvement, characterised by their generosity and enthusiasm for learning, was both sustaining and challenging. I conclude this study with an enormous respect for these six teachers whose commitment to children was always uppermost as they wrestled with their ideas, seeking new insights into their work. The children, less interested in reflection, offered generosity of another sort, allowing my presence in the 'child only' realms of these centres, where I became a privileged observer of their peer activities.

I thank my supervisors, Drs John Codd and Anne Smith, for their insightful guidance and continued encouragement, Professor Ivan Snook, Drs Fred Biddulph and James Chapman, for their helpful comments on earlier drafts and Jo Lewis for her untiring assistance during the fieldwork phase of this study.

Finally, I thank all the students with whom I have worked over the years, who taught me at least as much as ever I taught them.
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An exploration of the practice of early childhood teachers within New Zealand is particularly timely. The release and subsequent implementation of Before Five (1988) is evidence of government's commitment to improving early childhood education and care for children under five in New Zealand. In the Early Childhood Handbook (1989) which has followed the report, higher ratios of teachers to children are stipulated under what is described as the 'quality formula', the only formula under which centres now receive government funding. Thus government policy accords a central role to the teacher in achieving its stated objective of quality early childhood care and education for all children under five (Education to be More, 1988).

While we have many studies about what New Zealand early childhood educators do (for example, Hall, 1978; Meade, 1985; Smith and Haggerty, 1980) there are few which offer any systematic insights into how they make meaning of their work. It is a central claim of this thesis that educational practice is only fully comprehensible in terms of such meanings. That is, in order to understand practice we must also understand the beliefs, assumptions and values which inform it. Such understanding is seen as a prerequisite to the success of any attempt to change or improve practice through teacher education.

It is likely that for many teachers their beliefs may be largely, or in part, implicit. Particularly is this likely to be so if they have adopted commonly used practices and have not had these challenged. However the advent of recent policy has created a climate in which teachers are required to adopt an advocacy role, engaging as partners in constructive dialogue not only with their colleagues as in the past, but also with their communities. This will require them to make the tacit knowledge implicit in competent performance both explicit and open to scrutiny.

There is a further reason for examining teachers' beliefs. The introduction of three year integrated training programmes for kindergarten teachers and childcare workers in 1987 was evidence of government's recognition of the arguments made by early childhood educators (Report of the Working Party on Childcare Training, 1986) that teacher training was a critical factor in the provision of quality early childhood education and care. Currently courses for early childhood educators specify a minimum number of hours to be spent in early childhood educational contexts, the opportunity to practice being viewed as a necessary complement to theoretical study. There is an assumption in such policy that formal theory taught in the classroom will be translated by the beginning teacher into
practice and that practical problems encountered in the field will be resolved by recourse to such formal theory. The present study challenges such a claim and argues for an alternative conception of the theory-practice relationship. From this position it explores the 'operational theories' of a small number of New Zealand early childhood teachers and discusses the implications for teacher educators.

In Chapter two there is discussion of what constitutes educational theory and the nature of its relationship to practice. The 'applied science' view of education is rejected and education is instead construed as praxis. Rather than existing as separate entities, theory and practice are conceptualised as mutually constitutive and their relationship dialectical. From this position it is argued that teachers' beliefs, to the extent that they inform their practice, do indeed constitute educational theory.

In Chapter three the literature which examines the beliefs of early childhood teachers is reviewed and some methodological issues are raised in relation to the study of belief. The literature is found to largely reflect the 'applied science' view of education, and a critical assessment is offered in support of the argument of the previous chapter.

In Chapter four the methodology used in this study is outlined. An interpretive approach was taken in which classroom observations of teacher interaction with 'target' children was followed by semi-structured interviews in which teachers' and children's views of practice were sought.

In Chapter five the findings are presented in the form of six case studies, in which observational and interview data are combined to provide a description of each teacher's 'operational theory'.

In Chapter six the general trends from these case studies are summarised and the relationship between teachers' espoused beliefs and observed practice discussed.

In chapter seven conclusions are drawn, the implications of these findings for teacher education are discussed and future possible research directions identified.
Chapter Two

THE NATURE OF EDUCATIONAL THEORY

In this chapter it will be argued that attempts to change or improve educational practice are likely to be successful only when the beliefs that inform it are made explicit and thus amenable to reflective examination in the light of practical activity. Implicit in this statement is a further claim that such beliefs do, in fact, constitute educational theory. It is the justification for these two claims which will be the focus of this chapter.

The nature of educational theory has been a controversial area of debate over many years (e.g., O'Connor, 1957; 1973; Hirst, 1966; 1983; Carr, 1979). Claims as to what counts as theory are entailed in most discussions about the nature and purpose of education. Carr and Kemmis (1986) identify two forms of consciousness which can be traced back to Aristotle's classification of the disciplines. They argue that different conceptions of education can be derived from Aristotle's distinction between *techne* and *phronesis*. *Techne* gives rise to a technical view of education in which teacher-technicians apply 'scientific' knowledge of means to the task of achieving given ends. Children are the raw material which must be engineered into desired shapes and the curriculum is the tool with which to achieve this task. Thus teaching becomes a form of applied science. An alternative conception of education can be derived from *phronesis*. From this position education is viewed as a complex and dynamic practical activity in which technical control is both impossible and undesirable. Teachers are viewed as professionals, disposed to act truly and rightly, exerting wise judgement as they engage in the pursuit of a multitude of worthwhile goals.

Both of these positions are reflected in the literature on teaching. Each offers a different account of what constitutes educational theory. These accounts will now be reviewed under the headings: Education as applied science and education as *praxis*.

Education as applied science

The view of education as an applied science emerges from an empiricist epistemology and reflects an attempt to apply the aims, concepts and methods of the natural sciences to the study of education. From such a perspective, educational theory can serve only an explanatory function. It cannot include statements of metaphysical belief nor judgements of value because neither of these are amenable to empirical proof. It must instead conform to the paradigm of theory as a logically interconnected set of hypotheses confirmed by observation (O'Connor, 1957).
Writing from this position, O'Connor argued that educational theorising in its traditional philosophical form could never be a scientific activity (O'Connor, 1957). He urged that it be replaced by a form of theory which was value-neutral and suggested that the disciplines of sociology and in particular, psychology, provide its basis. From these disciplines were to come scientific accounts of the educational process. Such accounts would explain educational phenomena and enable the prediction of outcomes. Practitioners acquainted with theory would be able to make choices about teaching methods based on scientific accounts of their effects.

Because of its purported neutrality, any such theory could address the means but clearly never the ends or desired outcomes of education. While O'Connor recognised that the educational process required educators to make decisions about the worth of various pursuits, he did not believe that theory could assist in what must be ultimately a subjective process of determining what is valued. Using the natural science paradigm, theory could only contain empirically supported statements about 'what is', never 'what ought to be'. Thus regarding traditional educational theory of the 'ought to be' variety he wrote:

> the word 'theory' as it is used in educational contexts is generally a courtesy title. It is justified only when we are applying well-established findings in psychology or sociology to the practice of education (O'Connor, 1957, p110).

The idea that educational means could be separated from ends had wide appeal in an era of technology. The conception of education as an applied science received much support in the United States in the 1960s as popular faith in science flourished with public events such as the first moon landing. It was evidenced both in attempts to improve classroom learning through the development of 'teacher proof' curricula, for example within the Headstart programme (Spodek & Rucinski, 1984) and in an expansion of experimental research which attempted to 'control for' teacher differences. Teachers came to be seen as technicians who applied scientific knowledge to achieve goals determined by the curriculum planners. Such a view was particularly consistent with behaviorist teaching approaches.

This view lingers on in the popular conception of theory as a body of knowledge which is applied to practice. The theory-practice relationship is viewed as one in which separate and dichotomous domains exist in a linear relationship, theory preceding practice. This attitude is evident, for example, in a recently published argument for the application of Piagetian theory to Nursery school practice, in which it is stated:
Theory can be our lifeline to good practice but only if we constantly link it with our day-to-day work. (Bruce, 1985, p 151).

Traditionally pre-service teacher education has consisted of providing beginning teachers with knowledge of academic theories (e.g., those which explain how children learn) for later application to practical questions of what to do in the classroom. In early childhood education this takes the form of introductory courses in developmental psychology which introduce students to recognised theories of young children's development and learning. Once the beginning teacher graduates from the pre-service programme, problems of practice, that is, gaps between intentions and outcomes, are attributed to the limitations of the teacher/technician or to the inadequacy of the theory as an explanatory tool. Once in service, teachers come to be viewed as consumers of improved theory (Lampert, 1984) and teacher education seen as a process of transmitting new theories generated out of academic practice with 'recipes' for their implementation. From this perspective, professional development requires that teachers adopt a technical approach to their work in which they "seek to optimize the efficacy of learning by utilising scientific knowledge" (Carr and Kemmis, 1986, p30).

Clearly, within the 'applied science' model, teachers' beliefs do not constitute educational theory. Beliefs about the metaphysical world and about what is valuable are explicitly excluded from O'Connor's definition of theory. This would allow only claims which are amenable to empirical proof, propositions about 'what is' in the world of the classroom, to be counted as theory. However O'Connor rejects practitioners' beliefs as 'unsubstantiated conjecture' (O'Connor, 1957, p108) arguing that only the knowledge generated by academic practice can meet scientific criteria that would warrant its description as theory. Such a view locates teachers' beliefs within the domain of common sense and requires that they be replaced by more adequate accounts.

There are several criticisms of the 'applied science' model of education and these will be briefly outlined here. The first emerges from the new philosophy of science (in particular the work of Kuhn, 1962) and is an explicit rejection of the positivist understanding of the nature of knowledge which underpinned the position taken by O'Connor. Positivism refers to a style of thought which maintains that 'valid knowledge can be established only by reference to that which is manifested in experience' (Kolakowski, cited in Carr and Kemmis, 1985, p61). Positivists maintain that it is the task of the scientist to assess knowledge claims in the light of empirical evidence. Claims about the world which are not empirically testable, or able to be logically deduced from an empirically established truths, can never be validated and therefore have no status as knowledge.
Implicit in the positivist position is the belief that the knowledge generated by scientific inquiry is objective and therefore neutral. It rests on the assumption that the world can be experienced by observers who hold no preconceptions but simply 'record it as they see it' and that such recordings can be interpreted as objective accounts or truth. However Kuhn (1970) argues from an historical account of the development of science that the positivist conception of objective knowledge is a myth. Rejecting an evolutionary account of scientific knowledge as accumulating and growing over time, he instead proposes a revolutionary model in which science is explained as a succession of dominant paradigms which are overthrown and replaced. He argues that at any one time scientists operate from within a particular theoretical framework or set of assumptions about the world. This framework or paradigm determines which questions are asked and which research methods are used to address them. Kuhn calls the theorising which takes place from within the dominant paradigm 'normal science' (Carr and Kemmis, 1985, p72). In time, however researchers working within a dominant paradigm run into difficulties and find themselves unable to resolve certain problems. This brings about a state of crisis within the existing paradigm and a reconsideration of fundamental philosophical questions about the nature of knowledge and truth. Eventually the paradigm is overthrown and a new one takes its place, the research community gets converted (or dies off) and the new paradigm come to be regarded as 'normal science'. This cycle continues to be repeated throughout the history of science.

Kuhn's arguments have been extensively debated within the philosophy of science and the conceptual relativism implicit in his account is highly problematic. However the important point of relevance to this discussion is his claim that observations can never be independent of theory because they are always interpreted by reference to the dominant theory or paradigm of the time. Further he stresses the concept of research as an activity performed within a social community which gives its allegiance to a particular 'world view'. This 'world view' provides the structure for the research enterprise, determining what will constitute a research problem, what will count as a solution and how such a solution might be reached. Because different paradigms are incommensurable there can be no impartial way of judging one superior to another. The emergence of a new paradigm thus reflects the conversion of the scientific community to a preferred 'world view'. A paradigm cannot be seen as neutral because it embodies a set of values, beliefs and assumptions which are shared by like-minded people.
While the relativism implicit in Kuhn's position has been challenged, his arguments against positivism have received wide support. Kuhn rejects the tenets of positivism by arguing that knowledge can never be value free and neutral but is always context bound, normative and political. Observations of the real world cannot be 'objective' as these can be interpreted only by reference to the observer's existing world view. Thus the notion of neutral scientific theory guiding educational practice is a myth. Such theory can be no less ideological than the traditional philosophising rejected by positivists such as O'Connor.

A further objection to the applied science model of education comes from the argument that separation of means and ends is not possible in relation to education. The engineering metaphor in which people with technical expertise interpret the plans drawn up by designers has limited applicability in discussions of education. It is clear that both enterprises imply ends and that such ends should only be conceptualised if they are achievable. There is little point designing a bridge, for example, if there is no known way to build it. Thus it can be legitimately claimed that there are bodies of 'technical' knowledge associated with both educating and engineering and that statements about the aims or outcomes of both of these activities need to be consistent with such knowledge. Beyond this point however the analogy serves no further use, for there are significant differences between the enterprises of engineering and education. Peters highlights one such difference when he states

to call something educational is to intimate that the processes and activities themselves involve something worthwhile (Peters, 1974, cited in Tom, 1984, p 93).

If one were to view the process of education only as a means of creating the desired future person, any methods would be acceptable as long as they could be proven to be efficient in achieving the result. Clearly some means, that is, teaching methods, would be rejected because they were not efficient and have been found to lead to different ends from those desired. For example, it is unlikely that children could be taught to show tolerance by the administration of rigorous punishment every time they strayed. Means must be consistent with 'ends' if the latter are to be achieved. Importantly also however, 'means' must always be morally defensible if the enterprise is to be judged as 'educational'. The idea that 'means' knowledge could be value free is unsupportable because decisions about educational practice, unlike engineering, always involve intervention in the lives of people. It is this position which is taken by Tom (1984) who argues that teaching is best conceptualised as a moral craft. (This position will be further outlined in the following section).
There is another objection to the applied science model of education. Peters (1974) outlines this in his explicit rejection of the assumption that educational practice will be improved when teachers assimilate and apply psychological theories to their classroom activity. Drawing on concepts of the rational man, Peters (1974) contends that people are rational and that their activity has purpose and social meaning. Teachers whose task it is to 'hand on the rules and traditions of society and get children to learn or get things right' (Peters, 1974, p206) must do this by reference to such meanings. This requires a knowledge of social conventions and the ability to interpret and understand human intentions and purposes.

However on Peter's account, learning theory which offers a mechanistic account of human action as 'behaviour' fails to adequately explain most of human activity. Concepts of 'drive' and 'stimulus' do not allow for purpose or intention and thus are of little use to the teacher whose work is grounded in 'meaning making'. Peters rejects the appeals made by psychologists to teachers to apply laboratory knowledge in the classroom and argues that these be replaced by efforts to systematise the 'hunches' of practitioners in order to test and refine this practical knowledge. While contemporary psychology has progressed from the crude behaviourism to which Peters alludes, his arguments are nonetheless relevant. Their substance is echoed by Hirst (1983) in his discussion of the relationship of the traditional disciplines to educational theory, each of which he sees as of limited usefulness in determining principles for educational practice. (His position will be further outlined in the following section).

Education as praxis
Carr and Kemmis (1986) trace the view of education as praxis to the Aristotelian conception of a 'practical' discipline (as opposed to 'theoretical' or 'productive', the other two categories of knowledge which complete his epistemology.) The term praxis is used to describe the intellectual activity associated with the practical disciplines and is defined as informed action which by reflection on its character and consequences reflexively changes the knowledge base which informs it (Carr and Kemmis, 1986, p33).

It is always guided by a moral disposition to act truly and justly, a principle that is encapsulated in the term phronesis. Thus from the concept of praxis comes an account of education as a complex and dynamic practical activity. Rather than simply exerting technical control, teachers are seen as reflective practitioners, disposed to act truly and rightly, aspiring to wise judgement as they engage in the pursuit of a multitude of worthwhile goals.
Such an account fits well with that offered by Tom (1984) who argues that teaching is essentially a moral activity. Defining 'moral' as a concern for rightness of conduct and for what is important or valued, he outlines three distinct ways in which this is evidenced. Firstly the curriculum content may be explicitly moral, involving instruction concerning right or wrong behaviour. An example of this would be the early childhood teacher encouraging children to share equipment with others. Secondly, the curriculum reflects decisions about what is and is not worthwhile knowledge. Statements about children's needs (e. g., the *Early Childhood Handbook*, 1989) are essentially normative and reflect educators' beliefs about the good life and the good society. Thirdly, because teaching is an intentional activity aimed at promoting particular learning, teachers have the power to decide what will happen in the classroom, that is, teachers have power over students. Even the apparently democratic classroom (e. g., the 'free play' programme) is an outcome of the teacher's decision to pursue his/her goals in this way. Thus the teacher is morally responsible for the way children are treated.

It was recognition of the practical nature of education that led Hirst (1966) to challenge O'Connor's (1957) definition of educational theory. Hirst argued that theory performs a different task when it is aligned with a practical activity. Rather than simply explaining (as in the natural sciences) it also prescribes, by providing "an argument whose conclusion consists of recommendations for practice" (Moore, 1974, p24). Hirst believed that educational theory provided the principles on which practice is based. Rejecting O'Connor's position, he offered a definition of educational theory as a rationally defensible set of principles which exist to guide educational practice. But from where can such principles be drawn and on what basis can they be rationally defended?

It is clear that in his early writing Hirst (1966) saw the disciplines (e. g., philosophy, psychology, sociology, history) as providing such a basis. Like O'Connor, he viewed theory as a body of knowledge to be applied to practice. However he differed from O'Connor in that he did not limit this body to empirical knowledge but included metaphysical beliefs and value judgements as legitimate aspects of educational theory. Hirst described education as a field of enquiry which drew upon the various disciplines in order to develop principles for practice. Such principles, he argued, would need to be tested within the criteria appropriate to the discipline from which they emerged.
While Hirst's more comprehensive account of theory was welcomed (e.g., Struthers, 1971) it was also criticised on several counts. Carr (1979) pointed out that Hirst's view of educational theory as prescriptive was incompatible with his position as an analytic philosopher concerned with logical argument and conceptual clarity. O'Connor (1973) rejected Hirst's account of the way in which disciplines contribute to such theory as constituting an "intellectual salad", while Struthers (1971) argued that Hirst had underestimated the importance of ethics in educational theory. Importantly, Carr (1979) challenged Hirst to reconsider the purpose of educational theorising and its relationship to practice. Carr identified two different meanings associated with the word 'theory'; a) theory as a body of knowledge produced by those engaged in academic pursuits and b) theory as the conceptual framework from within which these academic pursuits occur. He describes the relationship between the two thus:

...the theories that arise out of academic enquiries are no more than the formally stated outcomes of distinctive practices that are themselves structured by 'theories' which express how those who engage in these pursuits ought to proceed (Carr, 1979, p30).

Thus he claims that all practice (be it the practice of academic enquiry or the practice of classroom teaching) is shaped by the practitioners' theories, which are in turn, continually modified by being 'tested out' in practice. Rather than a 'body of knowledge' which is 'applied', Carr sees theory as the conceptual framework in which practice occurs, constituted as

a set of more or less consciously held beliefs, values and assumptions that are sufficiently interrelated to ...prescribe a consistent course of action (Carr, 1979, 32).

This view of theory is implicit in the concept of praxis. Neither theory nor practice is preeminent but both exist in a dynamic, mutually constitutive and dialectical relationship in which a continual interactive process of reflection/action enables contradictions between intentions and actions to be uncovered and resolution sought. When theory is understood in this way, educational theory can only be understood as the beliefs of educational practitioners as manifested in their practice. Academic theories (for example, operant learning theory), which both generate and emerge from academic practice may be constitutive of some beliefs but only to the extent that these are evidenced in what practitioners actually do.
It was this understanding of educational theory that Hirst adopted in his later writing (Hirst, 1983). In reaching this understanding Hirst rejected his earlier view that the disciplines could, in themselves, provide the basis for educational theory. He argued now that none was adequate to such a task, for each could address only those aspects of the educational process that came within its scope, e.g., sociology could address sociological aspects only. More importantly, however, Hirst now rejected as a technically inspired myth, the idea that the implementation of premeditated principles or the application of a pre-existing body of knowledge lead to rational action. Drawing on the work of Oakeshott (1962, cited in Hirst, 1983) he argues that effective educators have practical knowledge which consists of

organised abilities to discern, judge and perform ...rooted in understanding, beliefs, values and attitudes (Hirst, 1983, p11).

This practical knowledge, rather than existing as a series of abstracted propositions is demonstrated in competent action. Practitioners may not be able to articulate such knowledge in advance of their action but they do act knowledgeably in that their actions have a coherence that is recognisable to the observer. It is the preservation of this 'coherence' that Hirst describes as the hallmark of rational activity (Hirst, 1983, p12). Thus a beginning teacher is deemed competent when her actions reflect the established patterns of more experienced peers. Innovations or differences in her behaviour are acceptable as long as these 'preserve the idiom', that is, as long as they are recognisable as 'good teaching'. Practical knowledge is gained through engagement in the activity itself. Teacher educators recognise this in their emphasis on the practicum in courses of pre-service teacher training. Further such knowledge is demonstrable only in action, thus teacher trainees are assessed 'on the job' in the classroom setting where they can show, by their competence, that they 'know how'.

Thus Hirst modified his earlier position. Whilst initially he maintained that rational action came about through the implementation of premeditated principles, now he explicitly argued that principles emerge from reflection on successful practice. This position is consistent with that of Carr (1979) who described theory as the conceptual framework in which practice occurs. From this position, educational theory and practice are viewed as mutually constitutive parts of a whole. Educational practice is improved by submitting it to rational appraisal, while theory is submitted to practical tests. This view of the theory-practice relationship is consistent with the pragmatist position adopted by Dewey.
Unlike the empiricists, Dewey (1960) did not believe that there are such things as objective facts. Rather he saw all beliefs, whether empirical or moral in nature, as potentially fallible outcomes of our deliberate experimental interaction with the environment. He argued that we could never obtain certain knowledge but only rational and warranted belief. Dewey conveyed this notion in the phrase "warranted assertibility". Dewey's position was action-oriented. He did not separate a thinking mind from an acting body, rather he viewed people as embodied 'knowers' whose interaction with the environment involves both their thoughts and their actions. The whole point of knowledge is that it enables us to act. Concomitantly, action allows us to test our knowledge which exists in the form of tentative hypotheses about the world. These are refined through the continual process of action/reflection. Dewey construed the knowable world as a set of activities leading to consequences, which, in turn, lead to other operations/consequences. Thought and action are but different phases of the same process.

Unlike the empiricists who sought to derive certainty from sense experience, Dewey offered a pragmatic view of truth, defining it as

the utility a thought possesses for showing us the way to the solution of the problem (Dewey, 1960, p245).

His emphasis on action is evident in this statement. Ideas are true if they work in action. People engage continually in a process of problem solving, with problems being identified, hypotheses generated and tested and resolution sought. This testing involves acting on the hypotheses (even if only in our minds) as though they were true and then evaluating the results of such experimentation. If it yields a satisfactory result, then our problem is solved and we can claim our idea to be useful and thus true in the pragmatic sense. If it does not then we begin again, this time with a new hypothesis.

A pragmatist account of knowledge is consistent with the praxis account of education which construes the theory-practice relationship as mutually constitutive and dialectical. Practice generates problems which we attempt to solve by recourse to theory but such theory must be put to practical tests if it is to be judged useful in solving the problem. Thus a cyclic process ensues with practice validating theory which in turn informs practice.
What are the implications of a pragmatist position for teacher education? Teacher educators who wish to improve practice will assist classroom teachers both to articulate the beliefs that inform their practice and to critically examine these beliefs in the light of practical tests. Carr (1979) suggests that such an approach is likely to be effective in improving education because it enables teachers to gain a better understanding of their own practice. Echoing the sentiments of Peters (1974), he describes the way in which traditional teacher education approaches have been perceived as irrelevant by teachers and argues that this problem will only be overcome when theory is grounded in practice.

Theory will have little practical significance unless it results in educators developing a more reflexive understanding of the activity that they are engaged in since it is only in this way the quality of their involvement in this activity will be improved and they will develop more intelligent and appropriate ways of engaging in educational practices (Carr, 1979, p30).

Hirst (1983) shares this view, believing that the practical knowledge of the teacher must be the starting place for the analysis of educational practice. He states this point thus:

If we are to develop rational educational practice it now seems to me we must start from a consideration of current practice, the rules and principles it actually embodies and the knowledge, beliefs and principles that practitioners employ in both characterising that practice and deciding what ought to be done (Hirst, 1983, 16).

This means that attempts to justify or improve practice (that is, to make it more rational) must begin with an understanding of what this practice means to those who participate in it. Hirst describes this as "penetration of the idiom" (Hirst, 1983, p12) and suggests it is achieved only through engagement in the activity and subsequent self-reflective analysis. While Hirst is unsure whether practical knowledge can ever be fully conceptualised, he sees the illumination of practitioners' "operational theories" (Hirst, 1983, p18) as an essential part of the process of justifying and improving educational practice.

Like Hirst (1983), Schon (1983) acknowledges the tacit nature of the practitioners' "knowledge in action" and argues for the importance of making this knowledge explicit, coining the phrase, "the reflective practitioner" (the title of his book) to describe the approach he recommends. Schon claims that we do not typically become reflective until we encounter something which puzzles us. This is similar to Dewey's account of people as problem solvers who achieve consciousness only when habits break down and action becomes problematic (Dewey, 1960) as well as to the Piagetian notion of "cognitive dissonance" (Piaget, 1952). Thus something out of the ordinary must occur to prompt reflection.
Within the *praxis* account of education, those beliefs which inform practice constitute educational theory. Stating this differently, educational theory consists of those beliefs held by practitioners which are manifested in their practice. At this point it is important to consider what is meant by 'belief'.

**The nature of belief**

In his discussion of the nature of belief, Scheffler defines it as "a disposition to act in certain ways under certain circumstances" (Scheffler, 1965, p76). That is, when we hold a certain belief about the world, we act as if it were true. Each person holds many beliefs. Scheffler writes that these

> hang together and exert mutual influence upon one another and they are in delicate interaction with (a person's) aims and attitudes (Scheffler, 1965, p86).

He warns against equating verbal assertions with beliefs, reminding us that sometimes people say things that they do not believe. If a person were to make a statement of apparent belief which conflicted with his/her actions this may suggest that the 'belief' was not genuine. However apparent discrepancies between what is said and done may simply offer insights into the relationship between a person's various beliefs. Some beliefs may inform action in one context, others in another. Further, some beliefs may modify others. A person's actions may only be fully comprehensible when we understand his/her whole belief system. Thus Scheffler writes,

> a single belief cannot be attributed to a person on the basis of his (sic) response dispositions under given overt circumstances (Scheffler, 1965, p86).

Consistency and coherence of beliefs may not be revealed on first impression but may become evident on further examination and reflection. We can only determine this by interpreting carefully what a person says about their own actions in addition to observing those actions. Sometimes we will remain unsure whether an assertion of belief is, in fact, genuine. The extent to which a verbal assertion can imply a disposition to action remains an area of dispute. In the present study only those beliefs which inform teachers' practice are understood to constitute their theories. Assertions of belief which are not enacted in practice have a different status.
Often it is the case that a person's beliefs are tacit, immanent in their actions (Scheffler, 1965). However, unless teachers can make their beliefs explicit they have no justification for their practice other than habit or expediency. In this case there is no way for teachers to evaluate the effectiveness of their own practice. They become dependent upon outside evaluators whose conclusions may be perceived by the teacher as irrelevant. If teachers are to be in control of their professional practice they must be able to evaluate it. This requires that teachers make their beliefs explicit, coherent and amenable to scrutiny. This becomes the basis for their professional accountability.

**Conclusion**

The present study is based on the view of education as *praxis*. From this position education is understood to be a complex practical activity occurring within a theoretical framework. This theoretical framework does not exist as scientific knowledge, 'distilled' for application. Rather it is a complex of beliefs held by practitioners, some more explicitly than others, which are continually tested and modified through practice. This complex of beliefs may be influenced by teachers' understandings of academic theory but because education is a dynamic activity which involves the simultaneous pursuit of many worthwhile goals, academic theory, which addresses only a part of the educational process, can be only of limited usefulness. It is likely that some aspects of teachers' practice may be relatively unreflective. This would be evidenced by a lack of coherence in teachers' accounts of their own practice. It is claimed here that practice will be most effective when teachers actively engage in the dialectic between theory and practice. This necessitates making tacit belief explicit and open to critical examination in the light of practice and in relation to their educational purposes.

The present study seeks to examine the beliefs which inform the early childhood educational practice of six New Zealand teachers. 'Practice' is here defined as teachers' daily work in early childhood centres, 'theory' as the beliefs that inform this work and 'operational theory' as the accounts teachers are able to give of their work. Each case is used to show how teachers are able to make their 'operational theories' explicit to varying degrees.

In order to develop the central argument and to locate this investigation within a wider context, it is necessary to review the research literature pertaining to the study of early childhood teachers' beliefs and theories. This is the focus of the next chapter.
Chapter Three

EARLY CHILDHOOD TEACHERS' BELIEFS: REVIEW OF THE LITERATURE

In their review of literature related to teachers' thought processes, Clark and Peterson (1986) identify three distinct areas of study: Teachers' planning, teachers' interactive thoughts and decisions and the most recent to emerge, teachers' theories and beliefs. It is the third of these areas that is central to the present study, drawing upon the definition of theory as a set of "more or less consciously held beliefs, values and assumptions" (Carr, 1979, p32). The literature proved to be relatively sparse but all of the studies included in this review have as their focus, early childhood teachers' views of practice. All are concerned (some more explicitly than others) with the relationship between what teachers think about their work and this work itself.

Most of the reviewed literature reflects the view of theory as a body of knowledge which exists 'distilled' for application and is thus at variance with the position taken in the preceding chapter. While some studies have focused on examining the relationship between teachers' accounts of academic theory and their practice, others have defined 'belief' more broadly, exploring teachers' views on various aspects of the educational process and comparing these with their observed behaviour. In both cases the emphasis has been on comparing what teachers say (i.e., their 'beliefs') with what they do (i.e., their 'practice') and establishing the degree of congruency between the two. This focus on congruency emerges from the view of theory and practice as separate and dichotomous domains. The implication from such studies is that practice will be improved when teachers exchange their existing theories for new ones (academic or otherwise) and/or more stringently apply these to practice.

It will be argued in this chapter that the questions about congruency between theory and practice which have preoccupied many investigators are inappropriate because they misconstrue the relationship between theory and practice. The position taken, therefore, will be at variance with most of the existing literature. In the following discussion three distinct approaches to the study of early childhood teachers' beliefs will be reviewed: Positivist research which attempts to measure beliefs as 'objective reality'; interpretive research which attempts to uncover the meanings teachers make of their work, and research which combines aspects of both of these traditions in attempts to compare teachers' understandings with empirical accounts of their practice. It will be argued here that each of these approaches has been based on an inadequate account of the theory-practice relationship, thus the insights they have offered are of limited usefulness.
Beliefs as 'objective reality'
The first group to be reviewed here are those which emerge from an 'applied science' view of education where positivist research methods are employed in an attempt to describe the 'objective reality' of teachers' beliefs and practices. Such an approach predominates in the North American literature, reflecting the psychologically oriented nature of the study of early childhood education within that context. Not surprisingly, within this framework, theory means "a body of knowledge produced by those engaged in academic pursuits" (Carr, 1979, p30). Thus investigations of teachers' beliefs have mostly been focused on teachers' understandings and implementation of Piagetian theory, Montessori's philosophy, operant learning theory, and so forth. Such studies typically assume that beliefs precede practice such that the former are assumed to be logically prior to the latter. There is a tendency for such studies to employ quantitative approaches, comparing some form of 'measurements' of belief with practice.

One of the earliest studies of this kind is that of Harvey (1967) who studied the effects of teacher beliefs on classroom atmosphere and student performance in a Colorado Head Start programme for disadvantaged children. Teachers completed a self administered test (This I believe or TIB) in which their views on a range of referents (for example, the family, the American way of life, sex) were sought. Their responses were categorised according to 3 levels of abstractness following which ratings of teacher and student behaviour were made in the classroom. Harvey found that the greater the abstractness of the teachers' belief system the greater was her resourcefulness, the less her dictatorial and punitive behaviour and the better the academic performance of the students. However the way in which statements which reflected the dominant white middle class American ethos were categorised as 'highly abstract' raises questions about what exactly was measured. (For example, respondents who expressed negative attitudes towards marriage, religion or the American way of life were categorised as low on abstractness).

A similar approach was taken by Verma and Peters (1974). In an attempt to develop a method which would enable different programmes to be evaluated in relation to their own philosophical bases, the authors developed a Teacher Belief Rating Scale (TBRS) which contained 24 items, equal numbers relating to Piagetian and Operant theory. In addition a Teacher Practices Observation Form (TPOV) was developed by translating the belief statements from the TBRS into behavioural categories. Following the administration of the belief rating scale to 38 daycare teachers, classroom observers made 60 observations of each teacher over a 90 minute period, coding segments of teachers' behaviour as 'Piagetian', 'Operant' or 'not observed'. Scores from both the TBRS and the TPOV were calculated and correlation coefficients computed to enable the relationship between each
teacher's beliefs and practices to be measured. No teachers were found to score as 'only Piagetian' or 'only operant' in orientation but rather they presented as eclectic, both in beliefs and practice. The main finding was that while teachers agreed significantly more with Piagetian beliefs, they behaved in ways the authors considered to be more consistent with operant theory.

The authors conclude by lamenting the absence of "theoretical purity" (Verma and Peters, 1974, p20) in daycare and suggest that such a mismatch proved teachers' actual practice to be no more than a series of intuitive and pragmatic decisions which were not theoretically informed. However the lengthy debate about the curriculum implications of Piaget's work for early childhood education (Spodek, 1986) raises questions about the validity of such observations. There has been little if any agreement about what a Piagetian curriculum might look like. Thus attempts to assess 'Piagetian teaching' are problematic. The conclusion that the practice of these teachers was 'theoretically uninformed' reflects the authors' view of what counts as theory. Clearly they refer here to academic theory rather than the beliefs of practitioners.

Several more recent studies employ similar methodologies. Kagan and Smith (1988) investigated the relationship between the cognitive styles of United States kindergarten teachers and their classroom behaviours which were categorised as 'child-centred' or 'teacher-structured'. 51 teachers completed self report instruments which assessed cognitive style, teaching ideology (using the Teacher Belief Rating Scale developed by Verma and Peters, 1974), and sought teachers' perception of their own classroom behaviours and occupational stress. In addition an outside rater observed the classrooms for two hours, recording teachers' verbal interactions and the time spent in group or individual activity. Raters also completed a Teacher Structure Checklist (an instrument which scored teacher control on a five point continuum.) A strong relationship was found to exist between teachers' endorsement of child-centred attitudes and their classroom practices. In addition, high scores on the Idealist scale (Inquiry mode questionnaire) and on the Feeling, Perceiving and Intuition scales (Myers Briggs) were found to be positively related to teacher preference for a flexible and spontaneous teaching style.

The authors draw two conclusions. The kindergarten teachers in their sample were able to accurately describe their own behaviours and they did appear to operationalise their beliefs. This is a similar finding to that of Berk and Berson (1971) who sought teachers' opinions of the amount of time children in their preschool classrooms spent on particular activities then compared these perceptions with an observer account. Teachers'
descriptions were mostly accurate, hardly surprising as most of the children's activities were teacher directed.

While the studies reported above have attempted to compare prior measurement of teachers' beliefs or cognitive style with aspects of observed practice, other studies draw conclusions from responses to rating scales alone. These are typically Likert-type scales which contain questions of the 'what if...?' kind, as well as seeking agreement or disagreement with various statements of belief. Underlying the use of this method is the assumption that teachers' principles exist as measurable entities, 'distilled' for application. By implication too, the process of teaching is viewed as context free, for how else could a response in the abstract to a statement such as "children should solve their own social problems" (Caldwell, Yussen and Peterson, 1981, p42), be interpreted as a meaningful statement about a teacher's practice? Studies which employ more open-ended methodologies (e.g., Spodek and Rucinski, 1986) demonstrate that teachers make actual decisions based on their knowledge of a large number of situational factors (such as their perceptions of the needs and abilities of individual children), and in pursuit of many simultaneously held aims. Rating scales, while lending themselves to large scale distribution and quantitative analysis, have most to say about researchers' assumptions. The questions they ask will reflect their views of the world of practice but these views may have little relevance to the respondents.

It is hardly surprising that such studies consistently report findings which match their expectations. Kaufman (1975) sent a modified version of the PTBI scale developed by Verma and Peters (1974) to two groups of teachers in training; one group enrolled in a Piagetian programme and the other in a programme based on behavioural principles. He found that the beliefs inventory did accurately identify the orientation of these teachers and suggests that the PTBI scale could be used to assist teachers to identify their beliefs and match these to an appropriate classroom style. His view that teachers should be 'trained with respect to epistemological beliefs' (Kaufman, 1975, p9) is surprising from a self-declared Piagetian. It is also consistent with the 'applied science' view of the theory-practice relationship. A more recent example is that of Caldwell, Yussen and Peterson (1981) who found Montessori teachers, in contrast to traditional teachers, to 'strongly agree' with Montessori's beliefs relating to the structured learning environment. Such studies can be criticised for their implicit assumption that the label 'Montessorian' or 'Piagetian' translates into particular uniform teaching practices.

While Cornelius (1989) used only a rating scale in her investigation of teachers' beliefs about play, she acknowledges the limits of her data. Following a survey of 100 United
States early childhood and elementary school teachers, she reports that teachers favour psychodynamic and social learning theories of play whilst holding a range of other beliefs about its purpose and value. While she raises questions about the relationship of these beliefs to classroom practice, she views the meaning of the term 'play' as unproblematic, yet the difficulty of reaching consensus on such meaning is a recurring theme in the play literature (Smith, Takvar & Gore, 1985).

All of these studies assume that teachers' verbal assertions can be unproblematically regarded as constituting their beliefs. Further, many studies assume that these assertions should translate into specific practices, independent of context. Clearly the position taken is that of education as 'applied science'. From this position it is hardly surprising that many of these writers conclude by urging teachers to develop greater theoretical stringency.

Teachers' meanings as cultural constructions
In contrast to the studies which attempt scientific objectification of beliefs and practice there are those conducted from within an interpretive framework which seek to understand the subjective meanings which teachers make of their work.

One such study is that conducted by King (1978). Using a Weberian action theory framework, King attempted to penetrate the culture of the British infant school classroom. Spending a year in each of three schools, he employed non-participant observation and informal interviewing of teachers in an attempt to uncover their prevailing ideologies. He reports finding a child-centred ideology, within which four constructs shape teachers' practice: Developmentalism (and the associated construct of readiness), individualism, play as learning and childhood innocence. He argues that teachers experience role conflict when children's learning within the child-centred programme does not match their expectations and that they resolve this by reference to what he calls "family-home theory" (p95), that is, their belief that the home has inadequately prepared the child for school learning.

While King rejected functionalist or structural-Marxist approaches to classroom sociology as being both simplistic and deterministic, he dismisses the teachers non-confirmation of his "family-home theory" as evidence of their false consciousness. From the framework of interpretive social science this somewhat cavalier response is surprising and raises questions about the study's validity.
There are some surface similarities between the work of King (1979) and that of Apple and King (1977). Both attempted to penetrate the ideology of early school practice but the latter approached their investigation of United States kindergarten practice from a critical Marxist position. Describing schools as "institutions that embody collective traditions and human intentions which, in turn, are the products of identifiable social and economic ideologies" (Apple and King, 1977, p343) they sought to uncover the social meanings constructed within a kindergarten classroom, the context for a year long study of classroom interaction. They report that within two weeks of entry to school the children divided materials into two categories; 'things to work with' and 'things to play with'. Work was perceived by teacher and children as more important than play and the term 'work' used to denote prescribed activity rather than referring to any intrinsic feature of the activity itself. Work was something that one had to do, play was something one chose. The teacher justified the presentation of work activities as preparation for school and adulthood, when conformity and obedience would be required. Apple and King argue that kindergarten practice initiates children into the world of work and that its primary function is one of socialisation rather than teaching academic content. The important contribution made by this study is the understanding of beliefs as social constructions. Beliefs about what was valued in the school setting were embodied in the meanings given to the terms 'work' and 'play'. These meanings were shared by all the participants in the classroom culture.

While using a different framework, Lubeck (1985) reaches a similar conclusion following her one year ethnographic study of a middle class white United States preschool and a black Headstart programme. She comments that teachers in both settings had "clear ideas about how children learn and how they should behave" (p133) and that these ideas were reflected in their very different behaviours. She concludes that each programme served to methodically socialise the children into the pre-eminent values of their cultures. In the case of the white preschool, this was effected through individualistic and materially centred practices such as children's free choice of activities and teachers working in isolation from one another, focused on supporting the activity of individual children. In the Headstart programme the black women worked collectively, often in spaces segregated from children and their interactions with children occurred in groups. Unlike Apple and King (1977), Lubeck does not offer a structural analysis of her findings but argues simply for acceptance of such cultural differences.

**Interpretive approaches to theory-practice congruency**

The most recent studies of early childhood teachers' beliefs emerge as a synthesis of aspects of the positivist and interpretive traditions of enquiry. Rating scales have been
largely abandoned in favour of semi-structured interviews, pre-coded observation schedules replaced by field notes. Unlike the earlier studies, objectivity is viewed as shared intersubjective agreement with researchers seeking to understand teachers' own constructs. Yet the model is still, in some respects, one of education as 'applied science', with theory defined as the subjective beliefs about children's learning and development held by teachers and applied to their practice. It is from this framework that questions are asked once again about theory-practice congruency.

In a study which compared the philosophies and practices of Ohio state kindergarten teachers, principals and supervisors, Hatch and Freeman (1988) invited 36 informants to describe both their current practices and their beliefs about children's learning and development. Teachers' descriptions of their kindergarten programmes indicated these to be skill based, highly structured, academically focused and based on a direct instruction model consistent with behaviourist theory. Teachers reported their compliance with the district course of study which established the pupil performance objectives. No teacher reported using a child initiated approach, nor was play included in any programme.

However when questioned about children's learning and development, more than half (55.6%) responded in a manner consistent with maturational or interactionist beliefs, many expressing with distress their view that kindergarten programmes had become 'overly academic'. Hatch and Freeman coin the term "philosophy-reality conflicts" to describe this phenomenon and conclude by asking how teachers are affected by the daily experience of such conflict. They suggest that teachers denied any curriculum control may come to see themselves as technicians rather than professionals. While their findings are alarming, Lampert (1984) argues that teaching is always a contradictory activity in which teachers must mediate between conflicting claims. Hatch and Freeman offer no insights into the way in which teachers actually did resolve their conflicts, their study being confined to teacher interviews and their subsequent analysis.

In another recent study focused on early school retention practices (Smith and Shepherd, 1988) an attempt was made to compare teachers' beliefs about learning, development and class promotion with their actual practices. The researchers also asked: What is it about the context of the school which might account for teachers' beliefs and practices? Forty kindergarten teachers were interviewed and case knowledge (that is, knowledge of what a teacher would do or had done under specific circumstances) sought, under the assumption that teachers' knowledge was likely to take the form of 'knowing how' rather than 'knowing that' (Price, 1969). Observations were conducted for 30 hours in each of six schools and focused on classroom organisation, teaching methodology and retention
practices. Finally documentary evidence was gathered (pupil records, parent pamphlets) and a sample of parents of children from two matched groups, one of which had experienced their children's retention in kindergarten, were interviewed to determine their perceptions of the school's grade promotion policies.

On the basis of their interview responses to questions about children's learning and development, teachers were classified into two categories; nativist and environmentalist, the latter category being broken into three sub categories; interactionist, (the nearest position to nativist), diagnostic-prescriptive and remediationist. The authors report that two of the teachers interviewed offered internally inconsistent responses, making it impossible for coders to assign them to one category. These teachers were excluded from the sample. Statistical analysis allowed for a comparison of the retention rates between nativist and environmentalist teachers, and a significant relationship was found between nativist beliefs and use of retention in grade. Teachers who believed that learning readiness was physiologically determined were more likely to recommend that children perceived as 'immature' be held back a year. The authors report that the teachers underestimated the level of parent and child resistance to this policy.

Surprisingly, in spite of having undertaken a range of different pre-service trainings, the teachers in each school but one were classified within the same category. In trying to understand why patterns of belief might exist within schools the authors postulate a tentative relationship between the organisational structure of the schools and their grade promotion practices. Schools which were more bureaucratic and in which there was more separation between grades were found to favour retention practices while schools with more flexible cooperative organisation were unlikely to use these. The authors note the inherent contradiction between teachers' nativist beliefs (which one would expect to translate into developmentally based, individualistic classroom practice) and the emphasis within the schools in which they teach on enforcing conformity, arguing that it is the latter rather than the former that determines the practice of retaining children in grade. Thus they propose that the 'belief' is simply a justification for practice which emerges in response to perceived social and structural factors; the pressure from parents to provide early academic instruction, the inflexibility of first grade teachers, and so on.

This interpretation of the data raises questions about the relationship between what people say and what they do. 'Gaps' between teachers' espoused beliefs and observed practices can be interpreted in several ways. Hatch and Freeman (1988) used the term "philosophy-reality conflict" and concluded that the teachers in their study were prevented (or at least, perceived themselves to be so) from implementing their beliefs in the classroom. Smith
and Shepard (1988) offer a different interpretation suggesting that the real belief that underlies the policy of retention in grade employed by some teachers is not one about the nature of children and their development but rather a more pragmatic belief about the nature of schooling. Teachers who favour retention see schools promoting early academic achievement and recognise that the credibility of teachers will depend to a large extent on their ability to promote such success. The school is seen to be inflexible and exacting rather than accommodating of difference, thus the emphasis on retaining children in grade for further preparation is increased.

The project undertaken by Smith and Shepard was commissioned by the school district. They do not report seeking confirmation of their interpretation from the participating teachers, this oversight constituting a major weakness in their design. While their study is mainly descriptive of teachers' beliefs and practices, their tentative exploration of apparent inconsistencies between teachers' prevailing rhetoric and the reality of their practice goes some way towards what Carr and Kemmis (1986) argue is the aim of educational action research. The purpose of such research is to ensure that the observations, interpretations and judgements of educational practitioners become more coherent and rational and thereby acquire a greater degree of scientific objectivity (Carr & Kemmis, 1986, p124). This begins when teachers begin to identify and explore inconsistencies in their practice, seeking explanations and ultimately, resolution.

While Smith and Shepherd talk of the context influencing teachers' beliefs about learning and development, their conclusion suggests that teachers' 'operational theories' are wider than this, embracing a wide range of beliefs relating not only to how children learn and develop, but also to the purpose of schooling, the expectations of school officials and parents, and so on. Their work emphasises the way in which theory embraces a complex network of beliefs informing practice.

It may be the apparent inconsistencies which provide the greatest insights into practice and its theoretical context. Lack of coherence in a teacher's account should not be a reason to exclude her from the sample as did Smith and Shepard, but rather a challenge to look again. Theory does not exist as a body of knowledge, 'distilled' for application to a given situation. Rather it is implicit in practice. Teachers pursue many goals, some of which may be inconsistent with each other. As Lampert (1984) highlights, teaching involves the reconciliation through action of inherent contradictions which cannot be resolved in the abstract.
If we are to understand the educational process adequately we cannot explore theory in isolation from the practical context. This is a mistake commonly made by those researchers who have attempted to investigate theory-practice congruency. Certainly it is possible to compare what people say with what they do; the mistake occurs when we assume that what people say, in itself, constitutes their theory. What people say in the context of an interview or questionnaire will be influenced by the questions we ask them and their 'reading' of the research context. But more than that, they can tell us only of those beliefs which they hold explicitly. Other tacit beliefs, existing only in action, are likely to be overlooked. Further, no matter how detailed the questions asked, talking about beliefs in abstract does not represent practice. It is only by observing practice that we get a sense of how teachers actually reconcile potentially conflicting beliefs. Attempts to explicate teachers' 'operational theories' by seeking statements of their belief in abstract and in advance of practice are likely to yield superficial and distorted accounts. Therefore subsequent claims of 'lack of congruency' between theory and practice have no validity.

If educational research is to have impact on practice it must abandon the 'applied science' model of the theory-practice relationship in which prior theory is understood to be applied to practice in favour of the praxis account which acknowledges a dynamic and dialectical relationship between theory and practice. The tentative claims made by Smith and Shepard begin to do this. While these authors falsely assume that belief can be described without reference to the practical context, they do begin to acknowledge a dialectical relationship between beliefs and practice, suggesting not only that theory influences practice but also that practice influences theory. This is evident in their conclusion that retention practices are related to, and form an integral part of, school structure (...) To protect (the children) from inappropriately difficult schooling, teachers may have used practices such as retention and couched them in the nativist theory of child development. (...) Alternatively, teachers with strong beliefs may have been instrumental in creating the school structures that were found to relate to retention practices (Smith & Shepard, 1988, p330).

Such an account of the relationship between teachers' beliefs and practices is scarcely evident in the literature. The nearest approximation occurs in the studies which explore teachers' beliefs by engaging teachers in explication of their own concrete practice, using their own constructs (e.g., Spodek & Rucinski, 1986). This approach ensures that accounts of belief are grounded in practical contexts. Rather than describing what is said as 'theory' and comparing this with practice, such studies use both what is said and what is done as contexts for making teachers' 'operational theories' explicit.
Spodek and Rucinski (1986) use personal construct theory in their attempt to classify the belief systems of first grade teachers. In a study designed to test a methodology for identifying teachers' belief systems related to classroom practice three teachers were each observed for five one hour periods and later questioned about the basis for the decisions they made during each occasion. From the interview data the authors extrapolated teachers 'theories-in-use' by collating sets of beliefs under the following headings: Goals for children's behaviour, children's needs, classroom management, planning and organisation, materials, learning, instructional processes, academics, evaluation and assessment and home and parents. Teachers were found to vary in the number of belief statements they made but there was some overlap in content with 19% of beliefs being shared by three teachers and 26% by two. Three categories predominated in the statements of all the teachers: These were classroom management, learning and instructional processes, suggesting these teachers to have a management orientation. The writers also attempted to classify beliefs as relating to values, that is, the 'oughts' of education, or facts, that is, statements about the world and its processes. They report a 40:60 ratio of value to fact beliefs and suggest on that basis that these teachers' decisions were more informed by technical knowledge than value positions.

Beliefs which were held in common by the three teachers were eclectic in their origins and related to developmental stage theory, and instructional practices, for example, the importance of immediate feedback and the need for children to experiment with concrete materials. Democratic beliefs were also shared, for example, that children should have some freedom of choice. The writers conclude however, that the differences rather than commonalities may be a profitable source of insight with relevance to teaching styles.

In their conclusion they also report briefly on the preliminary results of a replication of this study using preschool teachers. This latter group expressed many more beliefs related to goals for children, no beliefs related to evaluation and related beliefs about development to those about learning, suggesting the belief systems of preschool and first grade teachers to differ.

Surprisingly, Spodek and Rucinski (1986) describe the beliefs of these teachers as congruent with their practices. This would seem a self evident conclusion when these beliefs were construed from explanations given of actual teaching practice. Although their study focused on teachers' own constructions, their statement about the relationship between theory and practice reflects aspects of the 'applied science' view.
Spidell (1984) used a similar methodology when she recorded the interactions between three preschool teachers and children engaged in 'free play' and later used videotaped incidents as prompts for the teachers' reflection on their intentions during these episodes. In discussion of these actual examples of their practice, teachers were invited to explicate their beliefs about the early childhood curriculum, how teachers should teach and how children learn. While there were some differences between the three teachers, all held views consistent with the child-centred ideology (as described by King, 1978); that given a psychologically supportive, cognitively stimulating environment, children will learn at their own rate by pursuing their individual interests through play. Two of the teachers saw their work as including direct instruction and demonstration while one believed that teachers should not 'intervene' unless invited to do so by the child.

Spidell moved beyond teachers' constructs, however, using the Weberian concepts of 'economic interests', 'social-political structures' and 'cultural resources' to categorise the functions of each interactive episode. Thus teacher attempts to engage an isolated child in activity were classified as 'cultural' (encouraging culturally approved attitudes), while attention to discipline was seen as 'socio-political' (maintaining authority). However her attempt to classify some incidents as 'economic' (negotiation over scarce resources) was not supported by the participant teachers who maintained the view that there was enough of everything to go around. Like King (1978), Spidell suggests that these teachers have a false consciousness, arising from the child-centred ideology which they have adopted in which children are viewed as 'free to choose' and which is not congruent with the alternative view of teacher attention as a rationed commodity.

It is unfortunate that Spidell, while attempting a critical analysis, does not seem aware of the way her own work is ideologically bound. She writes of teachers' 'interruptions' and 'interventions into children's play', suggesting a view of play as a natural activity which is shaped only by children. Yet as Tizard (1971) has argued, the child-centered ideology and its embodiment in the early childhood educational environment can only be a cultural product. The work of Apple and King (1977) demonstrates the way meanings are embodied in common sense everyday language of practice and should alert the researcher to the need to be self reflective.

Interpretive work has limited validity unless the understandings it presents are substantiated by those participating in such study (Carr and Kemmis, 1986). While all of the studies reviewed above have involved dialogue of some kind between researcher and teacher, few have reported attempts at genuine collaboration. One study which used a collaborative model was that conducted by Wood, Cranstoun and McMahon (1980) in
Oxfordshire preschools. The researchers were particularly interested in the relationship between teachers' aspirations and their actual activity. Initially three teachers were invited to tape record half hour excerpts of their conversations with children for transcription and analysis according to functions. However when presented with this subsequent analysis, the teachers expressed dissatisfaction, both with the quality of their own interactions and with the way the analysis did not include contextual information which would make sense of their decisions. The next stage of the study involved 24 teachers (predominantly playgroup workers) who added explanatory comment to their self recordings. Several of these teachers participated in a further stage of the research in which they attempted to change their interaction patterns with children, mostly without notable success. The authors conclude that there is a gap between teachers' aspirations and their behaviour, which can be partly understood to be an effect of the school structure, that is, its physical design, teacher ratios, schedule of duties and so forth. They also suggest that some teacher beliefs warrant examination in the light of empirical data. For example, in centres where certain children were assigned to certain staff to ensure that all children had opportunity to develop a close relationship with a teacher, teachers were found to spend a high proportion of their time moving about to track down 'their' children and relay messages about centre routines. This behaviour did not promote sustained conversation, which would appear to be a necessary condition for the development of close relationships. Subjecting teachers' beliefs to practical tests enables such 'gaps' to be identified and addressed.

Wood et al's (1980) frank discussion of the difficulties associated with collaborative research is insightful. They report the teachers in their study to have different preoccupations from their own. This in itself might have provided a useful entry point to those teachers' beliefs. While the researchers sought to analyse teacher child interaction into domains and topics the teachers were much more interested in who began the dialogues, who kept them going and how to ensure that some children did not miss out. Wood et al (1980) comment on the teachers' belief that children should initiate their own activity and the way this was a 'given' in teachers' speculations about how to increase meaningful conversation with children. The teachers expressed irritation at how the researchers conceptualised their practice, arguing that the categorisation of conversations into a series of functional moves fragmented and distorted their activity. The way in which the teachers kept insisting that their practice could only be understood in the context both of their philosophy and the structural features of their work offers support for the praxis account of education as a complex, theoretically informed practical activity. Notably in this study, the teachers regarded the academic theories about teaching and learning which guided the research process as less relevant than their own theories which
embraced their beliefs, for example, the importance of allowing children individual choices.

Summary
The literature reviewed here so far has related to the North American and British contexts. Most of the studies were conducted in the context of the early formal schooling of children in the five to eight year age range (i.e., kindergarten and elementary grades in North America and infant classes in the United Kingdom). This explains in part the teachers' focus on reconciling developmentally appropriate practice and academic activities (e.g., Hatch and Freeman, 1988). Several studies have argued that the beginning school classroom has primarily a socialising function, this hidden curriculum visible only through penetration of the ideology embedded in its language and structures (e.g., Apple and King, 1977; Lubeck, 1985).

It seems that teachers' views about how children learn and develop, rather than conforming with any particular formal theoretical position are somewhat more eclectic. This leads some writers to conclude that such teachers' theories are 'impure' or 'inconsistent' when compared with formal criteria of what counts as 'holding a theory'. Thus they report an "absence of theoretical purity" (Verma and Peters, 1974, p20) while others exclude teachers' whose beliefs appear 'inconsistent' from their sample (Smith and Shepard, 1986).

Many studies present the early childhood teacher as advocate for the 'child centred ideology' with its commitment to developmentalism, individualism, learning through play and childhood innocence (eg, King, 1978). The role of the teacher is that of sensitively 'framing' the child's experience rather than directing or participating in it. Such a perspective is often termed 'traditional' and has its roots in the work of Rousseau, Isaacs and Dewey (Weber, 1984). However attempts to describe teachers' theories as reconstructions of formal early childhood educational theory offer only limited insights. In particular it is important to acknowledge the influence of the immediate social and cultural context in shaping both belief and practice.

The New Zealand Context
While early childhood teachers' beliefs have not been studied in the New Zealand context, two studies offer some relevant insights. In an evaluation of the integration of an additional teacher into six previously two-teacher New Zealand kindergartens, Smith, Macmillan, Kennedy and Ratcliffe (1989) interviewed 15 teachers and invited them to reflect on their roles and relationships with other staff. Labelling as 'successful' those
kindergartens in which the integration had been well perceived by staff, the authors identified the ability to articulate one's 'educational philosophy' as a teacher characteristic related to success. Where teachers had differing philosophies and had difficulty discussing these, they reported experiencing conflict and/or job dissatisfaction, sufficiently serious in many cases to cause them to seek an alternative position.

This study suggests that there is a range of individual educational beliefs held by teachers, even within the free kindergarten service, a service which Meade (1985) found to have adopted a remarkably uniform pedagogy. Unlike free kindergartens, which employ only teachers holding the NZKU Diploma, childcare settings are staffed by people holding one or more of up to twenty different relevant qualifications, if indeed they are qualified at all (Kerslake, 1987). Thus childcare services are more diverse than kindergartens, providing various contexts in which debate about what counts as 'good practice' would seem inevitable.

An example of such debate is introduced by Meade (1985) in her discussion of teacher behaviour in six New Zealand early childhood centres. Describing the inequitable teacher-child interaction patterns she observed, Meade cites Wood et al (1980) in arguing that "nature does not always take care of its own" (Wood et al, 1980, p188) and proposes that teachers re-examine the assumptions that underlie non-interventionist teaching practices. Her comments highlight the dilemma that teachers face when they attempt to reconcile equity policies with a naturalistic philosophy, expressed in the belief that the 'children will choose' the activity that will best further their development. In arguing for 'intervention' her assertions are similar to those of Peters (1974) in his critique of the position adopted by Rogers. Rogers believed that the purpose of education was self-actualisation and that within a truly educative model, the teacher should become a 'facilitator of learning'. "But surely we don't want any sort of self?" challenges Peters (p224), who rejects Rogers' "squeamishness about direction" and argues that education rightly involves the initiation of others into collectively valued modes of thinking and experience. Peters saw no discrepancy between the concepts of 'teacher' and 'facilitator of learning', agreeing with Rogers that teachers should adopt methods which engaged children's interest and promoted their growth. However he disagreed that children would always know what was in their best interests and claimed, as did Tom (1984) that educators are morally charged with deciding what should be learned. Meade (1985) takes a similar position in her conclusions. The distinction between children's 'needs' and 'wants' are blurred within the 'free play' model with teachers arguing that children's choices are made on the basis of need, yet clearly perceptions of need reflect beliefs about the purpose and nature of education.
The fervour with which New Zealand 'free play' advocates have been critical of 'structure' in early childhood settings has perhaps prevented such issues from being publicly addressed in the appropriate professional forums. However an impetus for debate is provided by the Ministry of Education's requirement that early childhood centres in consultation with parents/whanau develop charters outlining curriculum goals and equity policies. Teachers are being called upon to account both to their communities and to government for their practices and to make explicit the theoretical bases from which these emerge. Thus it is timely to raise questions within the New Zealand context about teachers' 'operational theories'.

Conclusion
Much of the focus of the literature on early childhood teachers' beliefs has been on comparing declared belief with observed practice. This work has rested on several misguided assumptions:

a) that people can identify their beliefs in abstract
b) that belief can be established (or even measured) from what people say
c) that statements of abstract belief will translate into specific actions

Underlying these assumptions is the 'applied science' view of the theory-practice relationship in which theory is understood to exist as a body of knowledge 'distilled' for application. The literature presents a challenge to this view because congruency was found to be weakest in those studies in which the questions asked about belief were at the level of abstract principles (e.g., Verma and Peters, 1974) or narrow in focus (e.g., Hatch and Freeman, 1988). This thesis argues that teachers' operational theories consist of many interrelated beliefs which, rather than existing as a body of propositional knowledge, are immanent in their practices. For this reason it is claimed that questions about congruency are inappropriate. By employing a case study approach, the present study is able to focus on the nature of the beliefs which inform practice, the relationship of these beliefs to one another and their manifestation in what teachers actually do.

The work of Spodek and Rucinski (1986) and Wood et al (1980) offer some insights into such a process. Both studies begin by inviting practitioners to explicate actual observed incidents, thus grounding the account of theory in practice. In the case of Wood et al, the practitioners had the opportunity to test their beliefs in practice, some receiving feedback which caused them to reconsider these and subsequently modify their practice. In both of these studies belief was seen to be an individual matter. Yet the studies of King (1978) and Apple and King (1979) along with more recent work on the culture of the preschool (Corsaro, 1986), demonstrate the way in which knowledge about schooling is shared by
all of the participants including the children. Attempts to theorise early childhood practice, therefore, need to explore not only what teachers say and do but also the meanings that their activity has to the children in their centres.

Clearly accounts of teachers' operational theories as reconstructions of formal psychological theory are inadequate. Teachers' practices are informed by their beliefs not only about how children learn and develop, but about what is valuable, expedient and approved of. These beliefs may be largely implicit, immanent in practice. It is by reflecting on practice that we are able to make them explicit and thus amenable to test. This is the point made by Dewey when he maintains that consciousness occurs only when habits break down (Dewey, 1960); it is only when the taken for granted world becomes problematic that we begin to question the adequacy or 'utility' of our beliefs. The literature suggests that a combination of classroom observation and teacher interview proves most fruitful, allowing for comparisons and negotiation between insider and outsider views. Lampert (1984) stresses that accounts of educational practice must both emerge from and be validated within the concrete practical experiences of teachers. Thus discussion of practice, rather than focusing on abstract principles, must attempt to explicate what it is that teachers actually do in terms that teachers themselves use. The use of structured recall of observed incidents (e.g., Spodek and Rucinski, 1985) seems a useful approach, particularly if supplemented by the use of additional questions to enable a wider focus.

In the present study theory is understood to be the framework of beliefs in which practice occurs rather than a body of abstracted knowledge which teachers apply to their work. Thus it is claimed that attempts to understand a teacher's operational theory must be grounded in practice. We need to attend not only to what a teacher says, but also to what she does if we are to begin to make this explicit. Further it is argued that people act upon a complex of interrelated beliefs, each belief exerting influence on the others. Several studies have supported this view, demonstrating that teachers' practices are shaped both by their beliefs and by the organisational context of learning (e.g., Smith and Shepard, 1988; Wood et al, 1980).

The position taken is that educational theory consists of teachers' beliefs which are manifest in their practice. From this position, questions of 'congruency' between theory and practice are inappropriate. However a teacher's account of her beliefs, that is her 'operational theory', may be more or less adequate. Good accounts will be full and relatively coherent. When belief is not explicit or when a declared belief is apparently inconsistent with observed action we are left with 'gaps' (Carr and Kemmis, 1986). The
identification of such 'gaps' serves to problematise practice, stimulating further reflection-action until a more adequate theoretical account can be given. Carr and Kemmis argue strongly for such reflection-action, maintaining that 'gaps' are closed only when practitioners move from ignorance and habit to knowledge and reflection. Their understanding of what constitutes a 'gap' is evident in their statement:

Closing the gap between theory and practice is not a case of improving the practical effectiveness of the products of theoretical activities but one of improving the practical effectiveness of the theories that teachers employ in conceptualising their own activities (Carr & Kemmis, 1986, p116).

In the present study, both the observed activity of six early childhood teachers, their own accounts and those of the children they teach, provide the data. Two questions are addressed:

1) What beliefs inform the practice of six New Zealand early childhood teachers, that is, what are their 'operational theories'?
2) How adequate are these teachers' 'operational theories', that is, how do they rate as full and coherent accounts of practice?
Chapter Four
METHOD

Rationale for methodology
A case study approach is taken because it allows each teachers' perceptions and experience to be explored as a unique and complete whole. While the term 'case study' does not imply any particular methodology, it is located in the interpretive tradition of social science research, the purpose of which is to

reveal the meanings of particular forms of social life by systematically articulating the subjective-meaning structures governing the ways in which typical individuals act in typical situations (Carr and Kemmis, 1986, p90).

The purpose of the case study is to illuminate human action within a particular social context. Its focus is on description and interpretation rather than measurement and prediction (Codd, 1981). Such a focus is particularly appropriate when we seek to understand why human agents act as they do, for it allows us to engage with their aims and intentions and to explore the tacit knowledge which they exhibit in action (Stake, 1978). Its strength lies in the attention given to the subtlety and complexity of the case.

Adelman, Jenkins and Kemmis (1982) identify several other advantages of the case study approach. Because it involves 'down to earth' reporting of real life incidents it is "strong in reality" (Adelman et al, 1976, p12), its accessibility enabling readers to evaluate conclusions using the same processes of judgement involved in everyday life. In other words, it "capitalises upon the natural powers of people to experience and understand" (Stake, 1978). Further, the case study recognises the embeddedness of social truths and their complexity. It allows for careful attention to be given to context and enables discrepancies between viewpoints to be reported. Finally, by illuminating practice, the case study can make a direct contribution to the world of action, creating "conceptual stabilities which are platforms for understanding and for action" (Kemmis, 1982). The insights it generates are both relevant and accessible to the practitioner, leading easily back again to the world of action.

Typically there are three aspects to a case study investigation; 'observe, inquire further, then seek to explain' (Parlett and Hamilton, 1972). In the present study, observation of children and teachers was followed by a series of interviews with teachers and children. The interviews included both structured recall relating to specific recorded incidents as well as questions which sought teachers' views more generally. This enabled teachers to
draw on their case knowledge (Spodek and Rucinski, 1986) without constraining their reflection on practice.

Kemmis (1982) explains that the object of the case study, as with any scientific inquiry, is to get at the truth of the matter, thus case study is an empirical exercise. In case study, while truth or falsity of conclusions is judged to some extent by reference to the sense experience of the observer it is also a matter for negotiation with the participants. Descriptions must have authenticity; participants should be able to recognise and validate the meanings made by researchers. In other words, what is ultimately reported must 'work' for those involved; it must illuminate rather than confuse or obscure. This is not inconsistent with a pragmatist view of knowledge. At all times it is important to recognise that the 'case' is constructed by the researcher who decides, ultimately, what is observed or asked and how the data is interpreted. Lather (1988) calls the process of inviting participant feedback on a researcher's interpretation a 'member check'. As well as the use of an independent coder and triangulation of participant perspectives, a 'member check' relating to the interpretation of the data was carried out at two points in the present study.

Because of the way in which case study research is grounded in the 'real life' world, ethical principles must be stringently upheld. The principles of negotiation and confidentiality were important considerations in the present study. Access to the settings was negotiated with employing bodies, and the informed consent of staff and parents sought. Agreement was reached with individual staff as to what information relating to themselves was disclosed and how this was interpreted in the final report. (Two staff requested changes which were accommodated). At all times, conversations with individual staff were treated as confidential. This was particularly important in several cases where staff expressed views of their co-workers, with the proviso that these not be reported. Every attempt has been made to offer anonymity to the participants in this study. Names and descriptions have been changed for this purpose. Yet it is acknowledged that case study research, because of its intensive focus, is likely to yield accounts which are publicly recognisable. The participants in this study consented to their involvement, fully aware of this fact.

While it is the beliefs and practice of six teachers that are reported in the present study, a research methodology was adopted which enabled practice to be observed from the perspective of the children in the centre. There were two reasons for this. In both centres children were allowed to select their own activities for most of each day. The work of Wood et al (1980) suggested that teachers' decisions not to engage with some children in this context are important signposts to their theories. They acknowledge the absence of
child data as a major weakness of their design. The decision to observe and interview children as well as their teachers also reflected the view that the meanings of practices are socially constructed. Both children and teachers engage in a process of negotiating meanings, although not necessarily as equal status partners, thus it is appropriate to seek the views of both. Comparison of the views of children, teachers and the observer allowed for triangulation of the data.

**Settings**

Observations were carried out in a childcare centre and a kindergarten, both near the city centre. Entry was gained by an initial approach to both the local Free Kindergarten Association and the New Zealand Childcare Association branch who gave me the names of two centres who might be willing to participate. I visited both centres, discussing the research proposal with the Head Teacher/Supervisor who agreed to the study being conducted.

a) Childcare centre

The childcare centre is administered by a community trust and has 50 children attending at one time, 15 of whom are over 4 years and 10 of whom are under 2. (The under 2 year olds are housed in a separate part of the building.) There are in total nine full and part-time staff, five of whom work with the children over 2. They are all accommodated in a large house which has been partially modified and is made up of several rooms with a back door leading to a huge rectangular shaped play area.

b) Kindergarten

The kindergarten is administered by the local Free Kindergarten Association and has a grade one classification, i.e., two groups of 40 children aged between 3 and 5 years attend for sessions of 2 and a half or 3 hours. There are two full-time staff. They are housed in a building designed for this purpose. It has one large room which can be divided by doors and a further smaller patio area through which children pass to reach the spacious L shaped play area.

Staff interviews were conducted in a setting of their choice. Five of the staff chose to be interviewed in their own homes and the sixth chose the centre. Child interviews were conducted in the centres.
Participants

a) Children

A letter seeking permission was sent to parents of all children aged between 4 years 3 months to 4 years 9 months and who attended the centres for 12 hours minimum per week. Two boys and two girls were chosen in each of the two settings, the first of each sex randomly and the second by selecting one from the remaining pool of children who had not been observed to play with the first child. In this way the likelihood of observing teacher interaction in a range of centre areas was increased. The children selected were aged between 4 years 3 months and 4 years 8 months. Eight children were each observed for a period of 10 hours at their early childhood centres.

b) Teachers

Six teachers were interviewed, two from the kindergarten and four from the childcare centre. Of the two kindergarten staff\(^1\), both held the New Zealand Free Kindergarten Diploma and one, in addition, the Trained Teachers Certificate (Primary). Of the four childcare staff, two held the NZ Childcare Association Certificate (with one of these having also trained as a Karitane nurse), one held the Trained Teachers Certificate (Primary) and the fourth was in her first year of the New Zealand Childcare Association field-based training. They were aged between 20 and 46 and had lengths of service ranging from 2 years to 16 years. All teachers were female.

Procedures

The study was carried out between April and October 1988. The observations and interviews were conducted by the author, the observation and later coding completed with assistance from an assistant. I am a 33 year old female university teacher in the field of early childhood education with 6 years previous experience as a kindergarten teacher and 5 years as a teacher educator. The assistant was a university graduate who was completing the Massey undergraduate Certificate in Early Childhood Education. She had worked as a Playcentre supervisor and was employed at the time of the study as a Community preschool officer.

a) Preparation

Three hours of pilot work in observational procedures was completed in a local kindergarten. During this time the research assistant and myself conducted observations of target children, recording their interaction with teachers. Following this, I spent a half

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\(^1\)The terms "staff" and "teachers" are used interchangeably.
day in each of the research settings becoming familiar with the environment and testing the recording equipment.

b) Observations
Each child was observed continuously for 20 x 30 minute periods, that is, 10 hours per child; a total of 80 hours. The assistant and I both observed the same child for 10 of those 80 hours, allowing for comparison of data and discussion regarding its interpretation. Because it was impossible to plan ahead for children’s departure times, some observational periods were cut short by the arrival of the parent to collect the child. When this occurred, the time was made up on another occasion. Where possible, the observations were carried out within a one week period, with attempts made to gather data which were representative of the child's total day in the centre. All children were observed at least twice from arrival and on departure. They were all observed throughout two of the daily staff-directed mat times and in some cases they were also observed throughout additional impromptu mat time sessions as well.

The child's language was recorded by a radio-microphone attached to a 'dress-up' jacket which was worn by the child. Staff in the centres agreed to invite the target children to wear this jacket during the observational period, removing it before s/he went home. While all of the target children initially agreed to wear the recording jacket, several of them later expressed reluctance to do so. Sometimes when this occurred the microphone could be placed unobtrusively near the child and the observation continued. However on some occasions, particularly if the staff or observer/s sensed that the child was becoming uncomfortable, the observation was abandoned. Fortunately, in every case but one (Mark) the children happily accepted the jacket again on a later occasion. In the case of Mark, the observer/s completed the observation period with written records only.

The observer/s recorded:
1 All dialogue between the child and teachers and details of the context in which this occurred. (Running records)
2 Any incidents that seemed to offer insights into children's views of the staff, or the staff's view of their work with children. (Field notes)
3 Documents (for example, newsletters to parents, notices on walls) in which staff made public statements about their work. (Field notes)
4 Contextual data including the numbers of adults and children present, details of the daily programme and the weather conditions.
c) Interviews

i) Teachers

At the conclusion of the observational period, all six teachers were individually interviewed. The focus of the interview was on exploring the beliefs which informed teachers' practices with dialogue about the target children allowing for exemplification. An interview schedule (Appendix one) was used to structure the dialogue and contained a list of broad questions which were followed up with probes as necessary. The interviews included opportunities for staff to comment on transcribed accounts of actual observed interactive incidents in which they had participated. Interviews lasted between one and two hours and were tape recorded. (An example is included as Appendix two.)

ii) Children

Each of the children was also interviewed. These interviews took the form of informal conversations between the author and the child in the centre. Again, an interview schedule was used (Appendix three) which contained questions about the child's perception of the teacher and peer activities in the centre. Two of the children's parents chose to be present at their interviews and one child was accompanied by his friend. The interviews lasted up to 10 minutes (according to the child's interest) and were tape recorded and later transcribed in full. (An example is included as Appendix four.)

d) Analysis of data

i) Observational data

Records of all interactions between the target children and teachers were transcribed in full, yielding a total of 332 episodes. After careful reading and re-reading of these data, and several attempts at ordering these, mutually exclusive categories were developed to enable these episodes to be coded according to their purpose. In line with recent ethnographic work (Corsaro, 1986) it was decided to code whole episodes rather than breaking these down into 'moves' or conversational turns. Treating the 'interactive episode' as an event which can only be understood as a whole, strengthens the validity of interpretive research and because it makes use of already established meaning systems, enables the process of seeking practitioner confirmation to be more direct (Wood et al, 1980). The categories were developed after talking with these teachers about specific recorded incidents and reflect the ways in which they described the intent of their interactions. The categories are descriptive and were arrived at inductively during the fieldwork phase of the study. They emerge from the conception of the teacher as an agent who acts with intent and purpose. Their use arises as an attempt to systematise teachers' interactions with children in order to identify patterns, either individual or collective, which may offer insights into practice.
The categories are ordered in relation to *child autonomy*, a construct which shaped teachers' practice. The interviews with teachers revealed that they understood their practice to be largely shaped by children's choices. This concept of children as autonomous agents became one 'window' through which to examine interaction. Thus categories have been described as child initiated, democratic (initiated by both teacher and child) and the remainder ordered according to the amount of choice afforded the child in regard to his/her participation.

**Categories**
The following first two categories are regarded as *democratic*: both children and adults initiated and the subject of the dialogue could relate to either:

**Social**
Greetings, comment about oneself, the person you are talking to or another third party, either in relation to the centre context or beyond. (Does not include comments about children's present activity.) E.g., 'Hi, how's it going?'; 'It's a bit crowded in here today'; 'You don't know where I'm going after kindy'.

**Plays**
Interaction of a pretend or physically playful nature. E.g., (tossing a rug over a child) 'Where has Nell gone?!' Or (entering the family corner) 'Oh, what lovely baking? Can I have a cake?' Or, (creeping up on an adult outside) 'We are witches and we've come to scratch you!'

The next set of categories describe the ways in which adults talk with children about the child's activity in the centre. This kind of interaction was initiated by both children and adults but its focus was on the activity of the child. Children did not comment on the activities of the adults:

**Describes**
A neutral (neither positive nor negative) comment about the child's activity. E.g., 'We're making a trap'; 'You've got all the little people'; 'I'm making big balls'.
The categories that follow were only initiated by adults, demonstrating clearly the difference in roles between child and teacher in the centre. The adult's focus was on giving; either evaluative comment, suggestion or direction, in relation to the activity of the child.

**Monitors**
Questions for the purpose of finding out what the child is doing, has done or intends doing next. The adult may be enquiring whether the child needs any assistance with what s/he is doing. E.g., 'What are you making over here?'; 'Did you finish off your puppet? What are you going to do with it?'; 'Are you managing to cut it OK?'

**Affirms**
Positive statements expressing approval of the child's activity. E.g., 'That's neat!'

In the categories that follow, the adult attempts to change the child's present behaviour in some way. Some forms of dialogue allow more opportunity for the child to exert some autonomy. These categories are listed in order of least to most directive.

**Suggests**
Suggestions that the child begin a new activity. The child has the option of agreeing or refusing. E.g., 'How about doing a painting?'; 'Come and have a go on the obstacle course!'

**Assists**
Assisting a child to do something s/he has already begun. Includes suggestions of how to do something, demonstration, physical assistance, provision of resources or information. E.g., 'Here, let me hold that bit of wood for you while you hammer'; 'You might need to use a staple to hold that on.'

**Extends**
Requests that the child 'do more' within the context of an activity already begun or that s/he reflect further on some aspect of the activity. E.g., 'What about giving your puppet some hair?'; 'How many spoons do we have? How many do we need?'
Leads
Any group activity (i.e., a group of children focused on a shared task) directed by an adult at which attendance and participation was voluntary. E.g., baking scones; music and movement, stories.

Mat
Any group activity directed by an adult at which attendance is compulsory. I.e., mat time.

Directs
Directions with which the child is required to comply, either related to centre routines or the 'rules' associated with the children's activities. E.g., 'It's tidy up time. Would you please clear up in there.'; 'When you drive the trollies you must look where you are going!'

Child initiated interactions with staff which did not fit the above categories of social or play or describes could be seen to have a complementary function to those initiated by the adults. Where adults gave evaluative comment, suggestions, assistance and directions, children sought these. This 'seeking' fell into the following categories:

Seeks recognition
Comments which drew the attention of staff to something the child was doing or had done and for which s/he clearly anticipated receiving approval. E.g., 'Watch me! I can jump higher!'; 'Look at my painting!'; 'I tidied up the family corner all by myself.'

Seeks access
Requests for help to do something, prompting physical assistance, suggestions for how to do it or provision of equipment or material. E.g., 'This nail won't go in!' ; 'Can we have the playdough in here today?'

Seeks arbitration
Requests for adults to arbitrate in child disputes. E.g., 'He took my box and I want to use it!'

Teacher Verification of Categories
Teacher verification of these categories completed this process. This was achieved by sending each teacher a description of the categories, accompanied by a representative sample of coded transcripts of her interactions with the children. Teachers were asked in an accompanying letter to comment on a) whether the categories accurately represented
their activity and b) whether the specific transcripts included were coded appropriately. Follow up to each teacher was made by telephone. All of the teachers agreed that the categories did represent their activity and supported the specific coding decisions.

Notes Regarding Coding
All staff initiated interactions were coded according to these categories in a mutually exclusive way. However, the categories describes, monitors, affirms were used when this was all the adult did. If however, she went on to suggest, assist or extend, the interactions were coded accordingly. For example, if an adult approached a child, greeted her, made a positive statement about her art work then offered a suggestion of how to attach a piece of fabric, this exchange would be coded as assists. Staff often finished an interaction with a direction, e.g., "...when you're finished here put your rubbish in the bin". If the previous focus of the interaction had been on suggesting, assisting or extending then it was coded accordingly. Interactions were only coded as directs if this was the only purpose of the interaction. Thus, this coding procedure is biased towards the categories suggests, assists and extends and possibly under-represents categories such as describes, monitors, affirms and directs.

Inter-coder reliability was estimated for 20% of the data. The research assistant independently coded 20% (N=66) interactions. Her coding of this data was compared with mine, carried out previously. When both of us assigned the same code to the same interaction, this constituted an agreement. Reliability was calculated by dividing the number of agreements (N=47) by the total number of interactions (N=66) yielding agreement of 71%.

This relatively low reliability reflects mostly a difference in coder interpretation of who began the interaction. In my initial coding, for the child to be regarded as the initiator, s/he had to make a deliberate physical or verbal overture to the teacher. However the independent coder interpreted less direct actions, such as standing near the teacher, as child initiated interaction. This difference accounted for 14 of the 19 disagreements. This problem was resolved in the final coding by maintaining the initial definition of 'child initiated'. While it is important to acknowledge the covert ways in which interactions are begun, it was decided that reliability would probably decrease rather than increase if coders had to decide on the basis of the observational records whether the child's non-verbal behaviour carried the intention of attracting the teacher's attention. The remaining five disagreements occurred over interactions which were equally divided between two categories. This was resolved finally by coding such episodes according to the category which occurred first.
ii) Interview data
The interview data were transcribed in full and used to address the following questions:

What is the participant's view of the centre function and her own role in it?
What beliefs does she express about children's learning and development?

Descriptions of staff beliefs were then compared with the other data, e.g., staff-child interaction patterns, the child interviews and the field notes. Key words were searched (e.g., 'play', 'work') from the interactive data and their contexts examined. Finally individual case studies were prepared for each teacher.

e) Follow up interviews
The first draft of the case studies were mailed to each participating staff member for confirmation, disconfirmation and/or comment. Staff were contacted by phone and offered a further face to face meeting if they wished to discuss the interpretation of the data. Four staff preferred to submit written notes and two participated in a further interview. These notes and interview data have been incorporated in the second draft of the case studies which appear in this thesis.
Chapter Five
FINDINGS

Six case studies are presented here in which the observational and interview data have been integrated to provide an account of each teacher’s declared beliefs and observed practices. The teachers’ views of their own practice are compared with the interactive data, which has been coded and is presented in table form. Six headings have been used to organise teachers’ views: Centre function, Educational goals, Development and Learning, Play, Teacher role and Interaction. While the headings used (e.g., 'Development and Learning', 'Play') have imposed order upon the data, some attempt has also been made to preserve the ambiguity and tension evident in the verbal accounts given by these teachers of their practice by attending not only to the dialogue’s content but also to its process (Opie, 1988). In each case there has been an attempt both to describe the teacher’s ‘operational theory’ (Hirst, 1983) that is, the account she was able to give of the beliefs which inform her practice, and to evaluate its adequacy.

Part A: The childcare setting
a) The teachers
Four teachers from the childcare centre participated in this study: Kim (the supervisor), Fran (the assistant supervisor), Maddy and Roxanne. During the 40 hour observation period their interactions with four children (Rose, Liam, Paul and Nell) were recorded. Following this they were invited to talk individually about their work in the context of two successive interviews.

b) The programme
The daily programme in the childcare centre consists of free play indoors until around 9:30 am when children gather in groups according to age with a rostered staff member for stories, songs and discussion. After this they have a second free play period in which they have the option of playing indoors or out. Activities available include playdough, art and craft, blocks, books, water, carpentry, climbing equipment, wheel toys, sand, etc. At around 10:00 am they are offered morning tea, and a lunchbreak follows at 11:30 am when the four year olds sit in a designated indoor space and eat lunches which they have brought from home. A staff member usually supervises this activity. Following lunch the four year olds return to the play areas (while the younger children have a sleep period) where they are free to choose their own activities. Most days at around 2:00 pm the children are gathered into ‘family groups’ of mixed ages.

The term used to denote children’s free choice of the centre activities

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1 The term used to denote children’s free choice of the centre activities
with a regular staff member and spend approximately 30 minutes in group activities (e.g., games, discussion, stories, songs). After this, television is turned on and the children can elect to watch Playschool or to play. Afternoon tea is available around this time. Most of the children observed were collected from the centre around this time of the day although it remains open until 6:00 pm.

With the exception of the supervisor, who is primarily involved in administrative duties, the staff are rostered on a three week schedule, each week bringing its own pattern of responsibilities for supervision, housekeeping and programme planning. Each staff member plans a theme once every three weeks and this is outlined on a wall plan in an area where parents can read it. Theme activities are the focus of mat times.

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1 'Theme' is the term used for planned discussions and activities focused on a particular concept or set of concepts (e.g., colours, healthy food).
Case study one: Kim

Kim is aged 30+ and is the childcare centre supervisor. She holds a Karitane Diploma as well as the New Zealand Childcare Association certificate and has worked in childcare for ten years. As supervisor Kim is responsible for the staffing and administration of the centre. Many of her interactions with children took place near the office from which she undertook this time consuming administrative work.

Function of the centre

Kim identified the provision of "quality care" as the function of the centre, defining this as

That's to meet all the children's needs (...) whether it be the loving environment they're in (...) they're well provided for physically, food, clothing, um, that the staff have got a caring nature, um, and that the children have all the opportunities that they need, whether it be inside or outside (Kim:20).

Kim expressed the view that the children needed both care and education, but in every statement her initial emphasis was on care. Her statement that the "educational programme" (centred around themes) provided for children's educational needs suggested her view of education to be a narrow one. This was misleading. Kim also stated the belief that children were learning all day (Kim: 177), the timetabled educational programme being simply "...what we have to put down on the centre plan" (Kim: 177). This is an example of the way teachers' perceptions of the expectations of others (for example, Ministry of Education officers) could be seen to influence centre practice.

Educational goals

Kim identified social skills and respect for others as a priority focus to enable children to cope with the immediate environment of the centre (Kim: 255). She also mentioned "physical and mental skills" as being important (Kim: 270). Her expectations for children were focused on "good behaviour", evidenced by conformity to centre rules. Thus her statement: "I expect the best from all of them. If I know they can do it, I usually expect them to do it" (Kim:237). While Kim believed that teachers should be "...aware of child development and watch what each child's level should be" (Kim:243) she also indicated her discomfort with assessment of children, stating "I find it really hard to judge kids and labelling and put things to them. I just fi... they're all lovely four year olds" (Kim:149).

1 The teachers' interviews have been transcribed and each turn numbered. Thus "Kim:20" refers to Kim's interview, turn number 20. Follow up interviews are indicated by the phrase "follow up" after the teacher's name.
This seemed to translate into the somewhat ambivalent centre practice of informal record keeping related to aspects of children's learning, but no individual interventions were planned should a child be considered to have learning deficits. While she spoke wishfully of additional staffing allowing staff to spend more time with individual children (Kim:319) it was by no means clear how such time would be used.

**Development and Learning**

Kim expressed the view that children learned constantly through their experiences with the environment and stressed the value of peer interaction (Kim: 214, 283). While she stated that children benefited from wide experience with a range of activities, she also indicated her reluctance to change their choice patterns. Her strategies for doing so included restructuring the environment and suggesting a new activity. However she spoke comfortably about using behaviour modification principles (giving children stars and stamps as rewards) to change behaviour that caused concern to staff or parents, (for example, taking off clothes, wetting pants) or to reinforce tidying up. These foci seemed consistent with Kim's comments about "good behaviour", although she herself explained the choices as "parent like". Possibly implicit in these was the belief that these behaviours were within the children's control (and therefore, their 'best' expected). Consistently also, however, both in her practice and in her reflection on practice, Kim stressed the need for children to adjust to centre routines (i.e., "to cope"), this being implicit in her description of socialisation.

**Play**

Kim described play as "an enjoyable learning experience" (Kim: 153) and initially also as "everything the child does", however when she described herself as playing it was in reference to physical activity (i.e., riding trollies and swinging). The understanding of play as physical activity was one which was shared by teachers and children in the centre and evidenced by the context in which this word was used. Analysis of the transcripts found Kim to use the word 'play' on six occasions, five of these relating to children's physical activity in the outdoor playground (and once to a game of dominoes which she initiated with Paul). Kim was never observed to engage in physical play herself and the children, when interviewed, described her as "never playing".

**Teacher role**

In the context of her work with children, Kim described her behaviour as "responsive", identifying children who were wandering or disruptive and making suggestions for what they might do (Kim: 51).
I would probably just observe and just to see really where...what they're actually doing (...) and I wouldn't interact unless I could see a need for it (...) (If) they're getting silly and hurting each other and that then I would probably interact and say, 'Oh what about...' (Kim: 73-75).

She identified a tension she felt between being a 'friend' to the children and being a 'teacher'. A teacher was seen as more authoritative, managing children with a consciousness of the other demands to be met, whereas a friend

...is just that bit more closer and bit more warmer because the children are here for such a long time. (...) As a friend I sit down with them, I talk to them, um, and it doesn't matter what's... what I've got to do, they're the most important thing at that minute (...) and I probably just generally do what they want to do instead of worrying about other jobs that I've got to do (Kim: 113-115).

When pressed for examples Kim indicated that she was still thinking through these ideas. 'Friend' seemed to be her preferred role but also something of a luxury, not often afforded by circumstance. She later commented frankly about the difficulty of working with untrained and young staff whom, she felt, could not be relied upon to adequately supervise the children, necessitating her continual overall supervision. Perhaps it was the lack of trained staff which was the major constraining factor in Kim's practice.

She expressed disappointment that she appeared "authoritative" in the transcripts, commenting, "It just seems that I'm always telling them to do something or they're coming to me for rewards" (Kim: 93). This view was supported by the interactive data and fitted with Paul's description of her as someone who "put the naughty people in the office" (Paul: Interview).
Interaction
Kim engaged in 30 interactive episodes during the observational period.

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Table 1: Kim's interactions

Of these, monitors was the highest scoring category (N=6; 20%) followed closely by recognition a child initiated category (N=5, 17%), suggests and directs (N=4 each; 13% each).

Lunch and tidying up accounted for the focus of most (80%, N=8) of the interactions coded monitors, directs, assists. Lunchtime was when Kim emerged from her more usual locations (office, entrance way, kitchen, locker room/lunch room, sleep room) into the
activity room where the 4 year olds spend most of their time indoors. The high proportion of her involvement that centred around routines was consistent with Kim's emphasis on the centre's caring function. Her interactions relating to routines were managerial in focus and centred on ensuring that children were on task.

Interactions with one child, Rose, accounted for 53% (N=16) of the total. Rose actively sought out Kim in the kitchen, dining room and sleep room, areas in which the four year olds, while tolerated, were not encouraged. Only Kim gave stars and stamps for tidying up. These were frequently the object of Rose's approaches, which took the form of hovering nearby persistently until acknowledged. On one occasion Kim responded with a redirection but usually Rose gained entry to the 'adult world' and was allowed to help with chores. This accounts for her insightful answer to the question, 'What do teachers do?'

They always do lots of work and they go to the quiet room to look after all the children who are sleeping (Rose: Interview)

Rose engaged in several lengthy interactions with Kim, providing competent assistance. These episodes allowed Rose to introduce conversation relating to the world outside the centre, for example in the darkened sleep room where Kim is making up the beds, Rose commented, "When I was a little girl I used to make huts like that..." (Rose:15). Kim's role in these conversations was low key, limited to listening and reflecting back Rose's comments. Kim's first priority appeared to be the task in hand (e.g., making up beds) and the dialogue appeared secondary. The only time she introduced an agenda in her interactions with Rose was to direct or reward Rose's tidying up. Again this focus was consistent with Kim's emphasis on socialisation, which meant, above all else, learning to conform to centre routines and expectations relating to "good behaviour".

On only two occasions was Kim observed to initiate interaction whose focus was other than lunch or tidying up; once in a brief exchange about Rose's 'cooking' and once to begin a game of dominoes with Paul. Her observations about her own behaviour were accurate. She rarely initiated interaction unless children were 'getting out of hand' or required direction regarding lunch or tidy up routines. It was difficult to judge whether Kim limited her interactions in this way because she was preoccupied with other tasks or whether she would have done so in any case. When asked this question in the follow up interview, she indicated that this was as much a philosophical decision as a matter of time constraints. Kim believed that children 'did better' when left to themselves. (Kim: Follow up) In summary it seemed that Kim believed that aspects of children's learning (i.e., their "physical and mental skills") occurred unproblematically when they were left to
choose activities. However some learning could not be left to chance, that is, learning to conform with centre routines related to maintenance of the environment and children's physical needs. This was her focus and it was consistent with her emphasis on providing a caring environment and ensuring that children develop social skills which enabled them to cope with centre life. It explained her "authoritative" style, a style that did not fit with her preferred role of friend (Kim: 113).

Kim's recognition of the discrepancy between her authoritative actions and desire to be a friend led her to express disappointment. It was not apparent, however, that the desire to be a "friend" emerged from any belief about its significance in relation to children's learning or development. Rather it seemed related to Kim's earlier comments about the importance of a "loving environment" in order to ensure children's security. It was access to the interactive data that generated Kim's awareness of her own interactive style and prompted her tentative reflections relating to a preferred style. The interview context did not allow enough time for her to work through the dilemma this presented, nor to identify the contextual factors which might contribute to it. In the follow up interview Kim indicated that the research process had left her with "unfinished business" (Kim: Follow up) which she wanted to give further attention.

Conclusion

Kim's interactions with children were mostly related to their physical needs (e.g., meals) or the maintenance of the centre rules about tidying up and reflected her commitment to children's physical care and the value she placed on respect. Otherwise she engaged with children only if they were "wandering or disruptive" (Kim: 51), preferring that they play without adult influence. Kim emphasised children's social learning as being most important; this seemed to mean learning "good behaviour". While she was unlikely to intervene in children's activity choices she did implement individual behaviour modification programmes when children did not conform to centre routines.

Kim found the interview context particularly unnerving and was often unable to answer questions to her own satisfaction. Clearly many of these called for views which she had not previously articulated. In addition, the interactive data offered insights which Kim found surprising and thus prompted her reflection. While she expressed disappointment with the managerial focus of her interactions with children, she was unable to see how the tension between authority figure and "friend" might be resolved within the centre context (Kim: Follow up).
While Kim's statements about the centre function, her goals for children and their development and learning were consistent with her observed behaviour, there were discrepancies evident in her two differing accounts of play and between her actual and stated preferred teaching style. These aspects of her 'operational theory' were not coherent and it was only by engaging with the data that Kim was able to begin to attempt to make them so. This involved her in reflecting on why these discrepancies existed and how they might be resolved in practice. Such reflection was clearly a new experience for Kim, whose practice could be described as relatively untheorised. However it was also clear that the interview context had limits for Kim, the combination of her nervousness and the newness of the experience placing constraints on the ease of the dialogue. As supervisor, Kim was responsible for the welfare of 50 children, the supervision of 10 staff and the daily administration of the centre. While she did not say so explicitly, Kim left the impression that she was unconvinced that 'reflecting' would change anything. This points to the need to recognise the way in which contextual variables (such as the availability of trained staff) influence teachers' beliefs and practices.
Case study two: Fran

Fran is the assistant supervisor in the childcare centre. She is aged 20+, holds the New Zealand Childcare Association Certificate and has worked in childcare for five years.

Function of the centre
Fran described the centre as providing a service to parents, by "providing the best possible service we can to children" (Fran: 14).

Educational goals
While Fran identified "school skills" (specifying knowledge of shapes and colours) as a learning focus, this was clearly secondary to her conviction that "children have got to know they are OK" (Fran: 94), the overriding belief which informed her practice. Fran argued that such knowledge was an important life skill:

Some children know that they're OK (...) whereas other children really need to know that and they do need that praise (...) I guess because I feel it's very important for an adult to feel OK about themselves or else everything else is just down and around them (Fran: 218-220)

and her commitment to this belief was reflected in her teaching goals

that the children (are) happy to see you in the morning! Laughing Or (...) join in at grouptimes and want to hug each other and feel confident enough to say their own name in front of the children (Fran: 160).

Fran used it to account for the way she engaged with children:

...you just look for them to do something good, because, um...so you can say, "Oh, look at that. That's really neat!" (Fran: 88)

This was indeed the way in which Fran worked. Throughout all the recorded interactions she behaved in a manner that was positive and affirming. The way Fran related this belief to her perceptions of adult life suggested it was part of her personal world view, a view that was demonstrated in her teaching practice.

Development and Learning
Like the other staff, Fran described children as learning directly through interaction with the environment and vicariously by watching and listening to others. The 'smorgasbord' analogy seemed appropriate in Fran's description of the centre programme. A fully balanced 'diet' of activities was provided and children expected to partake. Fran made this view explicit in her comment "I just feel you can get everything, all the skills you need out
of each area" (Fran: 168). She did not acknowledge any tension in her statement that the children "do need to experience it all (...) whatever they feel comfortable with" (Fran:92). Like all the other staff Fran was reluctant to challenge the activity choices children made for themselves. When a child's 'diet' was clearly not 'balanced', she indicated that she would first seek the permission of the child and parent before suggesting a change, a suggestion that the child was free to take or leave.

Fran's comments about clean up time 'interrupting learning' suggested that she viewed 'learning' as occurring only in the context of the activity programme (Fran: 208). Unlike the other staff who saw mat time as serving primarily an organisational function, Fran saw it as premium learning time because "it would be the one time you could pretty well say they were concentrating on something" (Fran:180).

However she expressed misgivings about adult initiated themes (the focus of mat time activity) believing that teachers sometimes misjudged the children's interest or prior knowledge. This was indeed the case. Each of the target children in the centre demonstrated prior competency with all of the concepts introduced as new knowledge in the context of mat time. Their responses at mat time ranged from eagerness to answer teacher questions (in the case of Rose) to a complete lack of attention (in the case of Liam).

**Play**

Like the other early childhood trained staff, Fran offered both a 'formal' and an 'intuitive' account of play. She began (as did all the staff) with a description of play as "learning". However she qualified this with the comment that she saw play as "moving about" (Fran: 132) rather than stationary activity. Then she became particularly reflective as she struggled further with the meaning of play, attempting to give both her own view and the one that she perceived the children to hold. She added to her description of "play as work" by distinguishing between adult's play and child's play:

> I think to adults its...you can do it and not really have to think about it or get anything out of it. I don't know but I think for children they're learning all the time (Fran: 130).

Finally she returned to the child's perspective, suggesting that enjoyment would be the deciding factor in the perception of an activity as 'play' or not. While this range of views were expressed by all of the staff, Fran differed from many of the others in that she recognised the discrepancy between her accounts as she spoke and tried to resolve this within the interview. The other idiosyncratic aspect to Fran's description was the way in which she offered the child's view. Her first tentative statement, that play involved learning, was an example of academic theory about play and appeared to be inconsistent
with Fran's use of the word in the centre context where she used it (on nine occasions) to refer to children's physically active or 'pretend' activities. Her second statement, that play implies enjoyment, was more consistent with the children's view of play as voluntary and sociable.

**Teacher role**

Like Kim, Fran used the term 'friend' as well as teacher when she described her role in the centre, stating,

Coming from the children I'd prefer if they just sort of see me as a friend. Coming from the adults I think I'd prefer it if they thought of me as a teacher. I don't really like the words "childcare worker". I sort of visualise just changing nappies and just doing manual tasks, whereas we do a lot more than that (Fran:26).

Expanding on the description of herself as a teacher, Fran added,

we carry out what a kindergarten does in their programming except to a greater extent (...) You have to allow for the different age groups and you have to allow for where the child is at and apart from that there's just so many children... (Fran:28).

In addition, Fran described herself as acting as "mediator" between the staff, parents and the supervisor (Fran:16), a role that she found both satisfying and frustrating.

**Interaction**

Out of the four childcare staff, Fran had the highest number of interactions with the target children, (N=60); twice that of any of the others. This along with the uniquely child-centred nature of many of her comments, suggested her focus to be very much on the children, rather than the centre routines.
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The four highest categories were plays (N=10, 17%), social (N=9, 15%), access (N=6, 10%) and assists/recognition (N=5, 8% each). Significantly, the first two of these are 'democratic' categories (that is, initiated by either child or teacher) while the next three are all child initiated. It seemed that Fran did indeed behave as 'friend' with children.
Children's descriptions of Fran suggested they saw her in this way. All replied affirmatively when asked "Is Fran your friend? and Rose expanded,

R: She always follows me!
NB: She follows you?
R: And I follow her! *Laughing*
NB: Do you? It's a game that you play?
R: *Nods vigorously*
NB: Oh that sounds neat. Does she do other things too?
R: Yeah
NB: What else?
R: Plays with the other kids
NB: She plays with them
R: And "What's the time Mr Wolf"! *Chuckling*
(Rose: Interview)

Not only was Fran observed to engage in play with the children, she also injected a playfulness into other interactions, for example in the following incident (coded social).

It is tidy up time and Liam is sitting at the dough table playing with the dough. T2 creeps up behind him, puts her hands on his shoulders lightly and bending down, grins at him. He chuckles and begins to gather up the dough (Liam:7).

Fran's reflections on practice were quite distinctive in that she often tried to give the child's perspective. For example, commenting on centre mealtimes she conveyed her sense that the teacher agenda was unlikely to reflect what was important to children.

I don't normally talk about anything that's important. We'll talk about their food but nothing really about what's going on in their life. It's just, "Eat up your yoghurt", that sort of thing (Fran: 80)

while, explaining her interaction style, she said,

I just try to be where the children are at, what they are wanting to do.....I don't often stay in one spot very long...I'm sort of moving and trying to see what's happening everywhere (Fran: 40).

Along with Mary, Fran was the only teacher who commented on children's thinking (and it was only these two teachers who engaged in interactions coded extends.) Fran described how she went about this, stating "I think I try and get children to think about things and, um, I say "Why?" to them" (Fran: 68-70).

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1 Each child's interactions with teachers were transcribed and numbered. Thus "Liam: 7" refers to Liam's seventh interaction with a teacher during the period he was being observed.
Fran indicated that she would not enter children's pretend play unless "it was rough or heading that way" (Fran:174). Surprisingly she was observed to engage in 10 incidents coded play during the observational period, all of these involved Nell, a child who played alone and whom Fran believed needed encouragement. 43% (N=26) of Fran's interactions occurred with Nell, a child who had few interactions with other staff and was described as withdrawn. Fran went out of her way to attend to Nell, explaining,

She's so quiet you want to make sure you talk to her...I guess I try to be really responsive to Nell. She's...because she's so quiet it's just so easy to overlook her I guess. You know you always pay attention...I try to make sure I give her quite a lot (Fran: 183).

It seemed from Fran's account that her belief that people needed affirmation took precedence over her view that adults should not intervene in children's pretend play.

Conclusion
Fran's practices could all be understood in the light of her belief that children "need to know they are OK". The source of this strong conviction appeared to be her reflections on successful adulthood and her belief that the foundation for this was laid in early childhood. This was an example of the way in which teachers traced their educational beliefs to their personal life experiences beyond the centre context. Statements of beliefs linked to a person's personal experience appeared to have a different status to other stated beliefs; in each case these 'personal' beliefs could be seen to be clearly enacted in practice.

Fran engaged in twice as many interactions with the target children as the other childcare staff and these were different in nature, being mostly either playful or social in nature or initiated by children. In spite of an expressed reluctance to intrude in children's play, the majority of Fran's interactions occurred in a play context. This apparent discrepancy is best understood as reflecting the overriding status of her belief that children "need to know that they're OK" which she translated into a need for adult affirmation. Her style of interaction was one of seeking out children, (particularly those whom she perceived as reserved) and showing interest in their activity. As well as emphasising self-esteem, Fran was the only childcare teacher to identify her role as promoting cognitive development. This was reflected in the interactive data where she, unlike any of the other teachers, was found to engage in extending conversation.

Fran's statements and observed behaviour were largely consistent. There was an apparent discrepancy in her expressed view that children need to experience all of the centre activities, yet her reluctance to 'intervene' to extend their choices. To some extent this was
echoed by all of the teachers in the study, although Fran made it most explicit. In the end Fran came down on the side of "whatever they feel comfortable with"; such a statement being congruent with her central focus on children's "need to know that they are OK".

Her understanding of play was similar to those of the other staff, with a juxtapositioning of 'formal' and 'intuitive' accounts. Fran herself recognised the discrepancy between these as she spoke and tried to reconcile this by reflecting further on how children might perceive play compared to adults. While a conclusion was not reached, Fran demonstrated the ability to move between her theory and practice, testing the adequacy of one against the other. This ability may have accounted for the relatively high level of consistency in what Fran said and was observed to do. In this sense, her 'operational theory' could be described as relatively coherent.
Case study three: Maddy

Maddy is aged 20+ and holds a Trained Teachers Certificate (primary). After teaching for a year in a primary school she moved to the childcare centre where she has worked for two years. Her four year old child accompanies her to the centre.

**Function of the Centre**

Maddy saw the centre as providing children with "love and care" first and meeting their educational needs secondly (Maddy: 38). While she was the only teacher to express this so directly, her view was one shared by all the childcare staff. Maddy's explicit focus on 'love' seemed to have emerged from her attempts to identify differences between the primary school context with which she was familiar and the childcare centre. She seemed to believe that the childcare centre had to ensure children's security while the school's focus was more educational. This belief in the importance of love and care combined with a primary teaching background translated into mat sessions in which Maddy directly taught 'caring and sharing'.

**Educational Goals**

In keeping with her description of the centre's function, Maddy stressed "caring and sharing", respect and "good manners" as priority programme goals. Maddy led one of the centre 'family groups' at which she regularly invited children to hug each other, explaining this practice as promoting caring. (Maddy: 183) Similarly the mat time practice of clapping for individual children's achievements was intended to promote self esteem showing them they're all good at something, you know? (...) sort of like school reports, um, you might have a child who is really academically bad but you'd write "S is marvellous at sports" or something (Maddy: 290).

However, while self esteem and pro-social behaviour featured in Maddy's discussion, it was the teaching of 'good manners' that was her focus. In 'family group' sessions she explicitly instructed children about the rules of polite conversation. Her descriptions of the target children further reflect this concern with 'good behaviour'. Paul was described as "well behaved, didn't really rock the boat at all (and) always cleaning up and stuff" (Maddy:151) whereas Liam tended to be "naughty" and inconsistent.

One day he might be all out to please you, you know, tidy up, be a good boy and that and then other days (...) he just couldn't be bothered (Maddy: 156).

Maddy's language suggested a normative orientation. Rose, for example, was "mature" while Nell was "intelligent". Overall, the manner in which she spoke of children was
consistent with a belief that teachers must ensure conformity to the rules of society (in the first instance, those of the centre).

Development and Learning
While Maddy spoke of 'development' in relation to the psycho-social domain (such language perhaps obscuring the way in which social behaviours were explicitly taught) she used the term 'learn' to refer to the content of the intended curriculum. Such intended learning could only take place when children felt secure, thus ensuring this security was the teacher’s first task (Maddy: 203).

She believed that children learned initially through sensory experience and later additionally from role models. She made reference to Piagetian theory, summarising her views thus:

There’s the stuff we learnt about cognitive development and assimilation and all the rest of it but that’s (...) just being in an environment where it’s really, you know, stimulating and there’s a lot of input and stuff like that (Maddy: 203).

Maddy referred explicitly both to Piaget and Ashton Warner to explain why children should be allowed to select their own activities, stating "the child learns to start with what's inside them" (Maddy:272). These beliefs were consistent with the traditional 'child centred' programme models in which children pursue activities of their choice. Her statements reflect the way in which teachers' 'operational theories' may incorporate their own reconstructions of academic theory, integrated with their other beliefs. In Maddy's case it seems likely that she genuinely believed that children needed "lots of input"; this was certainly the focus of her mat group sessions. But her stated belief that "children learn to start with what's inside them" seemed to be overshadowed, in practice, by her emphasis on teaching certain prescribed social behaviours. The majority of Maddy's interactions involved direct teaching to groups of seated children. While she was sensitive to the limits of such activity, stating "sometimes you are just talking at kids, sometimes you have facilitiated learning" (Maddy: 256) she was nonetheless an advocate, describing mat time activities as developing children's concentration in preparation for formal schooling."To me, mat time is like skills they've got to learn for when they go to school" (Maddy: 96).

Play
Maddy, the only one of the teachers in this study to have no formal early childhood training, defined play as "something more unstructured and initiated by themselves without teachers around" (Maddy:187). The study of play had not been an aspect of
Maddy's training as a primary teacher. Perhaps in that sense her view was 'naive'; it also fitted neatly with the children's perception. She believed that play was an important context for children's learning, drawing on psychodynamic theory in her statement:

they see something at home (...) and they don't quite understand well they come to (the centre) when they maybe.(...) role play what they've seen or heard at home and that helps...you know that's learning too (Maddy:219).

Coming from such a position it is not surprising that Maddy viewed adult involvement in children's play as unhelpful. This was borne out in her interactions. Maddy only approached playing children to give directions relating to routines. The transcripts show her to use the word 'play' in the way she described. On four of five occasions, play had the meaning of 'other than teacher-directed' (i.e., mat time or tidy up).

Teacher role
Maddy seemed to be struggling as she attempted to define her role, her hesitancy suggesting some uncertainty or ambivalence. Like Kim, her difficulty seemed to be in reconciling a desire to be a 'friend' to the children with her belief that teachers must "command respect" (Maddy: 82). The latter was a recurring theme in her interview, evident in recollections from her own schooling of "strong teachers", memories of her own primary teaching experience, her view of the centre supervisor as a strong leader and her preoccupation with children's 'good manners'. Yet as a newcomer to childcare, Maddy saw differences between this and the more familiar school context, these differences necessitating the adoption of a "softer" manner (Maddy: 86).

Maddy described herself unequivocally as a teacher, but identified two aspects to this role. The first she called "passive teaching", meaning

...a role model really (...) teaching them about love and caring and good manners, um, the way you react to other people (Maddy:50).

She contrasted this with "directed" teaching which she did at mat time, focused on specific themes (Maddy:60). In fact Maddy taught 'love and caring' in a similar way to colour names; through instruction and dialogue with groups of children. While the former was the focus of 'family groups' the latter determined the agenda of the morning mat times.

Maddy's comments about her involvement with children focused on mat time and supervision, both activities requiring attention to group needs. Maddy reported feeling overwhelmed by her responsibilities. Housekeeping duties and sole supervision of large areas allowed little time to give children individual attention. Maddy was ambivalent about
this. She clearly believed that adults could intrude into children's activity and was happiest maintaining a low profile. However she did advocate sensitive interaction, suggesting:

you can (...) quietly step into their imaginative play and get them sort of thinking about things. If you just sort of introduce like a little seed and it'll germinate... (Maddy: 113)

It was interesting to note the way in which Maddy did just this with her own four year old child at various points during the interview. Perhaps it was the other demands associated with her teaching role that prevented her from doing so in the centre.

**Interaction**

Maddy had 26 interactions with the target children.

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The majority (N=8, 31%) occurred in the context of a teacher directed group mat, followed by directs (N=4; 15%), and access, arbitration and recognition (N=3 each; 12% each). All of the directions were related to routines (for example, tidy up, lunch) with the children seeking recognition of art/construction twice and completion of a teacher directed task on three occasions. Over a third of the interactions were initiated by the children (N=9; 35%) suggesting that they found her approachable. However overall, Maddy's interactions could be described as directive in nature, reflecting her overriding emphasis on teaching socially acceptable behaviour.

Why did Maddy have such a high profile at mat times? Two of the target children (Liam and Nell) were in the 'family group' led by her, accounting in part for the high proportion of interactions recorded in this context. However because of her primary teaching experience, Maddy saw her contribution to the centre as "leaning more towards the educational side of it" (Maddy: 40) and subsequently assumed responsibility for more than her share of morning mat times. By doing so, she felt she provided a role model for the other staff.

There's quite a structure in taking a mat time, and keeping within bounds and sort of finishing it and starting it properly and there's some of the staff that might not...or who are in training, they, they can sort of watch you, you can be a role model for them (Maddy: 44).

Mat times were the context in which themes were discussed with children. Maddy suggests that this practice is important to parents:

One (parent) sort of queried whether the their child was learning anything because he has this sort of thing about a daycare being a place where they
just sort of played all day, whereas because (his wife) saw our programmes on the wall and had come in with Douglas at mat time and that she knew there was nothing like that happening and she could assure him, "Well, look, we, they do follow set things", you know it was quite a reassurance for her (Maddy: 205).

As well as bringing parent approval, Maddy saw the practice of themes as offering staff job satisfaction in the form of tangible evidence of children's learning. Her comments highlight the way in which the perceived status of childcare work can shape practice.

with (...) the view other people have of you, you get a lot more confidence and um satisfaction from knowing that you're not just changing nappies all day kind of thing. You know, some of the parents asked what I, I'd done before and that and when they found out I was a primary school teacher, well, I had their instant respect (...) and it shouldn't really be like that but it is (...) The other girls in training, they do just as good a job as I do but (...) it's just this kind of thing about childcare (Maddy: 254).

In Maddy's view, the centre staff were attracted to 'school-like' activities because these enabled them to feel like teachers.

Conclusion
Maddy, a trained primary teacher working in childcare, held some different views from the other staff. While she was able to draw on developmental theory to offer support for a child initiated approach to learning, most of her own involvement with children took place in the context of teacher-directed mat times. The consistent focus of both her dialogue and her practice was on teaching children respect, a quality she both explicitly valued and demonstrated in her own relationship with the centre supervisor.

In this sense her own 'operational theory' was relatively coherent, although the underlying tension between wanting to teach respect yet be a "friend" to children seemed to need resolution. These two desires were actioned to some extent in Maddy's practice. She did indeed teach respect yet the interactive data suggest that children found her approachable. She did not become involved in child initiated activity, maintaining always a more distant role of giving directions, assistance or approval, mostly in relation to routines. It is not clear whether her non-involvement in children's activity reflected her beliefs about the nature of play, her commitment to other duties, or a lack of certainty about how to step out of a primary teaching mode. It seems likely that all of these contribute to an explanation of her practice. At the follow up interview, Maddy indicated that the data had challenged her to think further about her role in an attempt to try to clarify these questions. It seemed that the research process may have prompted Maddy to begin to transform her practice into praxis.
Maddy suggested that, rather than reflecting beliefs about learning or development, the school-like centre practices served the function of heightening the professional status of childcare staff. This observation exemplified the importance of exploring the whole complex of a practitioner's beliefs in order to adequately explain practice. It also highlights the importance of the social context in which teaching takes place. Childcare teachers perceptions of themselves as low in status is likely to constrain their ability to enact their beliefs about worthwhile educational practice.
**Case study four: Roxanne**

Roxanne is aged 20+ has been employed as a worker in the childcare centre for two years. She is currently in the first year of the New Zealand Childcare Association field-based training programme. This means that unlike the other teachers participating in this study, Roxanne is only partially trained.

**Function of the centre**

Roxanne saw the centre as providing a service to parents by ensuring that "children's needs were met" (Roxanne: 12). It was clear from the examples she offered (e.g., sleep, food) that she saw physical needs as coming first. In addition she saw the centre as "starting (the children) off on their pre-educational things to get them ready for school" (Roxanne: 168). "Starting them off" translated into providing opportunities for children to practice doing homework, eating lunch by themselves, sitting on the mat and listening to teachers (Roxanne: 192).

**Educational goals**

Roxanne's beliefs about children's educational needs were clearly influenced by her own childhood experiences. Many of the practices she favoured were aimed at equipping children to cope with the harsh world of school as she recalled it. Roxanne had been expelled from secondary school a few years previously, but even her early memories of the infant classroom were vividly and poignantly expounded. Explaining why she invited children to do individual 'items' to the group at mat time, she said

> cause when I was a kid I would never ever dream of doing that, I used to get so terrified of standing up in the morning and having a morning talk, I used to get so nervous I used to sit there and make up a big long story to tell the kids (Roxanne: 83).

Roxanne felt that practice at performing to the group would give children "a lot of power" and make them more "independent" (Roxanne: 83).

While she identified "getting on with people" as the most important learning for children of this age, she also believed that teachers must transmit knowledge of social conventions, for example, when to wash your hands, eat your sandwiches, and so forth. This seemed to relate to her view that parents, and in their absence, childcare staff, must teach children knowledge of 'right and wrong', knowledge that she regarded as empowering because of the social ease it ensured.
Roxanne's view that rules are made by others is evident in her statement about the centre curriculum: "We might be teaching them the wrong things. I think it sort of dep...it's worked out by the teachers and the schools" (Roxanne: 190).

Development and Learning
Roxanne believed that children learned through experience, that is "by doing things and seeing if they work out right" (Roxanne: 178). She could offer no reason for the 'free choice' programme except that it was "... the way we've been told to do it" (Roxanne: 202). The confidence with which she offered this statement was consistent with the view of teaching as implementing other people's rules. It is interesting to note that while Roxanne defined play as 'the child's work' she was unable to connect this belief to the provision of the free play programme. This suggests that some of her statements about play may be best understood as examples of rhetoric or discourse, that is, statements of what she thought to be socially appropriate, rather than her personal commitment to a belief.

Play
Roxanne, like several of the other staff, defined play as the 'child's work', adding that what a child might describe as 'play' she would see as 'learning'. "To kids it's their work. For me, I think it's learning about everyday things" (Roxanne: 200) Roxanne seemed to have interpreted the 'formal' theory of play that she had encountered in her training as meaning that play provided direct preparation for the adult world of work, this view evident in such statements as

If they play with one activity (e.g., dough) all the time, fine, maybe he'll be a baker" (Roxanne: 206)

and

In the sandpit they're digging holes, they think, "Oh, when I grow bigger I'll be, work as a mechanic", sort of thing (Roxanne: 138).

Again Roxanne's views were coloured by her own life experiences. Expressing enthusiasm for play, she said "it's really great kids playing and that, 'cos I can't really remember doing it much when I was a kid" (Roxanne: 138).

Teacher role
Roxanne's concept of 'teacher' was someone who "teaches the children right and wrong" (Roxanne: 22). She offered the child's view of a teacher as "...high authority, "you can't do that" or "you come and do this" and you can learn by it" (Roxanne: 26). Describing her own work with children Roxanne constantly used the phrase "make sure..." ; for example, "make sure they're not hitting each other over the head with spades", "...are not
sitting around staring at everybody else", "...have got their lunches", "...are doing something", concluding finally with "...make sure they're doing the right thing" (Roxanne: 40).

Roxanne's view of authority seemed preeminent in relation to her other beliefs. People in authority made the rules (that is, they decided what was "right and wrong") which those beneath them must obey if they wanted to get ahead. This view was consistent with Kim and Maddy's focus on respect and centre practices such as the giving of tangible rewards for good behaviour.

While Roxanne did not challenge such rules in principle, she dealt with her own anxiety by displaying a token resistance. While she described herself proudly as 'high authority' she also aligned herself with the children, whom she described as being frightened of Kim, the centre Supervisor. Roxanne did not altogether take her own authority seriously, frequently choosing to "play around with the children as in a friend rather than teacher" (Roxanne: 16) and adopting a co-conspiratorial manner as she allowed children to disregard centre rules with admonitions of "Don't let Kim find out or you'll be in trouble!" She enjoyed the children's response to this, claiming "they think, 'it's Roxanne, we can fool around with her, you know she won't do anything to us' " (Roxanne: 36). For Roxanne it was the friendship of the children that was the most rewarding aspect of her work (Roxanne:210). Unlike the other staff, she reported feeling isolated from her co-workers.
Interaction
Roxanne had the fewest interactions with the target children, N=20 in total.

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Table 4: Roxanne's interactions

Almost half of these were coded directs (N=9) and related to routines (e.g., tidy up, lunch) or the children's use of space or equipment. Of the remaining 11 interactions, 7 were initiated by children. A directive approach is not surprising in the light of Roxanne's concept of a teacher as "high authority" (Roxanne: 26). Yet it is also clear from the child initiated interactions that the children found her approachable in spite of her self acknowledged blunt style of dialogue (Roxanne:71). Liam's comment suggests he saw
her as a 'player', a role she reported enjoying. When asked "What does Roxanne do?", he replied,

L:    She says, "Give me five" Grinning
NB:   Give me five! What do you do?
Liam demonstrates with his hand
Is that right? What else does she do?
L:    Plays on the spaceship with me.

Although few in number, Roxanne had some of the longest interactions, possibly because unlike the other teachers who tended to circulate, she often sat down. It was in the context of some of these interactions that one of the children, Rose, was twice observed to direct Roxanne's behaviour, reversing the usual roles of teacher and child.

On the first occasion Rose watched as Roxanne formed a dough aeroplane on her fingers. Roxanne began to 'fly' her plane, paying no attention to the children seated around her. Rose smiled approvingly and said, "Do it again!" The play episode continued with Rose urging Roxanne to extend on the original activity (by flying the plane higher and faster) while Roxanne responded accordingly. (Rose: 7)

On the second occasion Roxanne was watching as children slid down the zoom slide and called "Go Robert!" as a child tentatively began to slide. Rose instructed Roxanne to say "Go Rose!" on each of the five occasions that she slid down, with the other children making the same request. (Rose: 31) These were the only episodes in which children directed teachers. Perhaps it could be explained by Roxanne's behaviour, which at times signalled 'child' rather than teacher. Perhaps it was Rose (who spent most of her time in the centre assisting the staff with adult chores) who behaved as 'teacher'? In the light of this, Roxanne's view of Rose was interesting. She perceived Rose as superior, attributing this to Rose's "good family background". Describing Rose she said,

I think she's quite ahead of the other children (...) I mean, she knows how to play the dress up games properly and she doesn't get anything wrong. I think she's...oh, she's not high and mighty, I won't say that, but she gives me the impression that she looks down on me (...)She's very well spoken and stuff like that and she comes from a really good family (Roxanne: 119).

Again the theme of 'getting it right' emerges, a surprising statement in relation to children's dress up games which are not generally perceived by staff to be rule governed. Without being able to articulate this, Roxanne clearly felt that Rose knew the 'rules' pertaining to achieving success in life, 'rules' which she felt herself to have only a tenuous grasp of.
Conclusion

Roxanne's beliefs about authority influenced her views of curriculum and teacher role. Her own experiences of schooling (and as a staff member alienated from other staff in the centre) shaped her belief that children need knowledge of the social norms (which are prescribed by higher authorities) and account for her directive manner and her focus on children's social behaviour. It also explains her discomfort with children whom she perceives to be more knowledgeable than herself and her actions, which at times seem more 'child' than 'teacher'.

While from an outside perspective, Roxanne's statements are consistent with her actions, she herself is very limited in her ability to make such connections. Her explanations are related to her concept of authority as something to be both obeyed and resisted. Because Roxanne does not see herself as having the authority to determine her own practice many of her responses to questions about practice are reconstructions (often surprising, as in the case of her description of play) of what she has been told by someone else. Yet her recollections of childhood and her continued feelings of powerlessness lead into the contradictory practices of insisting that children cooperate with the social rules which will ensure their acceptance while at the same time leading them in resisting the authority of other staff. Because Roxanne is unaware of these contradictions, she is unable to resolve them. In this sense, Roxanne's practice remains largely untheorised, her 'operational theory' consisting of her beliefs that teachers and children must obey the rules, that play is fun and that school is a tough place for which children should be prepared.
Part B: The kindergarten setting

a) The teachers
Two teachers from the kindergarten participated in this study, Mary (the head teacher) and Amber. As for the teachers in the childcare setting, their interactions with four children (Katy, Mark, Betsy and Gary) were recorded over 40 hours and followed by interviews. The same headings have been used to order the data.

b) The programme
The daily programme at the kindergarten consists of free play from arrival at 8-45 am until around 11-30 am when all of the children are gathered on the mat with a teacher for group activities. In addition throughout the day teachers invite small groups of children to participate in teacher led group activities (e.g., cooking, moving to music). Morning tea is available to children throughout the morning. Activities available include playdough, clay, art and craft, blocks, books, water, sand, climbing equipment, carpentry, wheel toys, etc. Teachers share supervision of the indoor and outdoor areas on a rotating basis, session by session. The programme was planned in advance with themes being introduced periodically and new materials or activities introduced in connection with these.
Case study five: Mary

Mary is aged 40+, holds both a Kindergarten Teaching Diploma and a Trained Teachers Certificate (primary) and has worked in the kindergarten service for 12 years following a period of employment as a primary teacher. She is the Head teacher of a two teacher kindergarten. Mary's interview took longer than the others because of her particularly reflective style. This was also evident during the observation period when Mary often approached the observer to talk about 'dilemmas' she experienced in her work with children.

Function of the centre

Mary saw the kindergarten as "providing a preschool service" which she elaborated as

...providing education (...)providing experiences and activities and language (...) finding out where the child is at and taking them one step, one stage further. That's sort of my theory (Mary: 24).

Her "theory" fitted neatly with her practice; a high proportion of her interactions were focused on finding out what children were doing (monitors) within the structure of a prepared environment, offering assistance(assists) and suggesting that they extend upon their current task (extends). When she was not engaged with adults (e.g., parents, staff, visitors) or leading mat time, Mary was observed to be circulating amongst the children, checking if they needed help, giving assistance, and inviting children to extend or reflect on their activity.

Educational Goals

When asked to describe her goals for children Mary's first response was "coping in the school setting" (Mary: 203) which included such things as pencil skills and name recognition. However in the rest of Mary's discussion she consistently highlighted the importance of the social domain. Learning to share, cooperate, conform and be independent were seen as priority tasks. Mary also mentioned physical skills (Mary: 223) and the importance of extending children's thinking (Mary: 231). 'Extending' children was a particular focus of Mary's and evident in the interactive data.

In keeping with her view of children as individuals, she claimed that different programme activities would prove worthwhile for different children:

I think (the experiences) all have their place for the particular child, some might never do large climbing at home (...) so therefore it's valuable to that child... (Mary: 233).
This comment suggests that Mary aimed to produce the 'well rounded' child, who had experienced the range of kindergarten activities, either at the kindergarten or in another setting. Defining 'curriculum' as "catering for all their areas" (Mary: 199) Mary indicated that staff planned broadly to provide certain regular and new activities, then concentrated on extending individual children within that context. However, during the observational period the focus of her individual interactions was almost always on promoting two activities; "making" (the children's term for art and construction activities) and tidying up.

**Development and Learning**

Mary used the terms 'develop' and 'learn' relatively interchangeably. Her view of development could be classified as interactionist; she believed development was amenable to environmental influence, although she attributed much of this to 'readiness', that is, maturational factors beyond external control. She believed children learned through their mastery of the environment, from direct instruction and by observation:

(By) copying each other... by practising, by going over and over things...um...by actual instruction from adults (...) from books, pictures...um...trial and error, problem solving, by actually doing things, success leads to success, you know, achieve a little bit (Mary: 217).

However she did not see the kindergarten programme as particularly influential, attributing much more weight to the child's home experiences:

I don't feel a failure if children don't achieve a lot of things because (...) I'm just one tiny cog (...) All that bit outside kindergarten times often has a far greater effect than what we do. (Mary: 317)

**Play**

When discussion of children's play was first introduced by the interviewer, Mary ascribed it meaning as "pretend games" (Mary: 127). However she quickly modified her initial comments "I put a connotation of fantasy then. (...) Don't know why...otherwise it's everything they do" (Mary: 129-131). Mary initially described the terms 'work' and 'play' as synonymous (Mary: 155) but on further reflection wondered if she used these differently with boys and girls, urging boys to work outside but girls to play (Mary: 159). An analysis of the transcripts revealed that she used the word 'play' five times in relation to children's activity; (once with a boy who was invited to play with a doll and four times with girls who were invited to participate in drama, with water, "struts" and outside). The term 'work' was used 11 times; five times with boys (once regarding tidy up, twice each regarding art and carpentry) and six times with girls (in relation to construction with shapes, puzzles, drawing, and three times regarding tidying up). It appeared that her use of the terms was related to the nature of the activity rather than the child's gender.
Certainly within the dialogue of the kindergarten the terms were not used synonymously but rather as opposites. Children were frequently admonished at tidy up time, "It's not play time now. Time to work". Art/construction and tidying up were never described by Mary as play; notably these two activities provided the context for most of her interactions with the children.

Certainly the children did not see everything they did as play. In the interviews all four children at Mary's kindergarten distinguished between playing and "making". For example:

NB: Why do kids come to kindy?
M: To play
NB: Oh, to play. Do they do anything else as well?
M: Yes, they make things
NB: That's different from playing?
M: Yes
(Mark: Interview)

NB: Tell me, what do you do at kindergarten?
B: Um, I just go around and make things and play sometimes with the piano and dance and all that
NB: What sort of things do you do when you're playing?
B: I play with the babies
NB: Are there times at kindergarten when you're not playing?
Betsy nods
What are you doing when you're not playing?
B: I don't even play I just got to sit down read books I do
NB: You sit down and read books? Anything else you do when you're not playing?
B: I just um make stuff
NB: Like at the art table?
B: Yep
NB: That's not playing?
B: No
(Betsy: Interview)

Play was understood by the kindergarten children as something you do with someone, be it the 'babies' (dolls) or your friends. (All the children identified a 'friend' as "someone who plays with me"). The children described the art/construction activities as 'making' and described other activities such as stories, tidying up, mat time, as 'not play'.

While Mary regularly engaged with children who were making or tidying she did not often approach children who were playing (in the sense in which this word was used in the centre.) She was observed only once to enter a play episode. This was a brief encounter in which she commented on Gary's dough 'cakes'. On several other occasions she entered the family corner when children were playing but quickly turned this into work by requesting that they tidy up, an activity she extended by involving children in counting
cutlery and crockery as they put this away. Perhaps in spite of the rhetoric she offered about play being the child's work (and therefore intrinsically valuable) Mary did not always believe it to be so. There is a sense of this in her comment that "children are learning through their playing... sometimes, sometimes" (Mary: 211-213).

Teacher role
As head teacher, Mary saw herself as having responsibilities to parents, the kindergarten committee, the other teacher and the children. Much of the interview focused on a dilemma she identified in relation to her work with the children as she tried to integrate two different views of the teaching process.

Mary described herself as a 'teacher' with reluctance: "I'm a teacher, I must say I have to use that word because I teach, I teach skills" (Mary: 28). Her preferred description of herself was as a "provider of experiences and an interactor" (Mary: 28). What did 'teacher' mean to her? On the positive side, it seemed to mean assessing children's activity and helping them take the 'next step'. This is made explicit in the following statement:

...you do actually assess children and so you go to the next step and you have to think how to teach them that step (...) Some children you have to show, some you can just tell, some you can say "Well, let's find the reason, let's come and find out. Mainly I like to say "Let's come and find out what will happen if" (Mary: 29).

Mary contrasted this more interventionist teaching mode with one of providing experiences and "letting children develop". She described the way in which her own teaching philosophy has moved between these two positions:

...I sort of turned myself right away from the teaching and decided no, I wasn't going to do any of that. I was going to let the children develop at their own rate, I was going to provide experiences and language (...) but I'm swinging a little back... (Mary: 29).

At the time of the first interview Mary was able to articulate but not reconcile two beliefs, each of which had different consequences for practice:

1. Children need assistance to "take the next step" in their learning
2. Children learn when they are 'ready' according to their individual timetables.

Several of Mary's comments reflect the first belief. Offering the rationale for the use of themes in the programme she stated "some children just have got no initiative, no idea and
they need something(...) You can't just rely on the spontaneous" (Mary: 191; 197) while arguing for the employment of an extra teacher she said

The way I perceive using a third teacher is to do individual programs with children (...) who we, through observations, testing, checklists, have some positive data on, could do with some help to bring them up to par or extending (Mary: 323).

However her belief that children would make choices that best furthered their own learning seemed dominant. This was highlighted in discussion of the behaviour modification programme she had been observed to implement aimed at increasing girls' use of the outdoor trollies. Mary set up driving courses, invited all children (particularly girls) to participate, directed their efforts, and gave stamps and "licences" to all who completed the courses. In spite of receiving much parental approval for this programme (initiated to meet an AST course requirement), Mary regarded it as illegitimate teacher practice:

...because everyone had to do it...well they didn't have to...I felt...well I felt I was doing it for me and not as much for the children (...) I felt I was imposing myself and I, probably that's an overriding thing about my philosophy (...) I don't feel adults should dominate children but they do (Mary: 283-5).

Mary recognised in this account the dilemma she experienced about whether to 'teach' or 'let children develop':

It was to do with this teaching thing probably...teaching skills which is...I don't know why...something that I need to look at and which I am looking at myself more about that because I feel I should be teaching skills (Mary: 293).

She wrestled with this further, identifying her discomfort as

...making children do things...yes, I think that's probably my underlying thing...making children do things when they are not ready (Mary: 303).

How do they become ready? "You expose them to things...you let them experiment a bit" (Mary:307).

While Mary believed that some children would benefit from making different choices (Mary: 183) she confined her role to restructuring the environment to engage interest, followed by suggesting that the child try a new activity. This course of action was
consistent with her belief in readiness as a prerequisite for learning. If the child did not pursue the activity s/he was clearly not 'ready'.

**Interaction**

Mary had 93 interactions with the target children in the forty hour observation period. They were coded accordingly:

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Table 5: Mary's interactions

Of the six staff she had the second to highest interaction score, supporting her description of herself as an "interactor" (Mary: 28.) Directing, (N=18,19%) monitoring, (N=15,16%) assisting, (N=11,12%) and extending, (N=10,11%) were her four highest categories.
Half of the directions referred to tidying up (9), the rest to mat time (3), washing hands (1), trolley riding (3), staying off the grass (1) and throwing indoors (1). Monitoring interactions occurred in relation to children's art/construction activities (12), tidying up (2) and morning tea (1); as did assisting; art/construction (9) tidy up (2) and extending; art/construction (7), dramatic play (1) and social (1). Mary was actively involved with children, both in setting limits and seeking opportunities to help children extend upon their "making" activities. These emphases were congruent with her statements relating to programme goals.

While Mary described her dilemma related to teaching, in practice this was resolved by engaging in a challenging way with individual children who were participating in activities of their choice. Such interactions were coded extends, a category in which she scored (N=10) far higher than did Fran, the only other teacher to interact in this way. This was partly because Mary did tend to interact with children individually rather than in groups in which similar kind of 'extending' dialogue occurred (but was coded leads). However her interaction style was unique in that she regularly introduced her own 'agenda' in order to extend children's thinking. In the interview she made her commitment to this kind of interaction explicit, stating:

I usually like to extend them. If one child is doing something, try to get them involved a bit further or extend, look at this or do that... (Mary: 47).

Such an approach did not always appear to be welcomed by the children. For example, in the following exchange she returns to see if Mark has followed her suggestion to add numbers to the racing car he is making at the carpentry table.

Mary: Did you finish your racing car?
M: Yes He does not look at her
Mary: Good. What number did you give it?
M: I don't know 'till I've done it
Mary: Did you write the number yourself?
M: No, I'm doing it at home
Mary: What number do you like best?
M: Don't know
Mary: You haven't any numbers that you like best? I like thirteen, that's my favourite number
Mark screws up his face.
(Mark:?)

It seemed that as well as the dilemma of 'teach' or not, Mary also wrestled with how best to teach, particularly how much assistance to give children. In the interview she was given a transcript of an exchange coded extends (identified by Mary as 'teaching') in which she suggested to Mark and another child that they make fishes out of paper at the art
The interaction was a long one in which Mark had 20 turns. Mary questioned ("what do fish have?"), directed observation ("look at the fish in the fish tank"), and suggested ways of breaking down the task ("can you draw the fish's head?") to assist the children. However, even with this assistance Mark's friend demanded more help and Mary reported feeling unsure how to respond to this.

I was just about at my wits end thinking how I was going to get him to do...he wants to do it...how can I get him to do something without me actually telling him (Mary: 77).

She identified this as a constant question she faced in her 'teaching' role.

This is what I always find with teaching. Where do you come in? Where do you say "I'll show you" or how long do you keep them sort of trying and trying? It's always a dilemma with me (Mary: 73).

Discussing her interaction patterns Mary suggests that much of what happens is determined by the children themselves (Mary: 47), some of whom demand and gain more attention. She did however appear to be an active initiator, beginning 77% of the interactions with the target children.

Mary's descriptions of the target children suggest that her beliefs about their temperament or ability may be influential in shaping her interactions with them. In relation to Katy who has some difficulties relating to other children, she concludes:

...but I don't worry about it with her because(...)I've had the other two boys and I feel that's going to be her, that's how she's going to get through life...she's just fairly placid (Mary: 141).

Whereas regarding Betsy whom she describes as a "highly competent all rounder" (Mary: 145) she states:

I think she'll go far actually. (...) I did feel she could do more (...) in her art work. I felt she came to us at quite a high level (...) I try and extend (...) "Can you think of something else to do and how can we use that in the art work?" (Mary: 147).

Mark she describes as "very reserved but knowledgeable inside" (Mary: 149) and in her encounters with him she identifies the familiar dilemma:

I was very aware if he wasn't doing things, thinking "should I go there?" Did a lot of should I? shouldn't I? with Mark, um, but he sort of in the end developed at his own rate. If he didn't want to do something you couldn't get around him and so I just respected that (Mary: 149).
While the table does not indicate marked differences in Mary's interactions with these children her comments suggest that constructs of readiness (e.g. "developed at his own rate") home background and ability are used to explain children's individual differences and are related to her decisions about whether to 'teach' (extend) or 'let develop'.

**Conclusion**

Mary's programme was structured to enable children to engage with a range of activities in the company of their peers and with the support of their teachers. While teachers might have suggested various courses of action to children they never insisted on compliance, except in the case of tidying up, a requirement justified by the principle of respect for others. Unlike many of the other teachers in this study, Mary expressed the belief that teachers should extend children's thinking through introduction of themes and by initiating 'stretching' conversation, which she did. Like the others, however, she saw her influence as limited, children's learning being largely determined by readiness and home experience.

Mary wrestled outwardly with questions of when and how to 'teach' and when to 'let develop'. Although she implemented a behaviour modification programme (to meet external demands) this practice conflicted with Mary's beliefs related to readiness. In addition, while Mary described play as 'everything children do' this view was not congruent with her dialogue in the centre (or the understanding of the children) in which play contrasted with non-play activities such as art/construction and tidying up, the contexts for most of Mary's interactions.

Mary was a particularly reflective practitioner. She traced this to having had both primary school and kindergarten training and experience, which enabled her to compare and contrast ideas and methods. In discussion, (which she frequently initiated, beyond the interview context) she moved constantly between her theory and practice, unearthing potentially contradictory beliefs and attempting to integrate these through practice. She was open to examining her perceptions in the light of empirical data and was enthusiastic about explicating the reasons why she acted as she did. In this sense, Mary's practice could be said to constitute educational *praxis* as defined in chapter two of this thesis. The theoretical account that she offered, i.e., her 'operational theory', was full and its ambiguities the subject of her scrutiny and active resolution.
Case study six: Amber

Amber is 30+ years old, holds a Kindergarten Teaching Diploma and has taught for 7 years.

Function of the Centre
Amber described the function of the kindergarten in relation to needs; those of the parents, the children and the community.

I see it as a need for the parents who need time out from their children, I see it from the educational need that the children there's lots of things they learn (...) and I also see it from the point of view that they need socialising, they need fun, they need to mix with children (...) I see it as a good community need, parents need to mix with other parents (Amber: 14).

Educational Goals
Throughout the interview Amber made many references to the value of social interaction. Amber believed that relationships were more important than anything else, supporting this belief by reference to life experiences.

I think they should be able to mix, you know, be able to relate to other people because they always have to during life. (...) I mean we do it in our marriages, we do it in our relationships, we do it in our schools, we do it in our jobs and the most problems probably that people have at the other end as they get older is that they can't relate (Amber: 70).

In addition to social skills Amber specified physical skills (such as jumping, hopping, skipping, clapping, using scissors and holding a pencil) as important "for school and for life" (Amber: 176).

Development and Learning
While Amber spoke of "developing" self esteem, she used the term "learning" more readily and defined this as "picking up skills" (Amber: 177). This definition was particularly congruent with her expressed non-interventionist view of teacher role. Although she differed from Mary in this view, Amber did share the belief that children learned through interaction with the physical environment and from observing their peers, stating,

Hopefully from the activities provided they'll learn skills (...) and I think a lot of the time they're learning from the other children. They think, 'Oh, well, if he can do it I can do it too'. (...) That's where they're learning all their social and probably their language (Amber: 205).
She also attributed learning to children's readiness, a condition which she did not believe was very amenable to outside influence. She explained this thus:

You do try to intervene with every problem to try and help them. For some it will work and for some it doesn't which means if it doesn't they're not ready and there's not much you can do (Amber: 180).

While Amber acknowledged that children would often limit their centre activities according to their confidence, she did not see this as problematic, arguing "to feel good about themselves they have to play with things they know about" (Amber: 199).

**Play**

Like Mary, Amber offered two contradictory definitions of play. Firstly she described it as 'the child's work':

they're working, they're not just playing for the sake of playing. What would we do? We'd go to work for a day, well they'd play. They're working, they're having fun (Amber: 120).

However in the next breath she distinguished between child activity that she defined as 'work' (e.g., blocks, books, water, sand) and those she saw as 'play' (e.g., running around chasing each other, sitting having a pretend picnic, playing with balls). Amber believed that both activities, those she called 'work' and those she called 'play' were, in theory, of equal value and enabled children to learn new skills, however she added that 'play' was often not stretching "cause some of the kids might be chasing all day. They could do that for a week and they aren't extending themselves" (Amber: 128).

Analysis of the transcripts revealed Amber to have used the word 'work' only once (meaning 'other than story'). The term 'play', on the other hand was used on 11 occasions (three times in regard to the use of ropes/balls, three times in regard to games, once in regard to running and once in regard to pretend baking.) This fitted with her description and those given by the children. Amber only initiated interaction in the play context to redirect children.

**Teacher role**

Amber demonstrated a similar ambivalence to Mary with the term 'teacher', modifying such a description of herself with, "...not a structured teacher." (Amber: 16) Again her focus was on needs, the belief expressed that children could best determine how to meet these within the kindergarten setting and that the teacher's proper role was responsive rather than initiating. She stated this clearly:
We provide all the materials, we provide the place, we provide the children and we're there when they need us (...) I see it as we're a resource (Amber: 16, 20).

She appeared to favour non-intervention in children's activity. In relation to children's activity she stated:

...if they're doing it all by themselves, no, stay out unless some sort of trouble erupts (...) I like to come in before it gets too far out of hand (...) If they're coping, that's the idea behind kindergarten is that they can set up by themselves and follow it through by themselves, and if they can do it by themselves then they don't need us (Amber: 90,94).

Amber was clear that she would only seek out children if they "had a problem". (Amber: 26) This would be ascertained through observation of children's communication skills and general air of well being (Amber: 28). In addition to these "problem" children, she identified a further group of children who "might just need a little bit of help" (Amber: 30). Both Katy and Mark fell into this category for her; in the case of Katy, to mix more with other children and in the case of Mark, to participate more confidently in group activities. Gary was described as "self sufficient" and able to ask for what he needed, but like Mary, Amber saw Betsy (the "good all rounder", Amber: 108) as warranting lots of extending (Amber: 170). This view seemed to be based on her assessment of Betsy's potential.

Someone like Betsy, you'll know what you want (...) you'll probably want to say, "Have you got hair?" She'll say, "Yes" and I'll say, "Well, what about your puppet's hair?" (...) With someone like X who's just starting to do some good work there, praise and heap it on (Amber: 170).

Statements such as these alert one to the way in which beliefs about children and ability could shape teachers' practice.
Interaction

Surprisingly in view of her views on teacher role, Amber had the highest number of interactions (N=103) with the target children out of all the staff.

<table>
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<th>Gary</th>
<th>Betsy</th>
<th>Mark</th>
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Table 6: Amber's interactions

Like Mary her highest category was directs (N=32, 31%); just over half of these related to tidying up (N=16), the rest to children's use of space or equipment. The next highest scoring categories were those of access (N=13, 13%) monitors (N=11, 11%) and recognition (N=10, 10%). Clearly in spite of the fact that Amber's style was somewhat directive, children found her approachable. She liked to have fun with the children. Her manner of speaking was somewhat blunt, and somehow more 'parent' than 'teacher'; the
children seemed to perceive her directions as negotiable. This was evident in the way they often challenged her, as in the following episode:

Amber approaches the children who have their hands in basins of whipped soap.

Amber: Look out! You’re getting it everywhere!
Sally: We like to get it everywhere
Amber: Yea, but I don’t. Sally, you’re not to keep moving around with it, love.
(Betsy: 13)

Amber explained her non-interventionist role in relation to children's independence.

I see our role as making children independent so they don't need us and the ones who do need us, I see our role is in that we try and get them so they don't need us (Amber: 16).

This was a surprising statement when her interaction data is compared with that of the other teachers. Particularly incongruous is the large proportion of her interactions initiated by children either seeking recognition, access to equipment, assistance or arbitration (N=25, 24%). There are several possible explanations. One relates to Amber's belief that several of the target children 'needed' assistance or extension. (However her interactions with Gary, the child described as self sufficient, were similarly numerous.) An alternative explanation arises from Amber's belief about how independence is developed. She explains the process thus:

...We've said it for the last couple of months(i.e., praised the child's activity), now they know their work is good, they have enough confidence in their own work, they don't need to come and show it to us (...) They should have the self esteem that they wouldn't need our approval (Amber: 166).

Thus it appears that she sees a causal relationship between teacher approval, positive self esteem and ultimately, independence. It is difficult to know how genuine this explanation is, for approval giving accounted for only 10% of her interactions. Assuming this was a genuine belief, the empirical data proved it also to be a false one. Amber experienced far more dependency demands than any other teacher, including Mary who worked in the same setting with the same children. In the follow up interview Amber herself offered a third explanation for the apparent incongruity between her beliefs and practices, confessing that she enjoyed "having fun" with children (Amber: Follow up). This statement, while seemingly trite, can be related to Amber's beliefs about educational goals, one of which she describes as enjoyment.
Conclusion

While Amber is able to explicate aspects of her practice in relation to her beliefs, there are some large discrepancies between what Amber claims to do and what she actually does. Amber is the only teacher to strongly present the view that teachers should facilitate children's independence by 'standing back' from their activity, yet she has the highest interaction score of all staff, with many of the interactions involving her in giving assistance and approval. This trend may be explained by another expressed belief; that children need adult approval before they can become independent. Or alternately Amber's behaviour may simply reflect her sociable nature and a belief, implicit in her response in the follow up interview, that it doesn't really matter anyway. Ultimately, Amber sees her own influence as a teacher as limited in any case, believing that children will only learn when they are ready. Amber initially offered two views of play, settling on play as 'other than' work. While she expressed the view that children learn through their play she also expressed reservations about its quality and usefulness.

When made aware of these apparent inconsistencies, Amber acknowledges that they exist but does not see them as problematic. In this sense, her practice remains inadequately theorised. We have no way of knowing why she acts as she does. While she offers several tentative hypotheses relating to her interactions with children, these remain untested in the world of practice, thus her 'operational theory' contains large 'gaps' which are filled only with speculation.
Chapter Six
DISCUSSION

The case studies presented in the previous chapter attempt to uncover the beliefs which inform the practices of six early childhood teachers in two different settings. While all of these teachers appear to hold many views in common there are some individual differences, more notably in what is done than what is said. The content of these 'operational theories' is further discussed in this chapter which provides some synthesis of all of the cases. In addition the adequacy of these teachers' theories becomes the focus of discussion.

Teachers' beliefs: A summary
The first research question asked: What beliefs inform the practice of six New Zealand early childhood teachers? A summary is given here using the first five headings from the case studies.

a) Function of the centres
Five of the teachers in this study described their centre as providing a childcare service to parents. Only Mary, the head teacher of the kindergarten, described her centre in purely educational terms. The four childcare teachers identified care (attending to children's physical and psychological well being) as the first priority of their centre programme, and education as a secondary focus. They differed in this from the kindergarten teachers who identified education as their only focus. This difference no doubt emerges from the structural differences between the two settings (for example the age of children enrolled, their length of time in the centre requiring the provision of meals and sleep facilities) as well as from the differing role perceptions held by staff in the two institutions.

A high proportion of the interactions of childcare staff were focused on routines (e.g., meals, tidying up). Further, their involvement in housekeeping tasks left little time for interactions with children who were already 'managing'. This may explain why in spite of a higher adult to child ratio in the childcare centre compared with the kindergarten, the kindergarten staff had approximately twice as many interactions with the target children than did the childcare staff.

b) Educational goals
While most of the teachers made reference to the 'all round development' of children as the overriding goal of their centre programme, it was the psycho-social domain that was consistently emphasised. Social skills, good relationships, positive self esteem, 'caring
and sharing', confidence and respect were stressed as the most important outcomes of the programme, with teachers often drawing on their own life experiences to support these views.

Perhaps teachers believed that it was in this developmental domain that learning could not be left to chance. For many, their stated views that children must learn respect for others or 'social skills' were reflected in a lot of interactions of a directive nature related to centre routines, particularly tidying up. The two teachers who had received least early childhood training (Maddy and Roxanne) stressed the importance of transmitting social knowledge of 'right and wrong' to children and this was the focus of most of their interactions. The term 'development' did not adequately represent the way in which teachers actively socialised children to conform to prescribed social 'norms'. For example, Mary who expressed the view that 'children developed at their own rate' was relentless in insisting that children conform to centre expectations in relation to tidying up, with some 10% of her interactions involving specific directions to do so. In both centres mat time served as the context for explicit instruction in social behaviour, with children being instructed about turn taking and 'polite' ways of speaking, as well as participating in directed 'caring and sharing' with children being directed to hug their peers, or clap to affirm 'good' behaviour. While all of the teachers spoke of children's development and learning being largely beyond their influence, their actions suggested that they believed teachers have a responsibility to socialise children in line with social norms.

In the context of the interview only two teachers made mention of children's intellectual development and it was only these two teachers (Mary and Fran) who engaged in interactions coded extends. Both of these teachers expressed the belief that adults could and should promote children's intellectual development by approaching busy children and inviting them to extend upon what they are doing. Their beliefs were reflected in their practice. The other teachers did not include intellectual development amongst their goals. The absence of such a focus seemed to reflect their beliefs about what is valuable (social-emotional development being identified by all teachers as the priority) and/or about children's development and learning. Some teachers explicitly expressed the view that children's learning could not be influenced by teachers, advocating adult non-intervention.

Learning 'school skills' (for example, name recognition, use of pencils) was a goal identified by all teachers, but accorded low priority both in the context of the interview and in practice. It emerged from a view of the school, frequently explicitly linked to teachers' personal recollections of schooling (e.g., Roxanne), as an inflexible, curriculum (as opposed to child) -centred institution for which children needed preparation. While some
centre practices (for example, colour recognition activities) were specifically related to school preparation, the practice of defining desired behavioural ends (for example, name recognition) was not congruent with teachers' other beliefs, notably those about what was important knowledge and how children's development and learning occurred. These practices were better explained as reflecting teachers' beliefs about the expectations of parents, schools, Ministry officers and teacher educators and the desire of the childcare teachers to improve their own perceived status. Both Kim and Maddy made this explicit in their reflections upon the practice of themes, commenting that while the staff knew that the theme content was often already known by the children they were heartened by the parents' enthusiasm for this practice. Kim described the records of the theme based programme as "something we have to put down" to meet Education department expectations.

c) Development and Learning
The terms 'develop' and 'learn' were used interchangeably by teachers but the contexts in which these terms occurred suggest development was viewed as an outcome of learning which occurred through the interaction of children's experience and their physiological 'readiness'. All teachers described children as learning through interaction with the environment (specifically, the centre activities). These beliefs were evident in the 'free play' programmes which operated in each centre and are consistent with an interactionist perspective of development. Smith and Shepard (1988) define this as one point on a continuum of beliefs about development, with 'interactionism' falling in the centre and characterised by the view that development is amenable to environmental intervention while 'nativism' falls to one end and implies the belief that development is an internal organismic process. While all of these teachers believed that the environment did influence development, views differed on what might be influential, which aspects of development were amenable to influence and what amount of impact different influences might exert. Those teachers who spoke of learning through play (e.g., Kim, Maddy) also expressed the view that children should be left to get on with this by themselves. Some teachers (in particular, Amber) attributed more weight to physiological factors than did others, her view that "if they're not ready there's nothing much you can do" suggesting that her view of development falls towards the nativist end of the continuum (Smith and Shepard, 1988). In general most of these teachers did leave children to 'get on with it', intervening only to teach socially appropriate behaviour. Mary and Fran differed in that they actively initiated conversation with children with the intention of promoting intellectual development. Amber who had the highest number of interactions, alongside a declared non-interventionist philosophy, presented an enigma. This was partially explainable in the light of her view that the development of children's self esteem
depended on approval from adults. Amber's inability to explain the discrepancy between her declared beliefs and actions raises questions about the adequacy of her theory.

All teachers spoke of the importance of peers as models and believed children learned by observing others. For this reason they encouraged children to play with others, although they were resigned to the fact that some children (e.g. Nell) would not be accepted by their peers. Direct instruction was also viewed as a way of influencing children's learning, with teachers holding different views about its appropriateness. Nevertheless, all teachers with the exception of Fran, did engage in significant amounts of direct instruction in relation to centre routines.

d) Teacher role
Apart from Mary and Fran, all teachers espoused a non-interventionist view of their teaching role. While the former teachers expressed commitment to actively seeking out busy children and affirming or inviting extension of their activity, the others spoke of engaging with children only if there was a 'problem' (for example, aggressive play). Qualifying this latter view was the belief that one's influence would be in any case limited. Teachers spoke positively of accepting individual differences. These were explained by reference to two constructs 'readiness' and 'home effects'. King (1978) reported the same constructs to be used by British infant teachers whose 'child centred ideology' matched that of the teachers in the present study.

Teachers' role perceptions were generally consistent with their behaviours. This is not surprising in view of the literature which reports role perceptions to be influential (e.g., Ferri, Birchell, Gingell & Gipps, 1981). Several teachers attempted to define the term 'teacher' in a way that reflected their perception of this role as non-directive (e.g., Mary as an "interactor", Fran as a "friend"). These teachers could be seen to interact in ways consistent with their descriptions. However all teachers did engage in directive interactions related to non-negotiable aspects of centre practice (such as mat time attendance and tidying up). Several teachers (e.g., Kim, Mary) were surprised and disconcerted by the number of their interactions which had a directive focus, suggesting a gap between their intentions and actual practice. Teachers' explanations of practice stressed children's choice and they seemed genuinely puzzled by questions about what children had to do, reiterating that children chose their activities. Yet the children perceived their teachers as people who interrupted their activity with redirections, for example, Betsy commented to me "They're always getting in our way!" after a teacher's request to tidy up the family corner (Field notes: 12/8/88).
While teachers gave such directions constantly, none felt they would be justified in trying to change children's activity choice patterns. In spite of their statements about the importance of children's 'all round development', they were clearly resistant to attempting such changes. In line with the non-interventionist philosophy, the distribution of teacher attention or stereotypical activity patterns were not viewed as problematic. Teachers tended to see children's interactions with staff as largely determined by the children (although staff initiated 2:1) and generally expressed the view that children must be trusted to make their own choices. While most teachers said they would 'suggest' that a child try a new activity, their intervention was seen as stopping there. While Mary actually implemented a behaviour modification programme to change sex-stereotyped play patterns, this was initiated in response to a course requirement and conflicted with her belief that children should select activities only when they are 'ready'.

Behaviour modification programmes were implemented in both centres. In the childcare centre Kim gave out stars and stamps for tidying up. Because of the nature of this behaviour (conforming to social rules) she felt this intervention was acceptable. However all teachers expressed the view that definition of desired ends in relation to other aspects of children's learning was illegitimate and in conflict with such constructs as 'readiness' and 'freedom to choose'. This meant, to use the smorgasbord analogy, that while some children enjoyed a wide and balanced 'diet', others tasted just a little of what was available. Their teachers, by and large, saw this as inevitable, explaining it by reference to the child or his/ her home rather than to centre practice. Teachers seemed to see themselves as relatively powerless to change behaviour learned in the home or to influence the amount of 'potential' a child might have for learning.

As in King's (1978) study, the teachers in this study subscribed in varying degrees to the view that children's 'readiness' was a prerequisite for learning and that such readiness would be identified by the child's demonstrated interest. Yet in the process of observing the daily activities of the target children it became clear that a 'peer culture' existed in which children exerted pressure on others to conform with socially prescribed norms. Children were particularly outspoken in relation to what they considered to be gender appropriate activity, their comments serving to maintain stereotyped behaviour patterns. Davies (1989) reports a similar finding from her study of preschool discourse and refers to this phenomenon as "boundary maintenance" (Davies, 1989, p41). These findings offer a challenge to teachers' beliefs that the children in an early childhood centre are 'free' to choose the activity which will best further their learning. It is also a questionable assumption that a teacher will, in fact, notice a child's demonstration of interest. Several of the target children, notably those described as 'reserved' and 'withdrawn' by staff,
engaged in almost no interaction with teachers at all, except in the context of a large group in which they remained relatively anonymous.

When teachers do interact with children their beliefs about their role appear to be crucial. Only the two teachers in this study who mentioned children's thinking were observed to engage in extending conversation. The others who stressed 'social development' were actively engaged in socialising children to conform with centre rules. One incident serves as an example of this.

For several days Liam and the two friends he played with had been regularly gathering at the side of the fish tank and pointing at the 'rainbow' (created by the refraction of sunlight through the glass). They questioned each other as to how it had gotten there but no answers were forthcoming. On two occasions a teacher approached this knot of puzzling children and asked them if they had tidied up. Their interest in the rainbow was never communicated to the staff although it was quite overt to an observer. (Field notes: 19/6/88)

Most of these teachers focused on giving instruction about social norms. In spite of the existence of a large literature which promotes the role adults can play in children's learning, these teachers seemed to believe that children's intellectual development would take care of itself through play. However they also expressed reservations about the quality of children's play, describing it as limited and repetitive. This view matched the observer's perception and indeed that of the children who were recorded to comment on their play as 'boring' and the centre day as 'too long' on several occasions (Field notes: 25/5/88; 27/7/88). Perhaps, these teachers simply felt uncertain about how to involve themselves. This was the view expressed by Mary whose attempts to 'get children thinking' were by no means well received by them. Teachers eventually dismissed the less responsive children (e.g., Nell, Paul, Mark) as 'developing in their own way', this phrase perhaps disguising their sense of helplessness.

e) Play: Formal and intuitive knowledge

In five of the case studies, i.e., those teachers who had been formally trained in early childhood education, an apparent discrepancy existed between what teachers said about play and their actual practice. When asked to 'describe play' teachers would explain that it was 'everything a child does'. This statement was often supplemented by the further statements, 'play is the child's work' and 'children learn through their play'. This is the traditional view enshrined in the literature on children's play (e.g., Parten, 1932) and provides support for the play-based programmes offered in both centres. When play is understood to be everything a child does, developmentally appropriate, ('play is the child's work') and the context for learning ('children learn through their play') then
whenever a child does at the centre has to be valuable. Yet while teachers made statements of this kind, they also qualified them by assessing some activities as more worthwhile than others. Further, in their observed practice they frequently interrupted children at child initiated activities and directed them to others (e.g., tidying up).

In practice these teachers used the term 'play' quite selectively, in relation to certain specific activities only. Not only was this the case in the the transcripts of teachers' interactions, but it was also evident in the way they spoke indirectly about play during the interviews. In each teacher's interview there were contradictory statements made about play. A different account of play was given according to whether the questions were of an abstract nature (e.g., "what is play?") or embedded in the context of practice (e.g., "what is Rose doing in this incident?"). When discussing their practice teachers spoke of play in the same way as they did in practice, as revealed by the transcripts. In the context of practice or reflection on practice 'play' meant either physical or 'pretend' activity. It had the further connotations of being child-directed and sociable. Not surprisingly, given the social context, all of the children shared this understanding, describing these same specific activities as 'play' and all other activities as 'not play'. Given these terms, in spite of teachers espoused commitment to play, rarely if ever were they observed either to play themselves or to interact with playing children. In the 'real world' of the centres, play was understood to be something children did by themselves and which complemented those other activities which received teacher input. It could be argued from these data that the teachers, in spite of some statements to the contrary, saw play as having limited value.

How can the contradictory accounts of play be explained? It is argued here that these teachers drew on two different kinds of knowledge in their accounts of play; 'formal' and 'intuitive' (Lampert, 1984). Lampert makes the distinction thus: Intuitive knowledge is constructed as

each individual builds a store of this commonsense sort of information from personal experimentation on the physical environment. Such knowledge is not usually made explicit but is often useful and powerful. It contrasts, therefore, with the formal knowledge one is taught in school: a commonly accepted set of well-articulated descriptions of experience which may have little connection with the knowledge individuals apply in their everyday lives (Lampert, 1984, p2).

Lampert's distinction is similar to that made by Jones (1981) who draws on the Piagetian terminology, 'logical' and 'social' (Kamii & De Vries, 1977) in a discussion of teacher education models. She offers the following definition of these Piagetian constructs:
logical knowledge is constructed by the learner who generalises from repeated experiences (whereas) social knowledge is the conventions of one's culture, the names of things and rules for behaviour. Because these things are arbitrary they can only be taught directly, by telling or showing (Jones, 1981, p127).

She suggests that much of the formal theory taught to beginning teachers only ever becomes 'social knowledge', that is it is learned by rote but never integrated with one's world view to become 'logical' knowledge. In a sense, it is knowledge only of someone else's belief rather than a belief one 'owns' (that is, justifies from one's own personal experience). This is not to say that teachers who express 'formal' knowledge disbelieve what they say. Rather such assertions relate to social conventions rather than personal experience and therefore have a different status.

Attention to the language process of the interviews offers support for this interpretation. Statements which linked play to personal experience were offered confidently and quickly, while statements of formal knowledge were expressed much more tentatively, often in 'text book' phrases and without further elaboration. Further support comes from the observation that teachers who expressed the formal account of 'play as the child's work' were unlikely to draw on this to explain or justify practice. Roxanne, for example could not explain why there was a play programme operating in the centre. None of the childcare teachers attempted to influence parents' negative perceptions of the programme as 'just play'; rather they promoted themes as a way of impressing parents. 'Play as the child's work' and 'play as learning' was part of the formal knowledge which had shaped the rules requiring centres to provide play programmes, but it was not integrated with teachers' intuitive understandings of play, understandings which were shared by the children in the centre.

While the programme structure emerged from the formal view of play as 'everything children do', teachers' actual interaction patterns were consistent with their intuitive views of play as an activity which children engaged in collectively and which centred around either vigorous movement or pretence. Notably, all teachers believed that teachers should stay out of children's play and were observed to do just that, unless to re-direct or, as in the case of Fran, where a child was perceived to need support in a play context. Teachers were much more likely to engage with children who were 'working' (e.g., tidying up) or 'making' with the intention of evaluating and extending their activity.

Do early childhood teachers really value children's play as a medium for learning or is the description of 'play as learning' simply formal rhetoric? Several teachers explicitly expressed reservations about the value of children's play. Teachers actions would
certainly seem to convey to children that it is activities other than play that have importance to adults. While there is some distance between this interpretation and the analysis of Apple and King (1977) it is not difficult to see such behaviour as early socialisation for the experience of formal schooling, in which work and play are separated (Renwick, 1984). The comments made by these teachers about not 'intervening' or 'interrupting' children's play suggests they would offer a different explanation for their absence from children's play contexts. Their statements that children need to 'play out' their experiences without adult intervention and that children learn more from peer models than from adults are consistent with psychodynamic and social learning theories. However Smith and Shepard's (1988) study alerts us to the ways in which structural features influence belief and provides a warning against accepting one-directional accounts unquestioningly. It may be that when teacher attention is a scarce resource (e.g., when the teacher-child ratio is unfavourable) certain 'beliefs' have a particular attraction, allowing teachers to reconcile what is possible with what is desirable. Each of these alternatives warrants further investigation if teacher behaviour in relation to children's play is to be satisfactorily explained.

Teachers' 'operational theories': A summary

In chapter three it is suggested that a teacher's account of her beliefs, that is her 'operational theory', may be more or less adequate. Better accounts will be full and relatively coherent, the outcome of critical reflection on practice, evidencing the transformation of practice into praxis. Less coherent accounts will indicate 'gaps' in teachers' 'operational theories'. The present study is concerned with assessing the adequacy of the operational theories held by the six teachers who participated. By relating the accounts these teachers give of their beliefs to what they do in practice, a number of conclusions can be drawn:

1) All of the teachers in the study were able to offer some account of their beliefs, although their abilities to do so differed markedly (e.g., c.f., Mary with Amber). In the main, what teachers said was consistent with what they did. In particular, what teachers said they valued (e.g., teaching respect) was usually found to be the focus of much of their interaction.

2) In each teacher's account some statements of belief were explicitly linked to the teachers' life experiences beyond the centre context. These beliefs seemed highly influential in the practice of teachers, suggesting that they were both genuine and powerful. For example, Fran believed that you had to "know you were OK" to cope with adult life and her practice was focused on affirming children's activity, while Roxanne
believed you had to "learn the rules" if you were to cope with school and set out to teach these at every opportunity. It is claimed earlier in this chapter that such beliefs, emerging from teachers' reflections on personal experiences, form part of teachers' intuitive knowledge and as such have a different status from their statements of formal knowledge.

3) Some accounts had less to do with teacher's educational beliefs and more to do with their perceptions of contextual features such as the status of childcare work, the availability of trained staff, and the expectations of people in authority. In this study, these perceptions are viewed as another kind of belief which informs practice (while in other reported studies they are described as 'constraints'). It is possible that beliefs of this nature may be masked by apparent educational 'beliefs'. For example, while initially teachers described mat time as 'promoting children's learning', when questioned further they indicated their skepticism about this claim but justified the practice by commenting that it generated parent approval.

4) Sometimes teachers' statements of belief were not consistent with their observed practice. Several possible explanations seem likely:

   a) The statement is not one of genuine belief but rather reflects the teacher's view of what the questioner wants to hear. It is noted here that assessing the 'genuineness' of someone's belief is problematic. In the context of this study, statements of belief which were not manifest in a person's practice were not seen to be part of a person's theory.

   b) The statement of belief is an assertion of a 'proposition' which the teacher entertains. It is a statement of someone else's belief, perhaps existing as formal theory, which the teacher accepts at the propositional level. Statements of this kind often emerge as slogans, e.g., 'play is the child's work'. The teacher does not disbelieve these statements, thus we could claim she believes them. Actually they exist as untested 'propositions'. Often such statements relate to aspects of practice over which teachers see themselves having little control, e.g., the structure of the programme. It has been argued that these often reflect a person's formal rather than intuitive knowledge. To the extent that they inform practice, they constitute part of a teacher's theory.

   c) The statement of belief is genuine but this belief is overridden or modified by another stronger belief. Thus Fran, in spite of believing that adults should not become involved in children's play, did become involved with Nell in order to
provide the affirmation that she felt Nell needed. When teachers recognised their conflicting beliefs they reported experiencing 'dilemmas' in relation to their practice (e.g., Mary regarding when to intervene, Kim regarding how to be both authority figure and friend). It is of interest to note that Mary, the teacher who gave the fullest account of her operational theory was still wrestling with its contradictory aspects. Her attempts to reconcile these involved her in testing various ideas out in practice and reflecting on the outcomes. There was a sense in which this process would never be finished, but was part of her ongoing praxis.

However often teachers were unaware of contradictions between their statements or between what they said and did. For example, Roxanne acted both as authority figure and conspirator, while Amber apparently aimed for children's independence yet maintained their dependency. It seems likely that in these cases the teachers' declared beliefs were not genuine, or that these had only the status of 'propositions' which were entertained. Or, in the case of Amber it may have been that her beliefs were genuine but her theory didn't 'work'; that is, while she genuinely believed that her interactions promoted independence, the empirical evidence proved this to be a false belief.

5) Some teachers were unable to explain why they acted as they did. This may have reflected the limits of the methods used to elicit their views. However in some cases it seemed also to mean that their practice was relatively untheorised. Many teachers in this study indicated that the interview process prompted reflection for the first time. Some teachers, however (e.g., Amber, Roxanne) saw no need for reflection and were happy to allow practice to remain unexplained. This seemed linked to the view of their practice as largely outside their control, but rather part of a structure determined by someone else.

It will be argued in the next chapter that teachers will only be optimally effective in achieving their own goals when they transform unreflective practice to praxis. This implies giving a full and integrated account of the beliefs which inform practice and subjecting these to practical tests. Teachers need to make their educational aims explicit and evaluate whether or not these are attained in practice. For most of the teachers in this study there would be some way to go before this could become a reality.
In chapter two it is argued that educational theory consists of those beliefs which inform educational practice. Further it is claimed that theory and practice are mutually constitutive and dialectically related, that is, each challenges and informs the other. These claims emerge from the praxis account of education in which education is understood as a practical activity guided by the desire of practitioners to act wisely in accord with defensible principles. Moreover it is claimed that technical control through the application of 'scientific' knowledge of 'means' is neither possible nor desirable. Rather, teaching is seen as "a complicated personal and practical process of accommodation" (Lampert, 1984, p14) in which teachers move between their own theory and practice in pursuit of many competing worthwhile goals.

Oberg identifies the difference between practice and praxis and stresses the importance of self conscious scrutiny because it enables practitioners to 'theorise their practice, revise their theories in the light of practice and to transform their practice into praxis i.e., informed committed action (Oberg,1986).

However every practitioner does not instinctively moves from practice to praxis, in the way outlined by Oberg (1986). Both the praxis account and 'applied science' position with which it has been compared have different implications for the improvement of educational practice. Whereas on the applied science account, educational quality would depend on the ability of practitioners to apply scientific theory, the praxis position requires that teachers engage in critical reflexive examination in which their theory is submitted to practical tests and practice to rational inquiry, thus ensuring their continual process of refining.

In chapter three it is argued that studies which seek to measure congruency between theory and practice have a misguided conception of education and educational theory. Rather than existing as a body of knowledge 'distilled' for application to practice, educational theory is here defined as those "beliefs values and assumptions" (Carr, 1979, p32) which provide the conceptual framework in which practice occurs. Many writers (e.g., Carr, 1979; Hirst, 1983; Schon, 1983) make the point that such knowledge may be largely tacit, immanent in practice, rather than couched as a set of explicit propositions. However these same writers advocate the process of explicating this practical or intuitive knowledge so that we might begin to test and refine it in order to improve practice. This explication, it is
claimed, must begin with reflection on practice rather than seeking abstract accounts of belief, if it is to have any relevance to what people actually do.

Schon (1983) suggests that reflexivity does not occur unless something surprises us, jolting us out of habitual patterns of behaviour. In the present study, for at least one teacher, Mary, critical self reflection was not new but had characterised her approach for some time. It appeared that she had indeed transformed her practice into *praxis*. However several teachers reported themselves to be thinking about aspects of their practice for the first time, suggesting that the interview process in which teachers had access to empirical data, served the useful function of prompting such reflection. The six case studies presented in chapter five and discussed in chapter six demonstrate that talking about practice can be illuminative. However they also illustrate the limits of unreflective practice.

**Implications for teacher education**

When we give an account of a person's theory we should make reference to not only what she does but how she explains this action. But what if she is unable to explain aspects of her practice or her statements of belief seem contradictory, or perhaps are even manifest in contradictory practices? In this case the teacher's account can be described as incoherent and her practice, or aspects of it, as unreflective. Unreflective practice is unlikely to be effective. Improvement comes from a more thorough theorisation of practice. This means submitting practice to rational appraisal and theory to practical tests. The outcome will be a fuller and more coherent theoretical account which strengthens the effectiveness of practice.

The teachers who participated in this study demonstrated differing abilities to theorise their own practice. While Mary, an experienced teacher who had worked in both the primary and early childhood services, was highly reflective, identifying the 'dilemmas' she experienced as she sought to reconcile conflicting beliefs, she was also the exception. Fran, Maddy and Kim recognised some inconsistencies between their own statements and actions for the first time in the interview process. For Maddy and Kim in particular, this left them with a sense that a gap existed between their intentions and actions, and was the source of further reflection. Roxanne and Amber remained apparently untroubled by their inability to explain contradictions between what they said and did, leaving much of their practice inexplicable.
All of these teachers had undergone a teacher training process, with the exception of Roxanne who was in her first year of a three year programme. Unlike the others who had either kindergarten or childcare training, Maddy had trained as a primary teacher. While this study did not attempt to trace the roots of the participants' beliefs, each of the teachers did associate expressions of educational conviction with their personal life experiences. In particular, teachers recalled their own schooling and reflected on the success or otherwise of their adult relationships as they explained aspects of their current practice. In each case these beliefs were clearly immanent in their practice. This finding offers strong support for the biographical account of teacher socialisation (e.g., Ayers, 1988; Kleine and Smith, 1989) which argues that life experiences are highly influential in shaping teachers' beliefs and practices.

While only Maddy actually referred to her teacher training course as influencing her understanding of children's learning, the way in which all the other staff described children as 'learning through activity' and from 'peer models' suggests that their beliefs have been influenced by their engagement with formal or academic theories. However their statements often disguised the idiosyncratic nature of their individual understandings, for example Roxanne's view of play as direct preparation for future employment. Further it seemed that many statements remained at the level of discourse without being influential in those aspects of teachers' activity over which they exerted control. Early childhood teachers in New Zealand largely 'inherit' free play programmes, play being accorded the status of developmentally appropriate practice in policy (e.g., Early Childhood Handbook, 1989) but within that structural context they make decisions about their interactions. It has been argued here that teachers draw on two kinds of knowledge when they speak about play, formal and intuitive, and that the formal knowledge gained from training programmes sometimes remains only at the level of discourse.

These claims have implications for teacher educators. Much of what is taught in courses of teacher education may only ever achieve the status of formal knowledge. Students may pass examinations by drawing upon the formal theory they have been taught, but this may never be properly integrated into their complex of beliefs. If this integration does not occur, formal knowledge is unlikely to inform their practice. Jones (1980) makes a similar claim when she states:

> working teachers build theory out of their experience; they don't just quote others' theory. They don't act as they do because Piaget said so; they do it because they say so - because they have observed and experienced and they know that this is appropriate (Jones, 1980, p138).
Both Jones (1980) and Biddulph and Osborne (1984) argue that if teacher training is to be effective, teacher educators must engage with beginning teachers' existing belief systems. Jones suggests that formal theory be "demystified" (p138) with beginning teachers being urged to articulate and test their own theories as well as learn of the theories of others, e.g., Piaget. Biddulph et al write from a constructivist position and propose an 'interactive teaching model' in which teachers' questions about practice become the basis for considering the usefulness both of their own beliefs and relevant academic theory. His position is consistent in this respect with that of Dewey (1960) who argued that curriculum should be centred on problem solving and that existing bodies of knowledge, i.e., formal theories, should be seen not as fixed 'truths' but as outcomes of past inquiries which can serve as resources in our attempts to solve current problems.

Biddulph and Jones both support a curriculum in which learners and teachers collectively set out to resolve problems drawn from the world of practice. This suggests that rather than beginning teachers being taught formal theory in one context and expected to 'apply' it in another, the problems they experience in practice should become the starting place for its introduction. Bell, Kirkwood and Pearson (1990) reiterate this position, drawing on their review of the literature on teacher change or teacher development. (These terms are used interchangeably.) They identify several factors which have been found to facilitate change and conclude by advocating interactive teaching methods in which the dialogue between teachers and teacher educators is focused on the exploration and testing of teachers' 'implicit theories'. The dialogue needs to be genuinely collaborative, rather than either group claiming 'expert status'. It needs to occur over time, allowing time for teachers to reflect and test ideas in practice.

How much time is made available in programmes of pre-service education for critical reflection? Teacher trainees typically report high class contact hours and heavy workloads which necessitate that they be task orientated. Teaching practice brings a further series of tasks to be accomplished. The present study found that some teachers viewed teaching as 'following rules' rather than a process of enacting one's own theory. Is there a hidden curriculum operating in teacher education which ensures conformity at the expense of reflexivity? Claims that critical reflection should await competency (based on stage theories of teacher development and evident in the way the curriculum is structured with foundation courses preceding 'issues') certainly need challenging. Battersby (1987) argues for critical pedagogy in pre-service teacher education in which all knowledge becomes 'problematic' and therefore the focus of shared scrutiny and reflection. This study suggests that some teachers are graduating from their preservice training without the tools to theorise their practice. Like Battersby, Groundwater-Smith (1988) argues that only when teachers have these tools can their professional education be seen to be empowering.
Bell et al (1990) stress the concepts of ownership, morale and a supportive culture as being important prerequisites for change. Before teachers change their classroom behaviours they need to see the proposed change as being in their interests and as reducing rather than adding to their present level of stress. Further, it must be consistent with the shared sense of "what is good and true" embodied in the culture of the institution. This concept of 'culture' reflects the importance of the social and institutional context on teachers' practice, a view supported by the work of King (1978), Apple and King (1979) and Lubeck (1987). In relation to the present study this suggests that the cultures of the early childhood centres as well as those of the training institutions are likely to influence the beliefs and practices of teachers. The nature of such influence is frequently unrecognised by those who respond to it, the term 'professional socialisation' used to describe a process of enculturalisation. Early childhood teachers thus come to have a shared 'world view' which is not the subject of their explicit reflection. The present study suggests that any such 'world view' may be tenuous, existing as discourse rather than genuine belief and urges that culturally embedded practices be subject to continual scrutiny. Clearly, however, it will be difficult for a teacher to challenge 'taken for granted' institutional practices. This suggests that school based inservice education may be valuable, allowing for shared reconsideration of culturally ascribed practices. Context-embeddedness is one of the strengths of action research models, such as that reported by Bell et al (1990).

Another implication of the present study concerns the way in which teachers' perceptions of their own careers and personal lives mediate other beliefs related to education (Bell et al, 1990). Although a biographical approach was not taken, these influences were seen to be important. For example, the childcare teachers in this study held beliefs about the low status of their work. Their desire to improve their own status in the eyes of parents was enacted in their introduction of school-oriented practices, which they believed to be of limited educational worth. Several of the studies reviewed earlier in this study (Hatch and Freeman, 1988; Smith and Shepard, 1986) reported similar findings. Beliefs related to the external context appeared to override teachers' other beliefs about learning and teaching. Bronfenbrenner (1979) urges that an ecological approach be taken to the study of development, pointing out the way in which roles are always embedded in a larger context. His approach has implications for understanding teaching. The present study suggests that attention must be paid to the status and recognition accorded to early childhood teachers if we wish to improve practice. Teacher educators can begin by assisting teachers to identify such contradictions in their practice and to seek alternative ways to resolve these, such as collective action.
In summary, the following recommendations arise from the present study: (N.B., the term 'teacher' refers here both to teachers in preservice training and teachers in service).

1) Practical problems should provide the starting place for dialogue between teacher educators and teachers. This may be effected through the juxtapositioning of teaching practice with classroom discussion, allowing teachers to identify real dilemmas, explore these collectively, and return to test theory, seeking resolution in practice.

2) The nature of the practical problems identified by teachers is likely to change as they gain more experience. This suggests that planned opportunities for teacher education should be career long.

3) Teacher educators should engage with teachers' existing beliefs. This would require shared reflection in an atmosphere of trust in which teachers are assisted to make these beliefs explicit, identify contradictions and ultimately submit belief to practical tests.

4) Formal or academic theories should be presented to teachers as resources available to assist them in the resolution of practical problems. The focus should be on developing 'operational theories' which inform their practices. In this way theory becomes demystified and all knowledge becomes problematic, the subject of critical self-reflection.

5) Beginning teachers' understandings of formal theory should not be assumed on the basis of their responses, removed from the practical context. Formal knowledge may come to have the status only of discourse, rather than actually informing practice. Assessment will need to involve observation of practice as well as beginning teachers' accounts of their practice.

6) Time should be set aside in teacher education programmes to allow for teachers' critical self-reflection, observation, processing and testing of theory.

7) The possibility that a hidden curriculum operates within teacher education programmes should be investigated, to ensure that teachers come to view teaching as a form of praxis rather than merely 'following rules'. Such investigation would require teacher educators to transform their own practice into praxis.
Methodological considerations

The present study is based on six case studies and makes no claim to be widely representative. Case study by its nature is context embedded and thus its applicability to other contexts is limited. Discussing case study methodology and the issue of generalisability, Stake (1978, p6) however writes that "particularisation does deserve praise" arguing that a "full and thorough knowledge of the particular" may be more useful in guiding practical action than lawlike generalisations. He and others (e.g., Adelman et al, 1976) further suggest that a target case, if well described, can provide readers with a basis for "naturalistic generalisation" by identifying similarities between it and the situation with which they are familiar. A comparison of the findings from the present study with those of other New Zealand studies (e. g., Meade, 1985; Smith et al, 1988) suggests that the views expressed by these teachers are not atypical.

Case studies are always partial accounts involving many decisions about what aspects of an 'instance in action' to attend to (MacDonald & Walker, 1977). In the present study it was the interactions between six teachers and four children, along with the accounts given by all these participants, that constituted the primary source of data. Had interactions with parents and staff or with other children been included the conclusions reached may have been different. Reliability and validity were addressed through the use of a second observer and independent coder, triangulation of child, teacher and researcher perspectives and 'member checks' (Lather, 1989) to seek participant confirmation of interpretations.

Careful attention must be paid to the methodological issues associated with studying belief. Because belief is immanent in action, both the 'real world' of action and the interview 'one step removed' become important and complementary contexts for study. It has been suggested in this study not only that the genuineness of a person's expressed belief is sometimes in doubt, but also that a person holds beliefs of differing status. While a person's actions offer some insights, these are by no means conclusive. Achieving a valid account of someone's 'operational theory' requires collaborative reflection, testing and refining. This is a lengthy process and evokes the description of a researcher "stumbling from lamplight to lamplight in the fog" (Kemmis, 1982). The process will be most effective when participants feel genuinely at ease and committed to the outcome.
Opie (1988) suggests that the relationship between researcher and researched structures what is regarded as valid knowledge. Drawing on her own experience as a social science researcher, she writes, "I was forced early on to recognise that the conception of the interview as a dialogue between equals was inadequate" (Opie, 1988, p85). This point has been well made by Oakey (1981) who argues for democratisation of the research process, with genuine negotiation between researcher and participants over each aspect of the process, including the report. However both writers acknowledge the way in which tradition has privileged the position of researcher over researched. Lampert (1984) suggests that the maintenance of a viable 'self' is central to teaching. When we engage with a person's beliefs related to teaching, we engage with her very identity. This implies an ethical obligation to address power relations implicit in research design. If research is to be justified, it must demonstrate commitment to improving practice. Improvement is unlikely to occur if teachers feel inadequate and powerless as a result of their engagement in the research process.

**Implications for further research**
The present study did not explicitly explore the origins of teachers' beliefs, yet the statements made by teachers along with their observed actions suggests that their life experiences outside of the centre context were influential in shaping their teaching. While the biographical approach to teacher socialisation enjoys growing support in the literature, its claims need further substantiation than that offered by individual retrospective case histories. Longitudinal studies of teachers' development would provide useful complementary insights. Particularly interesting would be a descriptive study which identified those factors which prompted change in teacher beliefs and behaviour. However such work is unable to ensure the improvement of practice.

In their discussion of the purpose of educational research, Carr and Kemmis (1986) suggest that the primary task for the researcher is to

emancipate teachers from their dependence on habit and tradition by providing them with the skills and resources that will enable them to reflect upon and examine critically the inadequacies of different conceptions of educational practice (Carr & Kemmis, 1986, p123).

In this way research makes practice more 'theoretical', whilst remaining practical, in that the theory helps make judgements about what is to be done. Thus the emphasis is on empowering the teacher by assisting her to make her observations, interpretations and judgements more coherent and rational and therefore more scientific. The ability of the 'outside' researcher to achieve such a transformation is limited. This point is strongly stated by Carr and Kemmis when they write
It is entirely inappropriate for researchers to treat teachers as objects for scientific inspection, or as clients who accept and apply scientific solutions. Rather since the practical experience of teachers is the source of the problems under consideration, it must be realised that the active participation of practitioners in the research enterprise is an indispensable necessity (Carr & Kemmis, p126).

While the present study sought the involvement of teachers, its focus was on description rather than change. Yet if these teachers are at all representative of their colleagues in early childhood education, clearly there is work to be done. Their demonstrated interest and commitment suggests that there exists an openness to change, when such change can be seen to be in the interests of both children and teachers. What is now required is a more collaborative emphasis, with both teachers and researchers becoming equal status partners in joint pursuit of understandings which facilitate the improvement of practice. This means that both parties will be involved in determining the nature of the 'research question'. Further it implies that the research will be 'grounded' in the world of practice, with practice determining the value of any theory generated. These are the strengths of action research models, which aim to "improve and involve" (Carr & Kemmis, 1986, p165), the foci of improvement being the practice, the understanding of the practice by its practitioners and the situation in which the practice takes place. Action research involves collaborative involvement in identifying "strategies of planned action which are implemented and then systematically submitted to observation, reflection and change" (Brown, 1981, cited in Carr & Kemmis, 1986, p165). Thus by its very nature it is empowering in that it involves teachers in effecting change in their own practice.

Carr and Kemmis (1986) argue that such research must be more than interpretive, enabling penetration of the ideological character of teachers meanings and offering an account of the manner in which these are subject to historical and material constraints. Within the literature on teacher thinking there is debate about how teaching can best be conceptualised with some writers favouring the use of metaphors, (Taylor,1982) dilemmas, (Berlak and Berlak, 1975) or images, (Elbaz, 1983) but none of these approaches adequately address the ideological nature of language. A critical analysis of the discourse and practice of early childhood education is needed in which such phrases as 'free to choose' and 'intervention' become the focus of examination. Ultimately it is the teachers who must conduct such an examination, using the tools from academic practice to complement their own intuitive understandings, to become 'researchers in action', committed to improving their own practice. Only in this way can the rhetoric of empowerment become real.
REFERENCES


APPENDICES
Appendix One
INTERVIEW SCHEDULES: TEACHERS

1. How many years have you worked in early childhood education?
2. What qualifications do you currently hold?
3. What influenced your choice to work in early childhood education?
4. How do you see the function of the centre?
5. What is your role here?
6. What does teacher/Head Teacher/Supervisor mean in your centre setting?
7. Can you describe your work here more fully? (Depending on answer to Q5).
8. How do you interact with the children?*
9. During my time here I have been observing four children in particular: (children's names). Can you tell me a little about how you see each of those children? (one at a time.)
10. What does play mean to you?
11. How do you understand the children's use of the word 'friend'?
12. Can you tell me about the centre programme?
13. Do you have goals for children? If yes, what are they?
14. What does the term curriculum mean to you?
15. You've mentioned children's learning/development. How does the centre programme promote this?
16. I've noticed that you (refer to aspects of observed practice here e.g. "let children choose their own activities"). Can you tell me why you work in this way?*
17. Would increased staffing help you do your job better? Are there any (other) changes that would help you in your work?
18. Is there anything else you'd like to tell me that would help me understand how the centre works?
19. Finally, I wonder how you felt about my presence in your centre over the past few weeks? How did it affect you?

Notes:
1 Transcripts of interactive episodes were given to teachers at relevant points in the interview, usually following questions 8 and 16(*), with teachers asked to "tell me about what is happening".
2 The interview schedule was used flexibly, to accommodate teachers' spontaneous comments. Frequently probe questions were used to follow up main questions.
Appendix Two

TRANSCRIBED INTERVIEW: FRAN

NB and Fran are seated in Fran's lounge.

1 NB: First of all, Fran, how old are you?
2 Fran: I'm 22
3 NB: How many years have you been in childcare and how many in Rimu Childcare Centre?
4 Fran: Right, I've been five years in October it will be in service and four of those at Rimu Childcare Centre.
5 NB: And you trained...? You've got a childcare certificate haven't you? How did you do that?
6 Fran: I did that through field based training. I did that three year course while I was at Rimu Childcare Centre. I actually started it when I was at school which I wasn't supposed to do, and then I stopped it for a year and than I restarted it again.
7 NB: And why childcare?
8 Fran: Oh, goodness. I love children I guess. I just, it's something that I really feel for. I don't know, I can't imagine working without having some feeling or feedback, you know, emotions. Also, I guess I love to help people and you can just do so much for children.
9 NB: And why Rimu Childcare Centre?
10 Fran: Why Rimu Childcare Centre? I think it's because there is so many different children, you know, the age range is so different because I've worked on the infant side as well as the over two side, and also the centre works well together like everybody gets a say in what happens, and all that sort of thing so you can actually put in a lot into it, and so you sort of get a lot more out of it.
11 NB: Can you tell me how you see the function of Rimu Childcare Centre, the function of the centre?
12 Fran: Oh, goodness, the function of Rimu Childcare Centre. OK. Well I would probably say its main function is to provide a service for the parents, and by doing so we've got to provide the best possible service that we can for the children and that. That's really the way I look at it as if, its not as if we're there for the parents, you know, I mean its not as if the parents are there for us, we're there for the parents.
And what's your role there?

OK, well, I'm the assistant supervisor, but my role, I don't know, I guess it depends, I don't know. I don't feel I am just one of the oldest or the assistant supervisor because I carry Kim's role when she's not there. The rest of the time I'm still a worker, I'm doing all the other chores that the people in the centre do, and I'm also a mediator between the rest of the staff and Kim, and also for the parents too quite often because they, I don't know if they relate to me because I'm not actually the supervisor, but if there's something that's worrying them they could possibly tell me and I will look into it for them. Piggy in the middle type thing

Mm, that's interesting. And how does that feel?

I don't mind it, except when that I really do become stuck in the middle and I'm told, oh one of the staff will ask me to ask the supervisor something that she wants to ask her and I'll tell her what she says and then she'll change her mind, and I'll have to, it's sort of when I relay it back, you know I really get stuck in the middle sometimes, but I feel like I'm not, you know, I'm not putting any input into whatever's happening because I'm just doing what the staff wants and what the supervisor wants, but I would like to be able to work things out.

You like to mediate between people.

Yes, well I just find it makes it go easier, the centre. It runs more smoothly if I can just do the things that keep both lots of people happy.

The children refer to you as teachers don't they?

Some of them do. I think it depends on what their parents refer to us as.

Do you see yourself as being a teacher?

I guess I do, but, um...

Is there another word that you would use in preference?

Um coming from the children I'd prefer if they just sort of see me as a friend, coming from adults I think I prefer it if they thought of me as a teacher. I don't really like the words 'childcare worker'. I sort of visualise just changing nappies and just doing manual tasks, whereas we do a lot more than that.

Like...?

Like teaching. I feel that we basically carry out what our kindergarten does in their programming except to a greater extent because we cater for two year olds to five year olds in their over two's programme so you have to allow for the different age groups and you have to allow for where the child's at and apart from that there's just so many children its, you're in,
in some respects you're not taking over from the parents, but you're just
there if the children need you as the parent will be there if the child needs
you.

29 NB: So you'd see your role as being close to the role of the parent?
30 Fran: No, I wouldn't like to say that. Just as a friend, I guess we're related as,
but if you really have a close friend and that friend does teach you and I
mean you learn from them and you listen to them

1 NB: You talk about Kim being the supervisor, what does that mean in the
childcare centre?

2 Fran: If anything goes wrong she's responsible in the end. It all comes back on
you in the end. That's basically what it is

3 NB: What do you actually do in the centre?

4 Fran: During the day?

5 NB: Mm, apart from...you mentioned mediating between people? What else?

6 Fran: What else? Well I open the centre in the mornings. You're continually
greeting parents during the day... feed the lambs. Yes. There's always
daily routines like set times for all our food and all that sort of thing, sleep
times and that is also something I do as well as the other staff, and
programming. I'm, we all do a programme each three weeks. I'll do a
programme for the centre. I don't know and just little things I mean just
like emptying the dishwasher and refilling it just so that you don't get a
stack of dishes on the bench, and you just sort of do things like
that... Refilling toilet rolls.

7 NB: The things that make it runs smoothly?

8 Fran: Yes, yes, just so that it keeps going.

9 NB: How do you interact with the children?

40 Fran: Well, I talk to them laughs how do I communicate with them? Mm, well
I try very hard to get down to their level or not down to their level but to be
at the level that they're at. I don't know I really think it's just a case of I
just try to be where the children are at, what they're wanting to do. I
hadn't really thought of my interactions

1 NB: Mm, perhaps if I ask you some specific questions?

2 Fran: OK

3 NB: Um, or better still, if I just give you an example?

4 Fran: Oh not laughs

5 NB: This first one here is um , an extract. You were kneeling in the family
corner writing something on somebody's painting , and Rose approached
you with a painting saying would you write my name and you talked with
her about the painting. Just take a moment or two and read it through. You were identified as Fran at the side there and the Rose stands for *name* and the other children are just labelled 'C'. Pause while Fran reads the transcript. What's your impression? What can you tell me about what you are doing there?

46 Fran: I keep getting off task. I feel it's so hard just to do one thing without getting interrupted without thinking about something else.

7 NB: Yeah, you seem to be really good at dealing with lots of things at once.

8 Fran: I don't know, it's um....

9 NB: Is it a fairly typical sort of interaction?

50 Fran: Yeah, yeah, it would be actually

1 NB: Do you think they mostly start when the kids approach you?

2 Fran: Ah, it depends what area it is. Like with the paint they, I mean they sort of have to approach somebody like me to get their name on it. I don't know actually because I don't often stay in one spot very long anyway. I'm sort of moving and trying to see what's happening everywhere. I don't know.

3 NB: She had the conversation with you there about colours, what was that about?

4 Fran: I don't know. It must have been an exciting painting with all those colours on it!

5 NB: Do you always ask the children to write their names under the name you have written for them?

6 Fran: Um, no. The four year olds were um we're actually trying to encourage them to write their own name. We've now got a list up by the painting easels with all their names on it and so they can copy their own name off that, but before, yeah, we'd get them to copy underneath it. Preparation for school.

7 NB: Right.

8 Fran: Mm.

9 NB: If you just turn over and have a look at another one of these, an outside one this time. *NB directs Fran to the second transcript and pauses while she reads it.* Liam and two other boys, I think it was C and I can't remember who the other one was, were chasing each other round the fort with lots of gun noises and 'ugh, yuk's and you'd been watching them from a distance and you moved over towards them. What was that all about?

60 Fran: Liam was always, ah, playing rough.

1 NB: Mm, mm
Fran: I um, I try telling him that people are nice. I don't know if it works or not! 
*Laughing* He is getting better but to him everyone seems, um, as if they can hurt people. It's quite sad

NB: Mm, mm. By asking them "You're not going to hurt each other are you?" you were trying to get some sort of promise that they would play differently?

Fran: Um, yeah I guess I was getting them to say that they weren't going to play...that they were going to be nice and as a result they were all going to go off and play nicely for ever again! *Laughing*

NB: *Laughing* Mm

Fran: Yeah I dunno how realistic it is

NB: Mm. I was um, I was rather impressed at the time that you knew who McGyver was because I didn't! So are there any differences, I wonder, in the way that you interact with children when you inside and when you're outside?

Fran: Mm. Maybe when I'm inside I tend to think of it more as unlearning something I guess and outside as play. I always used to say um there when you've finished doing that you can all go outside and play, sort of saying that you don't play inside and...I mean I expect them to learn outside. I think they all do learn outside, but I do tend to think they run round and play more so than usual I guess.

NB: Mm, mm. So you think inside is being more of a learning place and that means you have a different role?

Fran: I don't think I do though. I mean I , I think I do think as inside as more of a learning place, but I think I try and get the children to think about things and , and um, if I say why to them I'm you know I'm likely to say outside as much as inside. You know: "Why did that happen?"

NB: Mm, mm. So you don't think you interact differently in those cases.

Fran: No, no.

NB: OK. What about when children are pretending? Um, pretend play. How do you interact with them at those times? Do you interact with them when they are playing pretend?

Fran: Um, I do outside, but not really inside. Ah I guess it really does depend on the area. In the dough area if you're actually sitting at the table and the children really want you to um interact with them and pretend that you know they are real cookies you put them in the oven. Outside you get that again in the sand pit. Um, I don't know, sometimes I do, sometimes I don't. It depends what's happening. I guess there's a lot in the pretending
like in that McGyver one and if it was to me it was rough, I guess or it was
heading that way then I would interact and try and turn it round the other
way. But if they were playing nicely or having a real good time, noone's
going to get hurt, I'd probably just smile and that would be it
75  NB: Mm, mm. What about some of the other times... like mat time? How do
you interact with the children at that time?
6  Fran: It would depend on how I'm feeling, and how the children are reacting. If
you've got the two and thee year olds all together you tend to um shout a
lot more, and it's not really fun time it's more of a sit down and be quiet
please, and you can't sing one whole song with the children without telling
somebody off or looking at somebody and wanting her to sit down or
something like that. When it's just the older one's by themselves when
you've got your, um like at 9 o'clock often in the mornings we have our
discussions about the theme. That's a lot better because the children...I
don't know if it's 'cos you are really interested in what you have to say but
the children are really interested in what you really have to say and it's
more of a two way thing, you know between me and the children whereas
the other one's more just me telling them what to do
7  NB: Mm, mm. What about tidy-up time. What's that like? How do you
interact with children there?
8  Fran: Um, I tidy up the area I'm in with the children, the one I'm working in at
the moment but I also tend to um keep walking around them supervising
them, making sure that the areas are being tidied up.
9  NB: Mm, Mm. What about meal times?
80  Fran: Meal times. If we are not busy I can sit down and talk to them, and I guess
I don't normally talk about anything important. We'll talk about their food
but nothing really about what's going on in their life. It's just really "Eat
up your yoghurt", that sort of thing
1  NB: Do you think there are any differences in the way that you interact with
boys and girls?
2  Fran: There probably is because I guess I actually expect the boys to run around
and do more boisterous things...but then some of the girls do as well. I
don't know I think that I react differently probably to each child because I
know what they can do and what they can't, and what to expect of them
and that but I don't think there'd be a big distinction between boys and
girls
83  NB: What about the two year olds and the four year olds?
Fran: Yeah, there would definitely be there because with the four year olds I would often say to them "You are a four year old, you know, I wouldn't expect that kind of behaviour from you!" whereas I know that I could expect that from a two year old.

NB: Mm, mm.

Fran: Yeah, but otherwise I wouldn't, I would probably praise them just as much as each other. I guess I would probably get more short-tempered with the four year olds though because I do feel that they can, that they do know better.

NB: Do you think that there are some children that you would seek out rather than wait for them to seek you out?

Fran: I guess there are. Sort of like in the mornings, ah, like Rose, she always sort of needed a person before mum could go, and you always made sure you saw her, and some other one's that you know um don't want mum to go, and they, and you can take them, I guess, and Nell I guess during the day because she's so quiet you just want to make sure that you talk to her. Yeah, I guess there is actually. And there is some others which you know are naughty, and you just look for them to do something good because um so you can say "Oh look at that! That's really neat!"

NB: Mm, mm. So you like to catch kids doing good things?

Fran: Yeah, yeah, it's so easy not to see it though.

NB: Mm, mm. You think kids need to hear you say that?

Fran: Yeah, I do I mean they're with us for so long, some for 10 hours a day are at the centre. They've got to know that they're doing ok.

NB: Mm, mm. Do you play at the centre?

Fran: Yeah, I've been on the bikes a couple of times, but they're actually starting to break, so I've given them up! Laughs I do, because I quite enjoy climbing outside especially climbing up on the on that tower thing out there. And I don't mind having a swing and the children pushing me. Yeah. Probably more outside than inside because when you're inside you sort of continue to supervise them in all the different areas.

NB: Mm, mm. It's OK to play with the kids...?

Fran: Yeah, I think so as long as you're still supervising the rest of the children.
Mm. Moving on to the four children I’ve just observed I would just like you to briefly tell me what you’re impression is of each of them and what they do at the centre, starting with Rose. How do you see Rose and what does she do at Rimu Childcare Centre?

Rose. Um, she's actually going to school in two weeks.

Fran: Yeah, we’ll be sad to lose her. Um, Rose.... I'd say she's a quiet child, she's quite serious whenever she does something she does it, you know, she'd sit down and really concentrate on that because she likes her paintings and that and they always turn out looking so neat. Um, she likes to be with the four year olds, with that little group of children. What else? Yes, she really likes her mum to um stay in the morning for a few more moments just to show her something in one of the rooms or something. She also loves to help the teachers too. She loves to help set out the lunches, and she likes looking after the little children. Sort of...I don't know, like being a little mum to the other children.

How are you involved with Rose?

Well she was actually in my um group, my name group. I think that it makes a difference, not a big difference, but they, Rose knows ah that I've got a little notebook and that I write down these things about her and like when she does all her shapes and that, it's all written down in the book, and I think that's quite nice because she, I don't know it just sort of makes her feel that little bit important, I guess.

So your role in relation to her is to write down things about her in the notebook....?

And as a friend, I guess.

Mm, mm. And what about Nell?

Nell, Nell. Quite different to Rose. She's actually going back into hospital too. She's having um tubes put in her ears. She's still having a lot of problem with her ears, sometimes she can hear, sometimes she can't. So sometimes she's happy, sometimes she's not. Um....

What does she do at the centre?

She plays a lot with J at the centre. She's still not really with the 4 year olds. The girls have sort of really of stuck together and Nell even though she started to be included in mealtimes its throughout the day she's not really.

What's your role in relation to Nell?
Fran: Ah, that's a hard one. I try to be really responsive, I guess, to Nell. She's, because she's so quiet it's just so easy to overlook her I guess. You know you always sort of pay attention.

NB: Yes, mm.

Fran: Because she's so quiet she doesn't get a lot of attention from the other children, not a lot of positive attention from the other children. I try to make sure that I give her quite a lot. But then as I said I because she's quiet you just often you don't talk to her I guess as much.

NB: Mm, mm. What about Paul? What does Paul do?

Fran: Paul and C play together all the time. Their parents have got it worked out so that when Paul's at the centre, C's at the centre, and those two stick together. They play a lot when they're inside they play a lot in the family area - that's been changed around now - and also in the um activity. He's quiet and serious. He's very serious. His mum said that. We got our photos taken, group photos and he didn't smile in any of the photos. He just... and it was very serious getting his photo taken and he just stood there with a straight face a long time. He enjoys it outside. I think he would prefer to be outside rather than inside.

NB: What's your involvement with Paul?

Fran: Um, I probably don't have that much to do with Paul because I know he's with C, and I sort of feel he's getting um I guess as much as he can with C

NB: Mm.

Fran: I don't have much to do with him at all really.

NB: And what about Liam?

Fran: Liam. Liam is actually making really neat block buildings at the moment. He's doing really well. Um, he's changed. I don't know what's happened. I think his parents are back together actually, but he's a lot more happier now and he he comes to me all the time and ah, shows me things and just ...I don't know. He's just interacting heaps with adults and that. He sticks with the four year old boys and prefers outside play. He's forever running inside. It's incredible. His shoelaces are forever coming undone! He likes playing in the family area now too. That's since it been changed around. He likes playing in there. Him and C stick together, but then there's the other little boy , C, when he comes along he tends to get really boisterous and excited.

NB: What is your involvement with Liam?
Um, I actually feel quite close to Liam. I don't know, I guess it's because he's I suppose taken me into his confidence, you know sort of putting trust in me, so I'm returning that.

NB: Mm, mm.

Because he never used to do that with any adults.

Mm, mm. So apart from tying his shoelaces what other things do you do?

Laughs Join in his games, his play

Mm, mm. How do you see play?

I think, I'd say play was part of learning. That goes all together, so like when the children are outside um running around which would be termed as play, they are also learning, they're learning, you know, physical skills and they're learning how to run backwards and that. I don't know. I think I tie them together. I mean I generally do say "Go and play now" but um I think they're learning at the same time. I don't think play to children is something like it is to adults. I think to adults it's... you can do it and not really have to think about it or get anything out of it. I don't know but I think for children they're learning all the time.

Mm. So as long as they're playing they're learning?

Mm, I think it just goes hand in hand, I mean, doing a painting, I don't know if... I guess I wouldn't call that playing actually when I think about it. I guess I'd term play more so when they're moving about.

Mm, mm. So is everything that the children do at the centre - apart from having their lunch and the bathroom - play?

I think to the child it would be if they were enjoying it

But to you? Not painting, you've mentioned that painting's not playing?

Mm. I don't know because I think they're playing all the time oh and they learn all the time....

Is some sort of play more worthwhile than other sort of play?

No. I'd say it's all very important.

Mm. Have you ever heard the kid's say "I'm not your friend" to other children?

Mm, mm.

What do you think they mean by that?

At the moment they mean I don't want to have anything to do with that person. I don't, it's not, it's not as serious as in a long term relationship. It's just for the for the moment.

Yeah, aha. Do you respond to that in any way?
Fran: It depends what it is. If it's said in a really spiteful way I'd probably say "Well that's not very nice." But most of them you know it's sort of just gone, it's just something they've said and then they've forgotten they've said it and they've been playing together.

NB: What is a friend at the centre to a child?

Fran: Oh, Oh know, um I think that they all consider each other friends actually. I mean they'll have really close friends like Liam and C, but otherwise they consider everyone to be friends. You sort of notice that when somebody new comes into the centre from outside they all sort of stick together, you know.

NB: Are you a friend to the children do you think?

Fran: Oh, I hope so. I'll ask them tomorrow. Laughing

NB: At the centre you have a programme you mentioned. What's the programme all about?

Fran: Ah, it's, it's based on the SEACOH plan I guess. We have a theme which we, which is relevant to the children, like for instance we've got quite a lot of 4 year olds going to school in the next couple of weeks, so we're doing a theme on shapes and colours and numbers just to make sure they know, you know, they're up with it before they go to school. That's, that's the main idea is to concentrate on something that he children need. Sometimes it's um based on what's happening around us. Sometimes it's just um sometimes it's the children ah not as often as it should be probably. Cause we haven't, we don't find the time to find out where we should be heading next. We sort go from one week to the next in deciding theme's as we go along.

NB: So the theme comes more from out of your head you mean?

Fran: Mm.

NB: And is there any way... how do you know if the kids know that stuff already or not? Like, you mentioned shapes for example?

Fran: Shapes, yeah. Well for things like that we can actually have a little notebook. We've got, um, check lists for shapes and numbers and colours and that. Um, that's it. You actually normally find out because you'll speak about it at mat time, and you'll ask a question and if all these hands go up and they know the answer you think oh no.

NB: Why do you think, oh no?
Fran: Because they already know it, but it doesn't, it doesn't really matter really because the older children quite enjoy teaching the younger ones or the children who don't know it, you know what's happening, tell them what's happening.

NB: Mm, mm. Do you have goals for children?

Fran: Um.... I guess we do in a way. We haven't actually...we have personal goals I guess but not main sort of centre goals for the children.

NB: So, what would be an example of a personal goal?

Fran: That all the children were happy to see you in the morning! Laughs Or um ...I would really like to have all the children join in at group times and want to um hug each other and feel confident enough to say their own name in front of all the children. Sort of ones like that I guess.

NB: Mm, mm. Does the term curriculum mean anything to you?

Fran: Um, we don't follow a curriculum. Well I wouldn't say. No, I don't think we do. Kindergarten's do but we don't.

NB: Well that's interesting because you said before that you did all the same things that kindergartens do?

Fran: Yeah, they... I don't, oh, that is true, but I feel that their um their association has, you know like their like their um buildings and that their equipment's all SEACOH and things like that are set up by the association and what they should be, guidelines I guess for what they should be doing, whereas as ours come from within the centre.

NB: Mm, mm.

Fran: Yeah.

NB: You talked about children when they're playing. You said that they are always learning. What sort of things are they learning?

Fran: Everything. Um, I don't know what, um, what .... say for example, family play, they doing role modelling, they're learning from, they're often doing what's happening at home. They're learning domestic chores. Um, they're learning physical skills with doing something, sewing buttons on clothes and that. I don't know, I just feel you can get everything, all the skills that you need out of each area, I guess. Each areas got all its different skills you can get from it rather.

NB: Mm, mm. P'raps you've answered this already but how are they learning? You've said they're learning while they're playing. Are there other ways that they're learning?

Fran: Well they do learn by um, I guess making use of their senses, especially role models. I feel they learn a lot through role models.
NB: Mm, mm. So do they need to be actively involved to be learning?

Fran: No.

NB: Mm, mm.

Fran: No, for instance, Nell, I notice she can sit back and just watch. Especially with dough play she'll just sit back and watch the other children and then she'll join in, and you can see that she's actually been listening and you know she knows what's going on without having to be involved in their play.

NB: Are there any parts of the day where the children are learning more than at other times, for example mat time or lunch time or play time?

Fran: Probably mat time when they have their actual talk about the theme, then they're concentrating on one idea, or then they'll talk about one special aspect, whereas throughout the day there's just one thing after another continuously.

NB: Mm, mm. So you think mat time...?

Fran: Mat time probably....

NB: ....is more important than other times?

Fran: No, I think it's all important. But that would be the one time, you could pretty well say they were actually concentrating on something.

NB: They need to concentrate to learn?

Fran: Um, I think if you wanted to teach them something new you would have to have to concentrate otherwise... ah... then again they learn to walk upstairs....No I still think you need to concentrate to learn something new.

NB: And the new leaning is likely to happen at mat time?

Fran: No, it could quite easily happen any time throughout the day.

NB: Mm. So you feel that throughout the day they are always learning?

Fran: Mm.

NB: In different kinds of ways?

Fran: Yeah.

NB: Mm. It seems like at the centre it's kind of set out like a smorgasbord. There's lots of things to choose from so kids can choose. Why is it, why is it set up in that kind of way?

Fran: So the kids can choose really. Um, I guess we feel that the children are there for a great percentage of their time, most of them being full time, and um, we're really there to provide the best we can for the children, so therefore I think the children need to be given a choice of what they want to do. There activities set out, but it is still very much child based.
NB: Mm. Does it matter if they say a child come to the centre for a couple of years or more all she did was just play with the dough? Would that be OK with you?

Fran: No. I would like to know why. I think if that was to happen then there would have to be a reason why she just sat at the dough and um as I said before I think if you can get something out of each different area, you know it's designed to give the child something so that they are all learning. They do need to experience it all, you know, whatever they feel comfortable with, but um, I don't think I would be happy if she just sat at the dough.

NB: So, if a child chooses to limit their um experiences in some way - sitting at the dough table is probably a bit of an extreme example - but say they do a quarter of what's offered at the centre, how would you respond to that?

Fran: Um, probably the first thing I would do is speak to the parents. Ah, actually, I probably wouldn't. I would probably talk to the children first, and ask them or suggest that maybe they should go into a different area, and if they didn't then I'd talk to the parent and ask them you know what they were like at home, I guess, and if she felt - you know, the parent felt - there was something that needed to be done or do, we'd have to do observations like you do! Laughs

NB: Laughing And then what? You observed, that's all they do....?

Fran: Um, I would have to think of an intervention, something that the parents are quite happy with and the child's quite happy with.

NB: Can you give me an example of something you might do?

Fran: When she's just playing with the dough all the time? Um, oh could be um, take her somewhere else, put her in a different area. Yeah.

NB: Mm, mm. I notice that some of the children have charts with stars on them. What's the reason for that?

Fran: Um, some are toileting charts. The charts all tend to be for children that were good, you know like the toileting one for instance, and for some reason decided to give it up. We had one four year old, a four year old girl who began to cry in them morning when her mum left and cling to her mum and as soon as her mum was gone, she was fine and there weren't any tears, it was, just her little morning thing, and um her mum wanted a star chart and as soon as she started putting stars up in the morning for being happy when mum went to work you know she stopped.

NB: So the parents can ask for that?

Fran: Oh we don't do it unless we ask the parents
3 NB: Mm, mm. But why do you think that works for that child. What is it about the star charts?

4 Fran: Mm. I don't know, they really like them. Giving stars for cleaning up....I guess it's something personal. Yeah.

5 NB: You have a group mat time and family group time. Why is that?

6 Fran: Well that time is to basically talk about everything, and to have songs and get together with the other children, so if anything's happening to one of the children that will be um talked about. Group times, that's a special time because we felt that the children were there for such a long time in the day sometimes there were children who weren't getting as much attention as they should be really for the amount of time they were at the centre, like ones I guess that are very easy to miss out. So group times, you just you get to know those children better, and they get to know the staff with them better, and the other children in the group.

7 NB: Is there anything that happens at the centre that stops kids from learning?

8 Fran: Yeah, clean up times. The children can be doing really neat things, but sometimes when you're under pressure I guess to get things done you say that's it clean up time and um whatever's going on just stops instantly.

9 NB: Do you have enough staff?

210 Fran: No, no I don't think so at all. I think the ratio of one to ten is, is not enough at all.

11 NB: Mm, mm. So what are the consequences of not having the staff?

12 Fran: Children don't get as much as there could be. That's ...sort of group time is to try and solve that I guess by making sure that each child does get a lot of attention, but ah when you've got domestic chores and that as well it's sometimes hard to fit time in

213 NB: Why is adult attention important for kids?

14 Fran: Often because their parents are so busy in the morning they say goodbye and go to work and that's it, and then they pick them up at night and they have tea and go to bed, so we've got to cater for really what they're missing out on during the day.

15 NB: And you think that kids need a lot of attention?

16 Fran: Mm

17 NB: Do you think some need it more than others?

18 Fran: Yeah. I think, yes some do. Some do um need um boosting their confidence I guess. Some children know that they're ok, and what they're doing's right where other children really need to know that and they do need that praise.
Mm. So that's what adults offer kids? The praise that makes them feel good about themselves?

Fran: Mm. Well that's what I'd like to do which I try to do is to boost up their self-esteem. I guess because I feel it's very important for an adult to feel ok about themselves or else everything is just down and around them, and it's also important for a child to.

Mm, mm. So that would be perhaps the central part of your philosophy in your work with the children?

Fran: Just to make them feel ok about themselves. Yeah.

Mm. Did you find that my observing the children in the centre affected you?

Fran: Um, At the start it did, because we tried to keep the centre all tidy, to make it look respectable, um and I guess it was because I really didn't know you I guess it was like an outsider coming in, and you know what was she going to do with their children type of thing, but, yeah, that was OK in the end.

Mm, mm. You think that you got more used to it as the time went on?

Fran: Yeah, and it was good too, especially with Nell because I thought she really um glowed from you know having the microphone on. I thought that was really neat. And the same with Liam I don't know if that's what did it or not, but he's certainly, I don't know, a lot more confident about being himself. He's not as boisterous and that as he used to be.

Ah ha. Yeah.

Is there anything else that you think will helpful for me in understanding how the centre works?

If you were allowed to go to a management meeting it would probably be quite good. Guess that's up to Kim in the final ...

Mm. What would I learn from a management meeting?

That parents fees are going up! Um, you just, you learn everything, all the little bits and pieces that people don't realise is involved in running the Rimu Childcare Centre, I guess. Money costs you know. Often management, each management meeting we're talking about something
new that has to be fixed, or something that we have to have from the
education board, or um staff needing to go away on courses and are the
management willing to pay more for the staff to do so? Just a lot of things
you don't sort of see normally.

33  NB:   Mm.  yeah.  There's certainly a lot to the job isn't there?

34  Fran:  Mm.

_Interview concludes._

_One hour._
Appendix Three

INTERVIEW SCHEDULE: CHILDREN

1. Can you tell me about your friends at (centre)?
2. What does it mean if someone's your friend?
3. Tell me what you do at (centre)?
4. Do you play?
5. What are you doing when you are playing?
6. Are there times when you are not playing? What do you do then?
7. Why do children come to (centre)?
8. Do you learn things here?
9. What do the teachers do here?

Note:
1. The interview schedule was used flexibly, to accommodate children's spontaneous comments. Frequently probe questions were used to follow up main questions.
Appendix Four

TRANSCRIBED INTERVIEW: BETSY

NB You're nearly five eh?
Betsy Birthday's tomorrow.
NB Are you? You're just about ready to go to school.?
Betsy Yes
NB Can you tell me about your friends? Have you got some friends at Kindergarten?
Betsy Yep N and R
NB Yes
Betsy And N and N ..
NB Anybody else?
Betsy No
NB Only girls?
Betsy Yeah
NB Any boys?
Betsy No - Only P and S
NB Why are those people your friends?
Betsy Because they are allowed to be my friends except .S's joking he's my girlfriend.
NB Who?
Betsy S is joking that he's my girlfriend.
NB Why is he joking?
Betsy I don't know he must be joking .....  
NB Yeah I...And are they always your friends all those kids everyday?
Betsy Yes.
NB And what about umm Amber is she your friend?
Betsy Yep.at last I'm finally getting this knot out of ...(tying shoe)
NB Let me have a go. How about Mary, is she your friend?
Betsy Yep.
NB And who do you play with?
Betsy I play with N, R, P sometimes and N, G, and N, and they sometimes just joke that they're not my friends and they cry at least they're not crying today well they pretend to cry ... outside and I was going to cheer them up they were being silly.
NB How'd you cheer them up?
Betsy: I cheered them - I tried but I didn't even cheer me up but they didn't even cheer up.

NB: Why do kids do that? Why do they say I won't be your friend anymore?
Betsy: Because they are being silly and stupid they just ... they don't know what they do sometimes.

NB: What happens if someone's your friend what do you do with them?
Betsy: I play with them and I take them to ... with me sometimes.

NB: Nobody's C's friend anyway.
Betsy: I don't know. Because he doesn't do what he's told

NB: Ah
Betsy: He always get puzzles out

NB: Yeah
Betsy: At tidy up time
NB: Yeah. So he doesn't have any friends?
Betsy: Nnn...
NB: Now tell me what do you do at kindergarten?
Betsy: Um I just go round and make things and play sometimes with the piano and dance and all that,

NB: Yeah What do you do when you are playing.
Betsy: I play outside or inside or outside or whatever but I don't know which.
NB: What sort of things do you do when you are playing?
Betsy: I play with the babies

NB: Yeah what else?
Betsy: And I play inside and I play in the ... and I play outside
NB: Are there times at kindergarten whey you're not playing - sometimes they're the other times what do you do in those times when you're not playing?
Betsy: I don't even play I just got to sit down read books I do.
NB: You've got to sit down and read books when you're not playing. What else do you do when you're not playing?
Betsy: I just um make stuff like ...
NB: Like when you're making stuff at the art table?
Betsy: Yep.
NB: That's not play?
Betsy: Nnn.
NB: Mmm. So playing is when you play with your friends in the family corner and when you do chasing outside
Betsy  Mmm.
NB    But when you make things at the art table ...?
Betsy Made things like rainbow made a big big rainbow today.
NB    Mmm. Did you? Wow good on you. You like making rainbows.?
Betsy  Yep
NB    Now tell me something (another child interrupts) why do kids come to kindergarten?
Betsy  Because they get lots of friend and um they play with each other and its .......
you learn how to play you learn how to read
NB    Do you learn stuff at kindergarten?
Betsy  Yep.
NB    What sort of things?
Betsy  You learn um you learn to ... and you learn to play with puppets and you learn
to be good.
NB    Yeah
Betsy  And its good at first you learn to read
NB    At kindergarten or school?
Betsy  School..
NB    Ah.
Betsy  .....sit down and learn books and all that.
NB    At school?
Betsy  Yep
NB    Its different from Kindy is it?
Betsy  Yes.
NB    Why do the teachers come to kindergarten?
Betsy  Because the got to teach.
NB    Oh what do they teach?
Betsy  They teach ya they read books to you.
NB    Yes and what else do they teach you?
Betsy  And sometimes they even sit us in the kitchen cause we're naughty.
NB    Do they?
Betsy  Mm.
NB    Why would they do that?
Betsy  Because if you been naughty and you don't sit still ..... 
NB    Pardon?
Betsy  Won't be in the story.
NB    Has that ever happened to you?
Betsy  No.
So teachers come to kindergarten to teach kids?

Yeah

And what do they do here? (Betsy leaves the room at this point).
Appendix Five

TRANSCRIPTION OF AN INTERACTIVE EPISODE: MARY AND MARK (THE 'FISHING' EPISODE)

Mark and C are pretending to catch fish from the box in the verandah room. They are using pieces of cane as fishing rods. Mary enters the room:

Mary: What are these?
Mark: Fishing
C: Fishing
Mary: I can't see any fish. What about making some fish with the paper outside?
Mark: Is there paper outside?
Mary: Yes. I wonder what sort of fish you could make? Great big ones?
How could you catch it I wonder?
C: Make a hole
Mary: How could we join it on?
C: Wool
Mark: Wool
Mary: Yes, have a look inside, you might find some resources inside here
Mary leads them into the art room
C: Pointing to the observer's stopwatch Hey, that's a funny watch
Mary: That's a special watch
Observer: It's a stopwatch
Mary: Come and see if you, come and see what you could use
C: I don't know how to make fish
Mary: You come and have a look at our fish over here...come and have a look in our fish tank
Mark: You can't put these into where the fish is! Referring to the 'fishing lines'
C: You have to 'tend, you have to 'tend
Mark: Counting fish One two three
Mary: You just have to pretend
C: Like in your head
Mary: Have a look at their tummies, their heads...
Mark: ..two, three....
C dips his fingers into the tank
Mary: ...ah no fingers when you look 'cos your germs get on that. How many fins has he got? Can you see where their eyes are? Can you see their eyes?

Mark: They're got, they're got black in the middle

Mary: Yea, they have

C: Orange around it

Mary: Yea, and what makes them swim? How can they swim?

Mark: 'Cos they've got those fins

Mary: Fins, fins on the sides?

Mark: Yep, and they got a tail

Mary: Yes

C: Oh what's the tail for?

Mary: The tail helps them...

C: I can count this one. There's one two three

Mary: How many fish are you going to make?

Mark: Mmm, two

Mary: Two, OK

C: That, I'm going to make that much holding up three fingers

Mary: To C You could help them because they're going to go fishing and they need lots of fish in that river. What sort of fish do you think you might make?

C: I, I can't make fishes

Mary: Well come and find some paper.

She leads them to the paper storage shelf

C: I'm having blue on my picture. I'm going to cut out a fish and colour it blue

Mary: OK. Here's a long one or do you want a short fat one?

C: Short fat one

Mark: I want a long one

Mary: To Mark Come and find a long piece. You come and get a long piece of paper. What about this one?

Mark: I want a long one

C: I'll take that

Mary: To C You'll take that

C: I'll take both, I'll take that. He grabs Mark's paper

Mark: I want one of these. Look at this one. Wowee!

Mary: It'll be a bit like an eel...

Mark: C just took, C just took one of those off me
Mary: ...do you want to do an eel? What's the matter?

*C gives back the paper to Mark with an embarrassed sound*

Come on. Now, there's the crayons? And there's pencils. What are you going to use?

Mark: We don't know how to draw fish

*C3 approaches Mary waving a book*

Mary: I can't hear. What's the matter dear?

C3: Book

Mary: What do you want me to do with it?

C3: Read

Mary: You want me to read, please read? OK, well I'll go outside when I do that. *Turning to Mark and C* Now what can you do...there's some pastels over there for drawing...

C: Yea but we don't know how to draw a fish shape

Mary: A fish shape. Bodies, fish have big long bodies...

Mark: Yea but we don't know how to do it

Mary: And some eyes...some eyes...a long shape

*C and Mark look unconvinced*

..well let's just come and have a try

C: I really don't know how they look

Mark: I don't know

Mary: We'll have a try. Can you draw the fish's face? They'll need big eyes

*Mark and C are seated at the art table with pens in hands. They begin to draw*

C4: *Approaching* Do you know where the stapler is?

Mary: It should be on the tables there. *To Mark and C* Can you make a fish's face? And his big eyes.

Mark: I know how to do it 'cos I done...

C: I can't!

Mary: Well you do what you'd like to do for your fish. What colours?

Mark: I'm going to do this colour 'cos it's my favourite

Mary: Your favourite. Start at the end and go right the way down and right the way back again

Mark: I can't do a fish shape. *He begins to draw a long line the length of his paper*

*C5 enters and shows Mary his pasting*

Mary: *To C5* What's that you've made? It looks like a cross you've made. *To C* What about you C?
C: It looks like a muppet
Mary: Mmm, what colour one are you going to do?
C: I might have red
Mary: A red fish, right, you find a red fish
C: I can't do it
Mary: Hang onto your paper. Can you make it a long shape or a round shape?
C: I can't
Mary: I think you could. Good work Mark

She comments to the observers about the difficulty of knowing how much help to give to the children
Good work Mark. You could make your crayon go right the way around and down that side for your fish shape
C: I don't know what to do to mine He has drawn a circular shape
Mary: Perhaps you could cut it. Perhaps you could cut your fish shape. What about some eyes? Perhaps you could cut the round shape? Cut its head shape?
C: I can't make a tail
Mary: Well we could join a tail on no trouble. Cut a tail, we could glue a tail on, we could use lots of things for a tail
C: I want one of those things there for a fish tail
Mary: We could get some orange. Did you see what C6 had? She had some orange paper for a fish tail. Look, over here She leads him over to the paper storage
C: I don't want it. Too dumb, too dumb, too dumb
Mary: Well you do what you want to. You make the fish shape you want to
C: I can't, I can't make it
Mark: I'll show you this, my tail
Mary: Wow, It's getting longer and longer and longer
She speaks briefly with a child at the adjoining fingerpainting table and moves away. Mark draws eyes on his fish (two parallel lines extending the length of the table and joined at one end). He staples a second piece of paper to the first and extends the lines to the end of the second piece. Meanwhile C has taped a second circular shape to his first.